



2018 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 36th Annual Report

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2018 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 36th Annual Report

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ABSTRACT

Introduction: This is the 36th Annual Report of the American Association of Poison Control Centers' (AAPCC) National Poison Data System (NPDS). As of 1 January, 2018, 55 of the nation's poison centers (PCs) uploaded case data automatically to NPDS. The upload interval was 7.72 [6.90, 12.0] (median [25%, 75%]) minutes, creating a near real-time national exposure and information database and surveillance system.

Methods: We analyzed the case data tabulating specific indices from NPDS. The methodology was similar to that of previous years. Where changes were introduced, the differences are identified. Cases with medical outcomes of death were evaluated by a team of medical and clinical toxicologist reviewers using an ordinal scale of 1-6 to assess the Relative Contribution to Fatality (RCF) of the exposure.

Results: In 2018, 2,530,238 closed encounters were logged by NPDS: 2,099,751 human exposures, 57,017 animal exposures, 368,025 information requests, 5,346 human confirmed nonexposures, and 99 animal confirmed nonexposures. United States PCs also made 2,621,242 follow-up calls in 2018. Total encounters showed a 2.96% decline from 2017, while health care facility (HCF) human exposure cases remained nearly steady with a slight decrease of 0.261%. All information requests decreased by 15.5%, medication identification (Drug ID) requests decreased by 30.2%, and human exposure cases decreased by 0.729%. Human exposures with less serious outcomes have decreased 2.33% per year since 2008, while those with more serious outcomes (moderate, major or death) have increased 4.45% per year since 2000.

Consistent with the previous year, the top 5 substance classes most frequently involved in all human exposures were analgesics (10.8%), household cleaning substances (7.28%), cosmetics/personal care products (6.53%), sedatives/hypnotics/antipsychotics (5.53%), and antidepressants (5.22%). For cases with more serious outcomes, sedative/hypnotics/antipsychotics exposures were the class that increased most rapidly, by 1,828 cases/year (9.21%/year) over the past 18 years. Over just the past 10 years (for cases with the most serious outcomes) antidepressant exposures increased most rapidly, by 1,887 cases/year (7.02%/year).

The top 5 most common exposures in children age 5 years or less were cosmetics/personal care products (12.1%), household cleaning substances (10.7%), analgesics (9.04%), foreign bodies/toys/miscellaneous (6.87%), and topical preparations (4.69%). Drug identification requests comprised 18.2% of all information requests. NPDS documented 3,111 human exposures resulting in death; 2,582 (83.0%) of these were judged as related (RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory).

Conclusions: These data support the continued value of PC expertise and need for specialized medical toxicology information to manage more serious exposures. Unintentional and intentional exposures continue to be a significant cause of morbidity and mortality in the US. The near real-time status of NPDS represents a national public health resource to collect and monitor US exposure cases and information requests. The continuing mission of NPDS is to provide a nationwide infrastructure for surveillance for all types of exposures (e.g., foreign body, infectious, venomous, chemical agent, or commercial product), and the identification and tracking of significant public health events. NPDS is a model system for the near real-time surveillance of national and global public health.

NOTE: Comparison of exposure or outcome data from previous AAPCC Annual Reports is problematic. In particular, the identification of fatalities (attribution of a death to the exposure) differed from pre-2006 Annual Reports (see Fatality Case Review – Methods). Death cases were described as all cases resulting in death and those determined to be exposure-related fatalities. Likewise, [Table 22](#) (Exposure cases by Generic Category) since year 2006 restricts the breakdown of included deaths to single-substance cases to improve precision and avoid misinterpretation.

Introduction

This is the 36th Annual Report of the American Association of Poison Control Centers' (AAPCC; <http://www.aapcc.org>) National Poison Data System (NPDS) [1]. Fifty-five regional poison centers (PCs) serving the entire population of the 50 United States, American Samoa, District of Columbia, Federated States of Micronesia, Guam, Puerto Rico, and the US Virgin Islands submitted information and exposure case data collected during the course of providing patient-specific exposure management and poison information for entire year of 2018.

NPDS is the data warehouse for the nation's PCs. Poison centers place emphasis on exposure management, accurate data collection and coding, and responding to the continuing need for poison-related public and professional education. The PC's healthcare professionals are available free of charge to users, 24 hours a day, every day of the year. Poison centers respond to questions from the public, health care professionals, and public health agencies. The continuous staff dedication at the PCs is manifest as the number of exposure and information encounters averaging close to 3.5 million annually since the year 2000. Poison center encounters involve either an exposed human or animal (EXPOSURE CASE) or a request for information with no person or animal exposed to any foreign body, viral, bacterial, venom, chemical agent or commercial product (INFORMATION REQUEST). A unique feature of PC case management is the use of follow-up calls to monitor case progress, provide ongoing treatment recommendations, and to determine the medical outcome of the case.

What's new in this year's report?

- The most rapidly increasing substance categories resulting in more serious outcomes for the past 10 years are antidepressants, stimulants and street drugs, antihistamines and anticonvulsants.
- Figure 4 represents the most rapidly ascending substance categories over the 10-year period.
- Table 17B shows the most ascending substance categories over 10 years and also since the inception of NPDS (in 2000) reflecting the most recent trends while retaining methodology from prior annual reports.
- New in 2017 and again in this current report, the large Tables 21 & 22 have been moved to Appendices D & E (end of the text) for readability and easy reference.
- This report introduces the morbidity index to identify substances associated with the most serious outcomes among adolescent self-poisoning cases. This index is highlighted in the **Emerging Trends** sections and is illustrated in [Figure 8](#).
- Self-poisoning suicide attempts by adolescents comprise an important **Emerging Trend**.

The NPDS products database

The NPDS products database contains over 444,000 products ranging from viral and bacterial agents to commercial chemical and drug products. The products database is maintained and continuously updated by data analysts at the Micromedex Poisindex[®] System (Micromedex Healthcare Series [Internet database], Greenwood Village, CO: IBM

Watson Health). A robust generic coding system categorizes the product data into 1,112 active generic codes. These generic codes collapse into Pharmaceutical (543) and Non-Pharmaceutical (562) groups. These two groups are divided into Major (68) and Minor (184) categories. The generic coding schema undergoes continuous improvement through the work of the AAPCC – Micromedex Joint Coding Group. The group consists of AAPCC members and IBM Watson Health editorial and lexicon staff working to meet best terminology practices. The generic code system provides enhanced report granularity as reflected in [Appendix E \(Table 22\)](#). There were no new generic codes introduced in 2018.

Methods

Characterization of participating poison centers and population served

All 55 US PCs are accredited, and all submitted data to AAPCC through 31 December 2018. The entire population of the 50 United States, American Samoa, the District of Columbia, Federated States of Micronesia, Guam, Marshall Islands, Northern Marianas, Puerto Rico, and the US Virgin Islands was served by the US PC network in 2018 [1,2]

The average number of human exposure cases managed per day by all US PCs was 5,753. Similar to other years, higher volumes were observed in the warmer months, with a mean of 6,040 cases per day in May compared with 5,389 per day in December. On average, US PCs experienced a new encounter involving an actual human exposure every 15.0 seconds.

Encounter management – specialized poison exposure emergency providers

Poison center Managing Directors are primarily responsible for patient care/information service operations, clinical education, and staff instruction. Most are PharmDs or RNs with American Board of Applied Toxicology (ABAT) certification in clinical toxicology. Medical direction is provided by Medical Directors who are board-certified physician medical toxicologists. At some PCs, the Managing and Medical Director roles are held by the same individual.

Encounters with US PCs are managed by healthcare professionals who have received specialized training in toxicology to allow for assessment, triage, management and monitoring of toxic exposure emergencies. These providers include medical and clinical toxicologists, registered nurses (RNs), pharmacists (PharmD or BS), physicians and physician assistants. Most commonly, RNs and pharmacists make up the contingent of "Specialists in Poison Information" (SPIs) or "Certified Specialists in Poison Information" (CSPIs) in the US. These (C)SPIs triage lay public callers to the most appropriate level of care and provide health care professionals with the most up-to-date management recommendations to care for their poisoned/overdosed patients. For a SPI to become nationally certified as a CSPI, (s)he must log a minimum of 1,200 hours in a PC and handle 2,000 human exposure cases

prior to being considered eligible to take the certification examination. RNs, pharmacists, physicians and physician assistants are the only individuals eligible to sit for the CSPI examination. Of note is the lack of an appropriate, core toxicology training within most graduate medical education curricula to allow these medical professionals to be prepared for PC patient management operations. These individuals must receive significant additional training beyond their degree programs to become (C)SPIs. Such training is only offered within the PCs. "Poison Information Providers" (PIPs) are allied healthcare professionals who are allowed to manage information-type and lower acuity (non-hospital) cases while working under the supervision of a CSPI. Poison centers undergo a rigorous accreditation process administered by the AAPCC and must submit an annual accreditation report and an extensive reaccreditation application every 7 years.

NPDS – near real-time data capture

Extensively enhanced over its predecessor, the Toxic Exposure Surveillance System (TESS), which began collecting data in 1983 and near real-time data since 2003, NPDS was launched on 12 April 2006. NPDS is the data repository for all US PCs and includes all case information collected by its predecessor. In 2018, all 55 US PCs uploaded case data automatically to NPDS in near real-time, making NPDS one of the few operational systems of its kind. Poison center staff record cases contemporaneously in 1 of 4 electronic medical record systems. Each PC uploads case data automatically. The average time to upload data for all PCs is 7.72 [6.90, 12.0] (median [25%, 75%]) minutes creating a near real-time national exposure database and surveillance system.

The web-based NPDS software facilitates the detection, analysis, and reporting of surveillance anomalies. System software offers a myriad of surveillance uses allowing AAPCC, its member centers and public health agencies to utilize NPDS exposure data. Users can access regional data for their own areas and view national aggregate data. Custom surveillance definitions are available, along with ad hoc reporting tools. Information in the NPDS database is dynamic. Each year the database is locked prior to extraction of annual report data to ensure consistent, reproducible reports. Additional information including autopsy data on fatalities may be added after the lock date as an addendum to the fatality abstract. The 2018 database was locked on 16 August 2019 at 05:00 PM EDT.

Annual report case inclusion criteria

Note: In this and last years' reports, human and animal "EXPOSURE CALLS" have been renamed to human and animal "EXPOSURE CASES," since a single call may result in multiple cases and the NPDS database contains information about individual exposure cases. The information in this

report reflects only those cases that are not duplicates and classified by the PC as CLOSED. A case is closed when the PC has determined that no further follow-up/recommendations are required or no further information is available. Exposure cases are followed to obtain the most precise medical outcome possible. Depending on the case specifics, most cases are "closed" within a few hours of the initial contact. Cases involving complex hospitalized patients or resulting in death may remain open for months while data continue to be collected. Follow-up contacts provide a proven mechanism for monitoring the appropriateness of management recommendations, enabling continual updates of case information, augmenting patient guidelines, providing poison prevention education, and obtaining final medical outcomes to make the data collected as accurate and complete as possible.

Statistical methods

All tables except Tables 1A, 3B and 17B were generated directly by the NPDS web-based application and can thus be reproduced by each PC. The analyses for Figures 1–4 were done using SAS JMP[®] version 12.0.1 (SAS Institute, Cary, NC) and summary counts were generated by the NPDS web-based application. The analysis for Figures 5–8 and Table 17B were done using Microsoft Excel 2016 (Microsoft, Redmond, WA) with the RegressItPC add-in (RegressIt_{TM}, version 2019.07.08).

NPDS surveillance

As previously noted, all active US PCs upload case data automatically to NPDS. This unique near real-time upload is the foundation of the NPDS surveillance system, making both spatial and temporal case volume and case-based surveillance possible. NPDS allows creation of volume and case-based definitions. Definitions can be applied to national, regional, state, or ZIP code coverage areas. Geocentric definitions can also be created, which use cases reported from a geographic location regardless of which PC managed the case. This functionality is available to every PC as well as the AAPCC surveillance team. Poison centers also have the ability to share NPDS near real-time surveillance technology with external organizations such as their state and local health departments or other regulatory agencies. Another NPDS feature is the ability to generate system alerts on adverse drug events and other drug or commercial products of public health interest such as contaminated food or product recalls. Thus, NPDS can provide near real-time adverse event monitoring, surveillance, response and situational awareness.

Surveillance definitions can be created to monitor a variety of parameters (i.e., volume or case based) on any desired substance or commercial product in the Micromedex Poisindex products database; and/or set of clinical effects or other parameters. The products database contains over

Table 1A. AAPCC population served and reported exposures (1983–2018).

| Year | No. of participating centers | Population served (in millions) | Human exposures | Exposures per thousand population |
|--------------|------------------------------|---------------------------------|-------------------|-----------------------------------|
| 1983 | 16 | 43.1 | 251,012 | 5.8 |
| 1984 | 47 | 99.8 | 730,224 | 7.3 |
| 1985 | 56 | 113.6 | 900,513 | 7.9 |
| 1986 | 57 | 132.1 | 1,098,894 | 8.3 |
| 1987 | 63 | 137.5 | 1,166,940 | 8.5 |
| 1988 | 64 | 155.7 | 1,368,748 | 8.8 |
| 1989 | 70 | 182.4 | 1,581,540 | 8.7 |
| 1990 | 72 | 191.7 | 1,713,462 | 8.9 |
| 1991 | 73 | 200.7 | 1,837,939 | 9.2 |
| 1992 | 68 | 196.7 | 1,864,188 | 9.5 |
| 1993 | 64 | 181.3 | 1,751,476 | 9.7 |
| 1994 | 65 | 215.9 | 1,926,438 | 8.9 |
| 1995 | 67 | 218.5 | 2,023,089 | 9.3 |
| 1996 | 67 | 232.3 | 2,155,952 | 9.3 |
| 1997 | 66 | 250.1 | 2,192,088 | 8.8 |
| 1998 | 65 | 257.5 | 2,241,082 | 8.7 |
| 1999 | 64 | 260.9 | 2,201,156 | 8.4 |
| 2000 | 63 | 270.6 | 2,168,248 | 8.0 |
| 2001 | 64 | 281.3 | 2,267,979 | 8.1 |
| 2002 | 64 | 291.6 | 2,380,028 | 8.2 |
| 2003 | 64 | 294.7 | 2,395,582 | 8.1 |
| 2004 | 62 | 293.7 | 2,438,643 | 8.3 |
| 2005 | 61 | 296.4 | 2,424,180 | 8.2 |
| 2006 | 61 | 299.4 | 2,403,539 | 8.0 |
| 2007 | 61 | 305.6 | 2,482,041 | 8.1 |
| 2008 | 61 | 308.5 ^b | 2,491,049 | 8.1 |
| 2009 | 60 | 310.9 ^b | 2,479,355 | 8.0 |
| 2010 | 60 ^a | 313.3 ^b | 2,384,825 | 7.6 |
| 2011 | 57 ^c | 315.7 ^b | 2,334,004 | 7.4 |
| 2012 | 57 | 318.0 ^b | 2,275,141 | 7.2 |
| 2013 | 57 ^d | 320.2 ^e | 2,188,013 | 6.8 |
| 2014 | 56 ^d | 322.9 ^f | 2,165,142 | 6.7 |
| 2015 | 55 ^g | 325.4 ^h | 2,168,371 | 6.7 |
| 2016 | 55 | 327.0 ⁱ | 2,159,032 | 6.6 |
| 2017 | 55 | 330.4 ^j | 2,115,186 | 6.4 |
| 2018 | 55 | 333.0 ^k | 2,099,751 | 6.3 |
| Total | | | 70,824,850 | |

^aAs of 1 July 2010 there were 60 Participating Centers.

^bAAPCC Total as of 1 July Mid Year US Census (2012 data for 50 United States, District of Columbia and Puerto Rico; 2011 data for Guam; 2010 data for American Samoa, Federated States of Micronesia, and the US Virgin Islands)

^cAs of 1 July 2011 there were 57 Participating Centers.

^dOne Participating Center closed in September 2013. Its data is included in the 2013 totals but not in the 2014 data.

^eAAPCC Total as of 1 July Mid Year US Census (2013 data for 50 United States, District of Columbia and Puerto Rico, Guam, American Samoa, Federated States of Micronesia, and the US Virgin Islands)

^fAAPCC Total as of 1 July Mid Year US Census (2014 data for 50 United States, District of Columbia and Puerto Rico, Guam, American Samoa, Federated States of Micronesia, and the US Virgin Islands) (2)

^gOne Participating Center closed in July 2014. Its data is included in the 2014 totals but not in the 2015 data.

^hAAPCC Total as of 1 July Mid Year US Census (2015 data for 50 United States, District of Columbia and Puerto Rico, Guam, American Samoa, Federated States of Micronesia, and the US Virgin Islands) (2)

ⁱAAPCC Total as of 1 July Mid Year US Census (2016 data for 50 United States, District of Columbia and Puerto Rico, Guam, American Samoa, Federated States of Micronesia, and the US Virgin Islands) (2)

^jAAPCC Total as of 1 July Mid Year US Census (2017 data for 50 United States, District of Columbia and Puerto Rico, Guam, American Samoa, Federated States of Micronesia, and the US Virgin Islands) (2)

^kAAPCC Total as of 1 July Mid Year US Census (2018 data for 50 United States, District of Columbia and Puerto Rico, Guam, American Samoa, Federated States of Micronesia, Marshall Islands, Northern Marianas Islands, and the US Virgin Islands) (2).

444,000 entries ranging from viral and bacterial agents to commercial chemical and drug products. Surveillance definitions may be constructed using volume or case-based definitions with a variety of mathematical options and historical

Table 1B. Non-human exposures by animal type.

| Animal | N | % |
|--------------------|---------------|---------------|
| Dog | 51,492 | 90.31 |
| Cat | 4,775 | 8.37 |
| Bird | 149 | 0.26 |
| Rodent / lagomorph | 119 | 0.21 |
| Horse | 97 | 0.17 |
| Sheep / goat | 65 | 0.11 |
| Cow | 36 | 0.06 |
| Aquatic | 23 | 0.04 |
| Other | 261 | 0.46 |
| Total | 57,017 | 100.00 |

baseline periods from 1 to 5 years. NPDS surveillance tools include:

- Volume Alert Surveillance Definitions
 - Total Encounter Volume
 - Human Exposure Case Volume
 - Animal Exposure Case Volume
 - Information Request Volume
 - Clinical Effects Volume (signs and symptoms, or laboratory abnormalities)
 - Syndromic Surveillance Volume - allows Boolean based definitions utilizing various NPDS data fields to be run based on historical trends for user defined periods of interest
- Case Based Surveillance Definitions utilizing various NPDS data fields linked in Boolean expressions
 - Substance
 - Clinical Effects
 - Species
 - Medical Outcome and others

Incoming data are monitored continuously, and anomalous signals generate an automated email alert to the AAPCC's surveillance team, designated PC or public health agency staff. These anomaly alerts are reviewed daily by the AAPCC surveillance team, the PC, or the public health agency that created the surveillance definition. When reports of potential public health significance are detected, additional information is obtained from reporting PCs via the NPDS surveillance correspondence system or phone. The PC then alerts their respective local or state health departments. Public health issues are brought to the attention of the Health Studies Branch, National Center for Environmental Health, Centers for Disease Control and Prevention (HSB/NCEH/CDC). This near real-time tracking ability is a unique feature offered by NPDS and the PCs.

AAPCC Surveillance Team clinical and medical toxicologists review surveillance definitions on a regular basis to fine-tune the queries. The CDC, as well as state and local health departments with NPDS access granted by their respective PCs, also have the ability to create surveillance definitions for routine surveillance tasks or to respond to emerging public health events.

Emerging trends

Each year since the 2007 annual report, the authors have selected a topic that highlights recent interesting and

Table 1C. Distribution of information requests.

| Information request type | N | % of Info. requests |
|--|---------------|------------------------|
| Drug identification | | |
| Public inquiry: Drug sometimes involved in abuse | 20,907 | 5.68 |
| Public inquiry: Drug not known to be abused | 13,563 | 3.69 |
| Public inquiry: Unknown abuse potential | 434 | 0.12 |
| Public inquiry: Unable to identify | 6,420 | 1.74 |
| HCP inquiry: Drug sometimes involved in abuse | 659 | 0.18 |
| HCP inquiry: Drug not known to be abused | 1,038 | 0.28 |
| HCP inquiry: Unknown abuse potential | 39 | 0.01 |
| HCP inquiry: Unable to identify | 455 | 0.12 |
| Law Enf. Inquiry: Drug sometimes involved in abuse | 13,503 | 3.67 |
| Law Enf. Inquiry: Drug not known to be abused | 7,204 | 1.96 |
| Law Enf. Inquiry: Unknown abuse potential | 327 | 0.09 |
| Law Enf. Inquiry: Unable to identify | 2,086 | 0.57 |
| Other drug ID | 483 | 0.13 |
| Subtotal | 67,118 | 18.24 |
| Drug information | | |
| Adverse effects (no known exposure) | 7,381 | 2.01 |
| Brand / generic name clarifications | 543 | 0.15 |
| Calculations | 90 | 0.02 |
| Compatibility of parenteral medications | 141 | 0.04 |
| Compounding | 180 | 0.05 |
| Contraindications | 1,142 | 0.31 |
| Dietary supplement, herbal, and homeopathic | 540 | 0.15 |
| Dosage | 9,591 | 2.61 |
| Dosage form / formulation | 1,122 | 0.30 |
| Drug use during breast-feeding | 1,471 | 0.40 |
| Drug-drug interactions | 19,853 | 5.39 |
| Drug-food interactions | 1,414 | 0.38 |
| Foreign drug | 68 | 0.02 |
| Generic substitution | 136 | 0.04 |
| Indications / therapeutic use | 4,719 | 1.28 |
| Medication administration | 4,477 | 1.22 |
| Medication availability | 343 | 0.09 |
| Medication disposal | 1,296 | 0.35 |
| Pharmacokinetics | 1,089 | 0.30 |
| Pharmacology | 460 | 0.12 |
| Regulatory | 1,092 | 0.30 |
| Stability / storage | 1,637 | 0.44 |
| Therapeutic drug monitoring | 296 | 0.08 |
| Other drug info | 13,218 | 3.59 |
| Subtotal | 72,299 | 19.65 |
| Environmental information | | |
| Air quality | 1,531 | 0.42 |
| Carbon monoxide - no known patient(s) | 469 | 0.13 |
| Carbon monoxide alarm use | 240 | 0.07 |
| Chem / bioterrorism / weapons (suspected or confirmed) | 10 | 0.00 |
| Clarification of media reports of environmental contamination | 17 | 0.00 |
| Clarification of substances involved in a HAZMAT incident - no known victim(s) | 76 | 0.02 |
| General questions about contamination of air and / or soil | 230 | 0.06 |
| HAZMAT planning | 63 | 0.02 |
| Lead - no known patient(s) | 307 | 0.08 |
| Mercury thermometer cleanup | 786 | 0.21 |
| Mercury (excluding thermometers) cleanup | 1,170 | 0.32 |
| Notification of a HAZMAT incident - no known patient(s) | 670 | 0.18 |
| Pesticide application by a professional pest control operator | 492 | 0.13 |
| Pesticides (other) | 2,019 | 0.55 |
| Potential toxicity of chemicals in the environment | 948 | 0.26 |
| Radiation | 43 | 0.01 |
| Safe disposal of chemicals | 951 | 0.26 |
| Water purity / contamination | 893 | 0.24 |
| Other environmental | 2,694 | 0.73 |
| Subtotal | 13,609 | 3.70 |
| Medical information | | |
| Dental questions | 64 | 0.02 |
| Diagnostic or treatment recommendations for diseases or conditions - non-toxicology | 4,926 | 1.34 |
| Disease prevention | 446 | 0.12 |

(continued)

Table 1C. Continued.

| Information request type | N | % of Info. requests |
|---|---------------|------------------------|
| Explanation of disease states | 508 | 0.14 |
| General first-aid | 763 | 0.21 |
| Interpretation of non-toxicology laboratory reports | 107 | 0.03 |
| Medical terminology questions | 45 | 0.01 |
| Rabies - no known patient(s) | 245 | 0.07 |
| Sunburn management | 97 | 0.03 |
| Other medical | 12,693 | 3.45 |
| Subtotal | 19,894 | 5.41 |
| Occupational information | | |
| Occupational treatment / first-aid guidelines - no known patient(s) | 30 | 0.01 |
| Information on chemicals in the workplace | 76 | 0.02 |
| MSDS interpretation | 57 | 0.02 |
| Occupational MSDS requests | 270 | 0.07 |
| Routine toxicity monitoring | 19 | 0.01 |
| Safe handling of workplace chemicals | 69 | 0.02 |
| Other occupational | 136 | 0.04 |
| Subtotal | 657 | 0.18 |
| Poison information | | |
| Analytical toxicology | 628 | 0.17 |
| Carcinogenicity | 79 | 0.02 |
| Food poisoning - no known patient(s) | 2,049 | 0.56 |
| Food preparation / handling practices | 5,176 | 1.41 |
| General toxicity | 22,880 | 6.22 |
| Mutagenicity | 24 | 0.01 |
| Plant toxicity | 1,338 | 0.36 |
| Recalls of non-drug products (including food) | 442 | 0.12 |
| Safe use of household products | 3,933 | 1.07 |
| Toxicology information for legal use / litigation | 139 | 0.04 |
| Other poison | 12,612 | 3.43 |
| Subtotal | 49,300 | 13.40 |
| Prevention / Safety / Education | | |
| Confirmation of poison center number | 11,693 | 3.18 |
| General (non-poison) injury prevention requests | 274 | 0.07 |
| Media requests | 534 | 0.15 |
| Poison prevention material requests | 5,521 | 1.50 |
| Poison prevention week date inquiries | 52 | 0.01 |
| Professional education presentation requests | 183 | 0.05 |
| Public education presentation requests | 287 | 0.08 |
| Other prevention | 659 | 0.18 |
| Subtotal | 19,203 | 5.22 |
| Teratogenicity information | | |
| Teratogenicity | 795 | 0.22 |
| Subtotal | 795 | 0.22 |
| Other information | | |
| Other | 48,944 | 13.30 |
| Subtotal | 48,944 | 13.30 |
| Substance Abuse | | |
| Drug screen information | 1,644 | 0.45 |
| Effects of illicit substances - no known patient(s) | 110 | 0.03 |
| New trend information | 111 | 0.03 |
| Withdrawal from illicit substances - no known patient(s) | 103 | 0.03 |
| Other substance abuse | 457 | 0.12 |
| Subtotal | 2,425 | 0.66 |
| Administrative | | |
| Expert witness requests | 30 | 0.01 |
| Faculty activities | 26 | 0.01 |
| Funding | 15 | 0.00 |
| Personnel issues | 119 | 0.03 |
| Poison center record request | 141 | 0.04 |
| Product replacement / malfunction (issues intended for the manufacturer) | 1,469 | 0.40 |
| Scheduling of poison center rotations | 47 | 0.01 |
| Other administration | 18,954 | 5.15 |
| Subtotal | 20,801 | 5.65 |
| Caller Referred | | |
| Immediate referral - animal poison center or veterinarian | 23,460 | 6.37 |
| Immediate referral - drug identification | 700 | 0.19 |
| Immediate referral - drug information | 103 | 0.03 |
| Immediate referral - health department | 8,345 | 2.27 |

(continued)

Table 1C. Continued.

| Information request type | N | % of Info. requests |
|---|----------------|---------------------|
| Immediate referral - medical advice line | 537 | 0.15 |
| Immediate referral - pediatric triage service | 112 | 0.03 |
| Immediate referral - pesticide hotline | 248 | 0.07 |
| Immediate referral - pharmacy | 361 | 0.10 |
| Immediate referral - poison center | 5,538 | 1.50 |
| Immediate referral - private physician | 1,682 | 0.46 |
| Immediate referral - psychiatric crisis line | 78 | 0.02 |
| Immediate referral - teratology information program | 175 | 0.05 |
| Other call referral | 11,641 | 3.16 |
| Subtotal | 52,980 | 14.40 |
| Total | 368,025 | 100.00 |

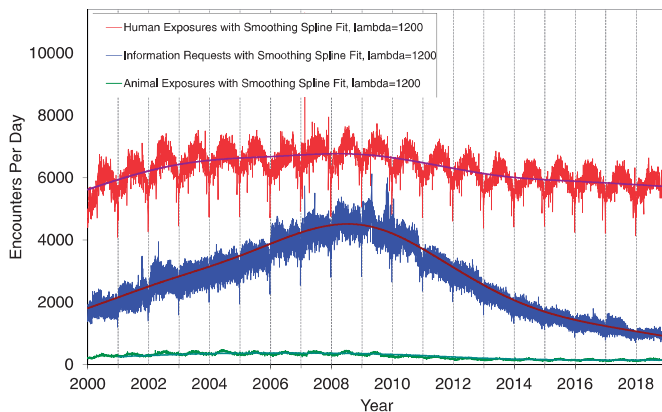


Figure 1. Human exposure cases, information requests and animal exposure cases by day since 1 January 2000. Smoothing spline fits using $\lambda = 1200$ for human exposures had associated $RSqr = 0.468$, information requests $RSqr = 0.916$ and animal exposures $RSqr = 0.877$.

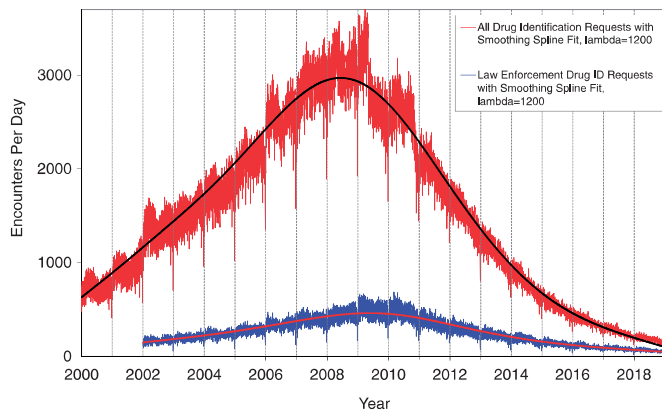


Figure 2. All drug identification and law enforcement drug identification requests by day since 1 January 2000. Smoothing spline fits used $\lambda = 1200$, all drug identification requests had associated $RSqr = 0.965$ and law enforcement drug ID requests $RSqr = 0.875$.

sometimes alarming trends in NPDS data. Past trends have compared NPDS findings to other datasets such as Google Trends and CDC reports. Two of the last 3 years focused on the opioid epidemic. Suicides present a concerning trend in the US, impacting especially adolescents [3]. This trend appears to hold true throughout the present decade and for the entire age group in their 2nd decade of life [4]. Surprisingly, the opioid epidemic does not appear to be

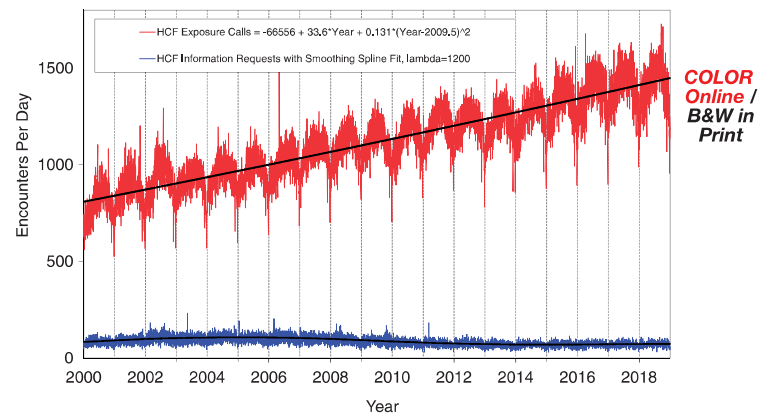


Figure 3. Health care facility (HCF) exposure cases and HCF information requests by day since 1 January 2000. Both linear and second order (quadratic) terms were statistically significant ($p < 0.001$) for regression of HCF human exposure with associated $RSqr = 0.780$. The quadratic coefficient is positive meaning the case counts are increasing faster than linearly. Smoothing spline fit with $\lambda = 1200$ for HCF information requests had associated $RSqr = 0.370$.

responsible for this trend, though adolescent deaths from opioid poisoning tripled between 1999 and 2016 [4,5].

For the 2018 report, we evaluated all closed human exposures by year from January 1, 2010 through December 31, 2018 with a focus on adolescent intentional – suspected suicides (see the sections below on Suicides). The percent change from year 2000 for all ages and ages 10-19 years were calculated and compared. In addition, the most rapidly increasing minor substance categories in 10-19 year-old intentional – suspected suicides was calculated using linear regression on single or multi-substance exposures to determine the mean increase per year with 95% confidence intervals for the 8-year period of January 1, 2011 to December 31, 2018. To identify individual generic codes that might identify the most serious outcomes in the 10-19 year-old intentional – suspected suicide exposures, we calculated a morbidity index with binomial 95% confidence intervals for single-substance exposures over the same 8-year period. The morbidity index was calculated as $1000 \times$ the ratio of serious medical outcomes to total exposure cases in this subgroup. Serious medical outcomes were defined as Moderate, Major or Death. Findings are presented in the sections on Emerging Trends – Adolescent Suicides and in Distribution of Suicides.

Fatality case review and abstract selection

NPDS fatality cases are recorded as DEATH or DEATH (INDIRECT REPORT). Medical outcome of DEATH is by direct report. DEATHS (INDIRECT REPORT) are deaths that the PC acquired from medical examiners or media but did not manage or answer any questions related specifically to that case.

Although PCs may report death as an outcome, the death may not be a direct result of the exposure. We define exposure-related fatality as a death judged by the AAPCC Fatality Review Team to be at least contributory to the exposure. The definitions used for the Relative Contribution to Fatality (RCF) classification are defined in Appendix B and the

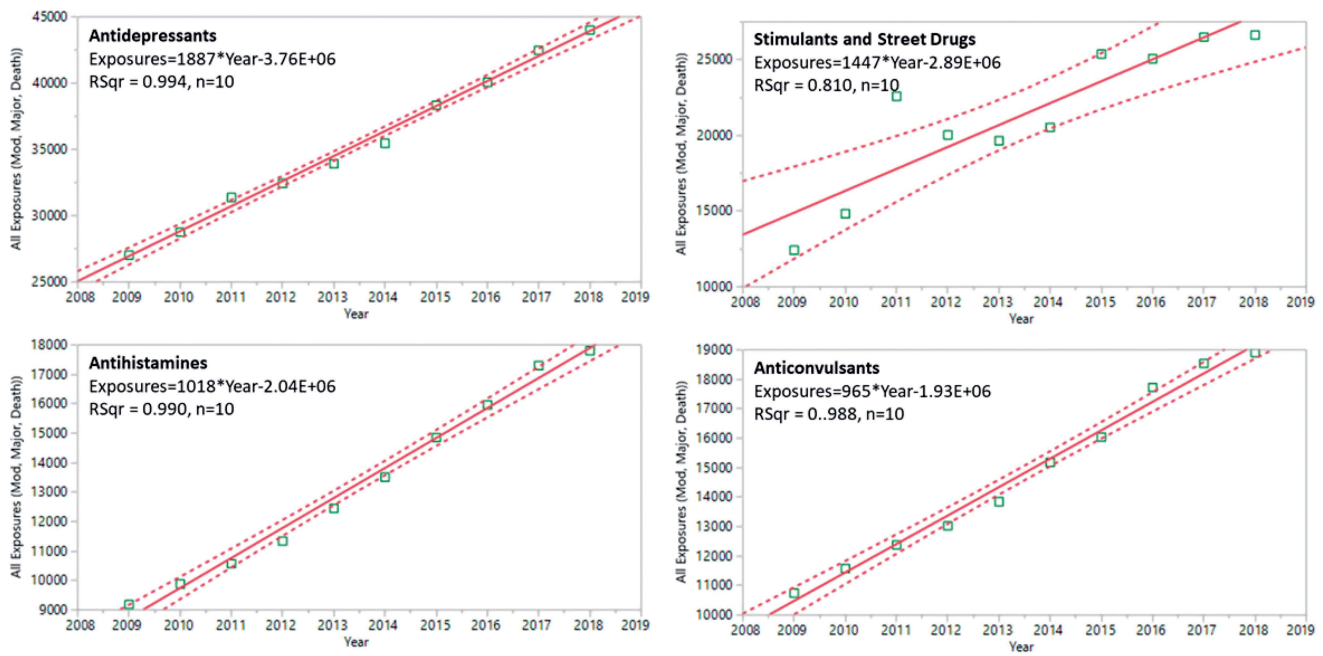


Figure 4. Substance categories with the greatest rate of exposure increase since 1 January 2010 for more severe outcomes (top 4). Solid lines show least-squares linear regressions for the human exposure cases per year for that category (\square). Broken lines show 95% confidence interval on the regression.

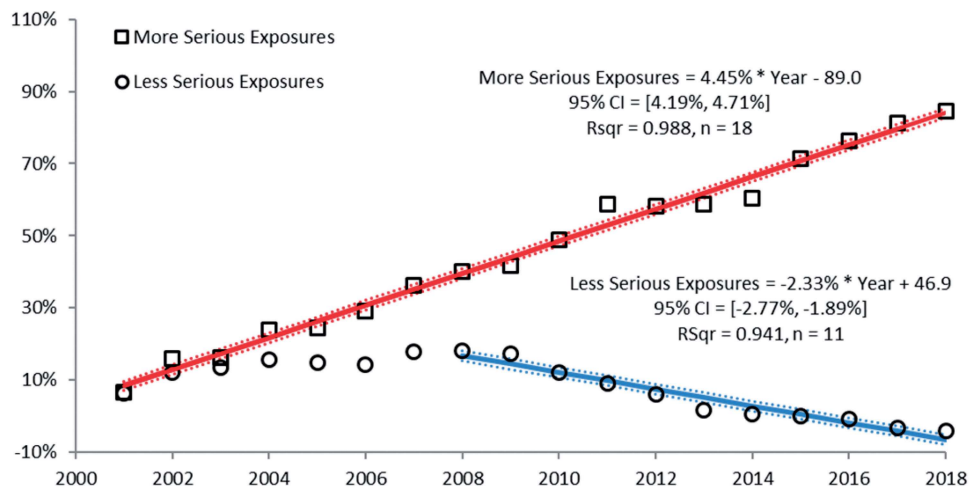


Figure 5. Change in encounters by outcome from year 2000. The figure shows the percent change from baseline (year 2000) for human exposure cases divided among the 10 medical outcomes. The more serious exposures (major, moderate and death) increased. The less serious exposures (no effect, minor effect, not followed (non-toxic), not followed (minimal toxicity possible), unable to follow (potentially toxic) and unrelated effect) decreased after 2008. Solid lines show least-squares linear regressions for the change in more serious exposures per year (\square) and less serious exposures (\circ). Broken lines show 95% confidence intervals on the regression.

methods to select abstracts for publications are described in [Appendix C](#). The AAPCC fatality review process was first published in detail in the 2008 NPDS annual report [1].

Pediatric fatality case review

A focused Pediatric Fatality Review team comprised of 6 pediatric toxicologists evaluated cases for patients under 19 years of age. The panel reviewed the documentation of all such cases, with specific focus on the conditions behind the poisoning exposure and finding commonalities which might inform efforts at prevention. The reviewed pediatric fatality cases exhibited a bimodal age distribution. Exposures

causing death in children ≤ 5 years of age were mostly coded as "Unintentional-General," while those in ages >13 years were mostly "Intentional." As has been true for several years, the circumstances of the case are often not captured in the reason code or the narrative. The pediatric fatality review team continues to encourage the procurement of further detail regarding law enforcement or child protective services involvement, postmortem investigation, and the means by which the child accessed the substances responsible for the fatality. Poison Centers are encouraged to heed previously published pediatric narrative guidelines to improve the determination of causality, and preventability, wherever possible.

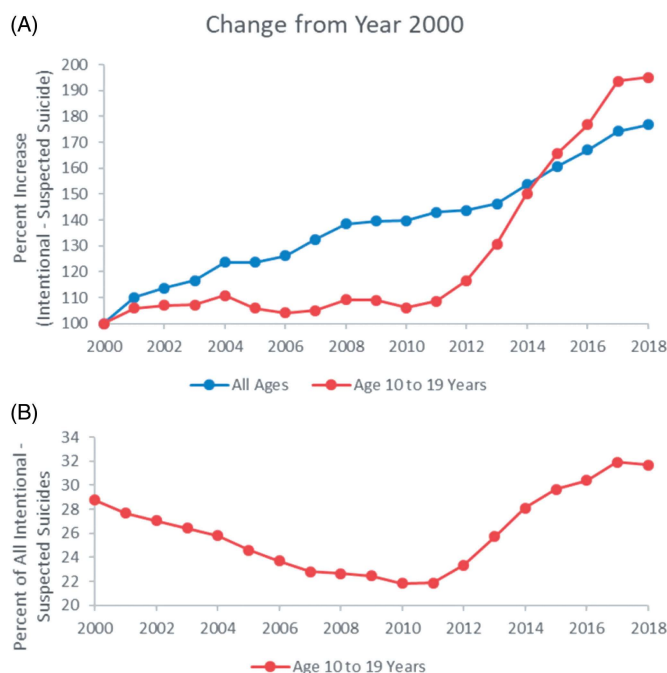


Figure 6. Change in intentional – suspected suicides from year 2000. The figure shows the percent change from baseline (year 2000) for human exposure cases for Intentional – Suspected Suicide for all ages and those aged 10-19 years. Panel A: Intentional – Suspected Suicide exposures increased in both groups, with those in the 10-19 year ages increasing more rapidly since 2010. Panel B: The percentage of all 10-19 year old Intentional – Suspected Suicides started at 28.7% in year 2000, slowly declined reaching a nadir of 21.8% in year 2010, and then rapidly increased to 31.7% by year 2018.

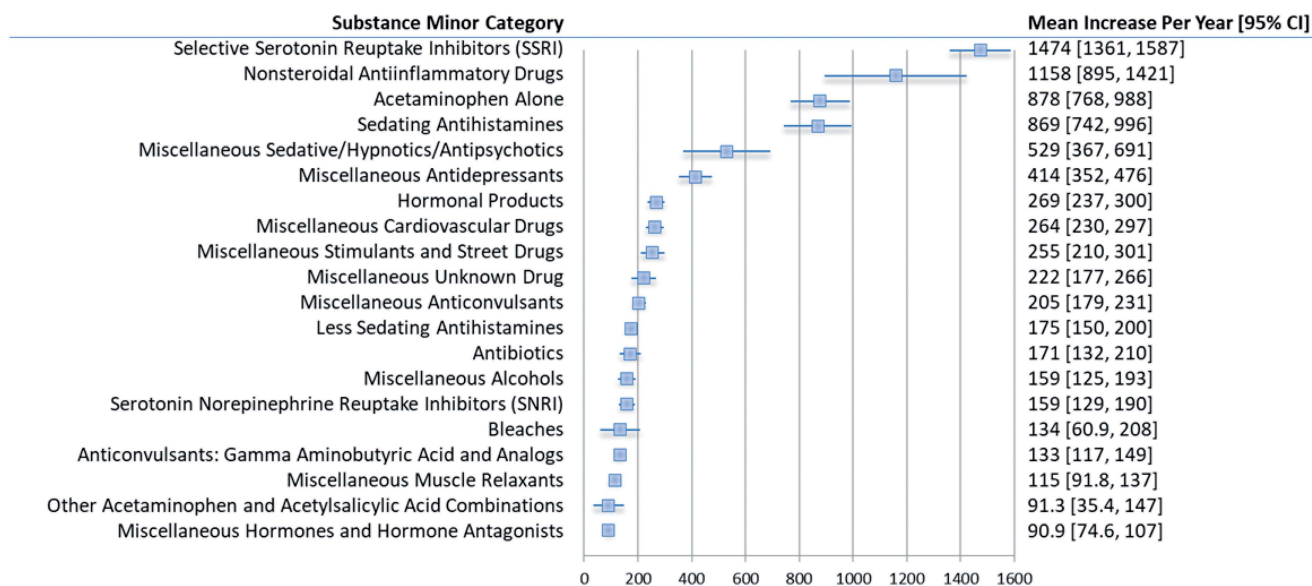


Figure 7. Substance categories with the greatest rate of exposure increase since 1 January 2011 for serious outcomes in 10 to 19 year intentional – Suspected Suicide exposures. The Forest Plot shows the 20 substance categories with the greatest rate of exposure increase from year 2011 for Intentional – Suspected Suicide exposures in the 10-19 year age group. Substance categories include single or multi-substance exposures. The boxes show the mean increase per year determined by least-squares linear regression with the whiskers depicting the 95% confidence interval on the regression.

Results

Information requests to poison centers

Data from 368,025 information requests to PCs in 2018 (Table 1C) was transmitted to NPDS, including requests in optional reporting categories such as prevention/safety/education (19,203), administrative (20,801), and caller referral (52,980).

Figure 2 shows that all Drug ID requests have decreased dramatically since mid-2008. Answering Drug ID requests is optional for poison centers and some have stopped answering these requests due to staffing constraints. Law enforcement Drug ID requests also showed a decline. The most frequent information request was for Drug ID, comprising 67,118 requests with PCs during the year. Of these, 35,069 (52.2%) were identified as drugs with known abuse potential.

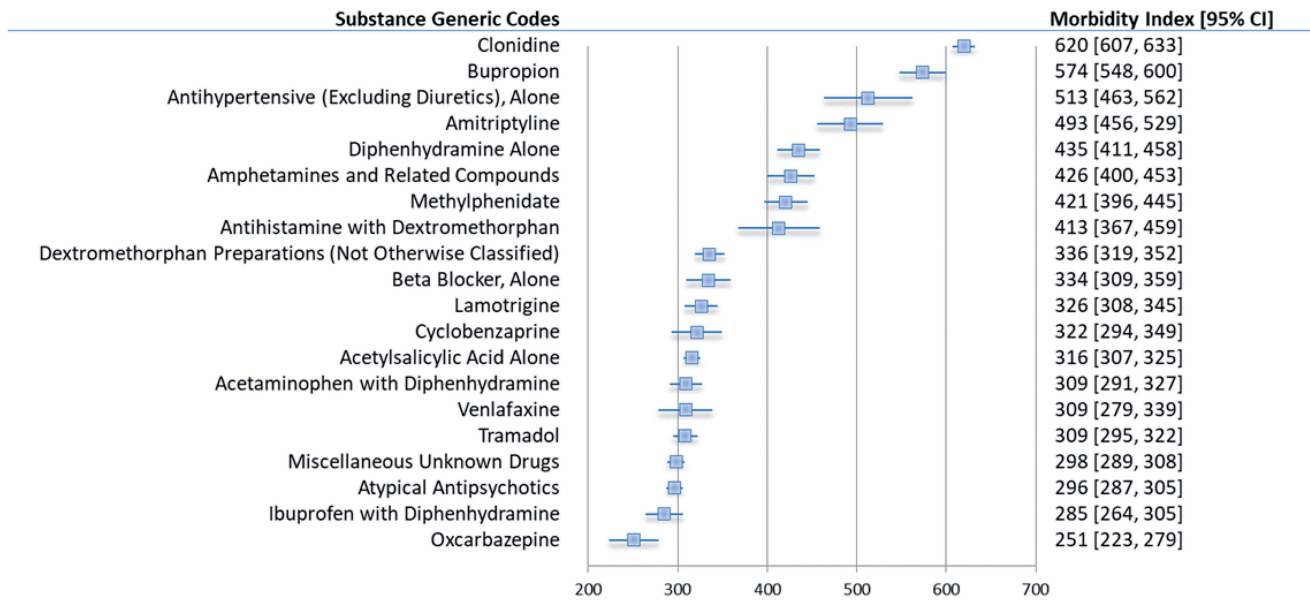


Figure 8. Generic substance codes with the greatest morbidity index since 1 January 2011 for 10 to 19 year intentional – suspected suicide exposures. The Forest Plot shows the 20 generic codes with the greatest Morbidity Index since year 2011 for single-substance Intentional – Suspected Suicide exposures in the 10-19 year age group. The morbidity index was calculated as the rate of serious medical outcomes (serious cases divided by all cases X1000) over the 8-year time period. Serious medical outcomes were defined as moderate, major or death. The boxes show the Morbidity Index with the whiskers depicting the 95% confidence interval for a binomial distribution.

However, these cases were categorized based on the drug's abuse potential without knowledge of whether abuse was actually intended.

While the number of Drug information requests decreased 4.89% from 2017 (76,014 requests) to 2018 (72,299 requests), the percentage of these slightly increased to 19.7% of all information requests. The most common drug information requests were about drug-drug interactions, followed by other drug information, questions about dosage, inquiries of adverse effects (without a known exposure), and therapeutic use and indications. Environmental inquiries comprised 3.70% of all information requests. Of these environmental inquiries, specific questions related to pesticides were most common, followed by cleanup of mercury (thermometers and other), and air quality.

Of all the information requests, poison information comprised 13.4% of the requests with inquiries involving general toxicity the most common followed by questions involving food preparation handling practices, safe use of household products, and food poisoning.

Exposure cases logged at poison centers

In 2018, participating PCs logged 2,530,238 total encounters including 2,099,751 closed human exposure cases (Table 1A), 57,017 animal exposures (Table 1B), 368,025 information requests (Table 1C), 5,346 human confirmed non-exposures, and 99 animal confirmed non-exposures. An additional 156 cases were still open at the time the database was locked. The cumulative AAPCC database now contains more than 70 million human exposure case records (Table 1A). A total of 19,618,430 information requests have been logged into the AAPCC database since the year 2000.

Figure 1 shows the human exposures, information requests and animal exposures by day since 1 January 2000. Smoothing spline fit of these data shows departure from linearity (declining rate of cases since mid-2007) for Human Exposure cases with some flattening over the last 2 years. Information requests are declining more rapidly and are also described by a smoothing spline fit, and Animal Exposure cases have likewise been declining since mid-2005. The 2 May 2006 exposure data spike on Figure 1 was the result of 602 children in a Midwest school reporting a noxious odor which caused anxiety but resolved without sequelae.

A hallmark of PC case management is the use of follow-up contacts to monitor case progress and medical outcome. US PCs made 2,621,242 follow-up contacts in 2018. Follow-up was performed in 45.7% of human exposure cases. One follow-up contact was made in 21.0% of human exposure cases and multiple follow-ups (range 2-201) were performed in 24.8% of cases. For human exposure cases in which follow-up contacts were documented, an average of 2.65 contacts per case were done.

Figure 3 shows a graphic summary and analyses of Health Care Facility (HCF) exposure and HCF information requests. HCF exposure cases slightly departs from linearity but continues to increase at a steady rate, while the rate of HCF information requests has declined since early 2005 but leveled off since late 2013. This increasing use of the PCs for the more serious exposures (HCF cases) is important in the face of the overall decline in exposure and information encounters.

Tables 22A (Nonpharmaceuticals) and 22B (Pharmaceuticals) (in Appendix E) provide summary demographic data on patient age, reason for exposure, medical outcome, and use of an HCF for all 2,099,751 human exposure cases, presented by substance categories. The Pharmaceuticals category includes both licit and illicit drugs.

Column 1: Name of the major, minor generic categories and their associated generic substances (Alternate Names). Note that for pharmaceuticals, the generic category or generic substance listed is for the initial FDA approved indication and may not reflect current indications or uses for the pharmaceutical.

Column 2: Number of Case Mentions (all exposures) in grey shading, displays the number of times the specific generic code was reported in any human exposure case. If a human exposure case has multiple instances of a specific generic code it is only counted once.

Column 3: Number of Single Exposures displays the number of human exposure cases that identified only 1 substance (1 case, 1 substance).

The succeeding columns (Age, Reason, Treatment Site, and Outcome) show selected detail from these single-substance exposure cases. Death cases include both cases that have the outcome of Death or Death (indirect report). These death cases are not limited by the RCF.

Table 2. Site of call and site of exposure, human exposure cases.

| Site | Site of caller | | Site of exposure | |
|---------------------------|----------------|-------|------------------|-------|
| | N | % | N | % |
| Residence | | | | |
| Own | 1,384,929 | 65.96 | 1,896,286 | 90.31 |
| Other | 27,221 | 1.30 | 43,736 | 2.08 |
| Workplace | 23,540 | 1.12 | 40,850 | 1.95 |
| Health care facility | 513,728 | 24.47 | 6,920 | 0.33 |
| School | 11,075 | 0.53 | 32,401 | 1.54 |
| Restaurant / food service | 484 | 0.02 | 4,132 | 0.20 |
| Public area | 8,612 | 0.41 | 23,687 | 1.13 |
| Other | 123,430 | 5.88 | 27,666 | 1.32 |
| Unknown | 6,732 | 0.32 | 24,073 | 1.15 |

Tables 22A and 22B (Appendix E) restrict the breakdown columns to single-substance cases. Prior to 2007, when multi-substance exposures were included, a relatively innocuous substance could be mentioned in a death column when, for example, the death was attributed to an antidepressant, opioid, or cyanide. This subtlety was not always appreciated by the user of this table. The restriction of the breakdowns to single-substance exposures should increase precision and reduce misrepresentation of the results in this unique by-substance table. Single substance cases reflect the majority

Table 3B. Population-adjusted exposures by age group.

| Age Group | Exposures/100k population | Number of Exposures ^a | Population ^b |
|--------------------------|---------------------------|----------------------------------|-------------------------|
| Children (<20) | | | |
| <1 | 2,525 | 103,979 | 4,118,388 |
| 1 | 7,189 | 295,411 | 4,109,372 |
| 2 | 6,936 | 284,308 | 4,098,763 |
| 3 | 3,304 | 135,029 | 4,086,292 |
| 4 | 1,637 | 66,653 | 4,070,976 |
| 5 | 986 | 39,967 | 4,052,875 |
| Child 6-12 | 454 | 131,587 | 29,007,680 |
| Teen 13-19 | 579 | 172,412 | 29,756,012 |
| Subgroup | 1,483 | 1,235,741 | 83,300,358 |
| Adults (≥20) | | | |
| 20-29 | 411 | 190,567 | 46,384,620 |
| 30-39 | 354 | 156,932 | 44,363,498 |
| 40-49 | 286 | 117,884 | 41,149,992 |
| 50-59 | 261 | 113,686 | 43,589,684 |
| 60-69 | 231 | 88,375 | 38,203,969 |
| 70-79 | 243 | 56,183 | 23,131,098 |
| 80-89 | 284 | 28,922 | 10,200,727 |
| 90+ | 266 | 7,132 | 2,677,064 |
| Subgroup | 340 | 849,884 | 249,700,652 |
| Overall Total | 631 | 2,099,751 | 333,001,010 |

^aNumber of Exposures excludes UNKNOWN ages from the individual age categories, but includes them in the Subtotals and Overall Total (see Table 3A)

^bAAPCC Total as of 1 July 2018, 333,001,010 (see Table 1A) [2].

Table 3A. Age and gender distribution of human exposures.

| Age (y) | Male | | Female | | Unknown gender | | Total | | Cumulative total | |
|--------------------------|----------------|----------------------|------------------|----------------------|----------------|----------------------|------------------|----------------------|------------------|---------------|
| | N | % of age group total | N | % of age group total | N | % of age group total | N | % of total exposures | N | % |
| Children (<20) | | | | | | | | | | |
| < 1 | 53,890 | 51.83 | 49,689 | 47.79 | 400 | 0.38 | 103,979 | 4.95 | 103,979 | 4.95 |
| 1 | 153,283 | 51.89 | 141,585 | 47.93 | 543 | 0.18 | 295,411 | 14.07 | 399,390 | 19.02 |
| 2 | 148,272 | 52.15 | 135,420 | 47.63 | 616 | 0.22 | 284,308 | 13.54 | 683,698 | 32.56 |
| 3 | 74,582 | 55.23 | 60,058 | 44.48 | 389 | 0.29 | 135,029 | 6.43 | 818,727 | 38.99 |
| 4 | 37,859 | 56.80 | 28,505 | 42.77 | 289 | 0.43 | 66,653 | 3.17 | 885,380 | 42.17 |
| 5 | 23,118 | 57.84 | 16,642 | 41.64 | 207 | 0.52 | 39,967 | 1.90 | 925,347 | 44.07 |
| Unknown ≤5 | 887 | 41.45 | 794 | 37.10 | 459 | 21.45 | 2,140 | 0.10 | 927,487 | 44.17 |
| Child 6-12 | 74,582 | 56.68 | 55,598 | 42.25 | 1,407 | 1.07 | 131,587 | 6.27 | 1,059,074 | 50.44 |
| Teen 13-19 | 65,006 | 37.70 | 106,442 | 61.74 | 964 | 0.56 | 172,412 | 8.21 | 1,231,486 | 58.65 |
| Unknown Child | 1,593 | 37.44 | 1,608 | 37.79 | 1,054 | 24.77 | 4,255 | 0.20 | 1,235,741 | 58.85 |
| Subtotal | 633,072 | 51.23 | 596,341 | 48.26 | 6,328 | 0.51 | 1,235,741 | 58.85 | 1,235,741 | 58.85 |
| Adults (≥20) | | | | | | | | | | |
| 20-29 | 87,057 | 45.68 | 103,257 | 54.18 | 253 | 0.13 | 190,567 | 9.08 | 1,426,308 | 67.93 |
| 30-39 | 69,712 | 44.42 | 87,094 | 55.50 | 126 | 0.08 | 156,932 | 7.47 | 1,583,240 | 75.40 |
| 40-49 | 48,746 | 41.35 | 69,059 | 58.58 | 79 | 0.07 | 117,884 | 5.61 | 1,701,124 | 81.02 |
| 50-59 | 46,525 | 40.92 | 67,085 | 59.01 | 76 | 0.07 | 113,686 | 5.41 | 1,814,810 | 86.43 |
| 60-69 | 34,201 | 38.70 | 54,118 | 61.24 | 56 | 0.06 | 88,375 | 4.21 | 1,903,185 | 90.64 |
| 70-79 | 20,596 | 36.66 | 35,566 | 63.30 | 21 | 0.04 | 56,183 | 2.68 | 1,959,368 | 93.31 |
| 80-89 | 10,119 | 34.99 | 18,781 | 64.94 | 22 | 0.08 | 28,922 | 1.38 | 1,988,290 | 94.69 |
| ≥90 | 2,244 | 31.46 | 4,885 | 68.49 | 3 | 0.04 | 7,132 | 0.34 | 1,995,422 | 95.03 |
| Unknown adult | 34,612 | 38.37 | 53,366 | 59.16 | 2,225 | 2.47 | 90,203 | 4.30 | 2,085,625 | 99.33 |
| Subtotal | 353,812 | 41.63 | 493,211 | 58.03 | 2,861 | 0.34 | 849,884 | 40.48 | 2,085,625 | 99.33 |
| Other | | | | | | | | | | |
| Unknown age | 4,846 | 34.31 | 6,432 | 45.53 | 2,848 | 20.16 | 14,126 | 0.67 | 2,099,751 | 100.00 |
| Total | 991,730 | 47.23 | 1,095,984 | 52.20 | 12,037 | 0.57 | 2,099,751 | 100.00 | 2,099,751 | 100.00 |

(87.9%) of all exposures. In contrast, only 43.7% of fatalities are single substance exposures (Table 5).

Tables 22A and 22B (Appendix E) tabulate 2,524,733 substance-exposures, of which 1,844,966 were single-substance exposures, including 949,972 (51.5%) nonpharmaceuticals and 894,994 (48.5%) pharmaceuticals. In 23.6% of single-substance exposures that involved pharmaceutical substances, the reason for exposure was intentional, compared to only 4.16% when the exposure involved a nonpharmaceutical substance. Correspondingly, treatment in an HCF was provided in a higher percentage of exposures that involved pharmaceutical substances (34.5%) compared with nonpharmaceutical substances (17.3%). Exposures to pharmaceuticals also had more severe outcomes. Of single-substance exposure-related fatal cases, 1,058 (78.3%) were pharmaceuticals compared with 293 (21.7%) nonpharmaceuticals.

Age and gender distributions

The age and gender distribution of human exposures is outlined in Table 3A. Children younger than 3 years of age were

involved in 32.6% of exposures and children ≤ 5 years accounted for approximately half of all human exposures (44.2%). A male predominance was found among cases involving children ≤ 12 years, but this gender distribution was reversed in teenagers and adults, with females comprising the majority of reported exposures. The overall rate of poison exposures reported to PCs is 631/100,000 population (Table 3B). The highest rates of poison exposures are in 1-year-old children (7,189/100,000 population) and 2-year-old children (6,936/100,000 population). Rates declined with age from 454/100,000 population in children 6-12 to 340/100,000 population in adults ≥ 20 years.

Caller site and exposure site

As shown in Table 2, of the 2,099,751 human exposure cases reported, 67.3% of exposures originated from a residence (own or other) while 92.4% of exposures actually occurred at a residence (own or other). Another 24.5% of exposure cases originated from an HCF. Beyond residences, exposures occurred in the workplace (1.95% of cases), schools (1.54%), HCF (0.330%), and restaurants or food services (0.197%).

Table 4. Distribution of age^a and gender for fatalities^b.

| Age (y) | Male | Female | Unknown | Total (%) | Cumulative total (%) |
|------------------|------------|------------|----------|-----------------------|-----------------------|
| < 1 year | 2 | 1 | 0 | 3 (0.2%) | 3 (0.2%) |
| 1 year | 1 | 4 | 0 | 5 (0.4%) | 8 (0.6%) |
| 2 years | 3 | 0 | 0 | 3 (0.2%) | 11 (0.8%) |
| 3 years | 1 | 0 | 0 | 1 (0.1%) | 12 (0.9%) |
| 4 years | 2 | 0 | 0 | 2 (0.2%) | 14 (1.0%) |
| 5 years | 0 | 0 | 0 | 0 (0.0%) | 14 (1.0%) |
| Child 6-12 years | 4 | 2 | 1 | 7 (0.5%) | 21 (1.6%) |
| Teen 13-19 years | 24 | 41 | 0 | 65 (4.8%) | 86 (6.4%) |
| 20-29 years | 121 | 71 | 0 | 192 (14.2%) | 278 (20.5%) |
| 30-39 years | 143 | 91 | 0 | 234 (17.3%) | 512 (37.8%) |
| 40-49 years | 95 | 91 | 0 | 186 (13.7%) | 698 (51.6%) |
| 50-59 years | 129 | 139 | 0 | 268 (19.8%) | 966 (71.3%) |
| 60-69 years | 93 | 105 | 0 | 198 (14.6%) | 1,164 (86.0%) |
| 70-79 years | 41 | 65 | 0 | 106 (7.8%) | 1,270 (93.8%) |
| 80-89 years | 25 | 38 | 0 | 63 (4.7%) | 1,333 (98.5%) |
| > = 90 years | 6 | 9 | 0 | 15 (1.1%) | 1,348 (99.6%) |
| Unknown adult | 4 | 0 | 0 | 4 (0.3%) | 1,352 (99.9%) |
| Unknown age | 1 | 1 | 0 | 2 (0.2%) | 1,354 (100.0%) |
| Total | 695 | 658 | 1 | 1,354 (100.0%) | 1,354 (100.0%) |

^aAge includes cases with both actual and estimated ages as shown in Table 21.

^bIncludes cases with RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory. This excludes reports with outcome of Death INDIRECT.

Table 5. Number of substances involved in human exposure cases.

| No. of Substances | Human exposures | | Fatal exposures ^a | |
|-------------------|------------------|---------------|------------------------------|---------------|
| | N | % | N | % |
| 1 | 1,844,966 | 87.87 | 591 | 43.65 |
| 2 | 158,306 | 7.54 | 328 | 24.22 |
| 3 | 53,626 | 2.55 | 197 | 14.55 |
| 4 | 22,108 | 1.05 | 102 | 7.53 |
| 5 | 9,729 | 0.46 | 56 | 4.14 |
| 6 | 4,742 | 0.23 | 34 | 2.51 |
| 7 | 2,508 | 0.12 | 25 | 1.85 |
| 8 | 1,420 | 0.07 | 7 | 0.52 |
| > =9 | 2,346 | 0.11 | 14 | 1.03 |
| Total | 2,099,751 | 100.00 | 1,354 | 100.00 |

^aIncludes cases with RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory. This excludes reports with outcome of Death INDIRECT.

Exposures in pregnancy

Exposure during pregnancy occurred in 6,888 women (0.328% of all human exposures). Of those with known pregnancy duration (n = 6,484), 45.3% occurred in the first trimester, 29.4% in the second trimester, and 25.3% in the third trimester. Most (72.6%) were unintentional exposures and 20.0% were intentional exposures. There were 3 deaths in pregnant females in 2018.

Table 6A. Reason for human exposure cases.

| Reason | N | % Human exposures |
|-----------------------------------|------------------|-------------------|
| Unintentional | | |
| Unintentional - General | 1,043,516 | 49.7 |
| Unintentional - Therapeutic error | 273,581 | 13.0 |
| Unintentional - Misuse | 146,275 | 7.0 |
| Unintentional - Environmental | 51,620 | 2.5 |
| Unintentional - Bite / sting | 38,783 | 1.8 |
| Unintentional - Occupational | 31,316 | 1.5 |
| Unintentional - Food poisoning | 19,161 | 0.9 |
| Unintentional - Unknown | 5,278 | 0.3 |
| Subtotal | 1,609,530 | 76.7 |
| Intentional | | |
| Intentional - Suspected suicide | 278,345 | 13.3 |
| Intentional - Misuse | 57,519 | 2.7 |
| Intentional - Abuse | 46,754 | 2.2 |
| Intentional - Unknown | 18,510 | 0.9 |
| Subtotal | 401,128 | 19.1 |
| Adverse Reaction | | |
| Adverse reaction - Drug | 35,070 | 1.7 |
| Adverse reaction - Other | 11,882 | 0.6 |
| Adverse reaction - Food | 5,814 | 0.3 |
| Subtotal | 52,766 | 2.5 |
| Unknown | | |
| Unknown reason | 18,650 | 0.9 |
| Subtotal | 18,650 | 0.9 |
| Other | | |
| Other - Contamination / tampering | 8,363 | 0.4 |
| Other - Malicious | 7,532 | 0.4 |
| Other - Withdrawal | 1,782 | 0.1 |
| Subtotal | 17,677 | 0.8 |
| Total | 2,099,751 | 100.0 |

Table 6B. Scenarios for therapeutic errors^a by age^b.

| Scenario | N | <=5 y (Row %) | 6-12 y (Row %) | 13-19 y (Row %) | >=20 y (Row %) | Unknown child (Row %) | Unknown adult (Row %) | Unknown age (Row %) |
|---|--------|------------------|-------------------|--------------------|-------------------|-----------------------------|-----------------------------|---------------------------|
| Inadvertently took/given medication twice | 84,689 | 16.56 | 12.04 | 5.85 | 59.18 | 0.08 | 5.89 | 0.40 |
| Wrong medication taken/given | 46,197 | 15.81 | 11.33 | 6.14 | 61.24 | 0.10 | 5.08 | 0.30 |
| Other incorrect dose | 40,471 | 31.32 | 11.09 | 6.67 | 46.64 | 0.10 | 3.84 | 0.35 |
| Medication doses given/taken too close together | 30,491 | 16.96 | 9.40 | 6.36 | 60.61 | 0.10 | 6.21 | 0.36 |
| Inadvertently took/given someone else's medication | 24,418 | 15.25 | 18.92 | 7.11 | 54.38 | 0.06 | 4.02 | 0.26 |
| Other/unknown therapeutic error | 18,047 | 21.00 | 10.72 | 6.48 | 54.75 | 0.14 | 6.33 | 0.59 |
| Incorrect dosing route | 10,688 | 9.09 | 4.16 | 4.10 | 71.05 | 0.23 | 10.55 | 0.80 |
| Confused units of measure | 7,415 | 57.88 | 16.61 | 4.11 | 19.76 | 0.11 | 1.42 | 0.11 |
| Incorrect formulation or concentration given | 5,936 | 48.74 | 16.61 | 5.00 | 27.19 | 0.12 | 2.12 | 0.22 |
| Health professional/iatrogenic error (pharmacist/nurse/physician) | 5,409 | 21.94 | 11.70 | 6.53 | 55.26 | 0.13 | 3.72 | 0.72 |
| More than 1 product containing same ingredient | 4,508 | 11.07 | 14.66 | 14.35 | 52.99 | 0.13 | 6.37 | 0.42 |
| Dispensing cup error | 4,476 | 70.53 | 15.80 | 2.23 | 10.32 | 0.09 | 0.96 | 0.07 |
| Drug interaction | 3,276 | 6.65 | 6.59 | 6.53 | 64.04 | 0.24 | 15.26 | 0.67 |
| 10-fold dosing error | 1,332 | 54.50 | 10.51 | 3.23 | 29.43 | 0.08 | 2.10 | 0.15 |
| Incorrect formulation or concentration dispensed | 1,257 | 45.66 | 13.68 | 5.49 | 31.11 | 0.24 | 2.47 | 1.35 |
| Exposure through breast milk | 191 | 91.62 | 0.00 | 0.52 | 6.28 | 1.05 | 0.52 | 0.00 |

^aAll cases with a scenario category of therapeutic error regardless of reason.

^bOf the human exposure cases reported to U.S. Poison Centers in 2018, 422,132 (20.1%) were coded to 1 or more of 54 scenarios.

Table 7. Distribution of reason for exposure by age.

| Reason | <=5 y | | 6-12 y | | 13-19 y | | >=20 y | | Unknown child | | Unknown adult | | Unknown age | | Total | |
|------------------|----------------|--------------|----------------|-------------|----------------|-------------|----------------|--------------|---------------|-------------|---------------|-------------|---------------|-------------|------------------|---------------|
| | N | Row % | N | Row % | N | Row % | N | Row % | N | Row % | N | Row % | N | Row % | N | % |
| Unintentional | 921,977 | 60.12 | 110,987 | 7.24 | 56,804 | 3.70 | 434,700 | 28.35 | 3,733 | 0.24 | 72,282 | 4.71 | 9,047 | 0.59 | 1,609,530 | 76.65 |
| Intentional | 42 | 0.01 | 15,405 | 3.92 | 107,988 | 27.50 | 266,259 | 67.80 | 233 | 0.06 | 8,187 | 2.08 | 3,014 | 0.77 | 401,128 | 19.10 |
| Adverse reaction | 3,313 | 7.14 | 2,614 | 5.64 | 3,675 | 7.93 | 35,881 | 77.38 | 138 | 0.30 | 6,259 | 13.50 | 886 | 1.91 | 52,766 | 2.51 |
| Unknown | 870 | 4.97 | 979 | 5.59 | 2,178 | 12.44 | 12,660 | 72.30 | 56 | 0.32 | 1,084 | 6.19 | 823 | 4.70 | 18,650 | 0.89 |
| Other | 1,285 | 8.46 | 1,602 | 10.55 | 1,767 | 11.63 | 10,181 | 67.02 | 95 | 0.63 | 2,391 | 15.74 | 356 | 2.34 | 17,677 | 0.84 |
| Total | 927,487 | 46.25 | 131,587 | 6.56 | 172,412 | 8.60 | 759,681 | 37.88 | 4,255 | 0.21 | 90,203 | 4.50 | 14,126 | 0.70 | 2,099,751 | 100.00 |

Table 8. Distribution of reason for exposure and age for fatalities^a.

| Reason | <=5 y | 6 - 12 y | 13 - 19 y | >=20 y | Unknown child | Unknown adult | Unknown age | Total |
|-----------------------------------|-----------|----------|-----------|--------------|---------------|---------------|-------------|--------------|
| Unintentional | | | | | | | | |
| Unintentional - General | 5 | 0 | 1 | 22 | 0 | 1 | 0 | 29 |
| Unintentional - Environmental | 2 | 4 | 1 | 26 | 0 | 1 | 1 | 35 |
| Unintentional - Occupational | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Unintentional - Therapeutic error | 1 | 0 | 0 | 37 | 0 | 0 | 0 | 38 |
| Unintentional - Misuse | 0 | 2 | 0 | 10 | 0 | 0 | 0 | 12 |
| Unintentional - Bite / sting | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| Unintentional - Unknown | 0 | 0 | 1 | 12 | 0 | 0 | 0 | 13 |
| Subtotal | 8 | 6 | 3 | 111 | 0 | 2 | 1 | 131 |
| Intentional | | | | | | | | |
| Intentional - Suspected suicide | 0 | 0 | 41 | 662 | 0 | 1 | 1 | 705 |
| Intentional - Misuse | 0 | 0 | 1 | 48 | 0 | 0 | 0 | 49 |
| Intentional - Abuse | 0 | 0 | 11 | 205 | 0 | 1 | 0 | 217 |
| Intentional - Unknown | 0 | 0 | 3 | 82 | 0 | 0 | 0 | 85 |
| Subtotal | 0 | 0 | 56 | 997 | 0 | 2 | 1 | 1,056 |
| Other | | | | | | | | |
| Other - Contamination / tampering | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Other - Malicious | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 8 |
| Subtotal | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 10 |
| Adverse reaction | | | | | | | | |
| Adverse reaction - Drug | 1 | 0 | 0 | 31 | 0 | 0 | 0 | 32 |
| Adverse reaction - Other | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Subtotal | 1 | 0 | 0 | 32 | 0 | 0 | 0 | 33 |
| Unknown | | | | | | | | |
| Unknown reason | 5 | 1 | 5 | 113 | 0 | 0 | 0 | 124 |
| Subtotal | 5 | 1 | 5 | 113 | 0 | 0 | 0 | 124 |
| Total | 14 | 7 | 65 | 1,262 | 0 | 4 | 2 | 1,354 |

^aIncludes cases with RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory. This excludes reports with outcome of Death INDIRECT.

Chronicity

Most human exposures, 1,807,022 (86.1%), were acute cases (single, repeated or continuous exposure occurring over 8 hours or less) compared to 984 (31.6%) acute cases among

the 3,111 fatalities. Chronic exposures (continuous or repeated exposures occurring over >8 hours) comprised 2.23% (46,861) of all human exposures. Acute-on-chronic exposures (single exposure that was preceded by a

Table 9. Route of exposure for human exposure cases.

| Route | Human exposures | | | Fatal exposures ^a | | |
|-------------------------------|------------------|-----------------|----------------|------------------------------|-----------------|---------------------------|
| | N | % of All Routes | % of All Cases | N | % of All Routes | % of All Cases |
| Ingestion | 1,753,788 | 79.30 | 83.52 | 1,066 | 72.17 | 78.73 |
| Dermal | 151,121 | 6.83 | 7.20 | 12 | 0.81 | 0.89 |
| Inhalation/nasal | 134,738 | 6.09 | 6.42 | 125 | 8.46 | 9.23 |
| Ocular | 88,108 | 3.98 | 4.20 | 2 | 0.14 | 0.15 |
| Bite/sting | 38,753 | 1.75 | 1.85 | 3 | 0.20 | 0.22 |
| Parenteral | 20,129 | 0.91 | 0.96 | 67 | 4.54 | 4.95 |
| Unknown | 17,845 | 0.81 | 0.85 | 182 | 12.32 | 13.44 |
| Other | 2,665 | 0.12 | 0.13 | 5 | 0.34 | 0.37 |
| Otic | 1,489 | 0.07 | 0.07 | 0 | 0.0 | 0 |
| Aspiration (with ingestion) | 1,125 | 0.05 | 0.05 | 12 | 0.81 | 0.89 |
| Vaginal | 1,019 | 0.05 | 0.05 | 1 | 0.07 | 0.07 |
| Rectal | 898 | 0.04 | 0.04 | 2 | 0.14 | 0.15 |
| Total Number of Routes | 2,211,678 | 100.00 | 105.33 | 1,477 | 100.00 | 109.08^b |

^aIncludes cases with RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory. This excludes reports with outcome of Death INDIRECT.

^bEach exposure case may have more than one route.

Table 10. Management site of human exposures.

| Site of management | N | % |
|--|------------------|--------------|
| Managed on site, nonhealth care facility | 1,378,067 | 65.6 |
| Managed in healthcare facility | | |
| Treated/evaluated and released | 305,004 | 14.5 |
| Admitted to critical care unit | 97,963 | 4.7 |
| Admitted to psychiatric facility | 89,671 | 4.3 |
| Patient lost to follow-up / left AMA | 80,660 | 3.8 |
| Admitted to noncritical care unit | 78,401 | 3.7 |
| Subtotal (managed in HCF) | 651,699 | 31.0 |
| Other | 19,723 | 0.9 |
| Refused referral | 25,428 | 1.2 |
| Unknown | 24,834 | 1.2 |
| Total | 2,099,751 | 100.0 |

continuous, repeated, or intermittent exposure occurring over a period greater than 8 hours) numbered 212,883 (10.1%).

Reason for exposure

The reason category for most human exposures was unintentional (76.7%), including: unintentional general (49.7%), therapeutic error (13.0%), and unintentional misuse (6.97%) (Table 6A).

Scenarios

Of the total 273,581 therapeutic errors, the most common scenarios for all ages included: inadvertent double-dosing (31.0%), wrong medication taken or given (16.9%), other incorrect dose (14.8%), doses given/taken too close together (11.1%), and inadvertent exposure to someone else's medication (8.93%). The types of therapeutic errors observed are different for each age group and are summarized in Table 6B.

Reason by age

Intentional exposures accounted for 19.1% of human exposures. Suicidal intent was suspected in 13.3% of cases, intentional misuse in 2.74%, and intentional abuse in 2.23%. Unintentional exposures outnumbered intentional exposures in all age groups with the exception of ages 13-19 years (Table 7). In contrast, of the 1,354 reported fatalities with

RCF 1-3, the major reason reported for children ≤ 5 years was unintentional, while most fatalities in adults (≥ 20 years) were intentional (Table 8).

Route of exposure

Ingestion was the route of exposure in 83.5% of cases (Table 9), followed in frequency by dermal (7.20%), inhalation/nasal (6.42%), and ocular routes (4.20%). For the 1,354 exposure-related fatalities, ingestion (78.7%), unknown (13.4%), inhalation/nasal (9.23%), and parenteral (4.95%) were the predominant exposure routes. Each exposure case may have more than one route.

Clinical effects

The NPDS database allows for the coding of up to 131 individual clinical effects (signs, symptoms, or laboratory abnormalities) for each case. Each clinical effect can be further defined as related, not related, or unknown if related. Clinical effects were coded in 808,147 (38.5%) cases (17.6% had 1 effect, 9.89% had 2 effects, 5.29% had 3 effects, 2.62% had 4 effects, 1.29% had 5 effects, and 1.80% had >5 effects coded). Of clinical effects coded, 77.3% were deemed related to the exposure, 9.87% were considered not related, and 12.8% were coded as unknown if related.

Case management site

The majority of cases reported to PCs were managed outside of a HCF (65.6%), usually at the site of exposure, primarily the patient's own residence (Table 10). Treatment in a HCF was rendered in 31.0% of cases. Only 1.21% of cases were referred to a HCF but refused referral.

Of the 651,699 cases managed in a HCF, 305,004 (46.8%) were treated and released, 97,963 (15.0%) were admitted to a critical care unit, 78,401 (12.0%) were admitted to a non-critical unit, and 89,671 (13.8%) were admitted directly to a psychiatric facility.

The percentage of patients treated in a HCF varied considerably with age. Only 12.5% of children ≤ 5 years and 18.4% of children between 6 and 12 years were managed in a HCF

Table 11. Medical outcome of human exposure cases by patient age^a.

| Outcome | <=5 y | | 6-12 y | | 13-19 y | | >=20 y | | Unknown child | | Unknown adult | | Unknown age | | Total | |
|---------------------------------|----------------|---------------|----------------|--------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|---------------|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| No effect | 209,362 | 22.57 | 23,130 | 17.58 | 33,521 | 19.44 | 97,917 | 12.89 | 615 | 14.45 | 8,664 | 9.61 | 1,533 | 10.9 | 374,742 | 17.85 |
| Minor effect | 72,988 | 7.87 | 18,869 | 14.34 | 48,775 | 28.29 | 173,709 | 22.87 | 325 | 7.64 | 11,245 | 12.47 | 1,735 | 12.3 | 327,646 | 15.60 |
| Moderate effect | 9,229 | 1.00 | 4,708 | 3.58 | 29,331 | 17.01 | 122,096 | 16.07 | 40 | 0.94 | 2,472 | 2.74 | 489 | 3.5 | 168,365 | 8.02 |
| Major effect | 903 | 0.10 | 353 | 0.27 | 3,472 | 2.01 | 24,548 | 3.23 | 6 | 0.14 | 174 | 0.19 | 54 | 0.4 | 29,510 | 1.41 |
| Death | 32 | 0.00 | 9 | 0.01 | 82 | 0.05 | 1,680 | 0.22 | 0 | 0.00 | 10 | 0.01 | 8 | 0.1 | 1,821 | 0.09 |
| No follow-up, nontoxic | 149,231 | 16.09 | 17,583 | 13.36 | 7,202 | 4.18 | 39,848 | 5.25 | 686 | 16.12 | 11,156 | 12.37 | 881 | 6.2 | 226,587 | 10.79 |
| No follow-up, minimal toxicity | 456,721 | 49.24 | 61,163 | 46.48 | 36,090 | 20.93 | 229,088 | 30.16 | 2,001 | 47.03 | 43,005 | 47.68 | 4,993 | 35.4 | 833,061 | 39.67 |
| No follow-up, potentially toxic | 17,101 | 1.84 | 3,009 | 2.29 | 9,878 | 5.73 | 38,872 | 5.12 | 479 | 11.26 | 9,870 | 10.94 | 4,028 | 28.5 | 83,237 | 3.96 |
| Unrelated effect | 11,901 | 1.28 | 2,757 | 2.10 | 4,021 | 2.33 | 30,718 | 4.04 | 103 | 2.42 | 3,592 | 3.98 | 400 | 2.8 | 53,492 | 2.55 |
| Death, indirect report | 19 | 0.00 | 6 | 0.00 | 40 | 0.02 | 1,205 | 0.16 | 0 | 0.00 | 15 | 0.02 | 5 | 0.0 | 1,290 | 0.06 |
| Total | 927,487 | 100.00 | 131,587 | 100.0 | 172,412 | 100.00 | 759,681 | 100.00 | 4,255 | 100.00 | 90,203 | 100.00 | 14,126 | 100.00 | 2,099,751 | 100.00 |

^aTotal number of cases where Death was an outcome (1,821 + 1,290) is greater than the number of fatalities (1,354) judged to be exposure-related (RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory).

Table 12. Medical outcome by reason for exposure in human exposures^a.

| Outcome | Unintentional | | Intentional | | Other | | Adverse reaction | | Unknown | | Total | |
|---------------------------------|------------------|---------------|----------------|---------------|---------------|---------------|------------------|---------------|---------------|---------------|------------------|---------------|
| | N | % | N | % | N | % | N | % | N | % | N | % |
| No effect | 298,213 | 18.53 | 71,216 | 17.75 | 2,043 | 11.56 | 1,832 | 3.47 | 1,438 | 7.71 | 374,742 | 17.85 |
| Minor effect | 192,026 | 11.93 | 117,125 | 29.20 | 3,080 | 17.42 | 12,739 | 24.14 | 2,676 | 14.35 | 327,646 | 15.60 |
| Moderate effect | 43,849 | 2.72 | 110,925 | 27.65 | 1,340 | 7.58 | 7,489 | 14.19 | 4,762 | 25.53 | 168,365 | 8.02 |
| Major effect | 3,224 | 0.20 | 23,036 | 5.74 | 273 | 1.54 | 996 | 1.89 | 1,981 | 10.62 | 29,510 | 1.41 |
| Death | 174 | 0.01 | 1,270 | 0.32 | 16 | 0.09 | 72 | 0.14 | 289 | 1.55 | 1,821 | 0.09 |
| No follow-up, nontoxic | 219,484 | 13.64 | 4,206 | 1.05 | 1,312 | 7.42 | 1,338 | 2.54 | 247 | 1.32 | 226,587 | 10.79 |
| No follow-up, minimal toxicity | 776,418 | 48.24 | 30,779 | 7.67 | 6,391 | 36.15 | 17,055 | 32.32 | 2,418 | 12.97 | 833,061 | 39.67 |
| No follow-up, potentially toxic | 42,798 | 2.66 | 32,379 | 8.07 | 1,880 | 10.64 | 3,275 | 6.21 | 2,905 | 15.58 | 83,237 | 3.96 |
| Unrelated effect | 33,295 | 2.07 | 9,067 | 2.26 | 1,336 | 7.56 | 7,965 | 15.09 | 1,829 | 9.81 | 53,492 | 2.55 |
| Death, indirect report | 49 | 0.00 | 1,125 | 0.28 | 6 | 0.03 | 5 | 0.01 | 105 | 0.56 | 1,290 | 0.06 |
| Total | 1,609,530 | 100.00 | 401,128 | 100.00 | 17,677 | 100.00 | 52,766 | 100.00 | 18,650 | 100.00 | 2,099,751 | 100.00 |

^aTotal number of cases where Death was an outcome (1,821 + 1,290) is greater than the number of fatalities (1,354) judged to be exposure-related (RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory).

Table 13. Duration of clinical effects by medical outcome.

| Duration of effect | Minor effect | | Moderate effect | | Major effect | |
|-----------------------|----------------|---------------|-----------------|---------------|---------------|---------------|
| | N | % | N | % | N | % |
| <=2 hours | 95,870 | 29.26 | 6,979 | 4.15 | 775 | 2.63 |
| >2 hours, <=8 hours | 95,896 | 29.27 | 33,617 | 19.97 | 1,978 | 6.70 |
| >8 hours, <=24 hours | 64,512 | 19.69 | 61,949 | 36.79 | 6,342 | 21.49 |
| >24 hours, <=3 days | 18,563 | 5.67 | 34,652 | 20.58 | 10,369 | 35.14 |
| >3 days, <=1 week | 3,904 | 1.19 | 8,164 | 4.85 | 5,337 | 18.09 |
| >1 week, <=1 month | 1,115 | 0.34 | 1,485 | 0.88 | 1,563 | 5.30 |
| >1 month | 346 | 0.11 | 352 | 0.21 | 222 | 0.75 |
| Anticipated permanent | 325 | 0.10 | 148 | 0.09 | 450 | 1.52 |
| Unknown | 47,115 | 14.38 | 21,019 | 12.48 | 2,474 | 8.38 |
| Total | 327,646 | 100.00 | 168,365 | 100.00 | 29,510 | 100.00 |

Table 14. Decontamination and therapeutic interventions.

| Therapy | N | % |
|--|------------------|--------------|
| Decontamination Only | 988,107 | 47.1 |
| Therapeutic Intervention Only | 266,244 | 12.7 |
| Decontamination and Therapeutic Intervention | 111,383 | 5.3 |
| Not Coded | 734,017 | 35.0 |
| Total | 2,099,751 | 100.0 |

compared to 66.0% of teenagers (13-19 years) and 50.0% of adults (age ≥ 20 years).

Medical outcome

Table 11 displays the medical outcome of human exposure cases distributed by age. Older age groups exhibit a greater number of severe medical outcomes. Table 12 compares

medical outcome and reason for exposure and shows a greater frequency of serious outcomes in intentional exposures.

The duration of effect is required for all cases which report at least 1 clinical effect and have a medical outcome of minor, moderate or major effect (n = 525,521; 25.0% of exposures). Table 13 demonstrates an increasing duration of the clinical effects observed with more severe outcomes.

Decontamination procedures and specific antidotes

Tables 14 and 15 outline the use of decontamination procedures, specific physiological antagonists (antidotes), and measures to enhance elimination in the treatment of patients reported in the NPDS database. These should be interpreted as minimum frequencies because of the limitations of telephone data gathering.

Ipecac-induced emesis for poisoning continues to decline as shown in Tables 16A and 16B. Ipecac was administered in only 21 (0.00226%) pediatric exposures in 2018. The continued decrease in ipecac syrup use over the last 2 decades was likely a result of ipecac use guidelines issued in 1997 by the American Academy of Clinical Toxicology and the European Association of Poisons Centres and Clinical Toxicologists and updated in 2004 [6,7]. In a separate report, the American Academy of Pediatrics concluded not only that ipecac should no longer be used routinely as a home treatment strategy, but also recommended disposal of home ipecac stocks [8]. A

Table 15. Therapy provided in human exposures by age.

| Therapy | < =5 y | 6-12 y | 13-19 y | > =20 y | Unknown child | Unknown adult | Unknown age | Total |
|---|---------|--------|---------|---------|---------------|---------------|-------------|---------|
| Decontamination | | | | | | | | |
| Cathartic | 275 | 116 | 1,255 | 2,307 | 0 | 10 | 1 | 3,964 |
| Charcoal, multiple doses | 66 | 14 | 270 | 642 | 0 | 2 | 1 | 995 |
| Charcoal, single dose | 4,940 | 864 | 10,918 | 18,989 | 0 | 87 | 14 | 35,812 |
| Dilute/irrigate/wash | 436,550 | 48,946 | 27,947 | 177,436 | 1,216 | 30,386 | 2,995 | 725,476 |
| Food/snack | 120,380 | 11,525 | 6,260 | 30,892 | 302 | 5,218 | 355 | 174,932 |
| Fresh air | 6,089 | 3,691 | 4,404 | 39,663 | 557 | 11,362 | 1,272 | 67,038 |
| Ipecac | 21 | 1 | 10 | 29 | 0 | 2 | 0 | 63 |
| Lavage | 15 | 8 | 183 | 567 | 0 | 4 | 0 | 777 |
| Other emetic | 6,848 | 647 | 1,424 | 5,890 | 12 | 418 | 61 | 15,300 |
| Whole bowel irrigation | 60 | 18 | 267 | 1,211 | 0 | 4 | 2 | 1,562 |
| Other Therapies | | | | | | | | |
| 2-PAM | 3 | 0 | 1 | 43 | 0 | 0 | 0 | 47 |
| Alkalinization | 109 | 93 | 2,209 | 9,803 | 0 | 20 | 8 | 12,242 |
| Amyl nitrite | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Antiarrhythmic | 14 | 15 | 336 | 2,061 | 0 | 4 | 1 | 2,431 |
| Antibiotics | 1,640 | 681 | 1,264 | 13,837 | 9 | 375 | 52 | 17,858 |
| Anticonvulsants ^a | 72 | 29 | 228 | 1,364 | 0 | 3 | 2 | 1,698 |
| Antiemetics | 1,223 | 761 | 8,576 | 16,866 | 2 | 76 | 11 | 27,515 |
| Antihistamines | 1,592 | 1,168 | 1,725 | 8,836 | 8 | 737 | 73 | 14,139 |
| Antihypertensives | 18 | 11 | 174 | 2,978 | 0 | 4 | 1 | 3,186 |
| Antivenom (Immune Fab fragment) – Not Specified | 274 | 242 | 200 | 1,818 | 0 | 9 | 2 | 2,545 |
| Antivenom/antitoxin (Non-Fab) – Not Specified | 18 | 25 | 18 | 249 | 1 | 1 | 0 | 312 |
| Atropine | 118 | 30 | 192 | 1,460 | 0 | 8 | 0 | 1,808 |
| BAL | 10 | 0 | 2 | 6 | 0 | 0 | 0 | 18 |
| Benzodiazepines | 1,084 | 635 | 7,433 | 33,265 | 1 | 142 | 28 | 42,588 |
| Bronchodilators | 315 | 214 | 385 | 4,691 | 2 | 170 | 22 | 5,799 |
| Calcium | 5,884 | 446 | 381 | 3,497 | 3 | 84 | 11 | 10,306 |
| Cardioversion | 4 | 3 | 19 | 293 | 0 | 1 | 0 | 320 |
| CPR | 74 | 11 | 133 | 1,591 | 0 | 8 | 5 | 1,822 |
| Deferoxamine | 9 | 1 | 40 | 25 | 0 | 0 | 0 | 75 |
| Digoxin Immune Fab | 10 | 11 | 18 | 491 | 0 | 3 | 0 | 533 |
| ECMO | 4 | 4 | 19 | 71 | 0 | 0 | 0 | 98 |
| EDTA | 35 | 2 | 0 | 5 | 0 | 0 | 0 | 42 |
| Ethanol | 0 | 0 | 2 | 54 | 0 | 0 | 0 | 56 |
| Extracorp. procedure (other) | 3 | 1 | 10 | 221 | 1 | 0 | 0 | 236 |
| Fluids, IV | 5,577 | 2,954 | 34,653 | 124,160 | 6 | 400 | 101 | 167,851 |
| Flumazenil | 72 | 20 | 200 | 1,109 | 0 | 6 | 1 | 1,408 |
| Folate | 8 | 3 | 48 | 1,738 | 0 | 3 | 2 | 1,802 |
| Fomepizole | 68 | 17 | 82 | 1,864 | 0 | 3 | 1 | 2,035 |
| Glucagon | 41 | 16 | 118 | 2,188 | 0 | 5 | 3 | 2,371 |
| Glucose, > 5% | 435 | 56 | 415 | 4,464 | 0 | 14 | 3 | 5,387 |
| Hemodialysis | 7 | 4 | 105 | 2,553 | 0 | 6 | 2 | 2,677 |
| Hemoperfusion | 0 | 1 | 2 | 43 | 0 | 0 | 0 | 46 |
| Hydroxocobalamin | 8 | 7 | 7 | 89 | 0 | 3 | 3 | 117 |
| Hyperbaric oxygen | 23 | 42 | 46 | 295 | 3 | 9 | 0 | 418 |
| Insulin | 16 | 16 | 145 | 2,435 | 0 | 2 | 0 | 2,614 |
| Intubation | 473 | 150 | 2,079 | 20,361 | 0 | 102 | 34 | 23,199 |
| Methylene blue | 18 | 5 | 18 | 196 | 0 | 2 | 0 | 239 |
| NAC, IV | 189 | 326 | 6,224 | 16,535 | 1 | 29 | 19 | 23,323 |
| NAC, PO | 19 | 31 | 749 | 1,814 | 0 | 4 | 1 | 2,618 |
| Nalmefene | 0 | 1 | 1 | 12 | 0 | 0 | 0 | 14 |
| Naloxone | 1,115 | 208 | 2,100 | 21,388 | 2 | 201 | 48 | 25,062 |
| Neuromuscular blocker | 49 | 16 | 208 | 1,842 | 0 | 5 | 4 | 2,124 |
| Octreotide | 100 | 14 | 52 | 432 | 0 | 1 | 0 | 599 |
| Other | 22,692 | 6,068 | 12,555 | 74,434 | 69 | 2,927 | 745 | 119,490 |
| Oxygen | 1,404 | 743 | 3,799 | 42,166 | 7 | 405 | 69 | 48,593 |
| Pacemaker | 3 | 1 | 3 | 226 | 0 | 0 | 0 | 233 |
| Penicillamine | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 3 |
| Physostigmine | 5 | 13 | 136 | 263 | 0 | 0 | 0 | 417 |
| Phytonadione | 18 | 11 | 115 | 994 | 0 | 4 | 0 | 1,142 |
| Pyridoxine | 6 | 5 | 41 | 585 | 0 | 0 | 0 | 637 |
| Sedation (other) | 522 | 255 | 2,733 | 22,488 | 0 | 79 | 27 | 26,104 |
| Sodium nitrite | 0 | 1 | 2 | 23 | 0 | 1 | 0 | 27 |
| Sodium thiosulfate | 4 | 3 | 0 | 35 | 0 | 1 | 0 | 43 |
| Steroids | 535 | 324 | 438 | 4,594 | 6 | 294 | 31 | 6,222 |
| Succimer | 136 | 8 | 13 | 60 | 0 | 1 | 0 | 218 |
| Transplantation | 1 | 0 | 6 | 21 | 0 | 0 | 0 | 28 |
| Vasopressors | 109 | 43 | 527 | 7,074 | 0 | 23 | 5 | 7,781 |
| Ventilator | 445 | 151 | 1,943 | 19,286 | 0 | 81 | 31 | 21,937 |

^aExcludes benzodiazepines.

Table 16A. Decontamination trends (1985-2018).

| Year | Human exposures | Ipecac administered (% of all exposures) | Activated charcoal administered (% of all exposures) | Exposures involving children ≤5 y (% of all exposures) | Ipecac administered (% of child exposures) | Activated charcoal administered (% of child exposures) |
|------|-----------------|---|--|--|---|---|
| 1985 | 886,389 | 132,947 (14.999) | 41,063 (4.6) | 568,691 (64.2) | 94,919 (16.6908) | 14,718 (2.59) |
| 1986 | 1,095,228 | 145,516 (13.286) | 56,481 (5.2) | 690,137 (63.0) | 99,688 (14.4447) | 18,191 (2.64) |
| 1987 | 1,164,648 | 117,840 (10.118) | 60,310 (5.2) | 730,228 (62.7) | 83,443 (11.427) | 18,507 (2.53) |
| 1988 | 1,364,113 | 114,654 (8.4050) | 88,876 (6.5) | 843,106 (61.8) | 80,749 (9.5776) | 26,118 (3.10) |
| 1989 | 1,578,968 | 110,545 (7.0011) | 101,368 (6.4) | 963,924 (61.0) | 79,192 (8.2156) | 30,345 (3.15) |
| 1990 | 1,646,946 | 98,986 (6.0103) | 108,341 (6.6) | 999,751 (60.7) | 73,469 (7.3487) | 31,579 (3.16) |
| 1991 | 1,836,364 | 94,877 (5.1666) | 129,092 (7.0) | 1,099,179 (59.9) | 73,069 (6.6476) | 36,177 (3.29) |
| 1992 | 1,862,796 | 79,493 (4.2674) | 135,625 (7.3) | 1,094,256 (58.7) | 63,486 (5.8018) | 38,937 (3.56) |
| 1993 | 1,747,147 | 65,078 (3.7248) | 127,893 (7.3) | 978,560 (56.0) | 50,834 (5.1948) | 35,791 (3.66) |
| 1994 | 1,926,992 | 51,356 (2.6651) | 138,247 (7.2) | 1,042,651 (54.1) | 41,489 (3.9792) | 35,670 (3.42) |
| 1995 | 2,023,089 | 47,359 (2.3409) | 155,880 (7.7) | 1,070,472 (52.9) | 38,372 (3.5846) | 38,095 (3.56) |
| 1996 | 2,155,952 | 39,376 (1.8264) | 157,331 (7.3) | 1,137,263 (52.7) | 32,622 (2.8685) | 37,986 (3.34) |
| 1997 | 2,192,088 | 32,098 (1.4643) | 156,213 (7.1) | 1,150,931 (52.5) | 26,536 (2.3056) | 35,856 (3.12) |
| 1998 | 2,241,082 | 26,653 (1.1893) | 152,134 (6.8) | 1,180,989 (52.7) | 22,247 (1.8838) | 34,302 (2.90) |
| 1999 | 2,201,156 | 21,942 (0.9968) | 145,853 (6.6) | 1,154,799 (52.5) | 18,326 (1.5869) | 33,812 (2.93) |
| 2000 | 2,168,248 | 18,177 (0.8383) | 145,911 (6.7) | 1,142,796 (52.7) | 15,239 (1.3335) | 31,554 (2.76) |
| 2001 | 2,267,979 | 16,058 (0.7080) | 149,442 (6.6) | 1,169,478 (51.6) | 13,389 (1.1449) | 30,367 (2.60) |
| 2002 | 2,380,028 | 13,555 (0.5695) | 149,527 (6.3) | 1,227,381 (51.6) | 11,163 (0.9095) | 30,340 (2.47) |
| 2003 | 2,395,582 | 9,284 (0.3875) | 140,412 (5.9) | 1,245,584 (52.0) | 7,310 (0.5869) | 28,888 (2.32) |
| 2004 | 2,438,643 | 4,701 (0.1928) | 135,969 (5.6) | 1,250,536 (51.3) | 3,366 (0.2692) | 28,335 (2.27) |
| 2005 | 2,424,180 | 3,027 (0.1249) | 123,263 (5.1) | 1,233,695 (50.9) | 1,999 (0.1620) | 26,338 (2.13) |
| 2006 | 2,403,539 | 2,176 (0.0905) | 111,351 (4.6) | 1,223,815 (50.9) | 1,337 (0.1092) | 23,843 (1.95) |
| 2007 | 2,482,041 | 1,740 (0.0701) | 106,010 (4.3) | 1,271,595 (51.2) | 1,052 (0.0827) | 22,829 (1.80) |
| 2008 | 2,491,049 | 1,205 (0.0484) | 97,297 (3.9) | 1,292,754 (51.9) | 641 (0.0496) | 21,286 (1.65) |
| 2009 | 2,479,355 | 658 (0.0265) | 84,805 (3.4) | 1,290,784 (52.1) | 330 (0.0256) | 19,168 (1.48) |
| 2010 | 2,384,825 | 360 (0.0200) | 74,431 (3.1) | 1,207,575 (50.6) | 163 (0.0100) | 16,581 (1.37) |
| 2011 | 2,334,004 | 262 (0.0100) | 66,770 (2.9) | 1,144,729 (49.1) | 98 (0.0100) | 13,930 (1.22) |
| 2012 | 2,275,141 | 193 (0.0100) | 57,888 (2.5) | 1,102,307 (48.5) | 83 (0.0100) | 11,284 (1.02) |
| 2013 | 2,188,013 | 134 (0.0100) | 50,459 (2.3) | 1,049,475 (48.0) | 42 (0.0000) | 9,334 (0.89) |
| 2014 | 2,165,142 | 132 (0.0061) | 46,030 (2.1) | 1,031,927 (47.7) | 41 (0.0040) | 7,977 (0.77) |
| 2015 | 2,168,371 | 105 (0.0048) | 42,712 (2.0) | 1,017,369 (46.9) | 29 (0.0029) | 6,965 (0.68) |
| 2016 | 2,159,032 | 88 (0.0041) | 40,633 (1.9) | 1,002,344 (46.4) | 22 (0.0022) | 6,333 (0.63) |
| 2017 | 2,115,186 | 64 (0.0030) | 39,985 (1.9) | 956,871 (45.2) | 12 (0.0013) | 5,743 (0.60) |
| 2018 | 2,099,751 | 63 (0.0030) | 36,807 (1.8) | 927,487 (44.2) | 21 (0.0023) | 5,006 (0.54) |

Table 16B. Decontamination trends: total human and pediatric exposures <=5 years^a.

| Therapy | Human exposures | | Exposures children <=5 y | |
|---------------------------------|-----------------|-------------|--------------------------|-------------|
| | N | % | N | % |
| Activated charcoal administered | 36,807 | 1.75 | 5,006 | 0.54 |
| Cathartic | 3,964 | 0.19 | 275 | 0.03 |
| Ipecac administered | 63 | 0.00 | 21 | 0.00 |
| Lavage | 777 | 0.04 | 15 | 0.00 |
| Other Emetic | 15,300 | 0.73 | 6,848 | 0.74 |
| Whole Bowel Irrigation | 1,562 | 0.07 | 60 | 0.01 |
| Total | 58,473 | 2.78 | 12,225 | 1.32 |

^aHuman exposures = 2,099,751; Pediatric exposures = 927,487.

decline was also observed since the early 1990s for reported use of activated charcoal. While not as dramatic as the decline in use of ipecac, reported use of activated charcoal decreased from 3.66% of pediatric cases in 1993 to just 0.540% in 2018.

Top substances in human exposures

Table 17A presents the 25 most common substance categories, listed by frequency of human exposure. This ranking provides an indication where prevention efforts might be focused, as well as the types of serious exposures PCs

regularly manage. It is relevant to know whether exposures to these substances are increasing or decreasing.

To better understand these relationships, we previously examined exposures with more serious outcomes per year over the last 19 years for the change over time for each of the 68 major generic categories via least squares linear regression. For more recent trends, we performed the same analysis of the increase in more serious outcomes over the last 10 years. The serious outcome exposure cases per year over this period were increasing for 35, static for 5, and decreasing for 28 of the 68 categories with data for the entire time period. The change over time for the 10 yearly values was statistically significant ($p < 0.05$) for 39 of the 68 categories with data for the entire time period. Table 17B shows the 25 categories which were increasing the most rapidly over the past 10 years. The increases for these substance categories over the 19-year period are included for comparison. Statistical significance of the linear regressions can be verified by noting the 95% confidence interval on the rate of increase excludes zero for all but 1 of the 25 categories. Figure 4 shows the change over time and linear regressions for the top 4 increasing categories in Table 17B for the 10-year period.

Tables 17C and 17D present exposure results for children and adults, respectively, and show the differences between

Table 17A. Substance categories most frequently involved in human exposures (top 25).

| Substance (Major Generic Category) | All substances | | Single substance exposures | |
|---|----------------|----------------|----------------------------|----------------|
| | substances | % ^a | exposures | % ^b |
| Analgesics | 275,747 | 10.85 | 174,269 | 9.45 |
| Cleaning Substances (Household) | 185,139 | 7.28 | 166,408 | 9.02 |
| Cosmetics/Personal Care Products | 165,959 | 6.53 | 159,328 | 8.64 |
| Sedative/Hypnotics/Antipsychotics | 140,692 | 5.53 | 51,495 | 2.79 |
| Antidepressants | 132,807 | 5.22 | 56,891 | 3.08 |
| Cardiovascular Drugs | 111,194 | 4.37 | 46,499 | 2.52 |
| Antihistamines | 110,346 | 4.34 | 74,698 | 4.05 |
| Foreign Bodies/Toys/Miscellaneous | 93,197 | 3.67 | 90,166 | 4.89 |
| Pesticides | 83,305 | 3.28 | 77,623 | 4.21 |
| Alcohols | 71,878 | 2.83 | 21,274 | 1.15 |
| Stimulants and Street Drugs | 71,117 | 2.80 | 39,238 | 2.13 |
| Anticonvulsants | 66,340 | 2.61 | 25,936 | 1.41 |
| Topical Preparations | 64,274 | 2.53 | 62,512 | 3.39 |
| Dietary Supplements/Herbals/Homeopathic | 59,259 | 2.33 | 49,485 | 2.68 |
| Vitamins | 58,862 | 2.32 | 48,630 | 2.64 |
| Hormones and Hormone Antagonists | 56,167 | 2.21 | 36,033 | 1.95 |
| Cold and Cough Preparations | 54,719 | 2.15 | 36,977 | 2.00 |
| Antimicrobials | 51,767 | 2.04 | 41,183 | 2.23 |
| Gastrointestinal Preparations | 47,622 | 1.87 | 33,952 | 1.84 |
| Chemicals | 45,378 | 1.79 | 39,175 | 2.12 |
| Bites and Envenomations | 43,337 | 1.70 | 42,671 | 2.31 |
| Plants | 42,495 | 1.67 | 40,233 | 2.18 |
| Fumes/Gases/Vapors | 34,144 | 1.34 | 31,476 | 1.71 |
| Other/Unknown Nondrug Substances | 31,739 | 1.25 | 29,677 | 1.61 |
| Electrolytes and Minerals | 30,046 | 1.18 | 24,052 | 1.30 |

^aPercentages are based on the total number of substances reported in all exposures (N = 2,541,958)

^bPercentages are based on the total number of single substance exposures (N = 1,844,966).

substance categories involved in pediatric and adult exposures.

Table 17E reports the 21 categories of substances most frequently involved in pediatric (≤ 5 years) fatalities in 2015.

Table 17F reports the 25 Drug ID categories most frequently queried in 2018, highlighting the value of Drug ID information to the AAPCC, public health, public safety, and regulatory agencies. Internet based resources do not afford the caller the option to speak with a health care professional, if needed. Proper resources to continue this vital public service are essential, especially since the top 10 substance categories include antibiotics and drugs with widespread use and abuse potential, such as opioids and benzodiazepines.

Table 17G reports the 25 substance categories most frequently reported in exposures involving pregnant patients.

Changes over time

Total encounters peaked in 2008 at 4,333,012 including 2,491,049 human exposure cases and 1,703,762 information requests. Total encounters decreased 2.96% from 2,607,413 in 2017 to 2,530,238 in 2018. Information requests decreased by 15.5% from 435,540 in 2017 to 368,025 in 2018, with a 30.2% decrease in drug identification requests and a 3.08% increase in HCF information requests. Human exposures

Table 17B. Substance categories with the greatest rate of exposure increase (top 25).

| Substance (Major Generic Category) | Increase in serious exposures per year ^a | | | | Single or Multi-Substance Exposures in 2018 |
|--|---|---------------------|---------|---------------------|---|
| | 10 Year | | 19 Year | | |
| | Mean | 95% CI ^b | Mean | 95% CI ^c | |
| Antidepressants | 1,887 | [1766, 2008] | 1409 | [1276, 1541] | 44,014 |
| Stimulants and Street Drugs | 1,447 | [876, 2017] | 936 | [709, 1164] | 26,630 |
| Antihistamines | 1,018 | [934, 1102] | 684 | [594, 774] | 17,808 |
| Anticonvulsants | 965 | [879, 1052] | 734 | [674, 795] | 18,911 |
| Cardiovascular Drugs | 949 | [866, 1033] | 981 | [949, 1013] | 23,600 |
| Alcohols | 837 | [731, 943] | 922 | [868, 976] | 25,322 |
| Unknown Drug | 665 | [581, 749] | 423 | [359, 488] | 9,793 |
| Analgesics | 654 | [731, 943] | 1689 | [1433, 1945] | 49,352 |
| Sedative/Hypnotics/Antipsychotics | 395 | [167, 623] | 1828 | [1468, 2188] | 50,144 |
| Hormones and Hormone Antagonists | 260 | [239, 280] | 254 | [243, 264] | 7,145 |
| Gastrointestinal Preparations | 176 | [144, 208] | 107 | [89, 124] | 3,498 |
| Muscle Relaxants | 161 | [93, 228] | 402 | [345, 460] | 10,351 |
| Cold and Cough Preparations | 117 | [2, 233] | 209 | [154, 263] | 7,929 |
| Dietary Supplements/Herbals/Homeopathic | 111 | [52, 171] | 15 | [-27, 58] | 2,503 |
| Weapons of Mass Destruction | 55 | [43, 66] | 23 | [15, 31] | 522 |
| Anticoagulants | 40 | [30, 50] | 48 | [43, 53] | 1,237 |
| Diuretics | 37 | [23, 52] | 50 | [43, 58] | 1,508 |
| Electrolytes and Minerals | 36 | [30, 42] | 40 | [36, 45] | 1,185 |
| Fumes/Gases/Vapors ^d | 35 | [20, 51] | -8 | [-22, 6] | 3,756 |
| Asthma Therapies ^d | 30 | [5, 55] | 2 | [-7, 11] | 1,016 |
| Cleaning Substances (Household) ^d | 29 | [-35, 93] | -68 | [-100, -36] | 7,129 |
| Narcotic Antagonists | 28 | [19, 36] | 14 | [10, 18] | 391 |
| Tobacco/Nicotine/eCigarette Products | 27 | [16, 37] | 13 | [8, 18] | 407 |
| Vitamins | 19 | [10, 27] | 35 | [30, 41] | 1,065 |
| Anesthetics ^d | 16 | [9, 24] | 8 | [4, 12] | 533 |

^aSerious exposures have outcomes of Moderate, Major or Death.

^bIncrease and confidence intervals are based on least squares linear regression of the number of calls per year for 2009-2018.

^cIncrease and confidence intervals are based on least squares linear regression of the number of calls per year for 2000-2018.

^dNot in top 25 for 2000-2018.

Table 17C. Substance categories most frequently involved in pediatric (≤ 5 years) exposures (top 25)^a.

| Substance (Major Generic Category) | All substances | % ^b | Single substance exposures | % ^c |
|---|----------------|----------------|----------------------------|----------------|
| Cosmetics/Personal Care Products | 117,298 | 12.12 | 114,718 | 12.75 |
| Cleaning Substances (Household) | 103,387 | 10.68 | 99,514 | 11.06 |
| Analgesics | 87,526 | 9.04 | 79,617 | 8.85 |
| Foreign Bodies/Toys/Miscellaneous | 66,519 | 6.87 | 64,911 | 7.21 |
| Topical Preparations | 45,397 | 4.69 | 44,522 | 4.95 |
| Antihistamines | 44,734 | 4.62 | 40,516 | 4.50 |
| Vitamins | 41,581 | 4.30 | 37,215 | 4.14 |
| Dietary Supplements/Herbals/Homeopathic | 39,984 | 4.13 | 37,456 | 4.16 |
| Pesticides | 35,015 | 3.62 | 34,029 | 3.78 |
| Gastrointestinal Preparations | 25,293 | 2.61 | 22,846 | 2.54 |
| Plants | 24,342 | 2.51 | 23,392 | 2.60 |
| Antimicrobials | 21,504 | 2.22 | 20,145 | 2.24 |
| Arts/Crafts/Office Supplies | 20,965 | 2.17 | 20,333 | 2.26 |
| Cardiovascular Drugs | 20,555 | 2.12 | 13,045 | 1.45 |
| Cold and Cough Preparations | 19,342 | 2.00 | 17,516 | 1.95 |
| Electrolytes and Minerals | 17,817 | 1.84 | 16,082 | 1.79 |
| Deodorizers | 17,662 | 1.82 | 17,423 | 1.94 |
| Essential Oils | 17,247 | 1.78 | 16,242 | 1.81 |
| Hormones and Hormone Antagonists | 16,713 | 1.73 | 13,064 | 1.45 |
| Other/Unknown Nondrug Substances | 12,247 | 1.27 | 11,784 | 1.31 |
| Antidepressants | 11,542 | 1.19 | 8,394 | 0.93 |
| Chemicals | 11,237 | 1.16 | 10,396 | 1.16 |
| Tobacco/Nicotine/eCigarette Products | 10,362 | 1.07 | 10,266 | 1.14 |
| Stimulants and Street Drugs | 9,363 | 0.97 | 8,116 | 0.90 |
| Alcohols | 8,816 | 0.91 | 8,582 | 0.95 |

^aIncludes all children with actual or estimated ages ≤ 5 years old. Results do not include "Unknown Child" or "Unknown Age".

^bPercentages are based on the total number of substances reported in pediatric exposures (N = 968,057)

^cPercentages are based on the total number of single substance pediatric exposures (N = 899,827).

Table 17D. Substance categories most frequently involved in adult (≥ 20 years) exposures (top 25)^a.

| Substance (Major Generic Category) | All substances | % ^b | Single substance exposures | % ^c |
|------------------------------------|----------------|----------------|----------------------------|----------------|
| Analgesics | 128,419 | 10.93 | 59,768 | 8.91 |
| Sedative/Hypnotics/Antipsychotics | 109,739 | 9.34 | 34,890 | 5.20 |
| Antidepressants | 86,018 | 7.32 | 30,539 | 4.55 |
| Cardiovascular Drugs | 76,647 | 6.52 | 26,277 | 3.92 |
| Cleaning Substances (Household) | 64,340 | 5.48 | 51,865 | 7.74 |
| Alcohols | 56,099 | 4.77 | 10,048 | 1.50 |
| Anticonvulsants | 49,730 | 4.23 | 16,944 | 2.53 |
| Stimulants and Street Drugs | 41,940 | 3.57 | 19,435 | 2.90 |
| Pesticides | 40,760 | 3.47 | 36,705 | 5.47 |
| Antihistamines | 39,921 | 3.40 | 18,577 | 2.77 |
| Hormones and Hormone Antagonists | 33,565 | 2.86 | 19,334 | 2.88 |
| Cosmetics/Personal Care Products | 31,288 | 2.66 | 28,433 | 4.24 |
| Bites and Envenomations | 28,933 | 2.46 | 28,475 | 4.25 |
| Chemicals | 26,747 | 2.28 | 22,323 | 3.33 |
| Fumes/Gases/Vapors | 24,945 | 2.12 | 22,850 | 3.41 |
| Antimicrobials | 21,764 | 1.85 | 15,463 | 2.31 |
| Cold and Cough Preparations | 20,958 | 1.78 | 11,202 | 1.67 |
| Muscle Relaxants | 20,213 | 1.72 | 7,301 | 1.09 |
| Hydrocarbons | 17,450 | 1.48 | 16,044 | 2.39 |
| Gastrointestinal Preparations | 16,927 | 1.44 | 7,869 | 1.17 |
| Unknown Drug | 15,423 | 1.31 | 9,617 | 1.43 |
| Topical Preparations | 14,736 | 1.25 | 14,057 | 2.10 |
| Other/Unknown Nondrug Substances | 14,717 | 1.25 | 13,465 | 2.01 |
| Foreign Bodies/Toys/Miscellaneous | 12,781 | 1.09 | 11,776 | 1.76 |
| Miscellaneous Drugs | 12,549 | 1.07 | 6,383 | 0.95 |

^aIncludes all adults with actual or estimated ages ≥ 20 years old. Results also include "Unknown Adult" but do not include "Unknown Age".

^bPercentages are based on the total number of substances reported in adult exposures (N = 1,175,150)

^cPercentages are based on the total number of single substance adult exposures (N = 670,521).

Table 17E. Substance categories most frequently involved in pediatric (≤ 5 years) deaths^a.

| Substance (Major Generic Category) | All substances | % ^b | Single substance exposures | % ^c |
|--|----------------|----------------|----------------------------|----------------|
| Fumes/Gases/Vapors | 14 | 21.21 | 2 | 5.41 |
| Analgesics | 11 | 16.67 | 7 | 18.92 |
| Unknown Drug | 8 | 12.12 | 7 | 18.92 |
| Antihistamines | 7 | 10.61 | 3 | 8.11 |
| Stimulants and Street Drugs | 4 | 6.06 | 1 | 2.70 |
| Anesthetics | 3 | 4.55 | 2 | 5.41 |
| Batteries | 2 | 3.03 | 2 | 5.41 |
| Cardiovascular Drugs | 2 | 3.03 | 2 | 5.41 |
| Cleaning Substances (Household) | 2 | 3.03 | 2 | 5.41 |
| Miscellaneous Drugs | 2 | 3.03 | 1 | 2.70 |
| Alcohols | 1 | 1.52 | 1 | 2.70 |
| Antineoplastics | 1 | 1.52 | 0 | 0.00 |
| Asthma Therapies | 1 | 1.52 | 1 | 2.70 |
| Cold and Cough Preparations | 1 | 1.52 | 0 | 0.00 |
| Infectious and Toxin-Mediated Diseases | 1 | 1.52 | 1 | 2.70 |
| Muscle Relaxants | 1 | 1.52 | 1 | 2.70 |
| Pesticides | 1 | 1.52 | 0 | 0.00 |
| Plants | 1 | 1.52 | 1 | 2.70 |
| Radiation | 1 | 1.52 | 1 | 2.70 |
| Serums, Toxoids, Vaccines | 1 | 1.52 | 1 | 2.70 |
| Weapons of Mass Destruction | 1 | 1.52 | 1 | 2.70 |
| Total | 66 | 100.00 | 37 | 100.00 |

^aIncludes all children with actual or estimated ages ≤ 5 years old. Results do not include "Unknown Child" or "Unknown Age". Includes death and death, indirect regardless of RCF.

^bPercentages are based on the total number of substances reported in pediatric fatalities (N = 66)

^cPercentages are based on the total number of single substance pediatric fatalities (N = 37).

Table 17F. Substance categories most frequently identified in drug identification requests (top 25).

| Substance (Major Generic Category) | All substances | % ^a |
|------------------------------------|----------------|----------------|
| Analgesics | 24,472 | 31.61 |
| Sedative/Hypnotics/Antipsychotics | 13,422 | 17.34 |
| Unknown Drug | 6,722 | 8.68 |
| Cardiovascular Drugs | 4,955 | 6.40 |
| Antidepressants | 3,690 | 4.77 |
| Anticonvulsants | 3,559 | 4.60 |
| Muscle Relaxants | 3,114 | 4.02 |
| Stimulants and Street Drugs | 2,986 | 3.86 |
| Antihistamines | 2,772 | 3.58 |
| Antimicrobials | 2,706 | 3.50 |
| Information Calls | 2,364 | 3.05 |
| Gastrointestinal Preparations | 1,659 | 2.14 |
| Hormones and Hormone Antagonists | 1,596 | 2.06 |
| Diuretics | 919 | 1.19 |
| Miscellaneous Drugs | 761 | 0.98 |
| Cold and Cough Preparations | 360 | 0.47 |
| Anticoagulants | 231 | 0.30 |
| Asthma Therapies | 193 | 0.25 |
| Electrolytes and Minerals | 181 | 0.23 |
| Vitamins | 154 | 0.20 |
| Anticholinergic Drugs | 151 | 0.20 |
| Weapons of Mass Destruction | 73 | 0.09 |
| Narcotic Antagonists | 61 | 0.08 |
| Other/Unknown Nondrug Substances | 60 | 0.08 |
| Antineoplastics | 49 | 0.06 |

^aPercentages are based on the total number of substances reported in all drug identification requests (N = 77,412)

Table 17G. Substance categories most frequently involved in pregnant exposures^a (top 25).

| Substance (Major Generic Category) | All substances | % ^b | Single substance exposures | % ^c |
|--|----------------|----------------|----------------------------|----------------|
| Analgesics | 840 | 10.60 | 534 | 8.62 |
| Cleaning Substances (Household) | 636 | 8.02 | 523 | 8.45 |
| Fumes/Gases/Vapors | 531 | 6.70 | 510 | 8.24 |
| Pesticides | 510 | 6.43 | 469 | 7.57 |
| Bites and Envenomations | 338 | 4.26 | 333 | 5.38 |
| Sedative/Hypnotics/Antipsychotics | 320 | 4.04 | 153 | 2.47 |
| Antidepressants | 318 | 4.01 | 172 | 2.78 |
| Vitamins | 298 | 3.76 | 214 | 3.46 |
| Antihistamines | 264 | 3.33 | 154 | 2.49 |
| Chemicals | 246 | 3.10 | 212 | 3.42 |
| Cosmetics/Personal Care Products | 214 | 2.70 | 200 | 3.23 |
| Foreign Bodies/Toys/Miscellaneous | 214 | 2.70 | 208 | 3.36 |
| Antimicrobials | 194 | 2.45 | 137 | 2.21 |
| Stimulants and Street Drugs | 186 | 2.35 | 99 | 1.60 |
| Infectious and Toxin-Mediated Diseases | 175 | 2.21 | 170 | 2.75 |
| Hydrocarbons | 168 | 2.12 | 150 | 2.42 |
| Plants | 164 | 2.07 | 155 | 2.50 |
| Hormones and Hormone Antagonists | 155 | 1.96 | 125 | 2.02 |
| Other/Unknown Nondrug Substances | 145 | 1.83 | 136 | 2.20 |
| Gastrointestinal Preparations | 136 | 1.72 | 87 | 1.41 |
| Electrolytes and Minerals | 134 | 1.69 | 94 | 1.52 |
| Cold and Cough Preparations | 128 | 1.61 | 84 | 1.36 |
| Alcohols | 117 | 1.48 | 44 | 0.71 |
| Cardiovascular Drugs | 110 | 1.39 | 71 | 1.15 |
| Anticonvulsants | 106 | 1.34 | 52 | 0.84 |

^aIncludes all patient classified as pregnant and all female patients with a 'duration of pregnancy' greater than 0.

^bPercentages are based on the total number of substances reported in pregnant exposures (N = 7,927).

^cPercentages are based on the total number of single substance pregnant exposures (N = 6,192).

decreased by 0.730% from 2,115,186 to 2,099,751 cases over the same time period.

Figure 5 shows the year-to-year change through 2018 as a percentage of year 2000 for human exposure cases broken down into cases with more serious outcomes (death, major effect, and moderate effect) and less serious outcomes (minor effect, no effect, not followed (non-toxic), not followed (minimal toxicity possible), unable to follow (potentially toxic), and unrelated effect. Since 2000, cases with more serious outcomes have increased by 4.45% (95% CI [4.19%, 4.71%]) per year from 108,148 cases in 2000 to 199,696 cases in 2018. However, cases with less serious outcomes have decreased since 2008 by 2.33% [-2.77%, -1.89%] per year from 2,339,460 in 2008 to 1,898,765 cases in 2018. This decrease in less serious exposures has driven the overall decrease in human exposures since 2008. Thus, we see a consistent increase in exposure cases from HCFs (Figure 3), as well as for the most severe exposures (Figure 5), while there is a continued trend toward decreasing cases involving less severe exposures.

Emerging trends – adolescent intentional – suspected suicides

A concerning, current trend is the increase in suicide attempts since 2000 for all ages of Americans. Over the period 2000-2016, the age-adjusted suicide rate in the US increased by nearly 30%. By 2016, suicide was the 10th leading cause of death, as the overall rate has steadily increased

Table 18. Categories associated with largest number of fatalities (top 25)^a.

| Substance (Minor Generic Category) | All substances | % ^b | Single substance exposures | % ^c |
|--|----------------|----------------|----------------------------|----------------|
| Miscellaneous Sedative/Hypnotics/Antipsychotics | 333 | 10.66 | 16 | 2.71 |
| Miscellaneous Stimulants and Street Drugs | 293 | 9.38 | 70 | 11.84 |
| Opioids | 251 | 8.03 | 41 | 6.94 |
| Miscellaneous Alcohols | 196 | 6.27 | 16 | 2.71 |
| Acetaminophen Alone | 175 | 5.60 | 77 | 13.03 |
| Calcium Antagonist | 154 | 4.93 | 38 | 6.43 |
| Beta Blockers | 122 | 3.90 | 18 | 3.05 |
| Acetaminophen Combinations | 101 | 3.23 | 21 | 3.55 |
| Selective Serotonin Reuptake Inhibitors (SSRI) | 94 | 3.01 | 0 | 0.00 |
| Miscellaneous Antidepressants | 90 | 2.88 | 11 | 1.86 |
| Hypoglycemic, Single Agent | 85 | 2.72 | 14 | 2.37 |
| Miscellaneous Unknown Drug | 75 | 2.40 | 18 | 3.05 |
| Acetylsalicylic Acid Alone | 65 | 2.08 | 22 | 3.72 |
| Tricyclic Antidepressants (TCA) | 65 | 2.08 | 19 | 3.21 |
| Miscellaneous Cardiovascular Drugs | 56 | 1.79 | 18 | 3.05 |
| Anticonvulsants: Gamma Aminobutyric Acid and Analogs | 55 | 1.76 | 2 | 0.34 |
| Sedating Antihistamines | 55 | 1.76 | 18 | 3.05 |
| Miscellaneous Fumes/Gases/Vapors | 53 | 1.70 | 33 | 5.58 |
| Nonsteroidal Antiinflammatory Drugs | 53 | 1.70 | 1 | 0.17 |
| Miscellaneous Anticonvulsants | 52 | 1.66 | 1 | 0.17 |
| Miscellaneous Muscle Relaxants | 52 | 1.66 | 4 | 0.68 |
| Cannabinoids and Analogs | 45 | 1.44 | 3 | 0.51 |
| Serotonin Norepinephrine Reuptake Inhibitors (SNRI) | 44 | 1.41 | 3 | 0.51 |
| Angiotensin Converting Enzyme Inhibitor | 37 | 1.18 | 0 | 0.00 |
| Miscellaneous Chemicals | 36 | 1.15 | 17 | 2.88 |

^aNumbers represent total exposures associated with 1,354 fatalities (with RCF of 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory); each fatality may have had exposure to more than one substance.

^bPercentages are based on the total number of substances reported in fatal exposures (N = 3,125).

^cPercentages are based on the total number of single substance fatal exposures (N = 591).

since year 2000 [3]. Particularly disconcerting is that adolescent suicide attempts logged in NPDS have increased at an alarming rate in recent years. Despite an early decline in suicide attempts amongst the youngest adolescents[4], the rates have increased in all subgroups from 2011-2018, in which a marked increase was noted in suicide attempts reported to poison centers over this time period (Figure 6A). A particularly significant trend was identified for cases in which the self-poisoning attempt was made by individuals aged 10-19 years. The percent of intentional – suspected suicide cases in the 10-19 year ages were relatively constant compared to year 2000, until 2011 in which a change in the course was noted. (Figure 6A). The percent of all intentional – suspected suicides for 10-19 year age intentional – suspected suicides was 28.7% in 2000, decreasing to a nadir of 21.8% in 2010, and then rapidly increasing to 31.7% in 2018 (Figure 6B). The 20 most rapidly increasing minor substance categories in 10-19 year intentional – suspected suicides for the past 8 years (corresponding to the time period of the most rapidly increasing adolescent suicides) are depicted in Figure 7. The five most rapidly increasing categories are selective serotonin reuptake inhibitors (SSRIs), nonsteroidal anti-inflammatory agents (NSAIDs), acetaminophen alone,

sedating antihistamines and miscellaneous sedative/hypnotics/antipsychotics. This may reflect increasing availability of these medications to adolescents.

The morbidity indices for single substance exposures in 10-19 year-old intentional – suspected suicides for the 8-year period are depicted in Figure 8. The top five generic codes associated with the largest morbidity indices in single-substance adolescent suicide attempts were clonidine, bupropion, antihypertensives alone, amitriptyline, and diphenhydramine alone.

Table 19A. Comparisons of death data (1985–2018)^a.

| Year | Total fatalities | | Suicides | | Pediatric deaths ^b | |
|------|------------------|------------|----------|-------------|-------------------------------|-------------|
| | N | % of cases | N | % of deaths | N | % of deaths |
| 1985 | 328 | 0.036 | 174 | 53.0 | 20 | 6.1 |
| 1986 | 406 | 0.037 | 223 | 54.9 | 15 | 3.7 |
| 1987 | 398 | 0.034 | 227 | 57.0 | 22 | 5.5 |
| 1988 | 544 | 0.040 | 296 | 54.4 | 30 | 5.5 |
| 1989 | 590 | 0.037 | 323 | 54.7 | 24 | 4.1 |
| 1990 | 553 | 0.032 | 320 | 57.9 | 21 | 3.8 |
| 1991 | 764 | 0.042 | 408 | 53.4 | 44 | 5.8 |
| 1992 | 705 | 0.038 | 395 | 56.0 | 29 | 4.1 |
| 1993 | 626 | 0.036 | 338 | 54.0 | 27 | 4.3 |
| 1994 | 766 | 0.040 | 410 | 53.5 | 26 | 3.4 |
| 1995 | 724 | 0.036 | 405 | 55.9 | 20 | 2.8 |
| 1996 | 726 | 0.034 | 358 | 49.3 | 29 | 4.0 |
| 1997 | 786 | 0.036 | 418 | 53.2 | 25 | 3.2 |
| 1998 | 775 | 0.035 | 421 | 54.3 | 16 | 2.1 |
| 1999 | 873 | 0.040 | 472 | 54.1 | 24 | 2.7 |
| 2000 | 921 | 0.042 | 477 | 51.8 | 20 | 2.2 |
| 2001 | 1,085 | 0.048 | 553 | 51.0 | 27 | 2.5 |
| 2002 | 1,170 | 0.049 | 635 | 54.3 | 27 | 2.3 |
| 2003 | 1,109 | 0.046 | 592 | 53.4 | 35 | 3.2 |
| 2004 | 1,190 | 0.049 | 642 | 53.9 | 27 | 2.3 |
| 2005 | 1,438 | 0.059 | 674 | 46.9 | 32 | 2.2 |
| 2006 | 1,515 | 0.063 | 705 | 46.5 | 39 | 2.6 |
| 2007 | 1,597 | 0.064 | 737 | 46.1 | 47 | 2.9 |
| 2008 | 1,756 | 0.070 | 797 | 45.4 | 39 | 2.2 |
| 2009 | 1,544 | 0.062 | 779 | 50.5 | 37 | 2.4 |
| 2010 | 1,730 | 0.072 | 779 | 45.0 | 55 | 3.2 |
| 2011 | 2,765 | 0.118 | 865 | 31.3 | 42 | 1.5 |
| 2012 | 2,937 | 0.129 | 890 | 30.3 | 46 | 1.6 |
| 2013 | 2,477 | 0.113 | 785 | 31.7 | 51 | 2.1 |
| 2014 | 1,835 | 0.085 | 790 | 43.1 | 34 | 1.9 |
| 2015 | 1,831 | 0.084 | 814 | 44.5 | 42 | 2.3 |
| 2016 | 1,977 | 0.091 | 906 | 45.8 | 44 | 2.2 |
| 2017 | 3,208 | 0.151 | 954 | 29.7 | 25 | 0.8 |
| 2018 | 3,111 | 0.148 | 953 | 30.6 | 51 | 1.6 |

^aHuman exposures with medical outcome of death or death, indirect regardless of RCF.

^bIncludes all children with actual or estimated ages ≤ 5 years old. Results do not include “Unknown Child” or “Unknown Age”. Includes death and death, indirect regardless of RCF.

Distribution of suicides

Table 19A shows modest variation in the distribution of suicides and pediatric deaths over the past 2 decades as reported to the NPDS national database. Within the last decade, the percent of exposures determined to be suspected suicides ranged from 29.7 to 50.5% and the percent of pediatric cases has ranged from 0.779 to 3.18%. The relatively large changes seen for 2011, 2012 and 2017 reflect the large increase in indirect death reports in those years (peaking at 1,376 in year 2017). Analyses of suicides and pediatric deaths for Direct and Indirect reports are shown in Table 19B. For a detailed analysis and discussion of adolescent suicide attempts, see the Emerging Trends section.

Plant exposures

Table 20 provides the number of times a specific plant was reported to NPDS (N= 42,495). The 25 most commonly involved plant species and categories account for 37.8% of all reported plant exposures. Three of the top 5 categories in the table are essentially synonymous for unknown plant and comprise 10.7% (4,552/42,495) of all plant exposures. For a variety of reasons, it was not possible to make a precise identification in these 3 groups. The most frequent plant exposures where positive plant identification was made were (descending order): *Cherry* (species unspecified), *Pokeweed* (*Phytolacca americana*), *Spathiphyllum* species, *Ilex* species, *Poison Ivy* and *Malus* species.

Table 19B. Comparisons of direct and indirect death data (2000–2018)^a.

| Year | All deaths | | | Suicides | | | | | Pediatric deaths | | | | |
|------|------------|--------|----------|----------|-------------|--------|-------------|----------|------------------|-------------|--------|-------------|----------|
| | Total | Direct | Indirect | Total | % of deaths | Direct | % of direct | Indirect | Total | % of deaths | Direct | % of direct | Indirect |
| 2000 | 864 | 845 | 19 | 448 | 51.85 | 443 | 52.43 | 5 | 18 | 2.08 | 18 | 2.13 | 0 |
| 2001 | 1,066 | 952 | 114 | 542 | 50.84 | 503 | 52.84 | 39 | 26 | 2.44 | 24 | 2.52 | 2 |
| 2002 | 850 | 739 | 111 | 455 | 53.53 | 436 | 59.00 | 19 | 24 | 2.82 | 15 | 2.03 | 9 |
| 2003 | 867 | 826 | 41 | 464 | 53.52 | 454 | 54.96 | 10 | 29 | 3.34 | 22 | 2.66 | 7 |
| 2004 | 955 | 898 | 57 | 516 | 54.03 | 501 | 55.79 | 15 | 25 | 2.62 | 21 | 2.34 | 4 |
| 2005 | 1,423 | 1,332 | 91 | 666 | 46.80 | 656 | 49.25 | 10 | 32 | 2.25 | 26 | 1.95 | 6 |
| 2006 | 1,515 | 1,415 | 100 | 705 | 46.53 | 687 | 48.55 | 18 | 39 | 2.57 | 32 | 2.26 | 7 |
| 2007 | 1,597 | 1,502 | 95 | 737 | 46.15 | 712 | 47.40 | 25 | 47 | 2.94 | 41 | 2.73 | 6 |
| 2008 | 1,756 | 1,535 | 221 | 797 | 45.39 | 750 | 48.86 | 47 | 39 | 2.22 | 32 | 2.08 | 7 |
| 2009 | 1,544 | 1,452 | 92 | 779 | 50.45 | 748 | 51.52 | 31 | 37 | 2.40 | 31 | 2.13 | 6 |
| 2010 | 1,730 | 1,455 | 275 | 779 | 45.03 | 732 | 50.31 | 47 | 55 | 3.18 | 47 | 3.23 | 8 |
| 2011 | 2,765 | 1,503 | 1,262 | 865 | 31.28 | 758 | 50.43 | 107 | 42 | 1.52 | 31 | 2.06 | 11 |
| 2012 | 2,937 | 1,507 | 1,430 | 890 | 30.30 | 759 | 50.36 | 131 | 46 | 1.57 | 30 | 1.99 | 16 |
| 2013 | 2,477 | 1,552 | 925 | 785 | 31.69 | 698 | 44.97 | 87 | 51 | 2.06 | 43 | 2.77 | 8 |
| 2014 | 1,835 | 1,559 | 276 | 790 | 43.05 | 757 | 48.56 | 33 | 34 | 1.85 | 23 | 1.48 | 11 |
| 2015 | 1,831 | 1,670 | 161 | 814 | 44.46 | 784 | 46.95 | 30 | 42 | 2.29 | 34 | 2.04 | 8 |
| 2016 | 1,977 | 1,852 | 125 | 906 | 45.83 | 885 | 47.79 | 21 | 44 | 2.23 | 37 | 2.00 | 7 |
| 2017 | 3,208 | 1,832 | 1,376 | 954 | 29.74 | 821 | 44.81 | 133 | 25 | 0.78 | 19 | 1.04 | 6 |
| 2018 | 3,111 | 1,821 | 1,290 | 953 | 30.63 | 823 | 45.19 | 130 | 51 | 1.64 | 32 | 1.76 | 19 |

^aHuman exposures with medical outcome of death or death, indirect regardless of RCF.

Deaths and exposure-related fatalities

A listing of cases (Table 21, Appendix D) and summary of cases (Tables 4, 5, 8, 9, 18, and 22) are provided for fatal cases with reasonable confidence that the death was a result of the exposure (exposure-related fatalities). Tables 11, 12, 19A and 19B consider all deaths, irrespective of the RCF. Beginning in 2010, deaths recorded as Indirect Report were no longer reviewed by the AAPCC fatality review team and the RCF was determined by the reporting PC. Table 19C indicates which cases are included in 12 tables reporting fatalities.

Table 19C. Detail of cases included in fatality tables.

| Table | Fatalities Included | RCF | N |
|-------|---|-------|-------|
| 4 | Death only | 1,2,3 | 1,354 |
| 5 | Death only | 1,2,3 | 1,354 |
| 8 | Death only | 1,2,3 | 1,354 |
| 9 | Death only | 1,2,3 | 1,354 |
| 11 | Death and Death (indirect report) | All | 3,111 |
| 12 | Death and Death (indirect report) | All | 3,111 |
| 17E | Pediatric Death and Death (indirect report) | All | 51 |
| 18 | Death only | 1,2,3 | 1,354 |
| 19A | Death and Death (indirect report) | All | 3,111 |
| 19B | Death and Death (indirect report) | All | 3,111 |
| 21 | Death and Death (indirect report) | 1,2,3 | 2,582 |
| 22 | Death and Death (indirect report) - Single substance deaths only | All | 1,351 |

There were 1,290 deaths, indirect and 1,821 deaths. Of these 3,111 cases, 2,582 were judged exposure-related fatalities (RCF = 1 - Undoubtedly responsible, 2 - Probably responsible, or 3 - Contributory). The remaining 529 cases were judged as follows: 103 as RCF= 4 - Probably not responsible, 66 as RCF= 5 - Clearly not responsible, and 360 as RCF= 6 - Unknown.

Deaths are sorted in Table 21 (Appendix D) according to the category, then substance deemed most likely responsible

for the death (Cause Rank), and then by patient age. The Cause Rank permits the PC to judge 2 or more substances as indistinguishable in terms of cause, for example, 2 substances which appear equally likely to have caused the death could have Substance Rank of 1,2 and Cause Rank of 1,1. Additional agents implicated in the death are listed below the primary agent in the order of their contribution to the fatality.

As shown in Table 5, a single substance was implicated in 87.9% of reported human exposures, and 12.1% of patients were exposed to ≥ 2 drugs or products. The exposure-related fatalities involved a single substance in 591 cases (43.6%), 2 substances in 328 cases (24.2%), 3 in 197 cases (14.6%), and 4 or more in the balance of cases.

In Table 21 (Appendix D), the Annual Report ID number [bracketed] indicates that the abstract for that case is included in Appendix C. The letters following the Annual Report ID number indicate: i = Death, Indirect report (occurred in 1,228, 47.6% of cases), p = prehospital cardiac and/or respiratory arrest (occurred in 519, 20.1% of cases), h = hospital records reviewed (occurred in 967, or 37.5% of cases), a = autopsy report reviewed (occurred in 1,527, or 59.1% of cases). The distribution of NPDS RCF was: 1 = Undoubtedly responsible in 1,550 cases (60.0%), 2 = Probably responsible in 750 cases (29.1%), 3 = Contributory in 282 cases (10.9%). The denominator for these Table 21 percentages is 2,582.

All fatalities – all ages

Table 4 presents the age and gender distribution for the 1,354 exposure-related fatalities (excluding death, indirect). The age distribution of reported fatalities showed an increase in deaths among children (<20 years old) compared to 2017, with 86 cases representing 6.35% of fatalities. This was an absolute increase of 15 fatalities (21.1% increase) in that age

Table 20. Frequency of plant exposures (top 25)^a.

| | Botanical name or Category | AAPCC Generic Code Name | N |
|----|--|--|-------|
| 1 | Unknown Botanical Name | Unknown Toxic Types or Unknown if Toxic | 1,989 |
| 2 | Cherry (Species unspecified) | Amygdalin and/or Cyanogenic Glycosides | 1,808 |
| 3 | Plants-general-unknown | Unknown Toxic Types or Unknown if Toxic | 1,639 |
| 4 | Plants-pokeweed | Other Toxic Types | 1,209 |
| 5 | Berry (not otherwise specified) | Unknown Toxic Types or Unknown if Toxic | 924 |
| 6 | <i>Spathiphyllum</i> spp. | Oxalates | 715 |
| 7 | Botanical Terms | Unknown Toxic Types or Unknown if Toxic | 599 |
| 8 | Unknown Botanical Name | Non-Toxic | 550 |
| 9 | <i>Ilex</i> spp. (not otherwise specified) | Gastrointestinal Irritants (Excluding Oxalate Containing Plants) | 538 |
| 10 | Plants-oxalates | Oxalates | 535 |
| 11 | Plants-toxicodendrol | Skin Irritants (Excluding Oxalate Containing Plants) | 529 |
| 12 | <i>Phytolacca americana</i> (L.) | Gastrointestinal Irritants (Excluding Oxalate Containing Plants) | 524 |
| 13 | Poison ivy | Skin Irritants (Excluding Oxalate Containing Plants) | 499 |
| 14 | <i>Malus</i> spp. | Amygdalin and/or Cyanogenic Glycosides | 432 |
| 15 | Unknown Botanical Name | Amygdalin and/or Cyanogenic Glycosides | 417 |
| 16 | <i>Epipremnum areum</i> | Oxalates | 384 |
| 17 | <i>Euphorbia tirucalli</i> (L.) | Skin Irritants (Excluding Oxalate Containing Plants) | 368 |
| 18 | Oleandergenin | Cardiac Glycosides (Excluding Drugs) | 359 |
| 19 | <i>Zantedeschia aethiopica</i> | Oxalates | 303 |
| 20 | Unknown Botanical Name | Skin Irritants (Excluding Oxalate Containing Plants) | 303 |
| 21 | Plants-cardiac glycosides | Cardiac Glycosides (Excluding Drugs) | 296 |
| 22 | <i>Solanum dulcamara</i> | Solanine | 290 |
| 23 | Unknown Botanical Name | Gastrointestinal Irritants (Excluding Oxalate Containing Plants) | 285 |
| 24 | Unknown Botanical Name | Oxalates | 283 |
| 25 | <i>Prunus armeniaca</i> | Amygdalin and/or Cyanogenic Glycosides | 271 |

^aNumber of substances related to a human exposure with a Major Generic Category of Plant. Unknown Botanical Name represents substances with a Major Generic Category of Plant and a NULL substance code. Total = 42,495.

group. The age distribution of reported fatalities in adults (≥ 20 years) was similar to prior years with 1,266 of 1,354 (93.5%) fatal cases occurring in that age group and 2 (0.148%) occurring in Unknown Age patients. While children ≤ 5 years old were involved in the majority of exposures, the deaths in this group comprised just 1.03% of the exposure-related fatalities. The number of deaths in this age group increase by 2 from 2017. Most (65.0%) of the fatalities occurred in 20 to 59-year-old individuals, in line with prior years.

Table 21 (Appendix D) lists each of the 2,582 human fatalities (including death, indirect) along with all the substances involved for each case. Please note, the substance listed in column 3 of Table 21 (alternate name) was chosen to be the most specific generic name based upon the Micromedex Poisindex[®] product name and generic code selected for that substance. Alternate names are maintained in the NPDS for each substance involved in a fatality. The cross-references at the end of each major category section in Table 21 list all cases that identify the substance as other than the primary substance. This alternate name may not agree with the AAPCC generic categories used in the summary tables (including Appendix E (Table 22)).

Table 18 lists the top 25 minor generic substance categories associated with reported fatalities and the number of single substance exposure fatalities for that category. Miscellaneous sedative/hypnotics/antipsychotics, miscellaneous stimulants and street drugs, opioids, and miscellaneous alcohols lead this list, followed by acetaminophen alone, calcium antagonists, beta blockers, acetaminophen combinations, selective serotonin reuptake inhibitors (SSRIs), and miscellaneous antidepressants. Note that Table 18 is sorted by all substances to which a patient was exposed (i.e., a patient exposed to an opioid may have also been exposed to 1 or more other products) and shows single substance exposures in the right-hand column.

The first ranked substance (Appendix D, Table 21) was a pharmaceutical in 2,254 (87.3%) of the 2,582 fatalities. These 2,254 first ranked pharmaceuticals included:

834 analgesics (366 fentanyl, 145 acetaminophen, 72 oxycodone, 46 salicylate, 36 methadone, 29 acetaminophen/hydrocodone, 22 morphine, 19 narcotic, other/unknown, 16 tramadol, 15 acetaminophen/oxycodone, 14 hydrocodone, 12 acetaminophen/diphenhydramine)
 694 stimulants/street drugs (321 methamphetamine, 242 heroin, 77 cocaine, 8 Kratom (*Mitragyna speciosa* (Korth.)), 8 amphetamine, 7 methylenedioxymethamphetamine (MDMA), 6 THC homologs)
 232 cardiovascular drugs (58 amlodipine, 28 verapamil, 20 metoprolol, 20 diltiazem, 13 digoxin, 11 propranolol, 10 flecainide, 10 diltiazem (extended release))
 144 antidepressants (35 bupropion, 28 amitriptyline, 14 bupropion [extended release], 14 doxepin, 10 nortriptyline, 9 trazodone, 8 venlafaxine)
 92 sedative/hypnotic/antipsychotics (31 alprazolam, 21 quetiapine, 10 benzodiazepine, 7 zolpidem, 6 olanzapine)

The exposure was acute (A) in 764 (29.6%), acute or chronic (A/C) in 338 (13.1%), chronic (C) in 124 (4.80%), and unknown (U) in 1,356 (52.5%) of fatalities.

A total of 1,420 tissue concentrations for 1 or more related analytes were reported in 736 cases. Most of these (1,284) involved fatalities with RCF of 1-3 and are listed in Appendix D (Table 21). Of note, all tissue concentrations are available to the PCs through the NPDS Enterprise Reports. The most frequent of these 1,429 analytes included: 249 acetaminophen, 128 ethanol, 83 salicylate, 79 fentanyl, 45 carboxyhemoglobin, 34 benzoylecgonine, 32 alprazolam, 27 methamphetamine, 24 diphenhydramine, 20 bupropion, 20 cocaine, 18 amlodipine, 16 lithium, 15 amphetamine, 15 ethylene glycol, 15 hydrocodone, 14 hydroxybupropion, 14 morphine (free), 14 norfentanyl, and 14 oxycodone.

Route of exposure was: Ingestion only in 1,021 cases (39.5%), Inhalation/nasal in 115 cases (4.45%), and Parenteral in 44 cases (1.70%). Parenteral only cases decreased by 54.6% from 2017. Most other exposures recorded a combination of routes or an unknown route.

The Intentional exposure reason was: Abuse in 1,173 cases (45.4%), Suspected suicide in 829 cases (32.1%), Misuse in 58 cases (2.25%), and Unknown in 94 cases (3.64%). Unintentional exposure reasons were: Environmental in 52 cases (2.01%), General in 36 cases (1.39%), Therapeutic error in 41 cases (1.59%), and Misuse in 24 cases (0.93%). Adverse drug reaction was the reason in 33 cases (1.28%).

Pediatric fatalities – age ≤ 5 years

Although children younger than 6 years were involved in the majority of exposures, they comprised only 51 (1.64%) of the 3,111 fatalities. These numbers are similar to those reported since 1985 (Table 19A, all RCFs and includes indirect deaths). Table 8 (RCF 1, 2 or 3, excludes indirect deaths) shows the percentage of fatalities in children ≤ 5 years related to total pediatric exposures was 14/927,487 (0.00151%). By comparison, 1,266/849,884 (0.149%) of all adult exposures involved a fatality. Of the 14 pediatric fatalities in which reason for exposure was documented, 8 (57.1%) were reported as unintentional, 5 (35.7%) as unknown, and 1 was coded as adverse reaction - drug (7.14%) (Table 8).

The 30 fatalities in children ≤ 5 years detailed in Appendix D (Table 21) (includes death, indirect reports and RCF 1-3) included 17 pharmaceuticals and 13 nonpharmaceuticals. The first ranked substances associated with these fatalities included: fumes/gases/vapors (8), analgesics (7), antihistamines (4), batteries (2), cleaning substances, household (2), stimulants and street drugs (2), plants (1), anesthetics (1), cardiovascular drugs (1), miscellaneous drugs (1), and muscle relaxants (1).

Pediatric fatalities – ages 6–12 years

In the age range 6 to 12 years, 11 fatalities are listed in Appendix D (Table 21) (includes death, indirect reports and RCF 1-3) included: fumes/gases/vapors (8), other/unknown nondrug substances (1), cold and cough preparations (1), and stimulants and street drugs (1). There were 7 cases in

which the exposure reason was specified: 4 were unintentional - environmental, 2 were unintentional - misuse, and 1 was unknown. (Table 8).

Adolescent fatalities – ages 13–19 years

In the age range 13 to 19 years, there were 65 reported fatalities with documented reason for exposure, an increase of 19 (42.2%) from 2017, and included 56 intentional, 3 unintentional, 5 unknown reason, and 1 other (Table 8). The 102 fatalities listed in Appendix D (Table 21) (includes death, indirect reports and RCF 1-3) included 95 pharmaceuticals and 7 nonpharmaceuticals. The first ranked pharmaceuticals associated with these fatalities included: analgesics (42), stimulants and street drugs (18), antihistamines (8), antidepressants (7), cardiovascular drugs (6), unknown drug (4), antimicrobials (2), electrolytes and minerals (2), sedative/hypnotics/antipsychotics (2), anesthetics (1), anticonvulsants (1), gastrointestinal preparations (1) and miscellaneous drugs (1). The first ranked nonpharmaceutical associated with these fatalities included: alcohols (2), chemicals (2), fumes/gases/vapors (2) and hydrocarbons (1). For a detailed analysis and discussion of adolescent suicide attempts, see the Emerging Trends section.

Pregnancy and fatalities

There were 3 deaths in pregnant women reported to NPDS in 2018. A total of 48 deaths of pregnant women have been reported between 2000 and 2018. The majority (40 of 48, 83.3%) were intentional exposures (misuse, abuse or suspected suicide).

AAPCC surveillance results

Key components of the NPDS surveillance system include the automated monitoring tools available to the NPDS user community. In addition to AAPCC national surveillance definitions, 31 PCs utilize NPDS as part of their surveillance programs. The CDC, FDA, 5 state health departments, 1 county health department and 1 state police department run surveillance definitions in NPDS. Since Surveillance Anomaly 1, generated at 2:00pm EDT on 17 September 2006, over 360,000 anomalies have been detected and reported. Over 2,500 were confirmed as representing public health significance with PCs working collaboratively with local health departments and, in some instances the CDC, on the identified issues.

At the time of this report, 650 surveillance definitions run continuously, monitoring case and clinical effects volumes and a variety of case-based definitions from food poisoning to nerve agents. These definitions represent the surveillance work by many PCs, health departments, the AAPCC, the Health Studies Branch (Division of Environmental Hazards and Health Effects, National Center for Environmental Health), and CDC. NPDS has also been used for surveillance during mass gathering events, such as the Super Bowl.

The methodology for automating surveillance continues to be improved in efforts to detect the index case of any relevant public health event. Algorithms for identifying the index case vary greatly regarding the substance to be identified. No individual algorithm works for every application. The magnitude and penetrance of NPDS are critical to epidemiologic surveillance and to the ability to substantiate situational awareness for clinicians, policymakers, and public health officials nationwide. Typically, NPDS surveillance detects the response to an event, rather than predicting an event. This fosters situational awareness and resilience during and after a public health event. Situational awareness is undoubtedly beneficial to public health surveillance.

Discussion

The exposure cases and information requests reported by PCs in 2018 do not reflect the full extent of PC efforts, which also include poison prevention activities, partnership with public health entities, and public and health care professional education programs.

NPDS exposure data may be considered “numerator data” in the absence of a true denominator; that is, we do not know the number of actual exposures that occur in the population. NPDS data covers only those exposures which are reported to PCs since poison exposures and poisoning deaths are not currently reportable events.

NPDS 2000–2018 encounter volume data clearly demonstrate a continuing decrease in exposure cases. This decline has been apparent and increasing since mid-2007 and reflects the decreasing use of the PC for less serious exposures. However, during this same period, exposures with a more serious outcome (death, major, moderate) and HCF cases have continued to increase. Possible contributors to the declining PC utilization include declining US birth rate (especially since exposure rates are much higher in children ≤ 5 years of age), increasing use of text rather than voice communication, and increasing use of and reliance on internet resources. To meet our public health goals, PCs will need to understand and provide access via the public’s 21st century communication preferences. We are concerned that failure to respond to these changes may result in a retro-shift with more people seeking medical care at HCFs for exposures that could have been managed on-site by a PC. Likewise, minor exposures may progress to more serious morbidity and mortality because of incorrect internet information or the absence of PC management. The net effect could be more serious poisoning outcomes because fewer people took advantage of PC services, with a resultant increased burden on the national healthcare infrastructure as may be reflected in the increased number of cases managed in a HCF this year.

NPDS statistical analyses indicate that adolescent suicide attempts by self-poisoning gradually declined after year 2000, reaching a nadir in 2010, then rapidly increased through 2018. This trend is evident in Figure 6A and 6B. NPDS data confirms a trend that is evidenced in other data

sources [3,5,9]. Unlike other data sources, NPDS offers the ability to provide a near real-time view of these public health issues without the need for data source extrapolations.

One of the limitations of NPDS data has been the perceived lack of fatality case volume compared to other reporting sources. However, when change over time is studied, NPDS is clearly consistent with other public health fatality analyses. One of the issues leading to this concern is the fact that medical record systems seldom have common output streams. This is particularly apparent with the various electronic medical record systems available. It is important to build a federated approach similar to the one modeled by NPDS to allow data sharing, for example, between hospital emergency departments and other medical record systems, including medical examiner offices, nationwide. Enhancements to NPDS can promote interoperability between NPDS and electronic medical records systems to better trend poison-related morbidity and mortality in the US and internationally.

Summary

Unintentional and intentional exposures continue to be a significant cause of morbidity and mortality in the US. The near real-time status of NPDS represents a national public health resource to collect and monitor US exposure cases and information requests.

Changes in 2018 encounters from 2017 are shown in Figures 1, 3, and 4, and include:

- Total encounters (all exposure cases and information requests) decreased by 2.96%.
- All information requests decreased 15.5%, Drug ID requests decreased 30.3%, and human exposures decreased 0.729%.
- HCF information requests increased 3.08%. Managed exposure cases reported from an HCF **decreased** 0.43%, attenuating the steady increase since 2000.
- Human exposures with less serious outcomes decreased 0.986% while those with more serious outcomes (moderate, major or death) **increased** 1.82% compared to an overall 4.45% yearly increase since 2000. The most rapidly increasing substance categories resulting in more serious outcomes over the past decade are antidepressants, stimulants and street drugs, antihistamines and anticonvulsants.

These data support the continued value of PC expertise and need for specialized medical toxicology information to manage the more severe exposures, despite a decrease in cases involving less severe exposures. In addition to telephonic services, PCs must consider newer communication approaches that match current, and future, public preferences. The continuing mission of NPDS is to provide a nationwide infrastructure for public health surveillance for all types of exposures, public health event identification, resilience,

response and situational awareness tracking. NPDS is a model system for the nation and global public health.

Disclaimer

The American Association of Poison Control Centers (AAPCC; <http://www.aapcc.org>) maintains the national database of information logged by the country's regional Poison Centers (PCs) serving all 50 United States, Puerto Rico, the District of Columbia and its territories. Case and contact records in this database are from self-reported encounters: they reflect only information provided when the public or healthcare professionals report an actual or potential exposure to a substance (e.g., an ingestion, inhalation, or topical exposure, etc.) or request information/educational materials. Exposures do not necessarily represent a poisoning or overdose. The AAPCC is not able to verify the accuracy of every report made to member centers. Additional exposures may go unreported to PCs and data referenced from the AAPCC should not be construed to represent the complete incidence of national exposures to any substance(s).

Declaration of interest

The authors report no declarations of interest.

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AAPCC fatality review team

The Lead and Peer review of the 2018 fatalities was carried out by the 49 individuals listed here including 6 who reviewed the pediatric cases [Peds]. The authors and the AAPCC wish to express our appreciation for their volunteerism, dedication, hard work and good will in completing this task in a limited time frame.

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† These reviewers served as associate managers during final review wrap up.

* These reviewers further volunteered to read the top ranked 200 abstracts and judged to publish or not publish each.

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AAPCC surveillance team

NPDS surveillance anomalies are analyzed daily by a team of 10 medical and clinical toxicologists working across the country in a distributed system. These dedicated professionals interface with the Health Studies Branch, National Center for Environmental Health, Centers for Disease Control and Prevention (HSB/NCEH/CDC) and the PCs on a regular basis to identify anomalies of public health significance and improve NPDS surveillance systems:

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Regional poison center fatality awards

Each year the AAPCC and the Fatality Review team recognizes several regional PCs for their extra effort in their preparation of fatality reports

and prompt responses to reviewer queries. The awards are presented each year at the North American Congress of Clinical Toxicology Annual meeting.

First Center to Complete all Cases (12/29/18, 19 cases): Alabama Regional Poison Control Center - Children's Hospital (Birmingham)
 Largest Number with Autopsy Reports (43 of 58 cases; 74%): Maryland Poison Center (Baltimore)
 Highest Percentage with Autopsy Reports (92% of 37 cases): Connecticut Poison Control Center (Farmington)
 Largest Number of Indirect cases (n = 1180; 91% of all Indirect cases): Banner Poison & Drug Information Center (Phoenix)
 Highest Overall Quality of Reports (5.89 out of possible 12 for 44 cases): Connecticut Poison Control Center (Farmington)
 Greatest improvement in Overall Quality of Reports (1.98 increase from last year): Connecticut Poison Control Center (Farmington)
 Most Abstracts Published in the 2018 Annual report (6 of the 66 published narratives): Carolinas Poison Center (Charlotte) [4 years running]
 Most Helpful Regional Poison Center Staff (based on survey of AAPCC review team): Indiana Poison Center
 Endurance Award (Reviewer and additional voluntary efforts for the NPDS review process): Alfred Aleguas Jr. PharmD (Tampa PCC)

Appendix B: Data definitions

Reason for exposure

NPDS classifies all encounters as either EXPOSURE (concern about an exposure to a substance) or INFORMATION (no exposed human or animal). A contact may provide information about one or more exposed person or animal (receptors).

SPLs coded the reasons for exposure reported by callers to PCs according to the following definitions:

Unintentional general: All unintentional exposures not otherwise defined below.

Environmental: Any passive, non-occupational exposure that results from contamination of air, water, or soil. Environmental exposures are usually caused by manmade contaminants.

Occupational: An exposure that occurs as a direct result of the person being on the job or in the workplace.

Therapeutic error: An unintentional deviation from a proper therapeutic regimen that results in the wrong dose, incorrect route of administration, administration to the wrong person, or administration of the wrong substance. Only exposures to medications or products used as medications are included. Drug interactions resulting from unintentional administration of drugs or foods which are known to interact are also included.

Unintentional misuse: Unintentional, improper or incorrect use of a non-pharmaceutical substance. Unintentional misuse differs from intentional misuse in that the exposure was unplanned or not foreseen by the patient.

Bite/sting: All animal bites and stings, with or without envenomation, are included.

Food poisoning: Suspected or confirmed food poisoning; ingestion of food contaminated with microorganisms is included.

Unintentional unknown: An exposure determined to be unintentional, but the exact reason is unknown.

Suspected suicidal: An exposure resulting from the inappropriate use of a substance for reasons that are suspected to be self-destructive or manipulative.

Intentional misuse: An exposure resulting from the intentional improper or incorrect use for reasons other than the pursuit of a psychotropic effect.

Intentional abuse: An exposure resulting from the intentional improper or incorrect use where the patient was likely attempting to gain a high, euphoric effect or some other psychotropic effect, including recreational use of a substance for any effect.

Contaminant/tampering: The patient is an unintentional victim of a substance that has been adulterated (either maliciously or unintentionally) by the introduction of an undesirable substance.

Malicious: Patients who are victims of another person's intent to harm them.

Withdrawal: Inquiry about or experiencing of symptoms from a decline in blood concentration of a pharmaceutical or other substance after discontinuing therapeutic use or abuse of that substance.

Adverse Reaction Drug: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to the active ingredient(s), inactive ingredient(s) or excipient of a drug, chemical, or other drug substance when the exposure involves the normal, prescribed, labeled or recommended use of the substance.

Adverse Reaction Food: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to a food substance.

Adverse Reaction Other: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to a substance other than drug or food.

Unknown Reason: Reason for the exposure cannot be determined or no other category is appropriate.

Medical outcome

No effect: The patient did not develop any signs or symptoms as a result of the exposure.

Minor effect: The patient developed some signs or symptoms as a result of the exposure, but they were minimally bothersome and generally resolved rapidly with no residual disability or disfigurement. A minor effect is often limited to the skin or mucus membranes (e.g., self-limited gastrointestinal symptoms, drowsiness, skin irritation, first-degree dermal burn, sinus tachycardia without hypotension, and transient cough).

Moderate effect: The patient exhibited signs or symptoms as a result of the exposure that were more pronounced, more prolonged, or more systemic in nature than minor symptoms. Usually, some form of treatment is indicated. Symptoms were not life-threatening, and the patient had no residual disability or disfigurement (e.g., corneal abrasion, acid-base disturbance, high fever, disorientation, hypotension that is rapidly responsive to treatment, and isolated brief seizures that respond readily to treatment).

Major effect: The patient exhibited signs or symptoms as a result of the exposure that were life-threatening or resulted in significant residual disability or disfigurement (e.g., repeated seizures or status epilepticus, respiratory compromise requiring intubation, ventricular tachycardia with hypotension, cardiac or respiratory arrest, esophageal stricture, and disseminated intravascular coagulation).

Death: The patient died as a result of the exposure or as a direct complication of the exposure.

Not followed, judged as nontoxic exposure: No follow-up calls were made to determine the outcome of the exposure because the substance implicated was nontoxic, the amount implicated was insignificant, or the route of exposure was unlikely to result in a clinical effect.

Not followed, minimal clinical effects possible: No follow-up calls were made to determine the patient's outcome because the exposure was likely to result in only minimal toxicity of a trivial nature. (The patient was expected to experience no more than a minor effect.).

Unable to follow, judged as a potentially toxic exposure: The patient was lost to follow-up, refused follow-up, or was not followed, but the exposure was significant and may have resulted in a moderate, major, or fatal outcome.

Unrelated effect: The exposure was probably not responsible for the effect.

Confirmed nonexposure: This outcome option was coded to designate cases where there was reliable and objective evidence that an exposure initially believed to have occurred actually never occurred (e.g., all missing pills are later located). All cases coded as confirmed nonexposure are excluded from this report.

Death, indirect report: Death, indirect report are deaths that the poison center acquired from medical examiner or media, but did not manage nor answer any questions about the death.

Relative contribution to fatality (RCF)

The Case Review Team (CRT) includes the Author and Reviewer from the RPC, The AAPCC Lead Reviewer, Peer Reviewer and Manager.

The definitions used for the Relative Contribution to Fatality (RCF) classification were as follows:

1. **Undoubtedly responsible** - In the opinion of the CRT the Clinical Case Evidence establishes beyond a reasonable doubt that the SUBSTANCES actually caused the death.
2. **Probably responsible** - In the opinion of the CRT the Clinical Case Evidence suggests that the SUBSTANCES caused the death, but some reasonable doubt remained.
3. **Contributory** - In the opinion of the CRT the Clinical Case Evidence establishes that the SUBSTANCES contributed to the death, but did not solely cause the death. That is, the SUBSTANCES alone would not have caused the death, but combined with other factors, were partially responsible for the death.
4. **Probably not responsible** - In the opinion of the CRT the Clinical Case Evidence establishes to a reasonable probability, but not conclusively, that the SUBSTANCES associated with the death did not cause the death
5. **Clearly not responsible** - In the opinion of the CRT the Clinical Case Evidence establishes beyond a reasonable doubt that the SUBSTANCES did not cause this death.
6. **Unknown** - In the opinion of the CRT the Clinical Case Evidence is insufficient to impute or refute a causative relationship for the SUBSTANCES in this death.

Appendix C: Abstracts of selected cases

Selection of abstracts for publication

The abstracts included in Appendix C were selected for publication in a 3-stage process consisting of qualifying, ranking, and reading. Changes in place since the 2014 report for the selection of the top 200 cases: include all pregnant subjects, include all children (0-2 y/o) subjects, increase (double) the weight on the autopsy report, add a weighting for Age of subject (1/age in years), add a weighting for infrequency of substance category (Generic Code).

Qualifying cases were thus: Age 0-2 y/o, Pregnant, or RCF = 1-Undoubtedly Responsible, 2-Probably Responsible or 3-Contributory. Fatalities by Indirect report were excluded beginning with the 2008 annual report. The ranking was based on Final Case Weighting (FCW).

$$FCW = f[1/(\text{num substances in this case}), WCS, 1/\text{Age (years)}, 1/(\text{num cases in that generic code this year})]$$

Where:

$$\begin{aligned} \text{Weighted Case Score (WCS)} \\ &= \text{Hospital records} * 8.8 + \text{Postmortem} * 15.2 \\ &+ \text{Blood levels} * 6.9 + \text{Quality/Completeness} * 6.4 \\ &+ \text{Novelty/Educational value} * 13.2 \end{aligned}$$

WCS Scores were normalized (z-score) within each AAPCC reviewer before the final weighting: 25% for each (1/NumSubstances, WCS, 1/Age, 1/NumCodes).

The WCS weighting factors were the averages of review team recommendations gathered in 2006.

The top ranked abstracts (200 + ties) were each read by individual reviewers who volunteered (See Appendix A) and the 2 managers (DAS and DEB). Each reader judged each abstract as "publish" or "omit" and all abstracts receiving 8 or more of 12 publish votes were selected,

further edited, cross-reviewed by the 2 managers and JBM, and published in this report.

Abstracts

Abstracts of the cases were selected (see Selection of Abstracts for Publication, above) from the human fatalities judged related to an exposure as reported to US PCs in 2018. A structured format for abstracts was required in the PC preparation of the abstracts and was used in the abstracts presented. Abbreviations, units and normal ranges omitted from the abstracts are given at the end of this appendix.

Case 115. Acute ethylene glycol (antifreeze) ingestion: undoubtedly responsible

Scenario/Substances: A 33 y/o female was found unresponsive in a pool of vomit. EMS intubated prior to ED transport.

Past Medical History: Spontaneous abortion 10 days prior.

Laboratory/Diagnostic Findings: VBG-pH 6.55/pCO₂ 28/pO₂ 189, K 7.7, lactate 10, AST 121, ALT 34, WBC 13. Serum APAP, ethanol and salicylate not detected. Head CT scan: negative. Ethylene glycol 254 mg/dL.

Clinical Course: In the ED: BP 107/44, HR 137, T 35 °C. She received sodium bicarbonate, IVFs and fomepizole. She was started on HD but had three cardiac arrests and died 12 hours after arrival.

Autopsy Findings: Cause of death: complications of acute ethylene glycol intoxication; manner of death: suicide. Pre-mortem blood: ethylene glycol 250 mg/dL.

Case 127. Acute kambo toxin (*Phyllomedusa bicolor*) dermal: undoubtedly responsible

Scenario/Substances: A 35 y/o female rubbed kambo (dried secretions of *Phyllomedusa bicolor*; giant monkey frog) into burned areas of her skin. She collapsed and was found unresponsive and "gurgling" with emesis and fecal incontinence. EMS found her in cardiac arrest.

Physical Exam: Diaphoretic, tachycardic and flushed, with five small lesions near her axilla ("like cigarette burns").

Laboratory/Diagnostic Findings: ABG-pH 7.15/HCO₃ 12.2, lactate 6.2. Na 135/K 3.3/Cl 106/CO₂ 27/BUN 7/Cr 1.04/Glu 326. AST 378, ALT 459, troponin 112. ECG: sinus tachycardia with "possible sub-endocardial injury," QRS 86, QTc 316. UDS: positive for benzodiazepines, opioids and cannabinoids. Serum APAP, ethanol and salicylate not detected. Digoxin level was not detected. CT head: negative. ECHO: LVEF 60%.

Clinical Course: She was intubated by EMS and achieved ROSC after several minutes of CPR, sodium bicarbonate and epinephrine. In the ED she was sedated with propofol and started on a bicarbonate infusion. She was tachycardic, diaphoretic and flushed, with intermittent rigidity and posturing. On Day 3 EEG showed seizure activity and she was started on lacosamide and midazolam. On Day 4 MRI showed anoxic injury; EEG: severe, diffuse dysfunction. On Day 7 she developed central diabetes insipidus, became febrile and required IV metoprolol for tachycardia and hypertension; 1 h later she required epinephrine, norepinephrine and glucagon for hypotension. On Day 8 she had no gag reflex and non-reactive pupils; nuclear medicine scan demonstrated herniation. Based on the prognosis, comfort measures were instituted and she died.

Autopsy Findings: Cause of death: drug toxicity; manner of death: accidental. Circular abrasions/burn areas to her left upper arm consistent with kambo rituals. Antemortem urine from Day 1: codeine < 0.010 mg/L; morphine 0.97 mg/L.

Case 132. Acute sodium nitrite ingestion: probably responsible

Scenario/Substances: A 19 y/o male ingested a mixture of sodium nitrite and water in a suicide attempt. For EMS he was initially convulsant, but rapidly became obtunded, had a seizure and became cyanotic. He received midazolam and was intubated during transport.

Physical Exam: Unresponsive, no spontaneous respirations: SBP ~85, HR 50s, O₂ sat 85% (100% FiO₂); pupils fixed and dilated, cyanotic extremities.

Laboratory/Diagnostic Findings: ABG-pH 6.78/pCO₂ 65/pO₂ <5/ HCO₃ 10/BE -26, lactate 9.6. Na 146/K 5.9/Cl 117/CO₂ 14/BUN 12/Cr 1.32/ Glu 158/AG 15, troponin <0.02, AST 32, ALT 30, bilirubin 0.5. Serum

APAP and ethanol not detected. ECG: junctional rhythm at 38, QRS 108, QTc 283.

Clinical Course: In the ED he received IVFs and methylene blue (2 mg/kg) but rapidly deteriorated, becoming more bradycardic and had a PEA arrest. Resuscitation including CPR, multiple doses of epinephrine, atropine, sodium bicarbonate and dopamine. ECHO: no cardiac activity; he was pronounced dead ~70 min after arrival.

Autopsy Findings: Not available.

Case 137. Acute ethylene glycol ingestion: undoubtedly responsible

Scenario/Substances: A 64 y/o male presented to an ED with altered mental status after ingesting an unknown substance.

Past Medical History: Multiple myeloma.

Laboratory/Diagnostic Findings: Na 140/K 6.7/Cl 108/CO₂ 6.7/AG 27/BUN 15/Cr 1.95, LFTs 'unremarkable.' ABG-pH 7.07, lactate 29. Serum APAP, ethanol and salicylate not detected. Head CT unremarkable. Subsequently: ethylene glycol 79.6 mg/dl; methanol and isopropanol not detected.

Clinical Course: Repeat labs 4 h later: Na 139/K 7.6/Cl 111/HCO₃ 5.8/ Cr 2.34/Glu 342, ABG-pH 6.91, lactate 29. Fomepizole was started 6 h after presentation and he was admitted to the ICU where he was intubated, sedated and started on HD. A sodium bicarbonate drip was started; BP 116/57, HR 42. That night he had 6 seizures and a midazolam drip was started. Na 143/K 3.9/Cl 104/CO₂ 11.3/BUN 13/Cr 2.41. Venous pH 7.04, repeat ethylene glycol 29 mg/dL. Thiamine and pyridoxine were given; fomepizole continued. On Day 2 the sedation was stopped and he had an episode of PEA. Due to recurrent clotting of the HD circuit a heparin drip was started and he was transitioned to CRRT. On vasopressin, epinephrine and norepinephrine: BP 74/54, HR 113, T 37.2C, FIO₂ 65%. At 14 h the ethylene glycol was 16.3 mg/dL. At 17 h: Cl 92/CO₂ 25/AG 27, Cr 1.8, Glu 208. On Day 2: Na 139/K 4.7/Cl 104/Cr 3.14/AG 28, ethylene glycol 11.5 mg/dl; he died 30 h after arrival.

Autopsy Findings: Cause of death: acute ethylene glycol intoxication; Manner of death: suicide. Autopsy findings: cerebral edema, crystals in the kidney and brain, obesity (BMI = 40.2), fibrotic liver.

Case 142. Acute strychnine, unknown drug ingestion, unknown: probably responsible

Scenario/Substances: A 33 y/o male was found in PEA arrest after reportedly ingesting a rat poison containing (0.5%) strychnine. EMS achieved ROSC; naloxone was administered without response.

Laboratory/Diagnostic Findings: ABG-pH 6.86/pCO₂ 38/pO₂ 576/HCO₃ 6.9. Na 145/K 4.5/Cl 97/CO₂ 8/BUN 28/Cr 1.64/Glu 178/AG 40, AST 122, ALT 130, INR 1.9, CK 1,752, lactate > 20. Serum APAP, ethanol and salicylate not detected. ECG: HR 117, QRS 102, QTc 415.

Clinical Course: Patient was sedated, paralyzed and intubated. He received IVFs and sedation, but exhibited intermittent jerking movements. Lactate normalized on Day 2, CK increased to > 20,000. Despite treatment for rhabdomyolysis his renal function deteriorated and he required HD on Day 5. His clinical status remained unchanged. Based on a poor prognosis family opted for comfort measures and he died on Day 9.

Autopsy Findings: Not available.

Case 164. Acute hydrofluoric acid ingestion: undoubtedly responsible

Scenario/Substances: An 85 y/o male drank an ammonium bifluoride-containing concrete cleaning product.

Past Medical History: Alzheimer's dementia, COPD, depression.

Physical Exam: BP 154/63, HR 86, RR 20, O₂ sat 99%, T 37°C.

Laboratory/Diagnostic Findings: Cl 110, CO₂ 20, Glu 152, AG 18, lactate 2.9.

Clinical Course: He had multiple episodes of emesis and coughing, but no oral burns, odynophagia, chest pain or abdominal pain. He was transferred to a tertiary hospital for endoscopy but had cardiac arrest immediately upon arrival. CPR was initiated; torsade de pointes was treated with Mg and defibrillation with ROSC. Two min later, he again went into torsades and then recurrent VF. He received Ca, Mg, lidocaine, amiodarone, epinephrine and defibrillation. He went into PEA with ROSC

and was started on norepinephrine. He developed recurrent torsades and VF. Due to his poor prognosis his family opted for comfort measures only. He received fentanyl, went into torsades and died on Day 1.

Autopsy Findings: Cause of death: cardiac dysrhythmia due to hypocalcemia and hypomagnesemia, due to ingestion of ammonium bifluoride; manner of death: accident.

Case 167. Acute hydrofluoric acid ingestion: undoubtedly responsible

Scenario/Substances: A 3 y/o male ingested ~90 ml of rust and stain remover (1-2.5% hydrofluoric acid). EMS found the child awake and alert, but he had 2 episodes of vomiting enroute to the ED.

Physical Exam: On arrival to the ED the child was intubated for lethargy: BP 112/79, HR 148, RR 46, O₂ sat 99%.

Laboratory/Diagnostic Findings: VBG: pH 7.056/pCO₂ 59.2/pO₂ 23.4/HCO₃ 16.2/BE -14.4. Na 137/K 4.5/Cl 110/CO₂ 12/BUN 17/Cr 0.43/Glu 228/AG 15, AST 62, ALT 13, bilirubin 0.7, INR 1.10, WBC 20.3/Hgb 12.9/Hct 39.1/PLT 492. Serum APAP, ethanol and salicylate not detected. UDS was negative. CxR: diffuse prominence of bronchovascular markings likely related to reactive airway disease, with left lower lobe infiltrate. ECG: HR 52, QRS 62, QT/QTc 286/308; non-specific T-wave abnormality.

Clinical Course: Patient received 1 g Ca chloride with improvement in HR and then transferred to a tertiary hospital where he arrived. 1 h later he was agitated and received fentanyl, midazolam and vecuronium. A central and arterial line were placed; dopamine and epinephrine drips were started for increasing hypotension. Arterial pH was 6.91 and he received sodium bicarbonate. 4 h later he went into VF and died, despite resuscitation efforts, ~5 h after the ingestion. Final laboratory values:

pH 7.07/pCO₂ 105/pO₂ < 19, Na 157/K 4.2/Ca 5.9, lactate 11.3.

Autopsy Findings: Not performed per parents' request.

Case 176. Acute drain cleaner ingestion: undoubtedly responsible

Scenario/Substances: A 53 y/o female ingested alkali drain cleaner (sodium hydroxide/sodium hypochlorite/sodium silicate) in a suicidal attempt.

Physical Exam: Pale and cold, RR 60. Burns were noted in her posterior pharynx.

Laboratory/Diagnostic Findings: Lactate 5; serum APAP and salicylate not detected.

Clinical Course: She was intubated and started on propofol and pantoprazole. An ECG suggested pericarditis, but it was unknown if this was related to the ingestion. In the ICU she received fentanyl for abdominal pain. CxR: free air; she was taken to the OR for an exploratory laparotomy that showed a perforated stomach and peritoneal blood. She died 26 h after initial presentation.

Autopsy Findings: Cause of death: complications of alkali ingestion; manner of death: suicide. Findings: gastric perforation, esophagitis, retroperitoneal hematoma and ischemic necrosis of the intestines.

Case 219. Acute hydrogen sulfide inhalation: undoubtedly responsible

Scenario/Substances: A 36 y/o male was found unresponsive in the restroom at a hog farm where he was doing construction work. Coworkers stated that there was a hole in the bathroom floor connecting to a sewer that emptied waste from the hog confinement area.

Physical Exam: BP 210/110, HR 156, RR 24, O₂ sat 94% RA, T 37°C. Unresponsive and seizing with dilated pupils and right lateral gaze.

Laboratory/Diagnostic Findings: Na 142/K 2.6/Cl 107/CO₂ 17.5/BUN 12/Cr 1.7/Glu 287/AG 17.5, WBC 24.4/Hgb 15.0/Hct 43.9/PLT 249. UDS was negative. CxR and CT head: negative.

Clinical Course: He was intubated in the ED and received propofol, midazolam, lorazepam, phenytoin and ceftriaxone. He was then transferred to a tertiary hospital where an MRI brain showed no abnormalities. Lumbar puncture infectious studies were negative. On Day 2 he had episodes of VT treated with amiodarone. His course was complicated by hyperkalemia, diffuse ST elevation (troponin 1.37), acidosis, renal insufficiency (Cr 3.4) and transaminitis (AST 3,914, ALT 1,394). On Day 3, ~30 min after starting HD, he became bradycardic and then died.

Autopsy Findings: Cause of death: chemical asphyxia; manner of death: accidental. Premortem blood showed nontoxic levels of lorazepam and naproxen; serum thiosulfate was measured at 10 mcg/mL. An inhalants panel was positive for acetone, t-butanol and isobutanol.

Case 247. Acute carbon dioxide inhalation: undoubtedly responsible

Scenario/Substances: A 77 y/o female was found unresponsive in a truck containing a large amount of dry ice.

Clinical Course: She died despite resuscitate efforts.

Autopsy Findings: Cause of death: asphyxiation; manner of death: accident. Toxicology testing: no drugs or alcohol detected.

Case 262. Acute barium ingestion: undoubtedly responsible

Scenario/Substances: A 33 y/o female called EMS after ingesting 'several scoops' of barium acetate mixed with water.

Past Medical History: Bipolar disorder, anxiety, diabetes, PTSD, borderline personality disorder, HTN. Medications: amlodipine, metoprolol, doxazosin, baclofen, lurasidone, buspirone, topiramate, sertraline, hydroxyzine.

Physical Exam: In the ED she was initially alert and oriented, with vomiting, but soon became intermittently somnolent and agitated. BP 151/83, HR 151, RR 18, O₂ sat 96% (RA).

Laboratory/Diagnostic Findings: ABG-pH 7.34/pCO₂ 29/pO₂ 77/HCO₃ 15.6/BD 8.6. Na 139/K 1.6/Cl 107. lactate 3.6, Mg 2.1. ECG: "wide complex tachycardia." Repeat ECG (1 h later): HR 67, PR 232, QRS 96, QTc 526.

Clinical Course: She presented to the ED ~1 h after the ingestion. She rapidly developed intermittent periods of tachyarrhythmias progressing to wide complex tachycardia. She was treated with IV K, Mg, lidocaine and cardioversion for VT. Soon after 100 mEq of IV sodium bicarbonate she developed VF. Despite ACLS interventions, including intubation, defibrillation, Ca, Mg and epinephrine, she died within 2 h of ED arrival.

Autopsy Findings: Cause of death: barium acetate toxicity; manner of death: suicide. Postmortem femoral blood: barium 13 mg/L.

Case 263. Acute-on-chronic potassium chloride ingestion: probably responsible

Scenario/Substances: A 72 y/o male was found unresponsive and incontinent after an intentional ingestion (at unknown time) of an oral potassium solution.

Past Medical History: Bulimia. Medications: potassium, APAP, ibuprofen.

Physical Exam: SBP 160s, HR 110, RR 27, T 36 °C.

Laboratory/Diagnostic Findings: K 8.3 (7.4 after treatment), Cr 2.2. Serum APAP, ethanol and salicylate not detected. ECG: PR 213, QRS 133, QTc 487.

Clinical Course: Patient had multiple cardiac arrests ~30 min after ROSC that involved VT, PEA and asystole. He was resuscitated and treated with vasopressors, CRRT, sodium bicarbonate drip, insulin and Ca. He ultimately had another cardiac arrest and died on Day 1.

Autopsy Findings: Not provided.

Case 271. Acute-on-chronic fluorinated hydrocarbon, inhalation: undoubtedly responsible

Scenario/Substances: A 28 y/o male presented to the ED with chest pain, lightheadedness and shortness of breath after huffing cans of an aerosol dusting agent.

Past Medical History: Daily huffing of aerosol product.

Laboratory/Diagnostic Findings: Troponin 8.2, BUN 42, Cr 2.4. ECG: ST elevation.

Clinical Course: In the ED: BP 132/84, HR 138, RR 22, O₂ sat 99% (RA). He was hypotensive during transfer to a tertiary hospital. Cardiac catheterization revealed left-sided vasospasm with no fixed lesions. He was treated with nitroglycerin but ~6 h after presentation went into cardiac arrest and died.

Autopsy Findings: Cause of death: complications of difluoroethane and trifluoroethane exposure. Postmortem drug screen was positive for fluoxetine, lidocaine, chlorpheniramine, and dextromethorphan.

Case 282. Acute hydrocarbon, fluorinated inhalation: undoubtedly responsible

Scenario/Substances: A 41 y/o female presented to an ED 3 h after huffing a keyboard cleaner containing 1,1 difluoroethane.

Past Medical History: Asthma, HTN, Crohn's disease, alcoholism, PTSD, anxiety.

Physical Exam: BP 179/115, HR 122, RR 20, O₂ sat 98% (RA), T 38 °C. Alert and oriented.

Laboratory/Diagnostic Findings: ECG: PR 124, QRS 84, QTc 441.

Clinical Course: Initially she was jittery, anxious and complained of SOB. ~3.5 after exposure, after walking to the bathroom, she went into VF. She received CPR, sodium bicarbonate, epinephrine and Mg, but died 4.5 h after exposure.

Autopsy Findings: Cause of death: 1,1, difluoroethane toxicity; manner of death: accidental. Postmortem blood testing: 1,1 difluoroethane 5.7 mg/L, diazepam, 0.036 mg/L, nordiazepam 0.17 mg/L.

Case 285. Acute hydrocarbon, fluorinated inhalation/nasal: undoubtedly responsible

Scenario/Substances: A 48 y/o male presented to an ED for evaluation of knee pain and was observed using "whippits" (later determined to contain difluoroethane) in the waiting room. He was later found slumped over with no pulse.

Past Medical History: Substance use disorder.

Physical Exam: After ROSC: BP 91/59, HR 126, RR 22, O₂ sat 85% (RA; 94% on ventilator), afebrile. GCS 3, diffuse muscle fasciculations.

Laboratory/Diagnostic Findings: Na 139/K 4/Cl 112/CO₂ 24/BUN 16/Cr 0.77/Glu 103, Ca 7.5, AST 69, ALT 110, WBC 10.3/Hgb 12/Hct 37/PLT 219. Serum APAP and salicylate not detected, UDS negative. CT head: no acute findings.

Clinical Course: CPR was initiated, he received epinephrine and Ca with ROSC. He was intubated and cooled. He became hypotensive to 60/29, was started on norepinephrine, but based on concerns for cardiac excitation, BP was maintained off vasopressors. In the ICU he had severe persistent myoclonus that did not respond to levetiracetam. He had no spontaneous breaths or brainstem reflexes. Based on the prognosis, the family opted for institution of comfort measures and he died.

Autopsy Findings: Difluoroethane was confirmed in serum. Cause of death: complications of probable difluoroethane inhalation; manner of death: accident.

Case 293. Acute water ingestion: undoubtedly responsible

Scenario/Substances: A 9 y/o male, who had been drinking a lot of water one day prior, complained to his older sister that he didn't feel well. She gave him his normal dose of dexamethylphenidate; the next morning he was unresponsive with tremors.

Past Medical History: ADHD with compulsive behaviors. Medications: dexamethylphenidate, albuterol.

Physical Exam: Minimally responsive in the ED, where he was intubated. He became hypertensive, bradycardic and hypoxic, then tachycardic. 600 cc of clear fluid removed via NGT.

Laboratory/Diagnostic Findings: Na 118, Urine Glu >500. Serum APAP and salicylate not detected; UDS negative. CT head: diffuse cerebral edema. MRI brain: cerebral edema and compressed spinal cord. Confirmatory drug testing: fentanyl, ketamine, diphenhydramine, methylphenidate, polyethylene glycol.

Clinical Course: In the ED he received 100 ml of 3% sodium chloride, lorazepam and succinylcholine, then transferred to a tertiary hospital. In the ICU he was intubated but had no purposeful movements off sedation; pupils were fixed and dilated. EEG showed no brain activity. BP 88/55, Hr 107, RR 16, O₂ sat 100% (40% FiO₂). Day 2: Na 125; intermittent posturing. Norepinephrine was started for hypotension: BP 85/50, HR 124, T 38 °C, CVP 13. He required active warming for persistent hypothermia. On Day 3 he was declared brain dead, care was removed and he died.

Autopsy Findings: Cause of death: complications of water intoxication; manner of death: accident.

Case 300. Unknown brodifacoum, THC homolog inhalation: undoubtedly responsible

Scenario/Substances: A 31 y/o male presented with hematemesis 2 days after smoking synthetic cannabinoid ("K2").

Physical Exam: Venus oozing from IV sites.

Laboratory/Diagnostic Findings: Hgb 18, INR "immeasurable high." UDS was negative. CT Abd: 'suggestive for peri-renal hemorrhage.'

Clinical Course: He was initially treated with oral vitamin K. On Day 2: Hgb 12; INR remained unmeasurable, Na 125. That evening he became altered; CT head showed a large frontal/parietal hemorrhage with midline shift and herniation. He was intubated and treated with 4 factor PCC, FFP, dexamethasone and mannitol. He was transferred to a tertiary hospital where a ventriculostomy was placed. He had fixed and dilated pupils and was unresponsive off sedation; INR 1.9. He was declared brain dead via brain perfusion study and taken for organ donation.

Autopsy Findings: Cause of death: hemorrhagic complications of acute brodifacoum intoxication; manner of death: accidental. Autopsy findings: bilateral uncal herniations, left frontoparietal hemorrhages, bilateral intraventricular hemorrhages, intraparenchymal pulmonary hemorrhages, intestine hemorrhage and hemorrhagic bladder. Toxicology: blood brodifacoum 96.5 mcg/L. Contributory condition: history of synthetic marijuana (K2) use.

Case 304. Acute imidacloprid ingestion: undoubtedly responsible

Scenario/Substances: A 40 y/o male mistakenly drank an imidocloprid-containing pesticide that was stored in a milk jug. His family found him vomiting and shaky; EMS found him in cardiac arrest. He was intubated with CPR and ROSC.

Past Medical History: Down's syndrome.

Physical Exam: In the ED: BP 75/38, HR 115, RR 20, O₂ sat 100%.

Laboratory/Diagnostic Findings: ABG-pH 7.1/pCO₂ 40.5/pO₂ 161/HCO₃ 12.7, lactate 9.2, Glu 355 (later 55), peak WBC 16.9. UDS negative.

Clinical Course: The patient remained unresponsive without sedation; pupils 8 mm and non-reactive. His clinical course was complicated by persistent hypotension requiring vasopressors, hypokalemia (K 2), hypoglycemia (Glu 55) and oliguria (Cr 1.7). Hypothermia protocol was initiated on Day 2 and he received IVFs, vasopressors, alkalization and electrolyte replacement. He was rewarmed without neurologic recovery. Based on the prognosis, comfort measures were instituted and he died on Day 3.

Autopsy Findings: Not available.

Case 306. Acute brodifacoum, diphenacoum, THC homolog inhalation: undoubtedly responsible

Scenario/Substances: A 46 y/o male presented to an ED with bloody emesis and then became obtunded.

Past Medical History: Chronic synthetic cannabinoid and ethanol abuse, arthritis.

Physical Exam: BP 119/70, HR 120, RR 20, O₂ sat 99% (intubated), T 36 °C. Pupils fixed and dilated, no spontaneous breathing or gag reflex.

Laboratory/Diagnostic Findings: INR > 10, Hgb 15.8, Hct 46.3. Serum APAP, ethanol and salicylate not detected. ECG: sinus tachycardia. CT head: subarachnoid hemorrhage.

Clinical Course: In the ED he was intubated and transferred to a tertiary hospital where he received 4 factor PCC, IV vitamin K and blood products. Repeat labs: Hob 13.6, INR 1.0. Despite treatment he was declared brain dead and died on Day 1.

Autopsy Findings: Subdural and subarachnoid hemorrhages with cerebral edema. Blood tested positive for difenacoum and brodifacoum.

Case 311. Acute acephate ingestion: undoubtedly responsible

Scenario/Substances: A 54 y/o male was found at home with vomiting and diarrhea. He told family he had ingested "a tin" of ant poison (later identified as acephate). EMS found him in cardiac arrest, intubated him and transported with CPR.

Past Medical History: Bipolar disorder, depression with prior suicidal ideation, GERD, alcohol abuse.

Physical Exam: After ROSC: BP 110/60, HR 125, O₂ sat 100% (100% FiO₂) intubated, pupils dilated and nonreactive.

Laboratory/Diagnostic Findings: Na 137/K 4.3/Cl 101/CO₂ <7/Glu 567/BUN 38/Cr 4.52, Ca 8.1, AST 298, ALT 227. ABG-pH 6.9/pCO₂ 44.7/pO₂ 553/HCO₃ 9.7/BD 22. Serum APAP, ethanol and salicylate not detected; UDS negative.

Clinical Course: In the ICU he received IVFs, atropine, a pralidoxime drip, dopamine and sedation. On the evening of Day 1 he had cardiac arrest x 3; his pupils remained dilated and nonreactive. Over the next 12 h he deteriorated and was declared brain dead on Day 2. Based on the prognosis, comfort measures were instituted and he died on Day 3.

Autopsy Findings: Not performed.

Case 313. Acute paraquat, glyphosate ingestion: undoubtedly responsible

Scenario/Substances: A 59 y/o male accidentally swallowed a 'mouthful' of paraquat and glyphosate-containing herbicide that was stored in an unlabeled sports drink bottle. He developed oral irritation and hematemesis prior to arriving at the ED within 20 min.

Past Medical History: Type 2 diabetes mellitus and HTN.

Physical Exam: BP 193/118, HR 138, RR 22, O₂ sat 99% (RA). The patient was diaphoretic and vomiting clear, foamy emesis.

Laboratory/Diagnostic Findings: ABG-pH 7.34/pCO₂ 33/pO₂ 218. (100% FiO₂) Na 139/K 3.6/Cl 101/CO₂ 17.9/BUN 10/Cr 1.12/Glu 351, AST 22, ALT 27, bilirubin 0.3. WBC 12/Hgb 15.4/Hct 46/PLT 206. CxR: unremarkable. ECG: sinus rhythm, QRS 105, QTc 479.

Clinical Course: In the ED, he was given activated charcoal, IV NAC, ascorbic acid and riboflavin, and intubated for airway protection. He was transferred to a tertiary hospital and remained on an FiO₂ of 21% with a target O₂ sat of 85%. He received emergent HD and then placed on CRRT. He required insulin for hyperglycemia (poorly controlled DM and steroids). On Day 2 he was alert and following commands, so he was extubated. AST 419, ALT 419, Cr 2.97 on CRRT. On Day 3, he was re-intubated for impending respiratory failure and metabolic acidosis and started on high dose norepinephrine, vasopressin and phenylephrine drips, and given 2 doses of methylene blue. On Day 4, he required epinephrine and 100% FiO₂. CxR: bilateral atelectasis with pulmonary edema. The patient went into PEA and ACLS was initiated without ROSC and the patient died. A serum paraquat concentration collected 27 h post-ingestion was 1,400 ng/mL.

Autopsy Findings: Not performed.

Case 314. Acute paraquat ingestion: undoubtedly responsible

Scenario/Substances: A 63 y/o male accidentally ingested ~60 mL of a 30% paraquat solution (his wife had left the solution in a soft drink bottle). He vomited several times and was taken to the ED.

Past Medical History: Parkinson's disease.

Physical Exam: Awake and alert but uncomfortable; no oropharyngeal burns. BP 138/79, HR 80, RR 17, O₂ sat 100% (RA).

Laboratory/Diagnostic Findings: K 3.2, Cr 1.2, BUN 17, AST 42.

Clinical Course: His vomiting stopped before ED arrival. He received IVFs, pantoprazole, ondansetron, IV cyclophosphamide (1g/d for 2 days), methylprednisolone (15 mg/kg/d) and IV NAC. HD was performed on Day 3 for decreased urine output and Cr increased (6.8) and he was transitioned to CCRT. On Day 4 he was intubated for hypoxia during an EGD that found patchy ulcerations and eschar in his esophagus. He required increasing ventilator support (FiO₂ 65% then 100%; PEEP of 10; O₂ sat ~85%) with increased pulmonary secretions, and vasopressors. Vancomycin was added on Day 18 for sepsis. On Day 21: AST increased from 695 to >3,700 and ALT 359 to 3057; ammonia 398, Cr 2.48 on CRRT. The patient had air trapping with decreased lungs compliance; CxR: interstitial prominence. He received 2 units PRBS (to improve oxygen delivery) but died on Day 22 after comfort measures were instituted.

Autopsy Findings: Not performed.

Case 323. Acute plant toxalbumin ingestion: undoubtedly responsible

Scenario/Substances: A 20 y/o male purchased 1,000 jequirity beans online, then crushed and ingested them in a suicide attempt. He developed abdominal pain, vomiting and diarrhea 12 h later, and had

hematemesis and hematochezia when he presented to an ED 24 h after the ingestion.

Past Medical History: Prior suicide attempts with castor beans.

Laboratory/Diagnostic Findings: Na 145/K 4.5/Cl 127/CO₂ 27/Glu 122/BUN 22/Cr 0.9, AST 25, ALT 13, lactate 1.3. WBC 34.7/Hgb 17.3/PLT 299, INR 1.1. Serum APAP and salicylate not detected. WBC (Day 3) 52.

Clinical Course: In the ED he was neurologically intact with a normal examination. Over the next 2 days he had progression of GI symptoms that improved with antiemetics and benzodiazepines. On Day 2 he developed confusion and agitation with tremors and abnormal eye movements. CT head was normal. His condition deteriorated to minimal responsiveness and choreoathetoid movements. EEG: mild background slowing. MRI brain: bilaterally signal abnormalities in the basal ganglia, brainstem, corpus callosum and corona radiata with diffuse leptomeningeal enhancement. He developed a tonic clonic seizure followed by PEA arrest that responded to resuscitation. Based on the prognosis, family opted for comfort measures and he died on Day 4.

Autopsy Findings: Not performed per family request. Urine testing (Day 3 sample): aβin 8.84 ng/mL.

Case 325. Acute *Thevetia peruviana* ingestion: undoubtedly responsible

Scenario/Substances: A 63 y/o female presented to an ED ~12 h after consuming a weight loss product. She was told they were candle nuts, and to mix part of one in tea; instead she ate 5 whole nuts at once. The nuts were later identified as *Thevetia peruviana* (yellow oleander).

Past Medical History: NIDDM. Medications: glyburide, metformin, simvastatin, fluticasone/salmeterol inhaler.

Physical Exam: Lethargic with nausea and vomiting, HR 53.

Laboratory/Diagnostic Findings: Na 133/K 7.3/Cl 100/CO₂ 25/Cr 1.5/Glu 555. Serum digoxin not detected. ECG: slow AF, QRS 114, QTc 335.

Clinical Course: She received insulin and sodium bicarbonate, her BP dropped and dopamine was initiated. She was resuscitated for VF but died during the placement of a temporary pacemaker.

Autopsy Findings: Cause of death: toxic effects of *Thevetia peruviana* (yellow oleander) seeds. The seeds and liver tested positive for peruvoside.

Case 326. Acute *Thevetia peruviana* ingestion: probably responsible

Scenario/Substances: A 64 y/o male was found hypotensive, tachycardic and diaphoretic after accidentally ingesting his wife's weight loss product. The plant seed product was labelled as 'Brazilian candlenut' but was thought to be oleander-based.

Physical Exam: BP 85/43, HR 175.

Clinical Course: In the ED he was in extremis and, despite ACLS efforts and 10 vials of digoxin Fab fragments, died shortly after arrival.

Autopsy Findings: Not available.

Case 327. Chronic argemone alba ingestion: probably responsible

Scenario/Substances: An 8 m/o male presented with a rash, agitation and lower extremity edema after receiving antimicrobials and herbal "poppy seeds" (sent by relatives in India) for a recent respiratory illness. The seeds had been crushed and mixed with food intermittently for weeks.

Physical Exam: Upon admission, he was afebrile, tachycardic and hypertensive with normal RR and O₂ sat. Physical exam: bilateral lower extremity edema with reticular, blanching rash; delayed capillary refill (5 sec).

Laboratory/Diagnostic Findings: CBC: leukocytosis, anemia and thrombocytopenia; electrolytes, liver function tests, urinalysis, ESR, CRP, INR, Coombs test, blood cultures: 'all normal.' Uric acid 8.3, LDH 536. Respiratory viral panel positive for human metapneumovirus. Abdominal U/S: hepatomegaly and ascites. ECHO: mild pulmonary artery HTN, small bilateral pleural effusions. Samples of the "poppy seeds" were confirmed to be *Argemone mexicana* and tested positive for sanguinarine and dihydrosanguinarine.

Clinical Course: Patient was admitted to the PICU and received diuretics. During preparation for intubation (due to lethargy and clinical decompensation) he went into PEA arrest. Despite CPR and PALS, he

failed to have ROSC. Based on the prognosis, family opted for comfort measures and he died on Day 4.

Autopsy Findings: History and clinical findings consistent with *Argemone mexicana* toxicity (also known as "epidemic dropsy"). Clinical findings: myocardial, pulmonary, hepatic and renal medullary congestion; diffuse dermal capillary dilatation and congestion. Serum testing (hospital blood from Day 2): sanguinarine and dihydrosanguinarine not detected.

Case 330. Acute methadone ingestion: undoubtedly responsible

Scenario/Substances: A 2 y/o male was found lethargic by his mother with her methadone bottle open and 20 pills missing. She then put the child down for a nap and could not wake him 5 h later. EMS found him in asystole; he was intubated and received IO naloxone and epinephrine.

Laboratory/Diagnostic Findings: Na 137/K >10/Cl 113/CO₂ 7/BUN 24/Cr 0.99/Glu 27/AG 17, AST 3,499, ALT 2,888, Ca 8.7, lipase 965, WBC 24.6/Hgb 8.7/PLT 55, Serum APAP and salicylate not detected; serum drug screen was negative.

Clinical Course: He was in cardiac arrest at ED arrival: cool, pale skin, pupils fixed and dilated, no pupillary or corneal response; T 33.2°C. An ECHO showed no cardiac activity after 30 min of resuscitation, and he was declared dead.

Autopsy Findings: The cause of death: methadone toxicity; manner of death: undetermined.

Case 377. Unknown, fentanyl inhalation/nasal: undoubtedly responsible

Scenario/Substances: A 20 y/o male was found unresponsive at home after snorting illicit "oxycodone/APAP" pills. EMS found him in cardiac arrest. He was intubated and received ACLS, 2 mg naloxone IM, then epinephrine and naloxone x 3 with ROSC. ETCO₂ 44, O₂ sat 91%.

Past Medical History: Substance abuse, ADHD. Medication: dextroamphetamine-amphetamine.

Laboratory/Diagnostic Findings: ABG-pH 7.05/pCO₂ 80/pO₂ 94/HCO₃ 2. Na 139/K 3.7/Cl 100/CO₂ 23/BUN 11/Cr 1.4/Glu 411/AG 16, lactate 7. AST 105, ALT 124, INR 1.1. Serum APAP, ethanol and salicylate not detected. UDS positive for benzodiazepines and THC. CxR: pneumomediastinum.

Clinical Course: In the ED he received additional naloxone and started on a naloxone drip started along with IVFs, norepinephrine, sodium bicarbonate, midazolam and hypothermia protocol. On Day 2 re-warming was initiated. EKG: ST depression and probably anterolateral infarct; HR 127, QRS 105, QTC 405. ECHO: LVEF 40-45%, globally decreased. CT head: diffuse brain edema with loss of normal gray-white interface. Brain perfusion scan: no significant flow of blood to the brain. HR 126, RR 22, BP 122/100, T 37°C (rectal), O₂ sat 91% (35% FIO₂). The patient received enoxaparin, famotidine, piperacillin-tazobactam, D5W, nicardipine and phenylephrine. Based on the prognosis, the family opted for comfort measures and he died on Day 2.

Autopsy Findings: Cause of death: toxic effects of fentanyl; manner of death: accident.

Case 668. Acute oxycodone parenteral: contributory

Scenario/Substances: A 38 y/o male was found injecting a syringe into his IV line during inpatient treatment for endocarditis and 2nd degree heart block.

Past Medical History: Substance abuse, endocarditis, aortic surgery. Medications: diphenhydramine, gabapentin, clonazepam, hydromorphone, oxycodone, quetiapine.

Clinical Course: The patient rapidly developed mydriasis (8 mm pupils) and then cardiac arrest. He was intubated and received CPR, naloxone, epinephrine, atropine, sodium bicarbonate and flumazenil without ROSC and he died after 1 h of resuscitation. An acute PE from IV substance abuse was thought to have contributed to death.

Autopsy Findings: Cause of Death: acute pulmonary thromboemboli due to IV drug abuse; manner of death: accidental. Femoral blood: oxycodone 283 ng/mL, oxymorphone <10 ng/mL, quetiapine metabolites. Vitreous fluid oxycodone >400 ng/mL.

Case 779. Acute-on-chronic tramadol ingestion: undoubtedly responsible

Scenario/Substances: A 47 y/o male mistakenly took a bottle of tramadol 50 mg tablets instead of his evening medications. He was immediately referred to the ED.

Physical Exam: Nauseated and confused.

Clinical Course: Within 15 min he had a seizure and went into PEA arrest. He was intubated, received CPR and ILE with ROSC after 40 min. He coded again in the ICU but died after 30 min of resuscitation efforts.

Autopsy Findings: Cause of Death: tramadol toxicity. Femoral blood (from a hospital sample): diphenhydramine 95 ng/mL, metoprolol 720 ng/mL, tramadol 22,000 ng/mL, o-desmethyltramadol 750 ng/mL.

Case 803. Chronic APAP ingestion: undoubtedly responsible

Scenario/Substances: A 49 y/o female presented to the ED with tachypnea, confusion and hypoglycemia (Glu 58), complaining of "stomach pain."

Past Medical History: Anxiety, substance abuse, prior suicide attempt. Medications: APAP, lorazepam, tramadol, simvastatin, oxycodone. Recently overdosed on benzodiazepines and cocaine and was discharged from the hospital several days prior. Her husband reported that he "threw away" her lorazepam and oxycodone and she was treating her pain with 2-3 tablets of APAP "every 4 - 6 h."

Physical Exam: BP 144/84, HR 95, RR 36, T 37°C, O₂ sat 96% (RA). Awake but slow to respond to questions with slurred speech. Pupils 3mm and reactive, tachypneic with Kussmaul pattern. Right upper abdominal tenderness.

Laboratory/Diagnostic Findings: Serum APAP 321 mcg/mL; salicylate 4.3 mg/dL. Cr 1.35 (baseline 0.57), VBG-pH 6.84/HCO₃ 4, lactate 19.3 mmol/L, AST 9,065, ALT 6,334 ALP 170, bilirubin 5.5, CK 1,014, ammonia 333, Phos 8.2, WBC: 45,200, INR 8.9. CT head: no acute findings; CT Abd: small bowel obstruction.

Clinical Course: In the ED she was given D50W, fomepizole, 2L IVFs, 3 amps of sodium bicarbonate and started on NAC. Fomepizole was stopped when ethylene glycol, methanol and isopropanol were undetectable. Repeat APAP level (6 h later) was 258 mcg/mL. She was admitted to the ICU, intubated and started on propofol, fentanyl, norepinephrine, sodium bicarbonate, vasopressin and CRRT. Day 2: T 35°C, HR 107, BP 93/53, O₂ sat 100% (40% FiO₂), AST 10,844, ALT 4665, lipase 73,000, INR 4.3, LDH 10,000, ammonia 164, lactate 13.4. She received FFP, insulin drip and antibiotics for aspiration pneumonia, ascites and splenic infarct. On Day 3 she was listed for liver transplant but then held due to pancreatitis. Day 6: GCS 9; CT head showed cerebral edema. Bilirubin increased to 19.9 on day 7. Day 8: IV NAC discontinued due to lack of IV access. She developed fulminant pancreatitis, ARDS and lost corneal reflexes. Based on the prognosis, the family opted for comfort measures and she died on Day 11.

Autopsy Findings: Cause of death: complications of acute APAP toxicity; manner of death: undetermined.

Case 868. Acute-on-chronic phenazopyridine ingestion: undoubtedly responsible

Scenario/Substances: A 53 y/o female presented with methemoglobinemia after chronic abuse of phenazopyridine.

Past Medical History: Chronic UTIs. Recent admission for methemoglobinemia (MetHgb 44%) after phenazopyridine misuse.

Physical Exam: The patient appeared "jaundiced" and was confused. BP 154/77, HR 108, RR 16, O₂ sat 78% (100% O₂ NRB), T 37°C.

Laboratory/Diagnostic Findings: MetHgb 46%. ABG-pH 7.32/pCO₂ 44/pO₂ 67/HCO₃ 22. Hgb 9.2/Hct 30.3/WBC 11.1/PLT 89. Serum APAP, ethanol and salicylate not detected. UDS positive for barbiturates and THC. Day 2: K 9.3, CO₂ 11, BUN 76, Cr 3.1, AST 930, AST 439, lactate 11.2.

Clinical Course: She remained confused, tachycardic and hypertensive, with renal insufficiency (brownish urine, BUN 42, Cr 1.9), mild acidosis (CO₂ 23), transaminitis (AST 123, ALT 156) and "long" QTc. She received a total of 5 mg/kg of methylene blue; repeated MetHgb was 26.4%. Repeat ABG-pH 7.23/pCO₂ 40/pO₂ 566 (on high-flow O₂), HCO₃ 16.8. On Day 2 she was started on norepinephrine for hypotension (BP 74/46) and received exchange transfusion (for cyanosis and increasing confusion). She died during transfer to a tertiary hospital.

Autopsy Findings: Not available.

Case 1163. Acute-on-chronic nitrous oxide inhalation: contributory

Scenario/Substances: A 30 y/o male was found unresponsive in his car with dozens of nitrous oxide cannisters. Upon arousal, he reported inhaling 10 cannisters recently and on a daily basis. He denied use of any other drugs or suicidal ideations but reported feeling light-headed and SOB.

Past Medical History: Morbidly obese, bipolar disorder.

Physical Exam: On ED arrival he was anxious but alert and oriented. BP 106/70, HR 148, RR 50, O₂ sat 100% (NRB), T 37.2°C.

Laboratory/Diagnostic Findings: WBC 15, Glu 466, Ca (ionized) 1.03, CO₂ 20, AG 21. Serum APAP, ethanol and salicylate not detected. UDS: positive for TCAs. ECG: HR 150.

Clinical Course: 50 min after ED arrival: BP 113/74, HR 129, RR 36, O₂ sat 100% (15L). He was given IVFs and 2mg IV lorazepam and was admitted to a floor bed. ~6h later he became agitated and dyspneic; O₂ sat was 100% (NRB). He suddenly collapsed and went into PEA. He was intubated and received ACLS (including epinephrine, Mg, Ca, sodium bicarbonate and atropine) for 40 min without ROSC. He died ~7h after ED arrival. The nitrous oxide use was thought to have been contributory to his death.

Autopsy Findings: Cause of death: bilateral pulmonary emboli due to DVT; manner of death: natural. Femoral blood testing: NO 71 mcg/mL. The autopsy report mentioned that 'chronic nitrous oxide abuse is a risk factor for the formation of DVT.'

Case 1164. Acute ketamine inhalation: undoubtedly responsible

Scenario/Substance: A 34 y/o male was found unresponsive in his bathroom tub with white powdery substance around his nares. He had discussed using ketamine earlier that evening. EMS found he in cardiac arrest and provided CPR, epinephrine, naloxone and defibrillation with ROSC. He lost pulses enroute to the ED.

Past Medical History: Attention deficit disorder, substance abuse.

Physical Exam: In the ED: BP 85/31, HR 79, RR 16, O₂ sat 97% (intubated). He had fixed and dilated pupils, no spontaneous movement and right periorbital ecchymosis.

Laboratory/Diagnostic Findings: VBG- pH 6.89/pCO₂ 89, lactate 16, Cr 1.3, AST 700's, INR 1.5 Hgb 15.8/PLT 35, fibrinogen <30. UDS was negative.

Clinical Course: In the ED he received epinephrine, amiodarone, atropine, Ca, naloxone and sodium bicarbonate with ROSC. He was started on norepinephrine, vasopressin and epinephrine drips for persistent hypotension. In the ICU he remained unstable and required increased vasopressors and sodium bicarbonate; CRRT was initiated. On Day 3 he had repeated cardiac arrests with ROSC after resuscitation, but remained in shock (SBP 50s) after the third cardiac arrest. Based on the prognosis, comfort measures were instituted and he died on Day 3.

Autopsy Findings: Cause of death: complications of acute ketamine use. Findings: cerebral edema; subscapular, subgaleal and left temporalis muscle hemorrhages. Antemortem blood: ketamine 13,189 ng/mL, nor-ketamine 16,439 ng/mL.

Case 1166. Acute isoflurane inhalation/nasal: probably responsible

Scenario/Substance: A 46-y/o male was found unresponsive in bed, by his wife, with 5 empty bottles of isoflurane. EMS found him in asystole and provided CPR, epinephrine and defibrillation with ROSC.

Past Medical History: Chronic alcoholism, HTN.

Physical Exam: Unresponsive, facial abrasions, pupils fixed and dilated. BP 185/100, HR 130, O₂ sat 100% (intubated), T 35°C.

Laboratory/Diagnostic Findings: ABG-pH 7.11/pCO₂ >60/pO₂ 110, NA 141/K 4.4/CL 90/CO₂ 18/BUN 18/Cr 1.13/Glu 231. WBC 8.8/Hgb 13.7/PLT 217. UDS negative. CT head and CxR: no acute disease.

Clinical Course: In the ICU he developed bilateral pulmonary infiltrates and respiratory failure, and was started on IV antibiotics. He developed progressive hypotension and went into cardiac arrest. He received CPR and norepinephrine with transient ROSC, but again arrested. Based on the prognosis, comfort measures were instituted and he died on Day 1.

Autopsy Findings: Antemortem blood: isoflurane 0.29 mcg/mL.

Case 1168. Acute lidocaine parenteral: undoubtedly responsible

Scenario/Substances: A 78 y/o male called 911 for symptomatic hypoglycemia. He went into cardiac arrest after EMS mistakenly administered IV lidocaine (2%; unknown dose) instead of D10.

Laboratory/Diagnostic Findings: ABG-pH 7.01. Na 138/K 4.4/Cl 98/CO₂ 23/BUN 22/Cr 1.8. ECG: HR 94, QRS 186.

Clinical Course: He was in asystole upon ED arrival, and received sodium bicarbonate and 100 mL of 20% ILE (followed by 0.5 mL/kg over 1 h) with ROSC and wide-complex VT. He also received 3 g Ca and intubated for airway protection. He became hypertensive (BP 207/79, HR 94, O₂ 100% vent); then, 3 h later, hypotensive and tachycardic (SBP 75, HR 122, QRS 134). He failed to respond to IVFs and norepinephrine, coded several times and developed cardiac tamponade. Based on the prognosis, the family opted for institution of comfort measures and he died 12 h post exposure.

Autopsy Findings: Cause of death: cardiac arrest, circulatory shock and cardiac tamponade. Autopsy was not performed.

Case 1195. Acute-on-chronic lacosamide, levetiracetam ingestion: undoubtedly responsible

Scenario/Substances: An 81 y/o male presented to the ED via EMS 1 h after ingesting ~75 tablets of lacosamide (200 mg) and levetiracetam (500 mg ER) in a suicide attempt.

Past Medical History: HTN, dementia, previous suicide attempt, seizure disorder. Medications: lacosamide, levetiracetam, aspirin, lorazepam.

Physical Exam: ED vital signs: BP 192/96, HR 91, RR 20, O₂ sat 94% (on 2L).

Laboratory/Diagnostic Findings: ECG: QRS 120, QTc 424. Repeat ECG (6 h later): QRS 124, QTc 447. Electrolytes "normal." Serum APAP and salicylate not detected.

Clinical Course: In the ED he was intubated and sedated with propofol and lorazepam and received IVFs. Intermittent seizure activity developed ~6 h later and persisted. He developed intermittent episodes of VT and then bradycardia with complete heart block. Based on the prognosis, comfort measures were instituted and he died 16 h after presentation.

Autopsy Findings: Cause of death: levetiracetam and lacosamide toxicity; manner of death: suicide.

Case 1217. Acute-on-chronic clomipramine, perphenazine, paroxetine, diphenhydramine, clonazepam, hydroxyzine, atomoxetine, cetirizine ingestion: undoubtedly responsible

Scenario/Substances: A 29 y/o male was found unresponsive with empty bottles of his medications: clomipramine, perphenazine, atomoxetine, lithium, clonazepam, paroxetine and hydroxyzine. EMS administered naloxone without response.

Physical Exam: In the ED he responded to painful stimuli. Initial BP 104/55, HR 95, O₂ sat 100% (RA), T 36.6°C.

Laboratory/Diagnostic Findings: electrolytes and AST/ALT were 'normal,' Cr 'slightly elevated.' Serum ethanol, APAP and salicylate not detected. ECG: QTc 575. Serum lithium 0.42 mmol/L.

Clinical Course: ~3 h after ED arrival he was somnolent and uncooperative, but admitted to an intentional ingestion. He became hypotensive (80/50) with decreased O₂ sat (93%) and labored breathing. During intubation he had seizure activity (receiving lorazepam) and became bradycardic (HR 30s) followed by heart block and cardiac arrest.

Autopsy Findings: Cause of death: combined toxic effects of atomoxetine, cetirizine, clomipramine, clonazepam, diphenhydramine, hydroxyzine, paroxetine and perphenazine. Femoral blood tested positive for: clonazepam 10.9 ng/mL, 7-aminoclonazepam 308 ng/mL, clomipramine 2,153 ng/mL, norclomipramine 2,864 ng/mL, paroxetine 988 ng/mL, diphenhydramine 67.0 ng/mL, cetirizine 0.7 mcg/mL, hydroxyzine 593 ng/mL, perphenazine 110 ng/mL and atomoxetine 10,000 ng/mL.

Case 1225. Unknown, bupropion (extended release), ethanol ingestion: undoubtedly responsible

Scenario/Substances: A 32 y/o male took 2 handfuls of bupropion 150 mg tablets with ethanol in a suicide attempt.

Past Medical History: Methamphetamine and alcohol abuse, depression with anxiety. Medications: alprazolam.

Laboratory/Diagnostic Findings: ABG-pH 7.36/pCO₂ 38/pO₂ 180/HCO₃ 21/BE -4.2. Na 142/K 3.8/Cl 112/CO₂ 23/BUN 8/Cr 0.7/Glu 83/AG 7, AST 14, ALT 16, bilirubin 0.4, WBC 7.7/Hgb 13.4/Hct 40/PLT 217. Serum ethanol 53 mg/dL; serum APAP and salicylate not detected. UDS positive for benzodiazepines, THC and amphetamines. CxR: negative. ECG: HR 87, QRS 84, QTc 425;

Clinical Course: In the ED he was alert: BP 132/86, HR 96, RR 16, O₂ sat 99% (RA), T 37°C. He was started on WBI, but his mental status declined and he had a seizure. He was intubated; QRS increased to 186 and a sodium bicarbonate drip was started. He became hypotensive and required vasopressor support. A left ventricular assist device was placed on Day 2, but he required escalating doses of 3 vasopressors. CRRT was initiated but he developed refractory shock. ECHO: dilated cardiomyopathy, LVEF 20%, global hypokinesis. ILE was administered with no improvement and he died on Day 3.

Autopsy Findings: Cause of death: bupropion overdose; manner of death: suicide.

Case 1240. Acute bupropion, hydrocarbon, fluorinated ingestion, inhalation/nasal: contributory

Scenario/Substances: A 39 y/o male ingested ~46 bupropion tablets and huffed a 'dusting aerosol' prior to being tasered (x 3) by police and going into cardiac arrest. EMS provided ACLS (epinephrine, sodium bicarbonate, Mg) and defibrillation with ROSC.

Physical Exam: BP 114/57, HR 100, RR 30.

Laboratory/Diagnostic Findings: K 3.4, UDS was negative. ECG: QTc 525, QRS 142; repeat (ICU) ECG: QTc 472, QRS 116.

Clinical Course: He was intubated and sedated with propofol in the ED. In the ICU he received lorazepam and levetiracetam for tremors and started seizing when propofol was weaned. He remained hemodynamically stable (BP 131/65, HR 103) and transferred to a tertiary hospital for EEG monitoring and concern for anoxic brain injury. At that HCF he had myoclonic jerks and seizures, initial MRI head was unremarkable. Repeat MRI: anoxic brain injury. Based on the poor prognosis, family opted for comfort measures and he died on Day 5. The tasing was thought to have contributed to his cardiac arrest and subsequent death.

Autopsy Findings: Cause of death: complications of cardiac arrhythmia following electronic control device and physical restraint. Antemortem blood: bupropion 170 ng/mL, hydroxybupropion 1700 ng/mL, acetone 2.5 mg/dL. The following not detected: methane, ethane, propane, isobutene, n-butane, halocarbons, 1,1-difluoroethane, 1,1,1,2-tetrafluoroethane.

Case 1337. Acute-on-chronic venlafaxine (extended release) ingestion: undoubtedly responsible

Scenario/Substances: A 77 y/o male was found seizing by family near an empty bottle of venlafaxine (150 mg ER).

Physical Exam: Initial vitals: BP 90/53, HR 114, RR 24, O₂ sat 98% (RA), T 37°C. He was in status epilepticus. In the ICU: BP 72/52, HR 83, O₂ sat 70% (100% FiO₂).

Laboratory/Diagnostic Findings: pH 7.21/pCO₂ 43/pO₂ 96/HCO₃ 17. K 3.7, BUN 17, Cr 1.3. Serum APAP, ethanol and salicylate not detected; UDS positive for benzodiazepines. ECG: ST depressions, QRS 136, QTc 535.

Clinical Course: In the ED he continued to have seizures and was sedated, intubated and given bicarbonate and vasopressors. He required multiple vasopressors for shock and several episodes of cardiac arrest. He died 14 hours after ED arrival.

Autopsy Findings: Cause of death: venlafaxine intoxication; manner of death: suicide. Numerous pills were found in gastric contents. Antemortem blood: venlafaxine 29,000 ng/mL, o-desmethylvenlafaxine 4,300 ng/mL.

Case 1360. Acute diphenhydramine ingestion: undoubtedly responsible

Scenario/Substances: A 32 y/o female was found by her mother after a presumed overdosed of OTC doxylamine. EMS found her seizing

and in SVT, with pills in her mouth. She rapidly progressed into VT and then PEA.

Physical Exam: Cardiac arrest, no evidence of trauma.

Laboratory/Diagnostic Findings: ABG-pH 6.5/pCO₂ 60.5/pO₂ 67.9/HCO₃ 4.7. Na 151/K 4.4/Cl 113/Glu 201, Hct 40. CxR: intubated, opacification of bilateral lung fields. ECG: junctional rhythm, RBBB, QTc 500.

Clinical Course: She received 1.5 h of ACLS resuscitation, including 16 doses of epinephrine, 10 doses of sodium bicarbonate, atropine, glucagon and transcutaneous pacing without ROSC. She died within 2 h of ED presentation.

Autopsy Findings: Cause of death: acute diphenhydramine intoxication. Blood diphenhydramine 29.8 mg/L (premortem); 29.8 mg/L (femoral blood at autopsy).

Case 1386. Acute hydroxychloroquine, ibuprofen, naproxen ingestion: undoubtedly responsible

Scenario/Substances: A 14 y/o female came home from school upset about bullying. Later that evening she collapsed in the hallway and was found crying, short of breath with thick red oral secretions and white particles in her mouth. EMS found bottles of hydroxychloroquine (6 g missing), ibuprofen (200 mg tablets) and naproxen (750 mg tablets).

Laboratory/Diagnostic Findings: Na 147/K 1.5/Glu 221, Ca 10.7, lactate 7.3, WBC 13.3/Hgb 9.9/Hct 31%. Serum APAP, ethanol and salicylate not detected. UDS was negative. CxR: pulmonary edema.

Clinical Course: She had a cardiac arrest shortly after ED arrival. CPR was initiated and she was intubated (with bloody, frothy sputum). She had ROSC after epinephrine (1mg) and sodium bicarbonate (100 mEq); recurrent cardiac arrests were treated with epinephrine, Ca, K, D50 and sodium bicarbonate. She was started on norepinephrine, vasopressin and sodium bicarbonate drips, and then had a left ventricular assist device placed by cardiology. Her blood pressure failed to improve, oxygenation decreased (O₂ sat 72% on 100% FiO₂) and she had recurrent cardiac arrests. Her pupils were fixed and dilated, and her BP 86/54 on multiple vasopressors. Based on her poor prognosis, comfort measures were instituted and she died 3.5 h after ED arrival.

Autopsy Findings: Cause of death: acute hydroxychloroquine intoxication. Toxicological testing (hospital plasma): hydroxychloroquine: 26,000 ng/mL.

Case 1394. Chronic methotrexate ingestion: undoubtedly responsible

Scenario/Substances: 75 y/o female nursing home patient presented to an ED with respiratory distress, GI bleed and sepsis. Her son, a physician, noted that her medication record from the nursing home listed methotrexate instead of metolazone. She had been mistakenly given methotrexate 2.5 mg/d for 14 d.

Past Medical History: End stage renal disease on HD, HTN, Parkinson's disease, hypothyroidism, s/p CVA, diabetes mellitus. Medications: Apixaban, metolazone.

Physical Exam: SBP 100, HR 70, RR "high 20s", O₂ sat 99% (on oxygen).

Laboratory/Diagnostic Findings: ABG-pH 7.4/pCO₂ 34/HCO₃ 22.6, Cr 2. AST 41, ALT <6, WBC 0.1/Hgb 9 (after transfusion)/PLT 8, INR 1.6. CxR: pneumonia. Initial methotrexate: 0.09 mmol/L; Day 2: 0.05; Day 5: 0.04; Day 6: not detected.

Clinical Course: She was hypotensive with melena on ED arrival. She received an RBC transfusion and 5 sessions of HD. Leucovorin was administered and continued until her bone marrow demonstrated recovery after about 11 days. Filgrastim and darbepoetin were also given. Glucarpidase was considered but not administered due to severe end organ damage and low plasma methotrexate concentration. She remained anuric and received vasopressors, IV antibiotics and antifungals, and multiple RBC and platelet transfusions for persistent pancytopenia. She required CPAP but refused intubation after severe episode of mucous plugging, hypoxia and bradycardia. Despite airway suctioning she became more bradycardic, then asystolic, and died.

Autopsy Findings: Not performed.

Case 1395. Chronic methotrexate ingestion: undoubtedly responsible

Scenario/Substances: A 79 y/o woman was prescribed methotrexate 2.5 mg once a week but accidentally took 6 tablets a day for 4 days. She

became weak and unable to ambulate. When her family discovered the error, she was brought to the ED.

Past Medical History: Cardiac pacemaker. Medications omeprazole, furosemide and ibuprofen.

Laboratory/Diagnostic Findings: Na 137/K 4.4/Cl 101/CO₂ 20/BUN 116/Cr 2.31, troponin 0.05, AST 23, ALT 17, ammonia 18. WBC 9.2/Hgb 7.5/PLT 335. Serum salicylate 3; serum APAP and ethanol not detected. CxR: unremarkable. Initial methotrexate level 0.5 mmol/L; 24 h later: 0.06 mmol/L.

Clinical Course: In the ED she was awake and alert; BP 113/51, HR 58, RR 23, O₂ sat 100% (RA). Leucovorin was given at 15 mg q 6h. On Day 1 she developed lethargy and labored breathing: BP 120/65, HR 64, RR 18, O₂ sat 93% (3 L NC). BUN 114, Cr 1.88, WBC 1.3/Hgb 7.6/Hct 24.4/PLT 157; she received 1 unit of blood. On Day 2: increased lethargy and confusion with vomiting and diarrhea. She was moved to the ICU: BP 91/44, HR 62, RR 24, T 36 °C. BUN 114/Cr 2.54, AST 1,142, ALT 560, WBC 1.3/Hgb 7.5/Hct 24.1/PLT 93. On Day 3 she was drowsy but oriented. BP 103/49, HR 60, RR 23, O₂ sat 97% (30%/30L FM). She developed generalized edema, blisters and skin sloughing all over her body, and bleeding from her mouth and other sites. Her leucovorin dose was 38 mg q 3 h. Labs: CO₂ 19/BUN 139/Cr 3.68/Glu 181, AST 1,756, ALT 1,237, bilirubin 5.1, ALP 56, ammonia 18, uric acid 24.3, troponin 0.31, Hgb 8.4/PLT 15. On Day 4 she was lethargic with continued bleeding and skin sloughing: BP 117/45, HR 60, O₂ sat 96% (30%/25L FM), T 98.5 °F. On Day 5 she was started on CRRT; BP 90/55, HR 60, RR 6, O₂ sat 98% (10 L NRB). Based on the prognosis, family opted for institution of comfort measures and she died on Day 9.

Autopsy Findings: Autopsy not performed.

Case 1409. Acute-on-chronic propranolol ingestion: undoubtedly responsible

Scenario/Substances: A 25 y/o female intentional ingested > 3 g of her propranolol. EMS found her in cardiac arrest with a suicide note (DNR request).

Past Medical History: Previous suicide attempts. Medications: propranolol, trazodone, levothyroxine.

Physical Exam: Post ROSC: BP 121/70, HR 79.

Laboratory/Diagnostic Findings: ABG (intubated)-pH 7.25/pCO₂ 47/pO₂ 97. Glu 250, K 7.5 (then 4); lactate 9. ECG: QRS 176, QTc 555.

Clinical Course: In the ED she was intubated and received epinephrine, sodium bicarbonate, Ca, glucagon, norepinephrine, ILE and IVFs with ROSC after 15 min. She developed PEA and bradycardia. 2 h later BP 143/99, HR 66, RR 24, O₂ sat 100%, T 34 °C. Repeat ECG: first-degree block, QRS 140, QTc 490. 5 h later: SBP 140s, HR 40s with a junctional rhythm. She developed fixed pupils ~12 h after presentation. CT head: impending herniation with diffuse infarction. She received norepinephrine infusion and vasopressin for diabetes insipidus. She was declared brain dead and died 35 h after presentation.

Autopsy Findings: Cause of death: hypoxic ischemic encephalopathy as a result of acute propranolol intoxication; manner of death: suicide. Antemortem serum: propranolol 360 ng/ml, carbamazepine 1.8 mcg/ml, carbamazepine-10,11-epoxide 0.26 mcg/ml.

Case 1467. Acute-on-chronic verapamil (extended release) ingestion: undoubtedly responsible

Scenario/Substances: A 49 y/o male presented to the ED after ingesting 50 tablets of verapamil 180 mg in a suicide attempt.

Past Medical History: HTN, end-stage renal disease (s/p renal transplant), ethanol abuse.

Laboratory/Diagnostic Findings: Na 137/K 3.3/Cl 107/CO₂ 12/BUN 56/Cr 5.98/Glu 260, Ca 7.7 WBC 21.0/Hgb 11/PLT 283, AST 16, ALT 24, INR 1.2. Serum APAP, ethanol and salicylate not detected. Post-intubation ABG: pH 7.14/pCO₂ 31/pO₂ 73, lactate 4.8. ECG: HR 45, QRS 136, QTc 520.

Clinical Course: He was initially alert and oriented x 3 but hypotensive. He was given 1 dose of activated charcoal but vomited and was subsequently intubated. He received 1 gram Ca, atropine, 2 L IVFs, 1 mg glucagon, and started on dopamine. Vital signs 1.5 h after ED arrival: BP 56/36, HR 61, RR 18, T 36 °C, O₂ sat 99%. Norepinephrine and HIE (2 U/kg/hr) were started, he received WBI with 500 mL of polyethylene

glycolate electrolyte solution and he was transferred a tertiary care facility for ECMO. At that hospital he was in refractory shock and received Ca, glucagon (5 mg) and vasopressors and insulin were increased. The patient became bradycardic, transcutaneous and transvenous pacing were unsuccessful; CPR was initiated but he went into cardiac arrest and died prior to ECMO.

Autopsy Findings: Cause of death: acute verapamil toxicity; manner of death: suicide. Heart blood verapamil 51.2 mg/L, norverapamil 4.5 mg/L; brain: verapamil 30.8 mg/kg, norverapamil 4.0 mg/kg; serum: verapamil 1.6 mg/L; norverapamil 1.2 mg/L.

Case 1482. Acute dopamine parenteral: undoubtedly responsible

Scenario/Substances: A 52 y/o male called EMS due to nausea, vomiting and generalized weakness. He had a history of ethanol abuse but had not drunk for several days. EMS inadvertently administered 400 mg dopamine IV; he developed cardiopulmonary arrest.

Physical Exam: Intubated, unresponsive, BP 50/20, HR 94, afebrile.

Laboratory/Diagnostic Findings: K 6.3, BUN 23, Cr 2.2. ABG-pH 6.7/pCO₂ 19/HCO₃ 2.5, lactate 16.3, troponin 0.019, CK-MB 1,421. ECG: occasional PVCs. Head CT and CxR were normal.

Clinical Course: He had ROSC in the ED after being intubated and receiving CPR and epinephrine. He was started on norepinephrine, vasopressin and phenylephrine for hypotension and received multiple boluses of sodium bicarbonate for metabolic acidosis (ABG-pH 6.9/HCO₃ 4). He was rewarmed from hypothermia, and developed anuric renal failure and persistent hypotension. Based on the prognosis, comfort measures were instituted and he died on Day 2.

Autopsy Findings: Not available.

Case 1549. Acute ranolazine, quetiapine, valproic acid ingestion: undoubtedly responsible

Scenario/Substances: A 65 y/o female ingested #50 of her brother's 1000 mg ranolazine tablets 45 min prior to ED arrival.

Past Medical History: Turner syndrome, schizophrenia, bipolar disorder, prior overdoses. Medications: mirtazapine, quetiapine, gabapentin, trazadone, rivaroxaban.

Physical Exam: Awake, alert and oriented. BP 103/67, HR 94, RR 20, O₂ sat 98%, T 37 °C.

Laboratory/Diagnostic Findings: VBG: pH 7.37/pCO₂ 39.6/pO₂ 60.5, lactate 4.3, NA 136/K 4.2/Cl 100/CO₂ 26/BUN 22/Cr 0.8/Glu 116, AST16, ALT 19, bilirubin 0.2 WBC 8.7/Hgb 11.9/HCT 37.9/PLT 481. Serum APAP, ethanol and salicylate not detected. UDS negative for amphetamine, benzodiazepine, cannabinoid, cocaine and opiates. ECG: HR 88, QRS 85, QTc 472.

Clinical Course: She received 50 g of activated charcoal in the ED. One hour later her SBP decreased to 89; repeat ECG: QTc 505. She received IVFs, Mg, Ca and was admitted to the ICU. She required 6 L IVFs and a norepinephrine drip for persistent shock. She developed somnolence, pulmonary edema, diaphoresis and worsening shock, and was intubated 8 h after arrival. Despite prolonged attempts at resuscitation, including IV glucagon, she developed seizure-like activity and bradycardia. She died within 12 h of admission.

Autopsy Findings: Cause of death: acute ranolazine intoxication. Antemortem blood: ranolazine 50 mg/L (therapeutic level 0.4-6.1 mg/L); positive (\leq therapeutic levels): gabapentin, mirtazapine, quetiapine, trazadone.

Case 1561. Acute-on-chronic diltiazem (extended release), ethanol ingestion: undoubtedly responsible

Scenario/Substances: A 67 y/o male presented to an ED after an intentional ingestion of ethanol and #27 diltiazem (delayed release) tablets.

Physical Exam: Awake and alert, complaining of dizziness. BP 102/56, HR 40, RR 18, afebrile, O₂ sat 'OK (RA).

Laboratory/Diagnostic Findings: SBP (after resuscitation): 110, HR 50. Initial lactate 8; serum APAP and salicylate not detected. ECG: NSR, no heart block.

Clinical Course: He received IVFs, atropine, Ca, glucagon and HIE. K became 1.3 so HIE was stopped. In the ICU, ~6 h later, he had a

cardiac arrest but was intubated and resuscitated with ROSC; a pacemaker was inserted. A CPR-related pneumothorax was treated with chest tube. HIE was re-started and he received vasopressors and ILE. Pupils were fixed and non-reactive, he developed seizures and was started on CRRT due to poor urine output. Based on his poor prognosis, family opted for comfort measures and he died on Day 6.

Autopsy Findings: Cause of death: complication from acute diltiazem intoxication; manner of death: suicide. Antemortem blood diltiazem 900 ng/mL.

Case 1576. Acute-on-chronic digoxin ingestion: undoubtedly responsible

Scenario/Substances: A 70 y/o male ingested 10 tablets of digoxin 'to put himself to sleep.'

Past Medical History: Metastatic melanoma, HTN, and depression. Medications: escitalopram, metoprolol, prochlorperazine, temazepam and digoxin.

Physical Exam: In the ED he was alert and oriented; BP 79/49, HR 118, RR 16, T 37 °C.

Laboratory/Diagnostic Findings: K 'normal', lactate 10.4, troponin 0.6, ECG: accelerated junctional rhythm at 86. No digoxin concentration available.

Clinical Course: He received IVFs and was admitted to the ICU where he had a cardiac arrest. He received 10 vials of digoxin Fab fragments but died 3 h after presentation.

Autopsy Findings: Cause of death: acute digoxin toxicity; manner of death: suicide. Pre-mortem blood: digoxin 16 ng/mL.

Case 1631. Acute-on-chronic acetaminophen/dextromethorphan/guaifenesin/pseudoephedrine, salicylate ingestion: contributory

Scenario/Substances: A 7 y/o female was diagnosed with influenza and treated with amoxicillin and oseltamivir. Over the next 5 days her family also administered an APAP-containing OTC cough and cold preparation (unknown dose q4h) and bismuth subsalicylate (262 mg q4h). On the morning of admission, she was found unresponsive and taken to the ED.

Physical Exam: BP 99/30, HR 160, RR 13, O₂ sat 100%, T 37 °C. Lethargic, pale, distended abdomen with hepatomegaly, capillary refill 5 sec.

Laboratory/Diagnostic Findings: bilirubin 2.1, AST > 20,000, ALT 8,171, ALP 390, INR 14.2, PTT 52, WBC 31/Hgb 8.1/PLT 252, lactate 10.3. Serum APAP 167, salicylate 11.7.

Clinical Course: She was intubated and received IVFs, epinephrine drip, antibiotics, sodium bicarbonate infusion and NAC. She was transferred to a tertiary hospital for further care, including vitamin K, blood products and CRRT, and listed for liver transplantation. ~4 h later she had a cardiac arrest and was resuscitated with epinephrine, amiodarone, multiple defibrillations, Ca, Mg and sodium bicarbonate. Attempts to initiate ECMO were unsuccessful and she died on Day 6. Her viral illness was thought to have contributed to her death.

Autopsy Findings: Acute liver failure; diffuse hepatocellular necrosis with sinusoidal congestion; coagulopathy, multiple ecchymotic and purpuric hemorrhages; hemorrhagic congestion of lungs; epicardial hemorrhages and effusion.

Case 1642. Acute ayahuasca ingestion: contributory

Scenario/Substances: A 22 y/o male developed hallucinations and a seizure after participating in a religious "soul quest" that involved drinking ayahuasca tea. He was intubated by EMS prior to ED arrival.

Physical Exam: BP 123/72, HR 113, RR 30, O₂ sat 100% (60% FiO₂), T 37 °C.

Laboratory/Diagnostic Findings: ABG-pH 7.1/pCO₂ 63/pO₂ 81/HCO₃ 19. Na 114/K 2.5/Cl 71/CO₂ 20/BUN 12/Cr 0.72/Glu 249, AST 92, ALT 32, bilirubin 2.1, INR 1.25. WBC 37/Hgb 12.5/PLT 337. Serum APAP, ethanol and salicylate not detected. CxR: patchy bilateral airspace opacities; ECG: NSR, QRS 124, QTc 418.

Clinical Course: The patient was admitted to the ICU, received IVFs, vasopressors and anticonvulsants. Neuroimaging revealed diffuse

cerebral edema and tonsillar herniation. On Day 2 he only withdrew to painful stimuli in his right leg. Based on the prognosis, the family opted for institution of comfort measures and he died on Day 3.

Autopsy Findings: Cause of death: hypoxic encephalopathy due to hyponatremia from primary polydipsia. Four round superficial burns on left forearm (consistent with Kambo inoculation sites); drugs of abuse screen: negative.

Case 1644. Acute ephedra, yohimbine, caffeine ingestion: undoubtedly responsible

Scenario/Substances: A 40 y/o male presented to an ED after ingested 81 pills of a 'fat burning medication' (listed ingredients: caffeine, ephedra extract, proprietary xanthinol, proprietary blend).

Past Medical History: Arthritis, bipolar disorder, traumatic brain injury, seizures, schizophrenia, depression.

Laboratory/Diagnostic Findings: ABG-pH 6.76/pCO₂ 70/pO₂ 214/HCO₃ 8. Na 146/K 2.8/Cl 108/CO₂ 14/BUN 8/Cr 1.33/Glu 210/AG 24. WBC 15/Hgb 15.7/Hct 47/PLT 295, CK 161. Serum APAP and ethanol not detected, salicylate 3.4 mg/dL. UDS positive for THC, benzodiazepines. ECG: HR 130s, QRS 132, QTc 359.

Clinical Course: The patient was agitated and combative and was held down by security to place IV and administer lorazepam. Pupils 5 mm and nonreactive, increased muscle tone. He was intubated with increased chemical sedation for persistent agitated delirium: BP 65/40, HR 130s with alternating narrow and wide-complex tachycardia. He received IVFs (for hypotension), sodium bicarbonate, potassium and cardioversion (brief NRS but then wide complex tachycardia). Lidocaine, sodium bicarbonate (11 amps and a drip) and potassium were given. He developed cardiac arrest and died despite continued CPR and resuscitation efforts.

Autopsy Findings: Cause of death: intoxication by yohimbine and caffeine. Blood testing: caffeine 120 mcg/ml, yohimbine 600 ng/ml, delta-9 carboxy THC 22 ng/mL, delta-9 THC 3.5 ng/mL, norfluoxetine 84 ng/mL; no ephedrine detected.

Case 1646. Acute ferrous sulfate, salicylate ingestion: undoubtedly responsible

Scenario/Substances: A 16 y/o female presented 9 h after taking #100 ferrous sulfate (325 mg) tablets and aspirin. She was vomiting at home.

Physical Exam: BP 125/102, HR 64, RR 26, O₂ sat 96%, afebrile.

Laboratory/Diagnostic Findings: ABG-pH 7.31/pCO₂ 19/pO₂ 133/HCO₃ 14. Na 139/K 2.9/CO₂ 14/Cr 1.13/Glu "normal." Serum APAP and ethanol not detected. Serum salicylate 10.1 mg/dL, serum iron 4,206 mcg/dL (repeated level was 4,300 mcg/dL).

Clinical Course: In the ED she was pale and lethargic, with bloody diarrhea. Abdominal x-ray showed tablets in her GI tract. WBI was initiated, she received deferoxamine (10 mg/kg/h), IVFs and potassium. Within hours she became more lethargic; repeat ABG-pH 7.02/pCO₂ 29/HCO₃ 7. She was flown to a tertiary hospital where deferoxamine was continued at 15 mg/kg/h, she was intubated. Repeat abdominal x-ray showed no tablets and WBI was stopped. Repeat iron level was 3,953 mcg/dL, ASA 4.2 mg/dL. ABG-pH 7.01/pCO₂ 39/pO₂ 43/CO₂ 11. Na 145/K 3.3/Cl 121/CO₂ 10/Cr 0.78/Glu 155., WBC 32.5, AST 72, ALT 28, INR 7.43. BP 119/85, HR 90s, RR 20s, T 97.7 °F. About 12 h later her iron level was 347 mcg/dL; then 316 mcg/dL 1 h later. She required epinephrine for hypotension and D25 for hypoglycemia (Glu 52). On Day 2 her iron level was 112 mcg/dL and vasopressors were continued. She was transferred to a tertiary hospital for liver transplant evaluation (pH 7.2, lactate 8.1, AST 1,172, INR 6.5, ammonia 90). On Day 3 her ammonia was 738 and lactate 12.4; she remained intubated and unresponsive to stimuli. Plasma FFP; CRRT and NAC were initiated. Transaminases peaked on Day 4 (AST 3,964, ALT 5,136, INR 8, ammonia 150, Factor V was 9% (normal range 60-140%). Day 8 she was extubated and answering questions; vasopressors and CRRT were stopped and she was taken off the transplant list. On Day 12 she developed a lower GI bleed and a bowel perforation on Day 15. She received antibiotics, blood products and multiple operations. She died on Day 49.

Autopsy Findings: Not performed.

Case 1647. Acute fluoride ingestion: undoubtedly responsible

Scenario/Substances: A 21 y/o female ingested 226 g of sodium fluoride powder. EMS found her unresponsive and she was intubated.

Past Medical History: Depression.

Physical Exam: BP 99/63, HR 115, RR 18, O₂ sat 100%.

Laboratory/Diagnostic Findings: ABG-pO₂ 477/HCO₃ 18.8. Serum ethanol, APAP and salicylate not detected. UDS positive for benzodiazepines. Hgb 9.8, Hct 31%.

Clinical Course: In the ED she was lavaged via NG tube and a HD catheter was placed. She had a cardiac arrest and received CPR, epinephrine (boluses and infusion), Mg, Ca, "massive transfusion protocol" (for acute blood loss and concern for DIC). After 75 min of resuscitation, a bedside ECHO showed no cardiac contractility and she was pronounced dead.

Autopsy Findings: Cause of death: acute sodium fluoride intoxication; manner of death: suicide.

Case 1656. Chronic loperamide ingestion: undoubtedly responsible

Scenario/Substances: A 27 y/o male was found in cardiac arrest after suspected loperamide abuse. EMS provided prolonged CPR, ACLS and "high dose" naloxone with ROSC.

Past Medical History: Loperamide abuse with previous hospital admissions for cardiac toxicity.

Laboratory/Diagnostic Findings: ABG-pH 6.6/pCO₂ 130, lactate 20, ALT 1,630, AST 1,200. Serum APAP, ethanol and salicylate not detected. ECG: torsades de pointes followed by sinus rhythm with "wide" QRS, QTc 506. Subsequent serum testing: loperamide 83 ng/mL, desmethyl-loperamide 340 ng/mL.

Clinical Course: In the ED he was intubated and nonresponsive with fixed and dilated pupils. SBP 60s, HR 120, T 32 °C. He received Mg, vasopressors, sodium bicarbonate and rewarming. Initial head CT showed cerebral edema. The patient was transferred to a tertiary hospital but had a cardiac arrest and died shortly after arrival.

Autopsy Findings: Not available.

Case 1709. Acute-on-chronic ropivacaine, lipid emulsion parenteral, other: undoubtedly responsible

Scenario/Substances: A 4 y/o male developed dysrhythmias after receiving continuous ropivacaine infusion at 120 mcg/kg/min, for 4 days, for post-operative pain.

Past Medical History: Bilateral nephroblastomas s/p chemotherapy. Hospital medications: ropivacaine, ceftriaxone, pantoprazole, propofol, fentanyl and TPN.

Laboratory/Diagnostic Findings: VBG-pH 7.31/pCO₂/48.8/pO₂ 49/HCO₃ 24.7/BE -2. Na 144/K 3.4/Cl 104/CO₂ 31/BUN 11/Cr 0.95/Glu 237/AG 9, CK 1,319, AST 96, ALT 78, bilirubin 0.2. WBC 15.35/Hgb 11.2/Hct 33.4/PLT 295. ECG: HR 136, QRS 148, QTc 517.

Clinical Course: The child was in the PICU, on ropivacaine and CRRT when he started to have increased ventricular ectopy. He received IV Mg, but then developed wide complex tachycardia. The ropivacaine infusion was stopped and an esmolol infusion was begun. ECHO showed decreased LVEF. Because of the persistent dysrhythmia ILE was given, but within minutes he had an asystolic arrest. He was intubated and resuscitated with epinephrine, sodium bicarbonate, Mg and defibrillation. External pacing was attempted without success. ROSC was achieved and the child was started on an epinephrine drip. After ~3 h he developed VF, was resuscitated with amiodarone, sodium bicarbonate, dextrose and insulin (due to hyperkalemia), and additional ILE without ROSC.

Autopsy Findings: Hospital pathologist reported: serum ropivacaine (IVC blood) 1.4 mcg/mL. Pathologist opined that the infusion may have exceeded the child's clearance capacity.

Case 1758. Acute pentobarbital parenteral: undoubtedly responsible

Scenario/Substances: A 36 y/o female posted a suicide note on social media and was found in cardiac arrest, 20 min later in a veterinarian's office with a bottle of pentobarbital and an empty syringe. EMS placed a supraglottic airway device enroute to the ED.

Past Medical History: Depression with suicidal ideation.

Physical Exam: Pupils fixed and dilated. After ROSC: BP 146/81, HR 123.

Laboratory/Diagnostic Findings: VBG-pH 6.882/pCO₂ 64/pO₂ 81/HCO₃ 12.1/BD 21. Lactate 13, Na 138/K 4.3/Cl 106/CO₂ 14/BUN 7/Cr 1.38 (peak 6.3)/Glu 347, AG 19. Ca 7.4, Phos 9.8, AST 552 (peak 1,850), ALT 271, bilirubin 1.2, INR 1.6, WBC 42.9/Hgb 10.6/Hct 37/PLT 166. UDS positive for barbiturates. Serum APAP, ethanol salicylate and phenobarbital not detected. Serum pentobarbital (~8 h after injection): 10 mcg/ml. CxR: cardiomegaly, perihilar opacities. ECG: irregular rhythm, HR 116, QRS 82, QTc 404. ECHO: LVEF 25%. CT head: loss of grey/white differentiation with diffuse cerebral edema, consistent with a severe hypoxic ischemic brain injury.

Clinical Course: There was ROSC after 75 min of resuscitation, including intubation, naloxone, epinephrine and sodium bicarbonate. She received ILE, antibiotics and naloxone, epinephrine, norepinephrine, dopamine and sodium bicarbonate drips. On Day 2, SPECT brain imaging showed no intracranial perfusion. Supportive care was withdrawn and she went for organ donation.

Autopsy Findings: Cause of death: drug toxicity; manner of death: suicide.

Case 1844. Acute methylenedioxymethamphetamine (MDMA) ingestion: undoubtedly responsible

Scenario/Substances: A 19 y/o female developed shortness of breath and chest pain shortly after using ecstasy, then had a cardiac arrest. EMS found her in PEA; she received CPR, intubation and epinephrine with ROSC.

Past Medical History: Asthma. Medications: albuterol.

Laboratory/Diagnostic Findings: Lactate 4.99, CK 750, AST 75, ALT 74. Serum APAP, ethanol and salicylate not detected. UDS positive for MDMA. CT head: unremarkable. On day 2: Na 138/K 4.5/Cl 109/CO₂ 19/BUN 8 Cr 0.6/AG 15, Mg 1.9, Ca 4.4, AST 68, ALT 54, CK 692, INR 1.2, WBC 18.1.

Clinical Course: In the ED: BP 128/74, HR 122, T 34 °C. She became agitated, biting the endotracheal tube and posturing. She received midazolam 5 h later with resolution of her posturing but only withdrew from pain in upper extremities. Continuous EEG monitoring was initiated for myoclonus and she was started on propofol and levetiracetam. On Day 2: BP 113/72, HR 111, T 36 °C, O₂ sat 92%. On Day 3 her examination was consistent with severe anoxic brain injury. There was concern for serotonin syndrome and cyproheptadine was started without improvement. Later that day she developed acute cerebral herniation and received sodium chloride 23.4% 30 mL IV x 2, mannitol 20% 75 grams IV x 1 and sodium chloride 3% infusion (65 mL/hr). CT head: diffuse cerebral edema and anoxic brain injury; MRI: hypoxic-ischemic injury. During sedation weans she was agitated and tremulous. On Day 7, she herniated and had no cough, gag or corneal reflexes. She developed diabetes insipidus and was started on desmopressin. Due to the poor prognosis, supportive care was withdrawn, she died and went for organ donation.

Autopsy Findings: Cause of death: methylenedioxymethamphetamine toxicity; manner of death: accident. Testing of a hospital urine sample was positive for MDMA.

Case 1859. Acute methamphetamine exposure: undoubtedly responsible

Scenario/Substances: A 21 y/o male called 911 ~3 min after ingesting 15 g of methamphetamine. He was found obtunded, hypertensive, tachycardic and hyperthermic (T 42 °C).

Past Medical History: Polysubstance abuse.

Physical Exam: BP 152/119, HR 169, RR 14, O₂ sat 100%, T (axillary) 42.4 °C. Nonverbal, moaning, unable to follow commands.

Laboratory/Diagnostic Findings: WBC 28.1/Hgb 14.8/Hct 43.7/PLT 181. Na 147/K 6.2/Cl 111/HCO₃ 19/BUN 32/Cr 2.9/Glu 75, INR >16, PTT >200. ABG-pH 7.19/pCO₂ 87/HCO₃ 32. UDS: positive for amphetamines, marijuana and opiates.

Clinical Course: He received IVFs, benzodiazepines and active cooling. "Hyperactive muscle activity" was treated with haloperidol (without improvement) and he was subsequently paralyzed and intubated. He developed shock (with hypotension and tachycardia) and was given adenosine, 4 L IVFs and started on norepinephrine. He went into cardiac arrest, received epinephrine and CPR. Dark blood was evident via NGT

and per rectum. He was resuscitated, with RBCs, dantrolene, Ca, sodium bicarbonate and atropine, for 3 h before developing wide complex bradycardia and then cardiac arrest.

Autopsy Findings: Cause of death: complications of methamphetamine intoxication; manner of death: accident. Postmortem blood samples: d-methamphetamine 7.5 mg/L, d-amphetamine 0.02 mg/L.

Case 1951. Acute amphetamine (hallucinogenic), n-ethyl pentylone, amphetamine (hallucinogenic) unknown: undoubtedly responsible

Scenario/Substances: A 28 y/o male stole a car and was involved in a minor accident. He was restrained by bystanders until police arrived. After placing him in handcuffs, he became unresponsive but responded to naloxone. He told police he had used "Molly" and became unresponsive again. The patient was in asystole when EMS arrived, initiated CPR and administered epinephrine and sodium bicarbonate.

Clinical Course: Upon ED arrival he was still in asystole, pupils fixed and dilated, T 38.8 °C, Glu 223. He was intubated and received epinephrine, Ca, sodium bicarbonate, naloxone and Mg without ROSC. He was pronounced dead shortly after ED arrival.

Autopsy Findings: Cause of death: acute n-ethyl pentylone toxicity; manner of death: accidental. Two baggies of material consistent with illicit drugs were recovered from his buttocks. Femoral blood tested positive for n-ethyl pentylone at 1100 ng/mL.

Case 1978. Acute-on-chronic methamphetamine unknown: undoubtedly responsible

Scenario/Substances: A 30 y/o male was dropped off at the ED after using methamphetamine.

Past Medical History: Schizoaffective disorder, bipolar disorder, cocaine abuse, alcohol abuse, previous overdoses.

Laboratory/Diagnostic Findings: ABG-pH 7.07/pCO₂ 46/pO₂ 189, Na 160/K 5.2/Cl 107/CO₂ 9/Cr 2.5/AG 44, AST 126, ALT 104. Serum APAP and salicylate not detected; UDS positive for amphetamines, methamphetamines and benzodiazepines. Lactate 14 mg/dL, CK > 89,000. CT head negative.

Clinical Course: In the ED he had agitated delirium and was tachycardic, diaphoretic and febrile. He was treated with sedatives and became tranquil but hypotensive with cardiovascular collapse and then cardiac arrest. He was intubated with CPR and had ROSC within a few minutes. Vital signs: SBPs 60-70; he received 4 L IVFs and started on norepinephrine. BP 70's systolic, HR 160's, T 40 °C. He was transferred to another HCF and received dextrose (for hypoglycemia) and active cooling. On Day 2 he remained unresponsive with dilated and sluggish pupils, no cough or gag and not breathing over the ventilator. Patient taken to the OR for bilateral lower extremity fasciotomies. Cr 3.7, lactate 3.32, CO₂ 16 and AG 13. On Day 3 he was unchanged off sedation: Cr 5.5, AST 4,202, ALT 2,612. He was started on CRRT for worsening renal function (Cr 6.8). On Day 6 his EEG suggested profound brain injury. Based on the prognosis, comfort measures were instituted and he died.

Autopsy Findings: Cause of death: complications of acute methamphetamine toxicity; manner of death: accident. Premortem blood: methamphetamine 6.7 mg/L amphetamine 2 mg/L lorazepam 0.26 mg/L.

Case 2049. Acute methamphetamine ingestion: undoubtedly responsible

Scenario/Substances: A 34 y/o female presented with AMS and slurred speech after a reported ingestion of 1.5 g of methamphetamine at a traffic stop.

Past Medical History: Polysubstance abuse.

Physical Exam: Confused, shaking, diaphoretic. BP 87/65, HR 178, RR 24, O₂ sat 98% (4L), T 39.1 °C.

Laboratory/Diagnostic Findings: Na 152/K 3.1/Cl 124/CO₂ 19/BUN 29/Cr 2.18/Glu 60, Mg 3, Ca 7.1, lactate 12 (then 6.3 ~1.5 h later), AST 88, ALT 13, CK "normal." Serum salicylate not detected. UDS: positive for methamphetamine and cocaine. CxR: normal. ECG: HR 168, QRS 98, QTc 492.

Clinical Course: She was intubated and sedated with fentanyl and propofol; received 6 L IVFs, lorazepam, norepinephrine and vasopressin

(for hypotension), D50 (for hypoglycemia), and antibiotics and actively cooled. In the ICU (~7 h later): BP 107/66, HR 128, RR 33, O₂ sat 95% (50% FiO₂), T 40.1 °C then T 40.5 °C. ABG-pH 7.4/pCO₂ 50/pO₂ 100/HCO₃ 17. ~ 16 h after presentation, CRRT was initiated for anuria and rhabdomyolysis (CK 20,000). ECHO: decreased LVEF and pulmonary edema. She went into PEA, then asystole and died ~22 h after presentation.

Autopsy Findings: Cause of death: complications of methamphetamine and cocaine toxicity; manner of death: accidental. There was crumpled plastic material in her small intestine. Antemortem blood (drawn at presentation): amphetamine <0.12 mg/L, benzoylecgonine <33 mg/L, methamphetamine > 1.0 mg/L. Urine (unknown collection time): positive for amphetamines, methamphetamine and cocaine metabolite.

Case 2078. Acute cocaine, morphine, fentanyl ingestion, vaginal: undoubtedly responsible

Scenario/Substances: A 35 y/o female ingested a large amount of cocaine and concealed wrapped 'rocks' of cocaine in her vagina during arrest by police. EMS administered midazolam, for suspected seizure, prior to ED arrival.

Past Medical History: Bipolar depression, anxiety and substance abuse.

Physical Exam: In the ED she was unresponsive with fixed and dilated pupils; rapidly had a cardiac arrest. T 38.8 °C.

Laboratory/Diagnostic Findings: VBG-pH 6.81/pCO₂ 107/pO₂ 33/HCO₃ 17/BD 19.3. Na 145/K 3.3, Ca (ionized) 4.5, Glu 195, lactate 11.6. Later: ABG-pH 7.08/pCO₂ 72/pO₂ 95/HCO₃ 21/BD 10.2. Na 153/K 2.5/Cl 112/Glu 177, lactate 13.2. Serum APAP, ethanol, salicylate, acetone, isopropyl, ethylene glycol and methanol not detected. UDS positive for THC, cocaine and morphine. ECG (following resuscitation): NSR with 1st degree AVB, QRS 184, QTc 534.

Clinical Course: In the ED the patient had a STEMI followed by PEA and torsades des pointes. She was intubated and resuscitated with IVFs, cardioversion, Mg, sodium bicarbonate, Ca, lidocaine, lorazepam, epinephrine, and ILE; WBI was started. Repeat vitals: SBP 130s (on vasopressors), HR 64, T 36 °C, O₂ sat 92% (60% FiO₂). Although family opted for no further resuscitation, she received supportive care including electrolyte replacement and antibiotics (CXR: pneumonia). On Day 2 she had limited response to voice and pain, and later developed rigidity and posturing; T 39.1 °C. ECHO: LVEF 28%. On Day 3 she was moved to hospice and died on Day 5.

Autopsy Findings: Analysis on premortem blood: cocaine 6,046 ng/ml, benzoylecgonine 6,728 ng/ml. Urine was qualitatively positive for benzoylecgonine, norfentanyl and morphine.

Case 2515. Acute cocaine ingestion: undoubtedly responsible

Scenario/Substances: A 14 m/o female was found unresponsive with seizure-like activity at home. She had last been seen normal 15 min earlier. Her mother initiated CPR. EMS intubated her and provided PALS enroute to the ED.

Physical Exam: Hypothermic, no pulse or respirations; pupils fixed and dilated.

Laboratory/Diagnostic Findings: Arterial pH 6.5, BD 24, lactate 17. Na 151/K 2.7/Cl 110/HCO₃ 15/BUN 15/Cr 0.4/Glu 440. AST 119, ALT 64, INR 1.4 CK 1,386. Serum APAP, ethanol and salicylate not detected; UDS positive for cocaine. ECG (after ROSC): sinus tachycardia at 160, RBBB, QRS > 121.

Clinical Course: She was resuscitated in the ED with epinephrine, sodium bicarbonate and Ca. ROSC was achieved and an epinephrine drip was initiated for hypotension. She was transferred to a tertiary hospital where confirmatory serum testing (via GC/MS) identified benzoylecgonine >1,000 ng/mL. She remained unresponsive with myoclonus, coagulopathy and diabetes insipidus (with subsequent hypernatremia). On Day 6 she was declared brain dead, supportive care was removed and she died.

Autopsy Findings: Not provided.

Disclaimer – all laboratories are different and provide their own normal ranges. Units and normal ranges are provided here for general guidance

only. These values were taken from Harrison's [10], Goldfrank's [11] or Dart [12].

Typical laboratory panels

ABG-pH/pCO₂/pO₂/HCO₃/BE

Basic metabolic panel: Na/K/Cl/CO₂/BUN/Cr/Glu/AG

Complete blood count: WBC/Hgb/Hct/platelets

Abbreviations & Normal Ranges

| | |
|--|--|
| ~ | approximately |
| Abd | abdomen |
| ABG-pH/pCO ₂ /pO ₂ /HCO ₃ /BE | |
| ABG | arterial blood gases |
| pH | hydrogen ion concentration [7.38-7.42 mmHg] |
| pCO ₂ | partial pressure of carbon dioxide [38-42 mmHg] |
| pO ₂ | partial pressure of oxygen [90-100 mmHg] |
| HCO ₃ | bicarbonate [22 - 28 mEq/L] |
| BE | base excess [±2mEq/L or mmol/L] |
| ACLS | advanced cardiac life support, protocol for the provision of cardiac resuscitation |
| ADHD | attention deficit hyperactivity disorder |
| AF | atrial fibrillation |
| AG | anion gap Na - (Cl + HCO ₃) [12 ± 4 mEq/L or mmol/L] |
| AICD | automatic implanted cardioverter/defibrillator |
| AKI | acute kidney injury |
| ALP | alkaline phosphatase [13-100] U/L |
| ALT | Alanine aminotransferase [7-41] U/L = (SGPT) |
| AMA | against medical advice |
| ammonia | [25-80] mcg/dL [15-47] mcmol/L |
| amp | ampoule |
| amphetamines (hallucinogenic) | one or more of the products (6-APB, bath salts, plant food, Bliss, Ivory Wave, Purple Wave, Vanilla Sky, et al) or chemicals (3,4 methylenedioxypropylvalerone [MDPV], 6-(2-aminopropyl)benzofuran [6-APB], butylone, desoxypipradrol [2-DPMP], ethylone, flephedrone, naphyrone, mephedrone, methylenedioxypropylvalerone, methylone, methcathinone, et al) |
| AMS | altered mental status |
| APAP | acetaminophen (acetyl-para-aminophenol), therapeutic [10-20] mcg/mL |
| APLS | advanced pediatric life support, protocol for the provision of cardiac resuscitation |
| aPTT | activated partial thromboplastin time [30-40] sec |
| ARDS | acute respiratory distress syndrome |
| AST | Aspartate aminotransferase [12-38] U/L = (SGOT) |
| AV block | atrio-ventricular block |
| BAL | British anti-Lewisite |
| BE | base excess, = base excess [±2mEq/L or mmol/L] |
| bicarbonate | [22-26] mmol/L |
| bili (direct) | direct bilirubin [0.1, 0.4] mg/dL |
| bili (indirect) | indirect bilirubin [0.2, 0.9] mg/dL |
| bilirubin | total [0.3-1.3] mg/dL |
| BiPAP | bilevel positive airway pressure, pressure support with 2 levels of continuous positive airway pressure |
| BLQ | below the limit of quantitation |
| BMI | body mass index |
| BNPT | prohormone with a 76 amino acid N-terminal inactive protein that is cleaved from the molecule to release brain natriuretic peptide. CHF is likely if BNPT >125 pg/mL (<75 y/o), > 450 pg/mL (>75 y/o), |
| body packing | insertion of drugs into body orifices to evade law enforcement |
| body stuffing | the ingestion of drugs in order to evade law enforcement |
| BP | Blood Pressure, systolic/diastolic, (Torr) |
| BPH | benign prostatic hypertrophy |

| | | | |
|------------------|--|---------------------------------|---|
| BUN | see Urea nitrogen | Hct | hematocrit [35.4-44.4] %females, [38.8-46.4] % males |
| C | degrees Centigrade | HD | hemodialysis |
| Ca (ionized) | ionized calcium, [4.5-5.6] mg/dL | Hgb | hemoglobin [12.0-15.8] g/dL females, [13.3-16.2] g/dL males |
| Ca | calcium [8.7-10.2] mg/dL | HIE | hyperinsulinemia-euglycemia therapy |
| CABG | coronary artery bypass graft | HIV | human immunodeficiency virus |
| CAD | coronary artery disease | Hour | when capitalized, Hour = hours since admission or since exposure as specified in the narrative |
| CHF | congestive heart failure | HR | HR, beats per min |
| CIWA | Clinical Institute Withdrawal Assessment for Alcohol | IABP | intraortic balloon pump |
| CK | creatinine kinase (CPK), total: [39-238] U/L females, [51-294] U/L males | ICP | intracranial pressure |
| CKMB | MB fraction of CK [0.0-5.5 mcg/L = 0.0-5.5 ng/mL] Fraction of total CK activity [0-0.04 = 0-4.0%] | ICU | intensive care unit |
| Cl | chloride [102-109] mEq/L | IDDM | insulin dependent diabetes mellitus |
| CMV | cytomegalovirus | IgE | immunoglobulin E |
| CNS | central nervous system | ILE | intravenous lipid emulsion (20%) |
| COHb | carboxyhemoglobin (RR < 3%) | IM | intramuscular |
| COPD | chronic obstructive pulmonary disease | INR | international normalized ratio (PT to control) [0.8-1-2] |
| CPAP | continuous positive airway pressure | IO | intraosseous |
| CPR | cardiopulmonary resuscitation | IU/L | international units per Liter |
| Cr | creatinine [0.5-0.9] mg/dL females, [0.6-1.2] males | IV | intravenous |
| CRRT | continuous renal replacement therapy | IVF | intravenous fluid(s) |
| CSF | cerebrospinal fluid | K | potassium [3.5-5] mEq/L |
| CT | computed tomography (CAT scan) | kg | kilogram |
| CVA | cerebrovascular accident | L | Liter |
| CVP | central venous pressure | lactate | lactic acid [4.5-14.4] mg/dL arterial, [4.5-19.8] mg/dL venous [0.5-1.6] mmol/L arterial, [0.5-2.2] mmol/L venous |
| CVVH | continuous venovenous hemodiafiltration | LBBB | left bundle branch block on ECG |
| CxR | chest radiograph, chest xray | LFT | liver function tests |
| c/w | consistent with | LV | left ventricle |
| D10W | 10% dextrose in water | LVEF | left ventricular ejection fraction |
| D50W | 50% dextrose in water | m/o | months old |
| D5NS | 5% dextrose in normal saline | MAP | mean arterial pressure |
| D5W | 5% dextrose in water | mcg/dL | micrograms per deciliter |
| Day | when capitalized, Day = hospital day, i.e., days since admission to the initial hospital admission for this exposure | mcg/L | micrograms per Liter |
| DIC | disseminated intravascular coagulation | mcg/min | micrograms per minute |
| DM | diabetes mellitus | mcg/mL | micrograms per milliliter |
| DNI | do not intubate | mcmol/L | micromoles per liter |
| DNR | do not resuscitate | MDA | 3,4-methylenedioxyamphetamine |
| drip | intravenous infusion | MDMA | methylenedioxymethamphetamine (ecstasy, molly) |
| Dx | diagnosis | ME | medical examiner |
| ECG | electrocardiogram (EKG), leads = I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6 | MetHgb | methemoglobin (RR < 1%) |
| ECHO | echocardiogram | Mg | magnesium [1.5-2.3] mg/dL |
| ECMO | extracorporeal membrane oxygenation | mg | milligrams |
| ED | emergency department, in these abstracts refers to the initial health care facility | mg/dL | milligrams per deciliter |
| EDDP | principal methadone metabolite, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine | mg/kg | milligrams per kilogram |
| EEG | electroencephalogram | mg/L | milligrams per Liter |
| EGD | esophagogastroduodenoscopy | min | minutes |
| ELISA | enzyme-linked immunosorbent assay | ml | milliliter |
| EMS | emergency medical services, paramedics, the first responders | mmol | millimoles |
| ER | extended release medication | mmol/L | millimoles per Liter (previously mEq/L) |
| ETT | endotracheal tube | mosm/kg | milliosmoles per kilogram |
| FFP | fresh frozen plasma | mosm/L | milliosmoles per Liter |
| FiO ₂ | fraction of inspired oxygen (%) | MRI | Magnetic Resonance Imaging |
| g | grams | MRSA | Methicillin-resistant Staphylococcus aureus |
| g/dL | grams per deciliter | ms | milliseconds |
| GCS | Glasgow Coma Score, ranges from 3 to 15 | MSDS | material safety data sheet |
| GERD | gastroesophageal reflux disease | Na | sodium [136-146] mEq/L |
| GI | gastrointestinal | NAC | n-acetyl cysteine |
| Glu | glucose, fasting [75-110] mg/dL | | |
| h | hours | | |
| HBO | hyperbaric oxygen treatment/therapy | Narrative Headers: | |
| HCF | health care facility | Scenario/Substances: | concise narrative of EMS & pre-HCF events |
| HCG | human chorionic gonadotropin test for pregnancy | Past Medical History: | available relevant past medical history |
| HCO ₃ | bicarbonate [22 - 28 mEq/L] | Physical Exam: | initial physical exam if available |
| HCP | health care provider | Laboratory/Diagnostic Findings: | initial results, give units except for units given in abbreviations |
| | | Clinical Course: | concise narrative of HCF & beyond with outcome |
| | | Autopsy Findings | medical examiner and/or autopsy results |
| | | NG | nasogastric |
| | | ng/mL | nanograms per milliliter |

| | | | |
|--------------------|--|----------------|---|
| NOS | not otherwise specified | ROSC | return of spontaneous circulation |
| not detected | analyte below the level of quantitation, negative | RPC | regional poison center |
| NPO | nil per os, nothing by mouth | RR | respiratory rate, breaths per minute |
| NRB | non rebreathing mask for O ₂ delivery | s/p | status post |
| NS | normal saline | salicylate | aspirin, acetylsalicylic acid, therapeutic [15-30] mg/dL |
| NSTEMI | non-ST segment elevation myocardial infarction | SBP | systolic blood pressure |
| O ₂ sat | oxygen percent saturation [94-100] % at sea level | sec | seconds |
| OG | serum osmol gap = measured serum osmolality – calculated serum osmolality [0 ± 10 mOsmol/kg] | SL | sublingual |
| OR | operating room | SVT | supraventricular tachycardia |
| Osm | osmole | T (oral) | Temperature (oral) [36.4, 37.2] °C or |
| OTC | over the counter | T (rectal) | Temperature (rectal) [36.4, 37.2] °C or |
| PALS | pediatric advanced life support | T (tympanic) | Temperature (tympanic) [36.4, 37.2] °C |
| PC | poison center (= PCC, or Poison Control Center) | TBSA | total body surface area |
| PCC | prothrombin complex concentrate | THC | tetrahydrocannabinol |
| PCP | primary care provider | THC Homolog | one or more of the products (Blaze, Dawn, herbal incense, K2, Red X, spice, et al) or chemicals (cannabicyclohexanol, CP-47,497, JWH-018, JWH-073, JWH-200, et al); |
| PEA | pulseless electrical activity | | |
| PEEP | positive end expiratory pressure | TPN | total parenteral nutrition |
| Phos | phosphate (phosphorous) [2.5-4.5] mg/dL | Tprot | total protein |
| PICU | pediatric intensive care unit | troponin | troponin I, normal range [0-0.08] ng/mL, Cut-off for MI >0.04 ng/mL |
| PLT | platelet count [150-400] x10 ⁹ /L | | |
| PO | per os ("by mouth" in Latin) | TTE | transthoracic echocardiogram |
| POC | point of care | U | units |
| Ppm | parts per million | U/dL | units per deciliter |
| PR | P-R interval [120-200] msec on the ECG | U/L | units per liter |
| PRN | as needed | U/mL | units per milliliter |
| PT | prothrombin time, INR is preferred, but PT may be used if INR is not available | UA | urinalysis |
| PTA | Prior to admission | UDS | urine drug screen |
| PTSD | post-traumatic stress disorder | Urea | |
| PTT | partial thromboplastin time [26.3-39.4] sec | nitrogen (BUN) | [6-17] mg/dL |
| PVC | premature ventricular contraction | VBG | venous blood gases |
| QRS | ECG QRS complex duration [60-100] msec | VF | ventricular fibrillation |
| QT | Q to T interval on the ECG waveform, varies with HR | VSD | ventricular septal defect |
| QTc | QT interval corrected for HR, usually QTcB = QT/RR ^{1/2} (Bazett correction) 1-15 y-o [<440] msec, adult male [<430] msec, adult female [<450] msec | VT | ventricular tachycardia |
| | | WBC | white blood cell (leukocyte) count [3.54-9.06] 10 ³ /mm ³ |
| RA | on room air | WBI | whole bowel irrigation |
| RBBB | right bundle branch block on ECG | WNL | within normal limits |
| RBC | red blood cell(s) | y/o | year old |

Appendix D

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|-------------------------------------|---------|----------------------------------|----------------|------------|------------|-------------|--------|-----|------------------|--|
| Non-Pharmaceutical Exposures | | | | | | | | | | |
| Adhesives/Glues | | | | | | | | | | |
| 1ph | 30+ y M | toluene | 1 | 1 | A | Inhal + Par | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| Alcohols | | | | | | | | | | |
| 2ph | 17 y F | ethanol | 1 | 1 | A | Ingst | Int-A | 2 | ethanol | 512 mg/dL In Blood (unspecified) @ Unknown |
| 3ai | 17 y F | ethanol | 1 | 1 | U | Ingst | Int-A | 1 | | |
| 4ai | 23 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 5ai | 26 y F | ethanol | 1 | 1 | U | Ingst | Int-A | 3 | | |
| 6h | 28 y F | methanol | 1 | 1 | U | Ingst | Unk | 1 | methanol | 54 mg/dL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 2 | 2 | | | | | | |
| 7pha | 28 y M | ethanol | 1 | 1 | A/C | Ingst | Int-A | 3 | | |
| 8a | 30 y M | ethanol | 1 | 1 | A | Ingst | Int-A | 3 | ethanol | 289 mcg/dL In Blood (unspecified) @ Unknown |
| 9ai | 30 y M | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methanol | 2 | 2 | | | | | | |
| 10h | 31 y M | ethanol | 1 | 1 | A/C | Ingst + Rec | Int-U | 2 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 11h | 32 y M | methanol | 1 | 1 | A | Ingst | Int-U | 2 | | |
| | | Mitragyna speciosa korthals | 2 | 2 | | | | | | |
| 12 | 33 y F | methanol | 1 | 1 | A | Ingst | Int-U | 1 | | |
| 13ai | 33 y M | ethanol | 1 | 1 | U | Unk | Int-A | 2 | | |
| 14ai | 35 y F | ethanol | 1 | 1 | C | Ingst | Int-A | 1 | | |
| 15ha | 37 y M | methanol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 16p | 37 y F | ethanol | 1 | 1 | U | Ingst | Int-S | 3 | ethanol | 268 mg/dL In Serum @ Unknown |
| | | automotive-aircraft-boat product | 2 | 2 | | | | | | |
| 17ai | 38 y F | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 18h | 38 y M | ethanol | 1 | 1 | U | Ingst | Unk | 3 | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| 19pha | 39 y M | ethanol | 1 | 1 | A/C | Ingst | Unk | 3 | ethanol | 160 mg/dL In Blood (unspecified) @ Unknown |
| 20ai | 40 y F | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 21ai | 40 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 22ai | 41 y M | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| 23ai | 41 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 3 | | |
| 24i | 42 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 3 | | |
| 25ha | 43 y M | alcohol, unknown | 1 | 1 | A | Ingst | Int-A | 2 | ethanol | 615 mg/dL In Serum @ Unknown |
| 26ai | 43 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 27ai | 44 y F | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 28ai | 44 y M | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| 29p | 45 y F | isopropanol | 1 | 1 | A | Ingst | Int-S | 1 | isopropanol | 820 mg/dL In Blood (unspecified) @ Autopsy |
| | | doxepin | 2 | 2 | | | | | doxepin | 200 ng/mL In Blood (unspecified) @ Autopsy |
| | | doxepin | 2 | 2 | | | | | desmethyldoxepin | 230 ng/mL In Blood (unspecified) @ Autopsy |
| | | hydroxyzine | 3 | 3 | | | | | hydroxyzine | 120 ng/mL In Blood (unspecified) @ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------------|--------|-----|----------|---|
| 30ai | 46 y F | | | | C | Unk | Int-A | 2 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 31ai | 46 y M | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 32ai | 46 y M | | | | U | Unk | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 33ai | 47 y M | | | | | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | lidocaine | 2 | 2 | | | | | | |
| 34ai | 47 y M | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | hydromorphone | 3 | 3 | | | | | | |
| 35ai | 48 y M | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 36h | 48 y M | | | | A | Ingst | Int-U | 1 | methanol | 71 mg/dL In Blood (unspecified) @ Unknown |
| | | methanol | 1 | 1 | | | | | | |
| 37ai | 49 y M | | | | C | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 38pha | 49 y M | | | | U | Ingst | Int-U | 1 | ethanol | 477 mg/dL In Blood (unspecified) @ Unknown |
| | | ethanol | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 39ai | 49 y M | | | | C | Ingst | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 40ai | 49 y M | | | | U | Unk | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | isopropanol | 2 | 2 | | | | | | |
| 41i | 50 y M | | | | C | Ingst | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 42h | 50 y M | | | | A | Ingst | Int-S | 2 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | acetaminophen/ diphenhydramine | 2 | 2 | | | | | | |
| | | metformin | 3 | 3 | | | | | | |
| 43hai | 50 y F | | | | U | Unk | Int-A | 2 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 44ai | 50 y M | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | citalopram | 3 | 3 | | | | | | |
| 45ai | 50 y F | | | | C | Unk | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | cetirizine | 2 | 2 | | | | | | |
| | | citalopram | 3 | 3 | | | | | | |
| 46ai | 50 y M | | | | U | Unk | Int-A | 2 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 47ai | 51 y F | | | | U | Ingst + Unk | Int-S | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | hydroxyzine | 3 | 3 | | | | | | |
| 48ha | 51 y M | | | | A/C | Ingst | Int-A | 2 | | |
| | | alcohol, unknown | 1 | 1 | | | | | | |
| 49h | 52 y F | | | | A | Ingst | Int-S | 2 | methanol | 174.8 mg/dL In Blood (unspecified) @ Unknown |
| | | methanol | 1 | 1 | | | | | | |
| | | morphine | 2 | 2 | | | | | | |
| 50ai | 52 y M | | | | U | Unk | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 51ai | 52 y F | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 2 | 1 | | | | | | |
| | | venlafaxine | 1 | 1 | | | | | | |
| 52ai | 52 y M | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 53ai | 53 y F | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 54ai | 53 y M | | | | C | Ingst | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 55ai | 53 y M | | | | U | Ingst | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 56h | 53 y M | | | | C | Unk | Unk | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 57ai | 53 y M | | | | U | Unk | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| | | carisoprodol | 2 | 2 | | | | | | |
| 58h | 54 y F | | | | A | Ingst | Int-S | 2 | ethanol | 586 mg/dL In Blood (unspecified) @ Unknown |
| | | alcohol, unknown | 1 | 1 | | | | | | |
| | | metformin/sitagliptin | 2 | 2 | | | | | | |
| 59ai | 54 y M | | | | U | Ingst | Int-A | 1 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 60ai | 54 y M | | | | U | Unk | Int-A | 2 | | |
| | | ethanol | 1 | 1 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------|----------------|------------|------------|---------------|--------|-----|-----------------|--|
| 61ai | 54 y M | | | | U | Unk | Int-A | 3 | | |
| | | ethanol | 1 | 1 | | | | | | |
| 62ai | 54 y M | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | isopropanol | 2 | 2 | | | | | | |
| 63ai | 55 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 1 | | |
| 64h | 55 y M | ethanol | 1 | 1 | C | Ingst | Int-U | 3 | ethanol | 252 mg/dL In Blood (unspecified) @ Unknown |
| 65ai | 55 y F | ethanol | 1 | 1 | C | Unk | Int-A | 3 | | |
| 66ai | 55 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 1 | | |
| 67 | 56 y F | ethanol | 1 | 1 | A | Ingst | Int-A | 3 | ethanol | 530 mg/dL In Serum @ Unknown |
| 68ai | 57 y M | ethanol | 1 | 1 | U | Unk | Int-A | 2 | | |
| 69ai | 57 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 70ha | 58 y M | ethanol | 1 | 1 | A/C | Unk | Int-S | 1 | ethanol | 340 mg/dL In Blood (unspecified) @ Unknown |
| | | fluoxetine | 2 | 2 | | | | | fluoxetine | 2617 ng/mL In Blood (unspecified) @ Unknown |
| | | fluoxetine | 2 | 2 | | | | | norfluoxetine | 336 ng/mL In Blood (unspecified) @ Unknown |
| 71i | 58 y M | ethanol | 1 | 1 | U | Ingst | Int-A | 2 | | |
| 72ai | 58 y F | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | doxylamine | 2 | 2 | | | | | | |
| 73ai | 58 y F | ethanol | 1 | 1 | U | Unk | Int-A | 2 | | |
| 74ai | 58 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 1 | | |
| 75h | 59 y M | alcohol, unknown | 1 | 1 | U | Ingst | Int-A | 2 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 314 mg/dL In Blood (unspecified) @ Unknown |
| 76ha | 59 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 2 | ethanol | 181 mg/dL In Blood (unspecified) @ Unknown |
| 77ai | 59 y M | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| 78ai | 59 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 79ai | 60 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 80pha | 60 y M | ethanol | 1 | 1 | U | Ingst + Inhal | Int-A | 3 | ethanol | 423 mg/dL In Blood (unspecified) @ 5 m (pe) |
| | | THC homolog | 2 | 2 | | | | | | |
| 81ha | 61 y F | ethanol | 1 | 1 | U | Ingst | Int-U | 1 | ethanol | 450 mg/dL In Blood (unspecified) @ Unknown |
| 82ai | 61 y M | ethanol | 1 | 1 | U | Ingst | Int-A | 1 | | |
| 83i | 61 y M | ethanol | 1 | 1 | U | Ingst | Int-A | 1 | | |
| 84ai | 61 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 85ai | 62 y M | ethanol | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | isopropanol | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| 86h | 63 y F | methanol | 1 | 1 | U | Ingst | Int-U | 3 | | |
| 87pai | 63 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 3 | | |
| 88ha | 63 y M | ethanol | 1 | 1 | A | Ingst | Int-S | 3 | ethanol | 360 mg/dL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | hydrocodone | 0.1 mg/L In Blood (unspecified) @ Unknown |
| | | oxycodone | 3 | 3 | | | | | oxycodone | 0.17 mg/L In Blood (unspecified) @ Unknown |
| 89h | 63 y M | alcohol, unknown | 1 | 1 | A/C | Ingst | Int-S | 3 | ethanol | 172 mg/dL In Blood (unspecified) @ Unknown |
| 90h | 63 y M | ethanol | 1 | 1 | A | Ingst | Unk | 3 | ethanol | 79 mg/dL In Blood (unspecified) @ Unknown |
| | | ethylene glycol | 2 | 2 | | | | | ethylene glycol | 0 mg/dL In Blood (unspecified) @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---|--------|---------------------------------------|----------------|------------|------------|-------------|--------|-----|------------------|--|
| 91ha | 63 y M | methanol | 1 | 1 | U | Ingst + Unk | Int-U | 1 | methanol | 11 mg/dL In Urine (quantitative only) ⓐ Unknown |
| | | methamphetamine | 2 | 2 | | | | | methamphetamine | 0.67 mcg/mL In Blood (unspecified) ⓐ Autopsy |
| 92ai | 63 y M | | | | C | Unk | Int-A | 3 | | |
| 93ai | 64 y M | ethanol | 1 | 1 | C | Unk | Int-A | 3 | | |
| 94ai | 65 y M | ethanol | 1 | 1 | C | Unk | Int-A | 2 | | |
| 95ai | 65 y F | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 96ai | 65 y F | ethanol | 1 | 1 | C | Unk | Int-A | 3 | | |
| 97ai | 65 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 3 | | |
| 98ai | 66 y F | ethanol | 1 | 1 | U | Ingst | Int-A | 1 | | |
| 99ai | 67 y M | ethanol | 1 | 1 | A/C | Ingst | Int-A | 3 | | |
| 100ai | 67 y F | ethanol | 1 | 1 | U | Unk | Int-A | 2 | | |
| 101ai | 68 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 3 | | |
| 102ai | 68 y M | ethanol | 1 | 1 | U | Unk | Int-A | 2 | | |
| 103 | 69 y M | ethanol | 1 | 1 | C | Ingst | Int-A | 2 | ethanol | 205 mg/dL In Blood (unspecified) ⓐ Unknown |
| | | glycol, NOS | 2 | 2 | | | | | propylene glycol | 8.5 mg/dL In Blood (unspecified) ⓐ Unknown |
| 104ai | 69 y F | ethanol | 1 | 1 | C | Unk | Int-A | 3 | | |
| 105ai | 69 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 106ai | 69 y M | ethanol | 1 | 1 | U | Ingst + Unk | Int-A | 3 | | |
| | | hyperthermia | 2 | 2 | | | | | | |
| 107i | 70 y M | ethanol | 1 | 1 | U | Ingst | Int-A | 3 | | |
| | | isopropanol | 2 | 2 | | | | | | |
| 108ai | 70 y F | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 109ai | 73 y M | ethanol | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methanol | 2 | 2 | | | | | | |
| 110ai | 78 y M | ethanol | 1 | 1 | U | Unk | Int-A | 3 | | |
| 111h | 83 y F | isopropanol | 1 | 1 | A | Ingst | Unk | 2 | | |
| | | metformin | 2 | 2 | | | | | | |
| See Also case 133, 146, 147, 162, 170, 187, 207, 217, 226, 228, 231, 284, 286, 289, 317, 318, 337, 365, 369, 383, 384, 386, 396, 399, 412, 414, 418, 428, 430, 433, 434, 438, 441, 447, 450, 467, 469, 474, 478, 484, 486, 490, 494, 495, 497, 502, 515, 519, 523, 527, 529, 535, 544, 545, 546, 557, 558, 559, 561, 562, 570, 571, 572, 573, 576, 577, 581, 584, 587, 593, 594, 595, 596, 601, 605, 608, 615, 617, 618, 620, 627, 630, 633, 634, 640, 646, 652, 658, 662, 663, 669, 683, 684, 689, 700, 702, 703, 706, 714, 718, 721, 722, 730, 731, 733, 738, 740, 741, 745, 746, 748, 758, 762, 767, 768, 773, 776, 785, 787, 788, 792, 802, 805, 806, 813, 818, 820, 821, 822, 824, 825, 826, 827, 838, 839, 840, 841, 842, 843, 847, 857, 860, 865, 867, 870, 874, 879, 880, 887, 888, 904, 920, 921, 925, 927, 932, 941, 947, 953, 954, 955, 960, 961, 962, 970, 990, 993, 994, 996, 1024, 1027, 1032, 1033, 1039, 1045, 1053, 1057, 1065, 1070, 1071, 1119, 1150, 1171, 1179, 1180, 1185, 1203, 1210, 1221, 1225, 1228, 1229, 1232, 1233, 1236, 1241, 1242, 1243, 1246, 1247, 1252, 1259, 1269, 1286, 1288, 1289, 1296, 1301, 1309, 1313, 1319, 1335, 1350, 1358, 1364, 1366, 1369, 1370, 1373, 1375, 1407, 1408, 1411, 1420, 1424, 1441, 1444, 1453, 1457, 1462, 1463, 1465, 1466, 1469, 1470, 1473, 1476, 1479, 1490, 1491, 1493, 1505, 1507, 1510, 1515, 1517, 1521, 1524, 1534, 1535, 1540, 1541, 1544, 1559, 1562, 1566, 1568, 1573, 1586, 1636, 1675, 1684, 1689, 1693, 1717, 1721, 1723, 1724, 1726, 1732, 1746, 1747, 1749, 1754, 1755, 1757, 1760, 1761, 1763, 1769, 1771, 1778, 1782, 1788, 1793, 1794, 1796, 1813, 1818, 1820, 1833, 1837, 1840, 1852, 1862, 1882, 1892, 1894, 1898, 1921, 1924, 1926, 1932, 1936, 1961, 1962, 1965, 1969, 1975, 1985, 1987, 1991, 2005, 2006, 2007, 2009, 2011, 2021, 2028, 2034, 2040, 2046, 2048, 2057, 2064, 2072, 2074, 2077, 2099, 2106, 2111, 2114, 2123, 2137, 2146, 2149, 2157, 2163, 2170, 2174, 2178, 2182, 2189, 2205, 2216, 2217, 2219, 2221, 2225, 2226, 2232, 2235, 2253, 2254, 2264, 2284, 2285, 2286, 2295, 2296, 2311, 2316, 2320, 2321, 2322, 2337, 2343, 2349, 2353, 2359, 2363, 2365, 2372, 2376, 2378, 2383, 2384, 2385, 2388, 2394, 2398, 2399, 2402, 2417, 2420, 2422, 2423, 2431, 2433, 2434, 2437, 2441, 2442, 2444, 2448, 2455, 2457, 2462, 2468, 2472, 2482, 2484, 2485, 2487, 2489, 2490, 2494, 2497, 2501, 2502, 2505, 2508, 2512, 2553, 2565, 2575 | | | | | | | | | | |
| Automotive/Aircraft/Boat Products | | | | | | | | | | |
| 112h | 25 y M | ethylene glycol (antifreeze) | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | lithium | 2 | 2 | | | | | | |
| | | quetiapine (extended release) | 3 | 3 | | | | | | |
| 113h | 25 y M | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 28 mg/dL In Serum @ 25 h (pe) |
| | | ethylene glycol (antifreeze) | 1 | 1 | | | | | ethylene glycol | 46 mg/dL In Serum @ 18 h (pe) |
| | | camphor/menthol/ methyl salicylate | 2 | 2 | | | | | | |
| | | glow product | 3 | 3 | | | | | | |
| 114h | 29 y M | methanol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| [115pha] | 33 y F | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 250 mg/dL In Blood (unspecified) ⓐ Autopsy |
| 116 | 33 y F | methanol | 1 | 1 | A | Ingst | Int-U | 1 | methanol | 295 mg/dL In Blood (unspecified) ⓐ Unknown |
| 117ha | 52 y F | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 51 mg/dL In Blood (unspecified) ⓐ Unknown |
| | | venlafaxine | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--------------------------------|--------|---|----------------|------------|------------|-------------|--------|-----|-------------------|---|
| 118 | 53 y M | methanol | 1 | 1 | A | Ingst | Unk | 1 | methanol | 138 mg/dL In Blood (unspecified) @ Unknown |
| 119h | 57 y M | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | |
| 120ph | 57 y M | methanol | 1 | 1 | A | Ingst | Unt-M | 2 | | |
| 121h | 58 y F | methanol | 1 | 1 | U | Ingst | Int-S | 1 | | |
| 122h | 62 y F | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 123h | 62 y F | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 16 mg/dL In Blood (unspecified) @ Unknown |
| 124 | 63 y M | ethylene glycol (antifreeze) | 1 | 1 | A | Ingst | Unt-G | 2 | | |
| See Also case 16, 1365, 2582 | | | | | | | | | | |
| Batteries | | | | | | | | | | |
| 125pai | 22 m M | battery, disc (lithium) | 1 | 1 | A | Ingst | Unt-G | 1 | | |
| 126ai | 22 m F | battery, disc (lithium) | 1 | 1 | A | Ingst | Unt-G | 1 | | |
| Bites and Envenomations | | | | | | | | | | |
| [127pha] | 35 y F | toxin, Phyllomedusa bilcolor | 1 | 1 | A | Derm | Int-M | 1 | | |
| 128pa | 39 y M | envenomation (hymenoptera) | 1 | 1 | A | B-S | Unt-B | 1 | | |
| 129a | 55 y M | bite (mammal, rabies) | 1 | 1 | U | B-S | Unt-B | 1 | | |
| 130ph | 57 y M | envenomation (crotalinae) | 1 | 1 | A | B-S | Unt-B | 1 | | |
| Chemicals | | | | | | | | | | |
| 131pa | 19 y M | sodium nitrite | 1 | 1 | A | Ingst | Int-S | 1 | methemoglobin | 11 % In Blood (unspecified) @ Autopsy |
| [132p] | 19 y M | sodium nitrite | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 133phi | 21 y M | cyanide | 1 | 1 | A | Ingst + Unk | Int-S | 1 | | |
| | | beta blocker | 2 | 2 | | | | | | |
| | | olanzapine | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| | | sodium azide | 5 | 5 | | | | | | |
| 134h | 21 y M | ethylene glycol | 1 | 1 | A | Unk | Unk | 1 | ethylene glycol | 113 mg/dL In Blood (unspecified) @ Unknown |
| 135h | 22 y M | hydrochloric acid | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 136a | 22 y M | sodium azide | 1 | 1 | A | Ingst | Int-S | 1 | | |
| [137ha] | 24 y M | ethylene glycol | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 89 mg/dL In Blood (unspecified) @ 3 m (pe) |
| 138pha | 24 y M | sodium azide | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 139hai | 27 y M | dinitrophenol | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| 140ha | 29 y M | ethylene glycol | 1 | 1 | A/C | Ingst | Int-S | 1 | ethylene glycol | 515 mcg/mL In Blood (unspecified) @ Unknown |
| | | ziprasidone | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| | | hydroxyzine | 4 | 4 | | | | | | |
| | | fluoxetine | 5 | 5 | | | | | | |
| 141ph | 31 y M | sulfuric acid | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | toilet bowl cleaner (alkali/hypochlorite) | 2 | 2 | | | | | | |
| | | cleaner (anionic/nonionic) | 3 | 3 | | | | | | |
| [142p] | 33 y M | strychnine | 1 | 1 | A | Ingst + Unk | Int-S | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 143a | 36 y M | ethylene glycol | 1 | 1 | U | Unk | Unt-G | 2 | carboxyhemoglobin | 13.6 % In Blood (unspecified) @ Unknown |
| | | carbon monoxide | 2 | 2 | | | | | | |
| | | amphetamine | 3 | 3 | | | | | | |
| 144h | 37 y F | sodium azide | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 145ph | 37 y F | chemical, unknown | 1 | 1 | A/C | Inhal | Int-A | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---|----------------------------|------------------------------------|----------------|------------|------------|--------------|--------|-----|-------------------|--|
| 146pai | 38 y M | nitrites | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 147ha | 38 y M | ethylene glycol | 1 | 1 | A | Ingst | Unk | 1 | ethylene glycol | 87 mg/dL In Blood (unspecified) @ Unknown |
| | | isopropanol | 2 | 2 | | | | | | |
| 148pi | 43 y F | sodium azide | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 149ha | 44 y M | acid, unknown | 1 | 1 | A | Ingst | Int-S | 2 | ethanol | 250 mg/dL In Plasma @ Autopsy |
| 150 | 46 y F | dinitrophenol | 1 | 1 | A/C | Unk | AR-D | 2 | | |
| 151p | 48 y M | ethylene glycol | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 37 mg/dL In Blood (unspecified) @ 1 h (pe) |
| | | ethylene glycol | 1 | 1 | | | | | iron | 78 mcg/dL In Blood (unspecified) @ 1 d (pe) |
| 152p | 53 y M | hydrofluoric acid | 1 | 1 | A | Unk | Unk | 2 | | |
| 153 | 53 y M | ethylene glycol | 1 | 1 | A | Ingst | Unk | 2 | | |
| 154 | 57 y F | ethylene glycol | 1 | 1 | A | Ingst | Int-U | 1 | | |
| 155ha | 58 y M | boric acid | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 156h | 58 y M | hydrofluoric acid | 1 | 1 | A | Ingst | Oth-M | 2 | | |
| | | chemical, unknown | 2 | 2 | | | | | | |
| 157h | 59 y M | ethylene glycol | 1 | 1 | A | Ingst | Unk | 1 | ethylene glycol | 150 mg/dL In Blood (unspecified) @ 1 h (pe) |
| 158ha | 61 y M | ethylene glycol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 159h | 65 y M | ethylene glycol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 160ha | 67 y M | ethylene glycol | 1 | 1 | U | Ingst | Unk | 2 | ethylene glycol | 21 mg/dL In Blood (unspecified) @ Unknown |
| 161h | 71 y M | ethylene glycol | 1 | 1 | A | Ingst | Int-S | 1 | ethylene glycol | 22 mg/dL In Blood (unspecified) @ 1 h (pe) |
| | | ethylene glycol | 1 | 1 | | | | | ethylene glycol | 6 mg/dL In Blood (unspecified) @ 24 h (pe) |
| 162h | 83 y M | chemical, unknown | 1 | 1 | A | Ingst | Unt-M | 3 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 53 mg/dL In Blood (unspecified) @ Unknown |
| | | cleaner (anionic/nonionic)/naphtha | 3 | 3 | | | | | | |
| 163ha | 84 y M | potassium cyanaurite | 1 | 1 | A | Ingst | Int-S | 1 | cyanide | 0.85 mcg/mL In Blood (unspecified) @ Autopsy |
| | | hydroxocobalamin | 2 | 2 | | | | | | |
| [164ha] | 85 y M | hydrofluoric acid | 1 | 1 | A | Ingst | Unt-G | 1 | | |
| 165 | 93 y F | chemical, unknown | 1 | 1 | A | Inhal | Unk | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | carboxyhemoglobin | 36 % In Blood (unspecified) @ Unknown |
| 166pi | Unknown adult (>=20 yrs) F | cyanide | 3 | 3 | A | Ingst | Int-S | 1 | | |
| | | caffeine | 2 | 2 | | | | | | |
| See Also case 90, 103, 199, 207, 215, 220, 241, 877, 2456, 2553 | | | | | | | | | | |
| Cleaning Substances (Household) | | | | | | | | | | |
| [167ha] | 3 y M | hydrofluoric acid | 1 | 1 | A | Ingst + Derm | Unt-G | 1 | | |
| 168h | 39 y M | hydrofluoric acid | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 169 | 39 y F | drain cleaner (alkali) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 170h | 39 y M | toilet bowl cleaner (acid) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | hydrogen peroxide | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | ethanol (non-beverage) | 4 | 4 | | | | | | |
| | | benzoyl peroxide | 5 | 5 | | | | | | |
| 171h | 41 y M | drain cleaner (sodium hydroxide) | 1 | 1 | A | Ingst | Int-S | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|--|----------------|------------|------------|---------------------------|--------|-----|----------------------|---|
| 172h | 48 y M | drain cleaner (alkali/hypochlorite) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 173 | 50 y M | cleaner (alkali) | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 174h | 51 y M | toilet bowl cleaner (acid) | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 175h | 52 y F | drain cleaner (alkali) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| [176ha] | 53 y F | drain cleaner (sodium hydroxide/sodium hypochlorite/sodium silicate) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 177h | 59 y M | hypochlorite | 1 | 1 | A | Ingst + Inhal + Derm | Int-S | 2 | | |
| 178a | 60 y F | amphetamine | 2 | 2 | A | Ingst | Oth-M | 3 | | |
| 179 | 66 y F | hypochlorite | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 180ha | 69 y F | cleaner (alkali) | 1 | 1 | A | Ingst + Oc + Derm | Int-S | 1 | | |
| | | drain cleaner (sodium hydroxide) | 1 | 1 | | | | | | |
| | | hypochlorite | 2 | 2 | A | Ingst | Int-S | 3 | | |
| 181a | 69 y M | hypochlorite | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | drug, unknown | 2 | 2 | A | Ingst + Aspir | Unt-M | 2 | | |
| 182ph | 74 y M | cleaner (anionic/nonionic) | 1 | 1 | A | Ingst | Int-A | 3 | | |
| 183h | 83 y M | chlorhexidine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 184h | 83 y M | drain cleaner (alkali) | 1 | 1 | A | Ingst | Unt-G | 3 | | |
| 185 | 92 y M | laundry detergent (pod) | 1 | 1 | A | Ingst + Aspir + Oc + Derm | Unt-G | 2 | | |
| 186 | 14 m F | cleaner (anionic/nonionic) | 1 | 1 | A | Ingst + Aspir + Oc + Derm | Unt-G | 2 | | |
| See Also case 141, 901, 1263, 1562, 2145, 2415 | | | | | | | | | | |
| Cosmetics/Personal Care Products | | | | | | | | | | |
| 187h | 51 y F | hydrogen peroxide | 1 | 1 | U | Ingst | Oth-M | 2 | | |
| | | methadone | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 188ha | 54 y M | ethanol | 1 | 1 | A | Ingst | Int-S | 2 | ethanol | 137 mg/dL In Blood (unspecified) @ Unknown |
| | | acetaminophen/diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | chlordiazepoxide | 4 | 4 | | | | | | |
| | | cocaine | 5 | 5 | | | | | | |
| | | amphetamine | 6 | 6 | | | | | | |
| 189ph | 54 y M | hydrogen peroxide | 1 | 1 | A | Ingst | Unt-G | 2 | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 24 mcg/mL In Blood (unspecified) @ Unknown |
| | | levothyroxine | 3 | 3 | | | | | | |
| | | calamine lotion | 4 | 4 | | | | | | |
| See Also case 162, 170, 495, 1649 | | | | | | | | | | |
| Fumes/Gases/Vapors | | | | | | | | | | |
| 190pha | 1 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 22.3 % In Serum @ 1 h (pe) |
| 191pi | 1 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| 192pi | 1 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| 193pi | 2 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| 194pi | 3 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| 195pha | 4 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 17 % In Blood (unspecified) @ Unknown |
| 196pi | 5 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| 197pi | 6 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|-------------|------------|---------------|--------|-----|------------------------------|---|
| 198p | 8 y M | | | | A | Inhal | Unt-E | 2 | | |
| 199pha | 9 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 9 % In Blood (unspecified) @ Autopsy |
| 200pi | 10 y F | carbon monoxide cyanide | 1 2 | 1 2 | A | Inhal | Unt-E | 1 | | |
| 201pi | 10 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 202pi | 11 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 203h | 12 y F | carbon monoxide | 1 | 1 | A | Inhal + Derm | Unt-E | 1 | carboxyhemoglobin | 25 % In Blood (unspecified) @ Unknown |
| 204pha | 13 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 61 % In Blood (unspecified) @ Autopsy |
| 205pha | 14 y M | carbon monoxide | 1 | 1 | A | Inhal | Oth-M | 1 | carboxyhemoglobin | 34 % In Serum @ 30 m (pe) |
| 206i | 21 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 70 % In Serum @ 15 m (pe) |
| 207pha | 23 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 58 % In Blood (unspecified) @ 1 h (pe) |
| 208h | 25 y F | carbon monoxide cyanide ethanol | 1 2 3 | 1 2 3 | A | Inhal | Unt-E | 1 | carboxyhemoglobin ethanol | 43 % In Serum @ 1 h (pe) 312 mg/dL In Serum @ 1 m (pe) |
| 209pi | 25 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 210ph | 26 y M | carbon monoxide | 1 | 1 | A | Inhal + Unk | Int-S | 1 | carboxyhemoglobin | 50 % In Blood (unspecified) @ 1 h (pe) |
| 211pha | 26 y M | amphetamine methamphetamine oxycodone | 2 3 4 | 2 3 4 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 28 % In Blood (unspecified) @ Autopsy |
| 212a | 27 y M | helium | 1 | 1 | A | Inhal | Int-S | 1 | carboxyhemoglobin | 50 % In Blood (unspecified) @ Unknown |
| 213p | 27 y F | carbon monoxide | 1 | 1 | A | Inhal | Int-S | 1 | | |
| 214pha | 28 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 48 % In Blood (unspecified) @ Unknown |
| 215ph | 28 y F | carbon monoxide | 1 | 1 | A | Inhal | Unk | 1 | | |
| 216pi | 1 m M | carbon monoxide cyanide | 1 2 | 1 2 | A | Inhal | Unt-E | 1 | | |
| 217pa | 35 y F | carbon monoxide ethanol | 1 2 | 1 2 | A | Ingst + Inhal | Unt-E | 1 | carboxyhemoglobin ethanol | 60 % In Blood (unspecified) @ Autopsy 180 mg/dL In Blood (unspecified) @ Autopsy |
| 218ph | 35 y M | carbon monoxide | 1 | 1 | A | Inhal | Int-S | 1 | carboxyhemoglobin | 40.5 % In Blood (unspecified) @ Unknown |
| [219h] | 36 y M | hydrogen sulfide | 1 | 1 | A | Inhal | Unt-O | 1 | thiosulfate | 10 mcg/mL In Serum @ Unknown |
| 220p | 36 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 221ph | 41 y F | carbon monoxide cyanide | 1 2 | 1 2 | A | Inhal + Derm | Unt-E | 1 | carboxyhemoglobin | 21.5 % In Serum @ 3.5 h (pe) |
| 222h | 42 y M | carbon monoxide | 1 | 1 | A | Unk | Int-S | 1 | carboxyhemoglobin | 4.5 % In Serum @ 30 m (pe) |
| 223pi | 42 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 224ai | 43 y M | carbon monoxide | 1 | 1 | U | Unk | Int-S | 1 | | |
| 225p | 44 y M | nitrogen | 1 | 1 | A | Inhal | Int-S | 2 | | |
| 226ai | 47 y M | carbon monoxide alprazolam ethanol | 1 2 3 | 1 2 3 | A | Unk | Int-S | 1 | | |
| 227p | 48 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | carboxyhemoglobin | 26 % In Blood (unspecified) @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|----------------------------|-------------------------|----------------|------------|------------|---------------------|--------|-----|-------------------|---|
| 228ai | 49 y F | carbon monoxide | 1 | 1 | A | Ingst + Inhal + Unk | Int-S | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 229ai | 55 y F | carbon monoxide | 1 | 1 | U | Unk | Int-S | 1 | | |
| 230pi | 55 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | carboxyhemoglobin | 40 % In Blood (unspecified) @ Unknown |
| 231pha | 58 y F | carbon monoxide | 1 | 1 | A | Ingst + Inhal | Unt-E | 1 | carboxyhemoglobin | 5 % In Blood (unspecified) @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 30 mg/dL In Blood (unspecified) @ Autopsy |
| 232pa | 59 y M | carbon monoxide | 1 | 1 | U | Inhal | Unt-E | 1 | carboxyhemoglobin | 0.5 % In Blood (unspecified) @ 15 h (pe) |
| | | carbon monoxide | 1 | 1 | | | | | carboxyhemoglobin | 15.4 % In Blood (unspecified) @ Unknown |
| | | carbon monoxide | 1 | 1 | | | | | carboxyhemoglobin | 38 % In Blood (unspecified) @ Unknown |
| 233pa | 59 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 32 % In Blood (unspecified) @ Autopsy |
| 234h | 60 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 2 | carboxyhemoglobin | 77 % In Blood (unspecified) @ Unknown |
| 235ph | 61 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 54 % In Blood (unspecified) @ Unknown |
| 236h | 62 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | | |
| 237p | 62 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | carboxyhemoglobin | 9 % In Blood (unspecified) @ Unknown |
| 238ph | 62 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 35 % In Blood (unspecified) @ Unknown |
| 239h | 66 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 2 | carboxyhemoglobin | 46 % In Blood (unspecified) @ 30 m (pe) |
| 240ph | 66 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 2 | 2 | | | | | carboxyhemoglobin | 35.6 % In Serum @ 3 h (pe) |
| 241ph | 66 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 2 | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| | | cyanide | 3 | 3 | | | | | | |
| 242ph | 71 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | carboxyhemoglobin | 28.8 % In Blood (unspecified) @ Unknown |
| 243ai | 74 y M | carbon monoxide | 1 | 1 | A | Inhal | Int-S | 1 | | |
| 244ph | 77 y M | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 245ha | 77 y M | carbon monoxide | 1 | 1 | A | Inhal | Unk | 1 | carboxyhemoglobin | 18.6 % In Serum @ Unknown |
| 246ai | 77 y M | carbon monoxide | 1 | 1 | U | Inhal | Unt-U | 1 | | |
| [247p] | 77 y F | carbon dioxide | 1 | 1 | A | Inhal | Unk | 1 | | |
| 248pai | 80 y U | carbon monoxide | 1 | 1 | U | Inhal | Unt-M | 1 | | |
| 249pi | 81 y M | carbon monoxide | 1 | 1 | U | Inhal | Unt-E | 1 | | |
| | | propane | 2 | 2 | | | | | | |
| 250pai | 83 y U | carbon monoxide | 1 | 1 | U | Inhal | Unt-M | 1 | | |
| 251p | 89 y M | carbon monoxide | 1 | 1 | C | Inhal | Unt-E | 1 | carboxyhemoglobin | 73 % In Blood (unspecified) @ Autopsy |
| 252ph | 91 y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | carboxyhemoglobin | 28.3 % In Blood (unspecified) @ 45 m (pe) |
| | | carbon monoxide | 2 | 2 | | | | | | |
| 253ph | 6-12 y U | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 1 | | |
| 254ph | 60+ y F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | carboxyhemoglobin | 32 % In Blood (unspecified) @ Unknown |
| 255pi | Unknown adult (>=20 yrs) M | hydrogen sulfide | 1 | 1 | A | Inhal | Unt-O | 1 | | |
| 256pi | Unknown adult (>=20 yrs) U | carbon monoxide | 1 | 1 | A | Inhal | Int-S | 1 | | |
| 257i | Unknown adult (>=20 yrs) M | fume-gas-vapor, unknown | 1 | 1 | A | Inhal | Unt-E | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---|----------------------------|--|----------------|------------|------------|---------------------|--------|-----|--------------------|--|
| 258i | Unknown adult (>=20 yrs) F | | | | U | Inhal | Int-S | 1 | | |
| 259p | Unknown adult (>=20 yrs) M | fume-gas-vapor, unknown | 1 | 1 | | Inhal | Unt-E | 1 | | |
| 260ph | Unknown age F | carbon monoxide | 1 | 1 | A | Inhal | Unt-E | 3 | carboxyhemoglobin | 53 % In Blood (unspecified) @ 1 h (pe) |
| | | carbon monoxide | 1 | 1 | | | | | carboxyhemoglobin | 26.4 % In Blood (unspecified) @ Unknown |
| 261hi | Unknown age U | | | | A | Inhal | Unt-E | 1 | | |
| | | carbon monoxide | 1 | 1 | | | | | carboxyhemoglobin | 28.3 % In Blood (unspecified) @ Unknown |
| | | carbon monoxide | 1 | 1 | | | | | carboxyhemoglobin | 39.3 % In Blood (unspecified) @ Unknown |
| | | carbon monoxide | 1 | 1 | | | | | carboxyhemoglobin | 56.4 % In Blood (unspecified) @ Unknown |
| See Also case 143, 165, 694, 1040, 1144, 1505 | | | | | | | | | | |
| Heavy Metals | | | | | | | | | | |
| [262ha] | 33 y F | barium | 1 | 1 | A | Ingst | Int-S | 1 | barium | 13 mg/L In Blood (unspecified) @ Autopsy |
| [263h] | 72 y M | potassium chloride | 1 | 1 | A | Ingst | Int-S | 2 | | |
| Hydrocarbons | | | | | | | | | | |
| 264ph | 19 y M | | | | A | Inhal | Int-A | 1 | | |
| | | hydrocarbon, fluorinated paint-Varnish-lacquer | 1 | 1 | | | | | | |
| | | | 2 | 2 | | | | | | |
| 265h | 23 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 2 | | |
| 266ha | 25 y F | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-S | 1 | | |
| 267pha | 25 y M | hydrocarbon, fluorinated | 1 | 1 | U | Inhal | Int-U | 1 | | |
| 268h | 26 y F | hydrocarbon, fluorinated | 1 | 1 | A/C | Inhal | Int-A | 2 | | |
| 269 | 26 y F | | | | C | Ingst + Inhal | Int-A | 1 | | |
| | | hydrocarbon, fluorinated acetaminophen/diphenhydramine | 1 | 1 | | | | | | |
| | | | 2 | 2 | | | | | | |
| 270p | 27 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 1 | | |
| [271a] | 28 y M | hydrocarbon, fluorinated | 1 | 1 | A/C | Inhal | Int-A | 1 | | |
| 272ai | 28 y F | hydrocarbon, fluorinated | 1 | 1 | U | Unk | Int-A | 1 | | |
| 273pai | 29 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 1 | | |
| 274pa | 31 y M | | | | C | Inhal | Int-S | 1 | | |
| | | hydrocarbon, fluorinated | 1 | 1 | | | | | fluoxetine | 120 ng/mL In Blood (unspecified) @ Autopsy |
| | | hydrocarbon, fluorinated | 1 | 1 | | | | | 1,1-difluoroethane | 16 mg/mL In Blood (unspecified) @ Autopsy |
| | | hydrocarbon, fluorinated | 1 | 1 | | | | | norfluoxetine | 350 ng/mL In Blood (unspecified) @ Autopsy |
| 275p | 32 y F | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 2 | | |
| 276 | 34 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 2 | | |
| 277p | 36 y M | hydrocarbon, fluorinated | 1 | 1 | U | Inhal | Int-M | 1 | | |
| 278ha | 36 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 1 | | |
| 279ai | 37 y M | hydrocarbon, fluorinated | 1 | 1 | U | Unk | Int-S | 1 | | |
| 280pha | 39 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-U | 1 | | |
| 281ai | 41 y M | hydrocarbon, fluorinated | 1 | 1 | U | Inhal | Unk | 1 | | |
| [282ha] | 41 y F | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 1 | 1,1-difluoroethane | 5.7 mg/L In Blood (unspecified) @ Autopsy |
| 283ai | 43 y M | hydrocarbon, fluorinated | 1 | 1 | U | Unk | Unk | 1 | | |
| 284ai | 44 y F | | | | U | Ingst + Inhal + Unk | Unk | 1 | | |
| | | hydrocarbon, fluorinated | 1 | 1 | | | | | | |
| | | methanol | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| [285ha] | 49 y M | hydrocarbon, fluorinated | 1 | 1 | A | Inhal | Int-A | 1 | | |
| 286ai | 51 y F | hydrocarbon, fluorinated | 1 | 1 | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|----------------------------|--|----------------|------------|------------|-------|--------|-----|---|--|
| | | ethanol | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| See Also case 592, 1240 | | | | | | | | | | |
| Industrial Cleaners | | | | | | | | | | |
| 287ha | 63 y F | | | | A | Ingst | Unt-G | 1 | | |
| | | sodium carbonate/sodium hydroxide/ sodium phosphate | 1 | 1 | | | | | | |
| 288ha | 85 y F | | | | A | Ingst | Unt-G | 1 | | |
| | | potassium hydroxide/sodium hypochlorite | 1 | 1 | | | | | | |
| 289h | Unknown adult (>=20 yrs) M | | | | A | Ingst | Unt-G | 2 | | |
| | | ammonium bifluoride | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| Miscellaneous Foods | | | | | | | | | | |
| 290ph | 29 y F | | | | U | Ingst | Unk | 2 | | |
| | | sodium bicarbonate | 1 | 1 | | | | | | |
| Mushrooms | | | | | | | | | | |
| 291i | 67 y M | | | | A | Ingst | Int-S | 1 | | |
| | | mushroom (unknown) | 1 | 1 | | | | | | |
| 292h | 75 y F | | | | A | Ingst | Unt-G | 2 | | |
| | | Amanita muscaria | 1 | 1 | | | | | | |
| Other/Unknown Nondrug Substances | | | | | | | | | | |
| [293ha] | 9 y M | | | | A | Ingst | Unt-M | 1 | | |
| | | nondrug, unknown | 1 | 1 | | | | | | |
| 294 | 91 y M | | | | A | Ingst | Int-S | 1 | | |
| | | nondrug, unknown | 1 | 1 | | | | | | |
| See Also case 106, 155, 1369, 1698, 1969, 1987, 2008, 2043, 2044, 2147, 2308, 2389, 2463, 2487 | | | | | | | | | | |
| Paints and Stripping Agents | | | | | | | | | | |
| 295 | 77 y M | | | | A | Ingst | Int-S | 1 | | |
| | | methanol/methylene chloride/toluene | 1 | 1 | | | | | | |
| See Also case 264, 1432 | | | | | | | | | | |
| Pesticides | | | | | | | | | | |
| 296a | 25 y M | | | | A | Inhal | Int-A | 1 | | |
| | | brodifacoum | 1 | 1 | | | | | | |
| | | rodenticide (antocoagulant) | 2 | 2 | | | | | | |
| | | THC homolog | 3 | 3 | | | | | | |
| 297h | 26 y F | | | | A | Ingst | Int-S | 2 | | |
| | | organophosphate | 1 | 1 | | | | | | |
| 298a | 27 y M | | | | A | Ingst | Int-S | 2 | | |
| | | dinitrophenol | 1 | 1 | | | | | | |
| 299pha | 28 y M | | | | U | Inhal | Int-A | 2 | | |
| | | rodenticide (antocoagulant) | 1 | 1 | | | | | | |
| | | THC homolog | 2 | 2 | | | | | | |
| [300ha] | 31 y M | | | | U | Inhal | Int-A | 1 | | |
| | | brodifacoum | 1 | 1 | | | | | brodifacoum | 96.5 mcg/L In Blood (unspecified) @ Unknown |
| | | THC homolog | 2 | 2 | | | | | | |
| 301pi | 33 y M | | | | A | Inhal | Oth-C | 3 | | |
| | | brodifacoum | 1 | 1 | | | | | | |
| | | THC homolog | 2 | 2 | | | | | | |
| 302h | 33 y M | | | | A | Ingst | Int-S | 2 | | |
| | | glyphosate | 1 | 1 | | | | | | |
| 303pai | 37 y M | | | | U | Inhal | Int-A | 1 | | |
| | | brodifacoum | 1 | 1 | | | | | | |
| | | THC homolog | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | 11-oh-thc (11-hydroxy-delta-9-tetrahydrocannabinol) | 0.011 mg/L In Whole Blood @ Autopsy |
| [304ph] | 40 y M | | | | A | Ingst | Unt-M | 1 | | |
| | | imidacloprid | 1 | 1 | | | | | | |
| 305i | 42 y M | | | | U | Unk | Int-S | 1 | | |
| | | paraquat | 1 | 1 | | | | | | |
| [306a] | 46 y M | | | | A | Inhal | Oth-C | 1 | | |
| | | rodenticide (antocoagulant) | 1 | 1 | | | | | | |
| | | THC homolog | 2 | 2 | | | | | | |
| 307ha | 50 y M | | | | A | Inhal | Oth-C | 1 | | |
| | | brodifacoum | 1 | 1 | | | | | | |
| | | rodenticide (antocoagulant) | 2 | 2 | | | | | | |
| | | THC homolog | 3 | 2 | | | | | | |
| 308ph | 52 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | difethialone | 1 | 1 | | | | | | |
| | | lorazepam | 2 | 2 | | | | | | |
| 309p | 52 y M | | | | A | Ingst | Int-S | 2 | | |
| | | methomyl | 1 | 1 | | | | | | |
| 310 | 53 y F | | | | A | Inhal | Unt-E | 1 | | |
| | | sulfuryl fluoride | 1 | 1 | | | | | | |
| [311ph] | 54 y M | | | | A | Ingst | Int-S | 1 | | |
| | | acephate | 1 | 1 | | | | | | |
| 312pha | 56 y M | | | | A | Inhal | Unt-G | 3 | | |
| | | esfenvalerate | 1 | 1 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|-------------------------|----------------|------------|------------|-------|--------|-----|---------------------------|---|
| [313h] | 59 y M | paraquat | 1 | 1 | A | Ingst | Unt-M | 1 | paraquat | 1400 ng/mL In Blood (unspecified) @ 27 h (pe) |
| [314h] | 63 y M | glyphosate | 2 | 2 | A | Ingst | Unt-G | 1 | | |
| 315h | 65 y M | paraquat | 1 | 1 | A | Ingst | Unt-M | 2 | | |
| 316 | 66 y M | paraquat | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 317pai | 67 y M | organophosphate | 1 | 1 | A | Unk | Int-S | 1 | | |
| | | strychnine | 1 | 1 | | | | | strychnine | 0.19 mcg/g In Muscle @ Autopsy |
| | | strychnine | 1 | 1 | | | | | strychnine | 36 mcg/g In Liver @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 59 mg/dL In Unknown @ Autopsy |
| 318pa | 68 y M | phosphine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 0.11 g/dL In Vitreous @ Autopsy |
| 319ha | 71 y M | glyphosate | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | zinc phosphide | 2 | 2 | | | | | | |
| 320pi | 77 y F | copper ammonium complex | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 321 | 78 y M | diclorvos | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | chlorpyrifos | 2 | 2 | | | | | | |
| 322h | 84 y M | diquate/glyphosate | 1 | 1 | A | Ingst | Int-S | 2 | | |
| See Also case 852, 2250 Plants | | | | | | | | | | |
| [323h] | 20 y M | plant, toxalbumin | 1 | 1 | A | Ingst | Int-S | 1 | abrin (abrus precatorius) | 8.84 ng/mL In Blood (unspecified) @ 61 h (pe) |
| 324h | 35 y M | plant, toxalbumin | 1 | 1 | A | Par | Int-U | 2 | | |
| [325ha] | 63 y F | Thevetia peruviana | 1 | 1 | A | Ingst | Unt-M | 1 | | |
| [326] | 64 y M | Thevetia peruviana | 1 | 1 | A | Ingst | Int-M | 2 | | |
| [327ha] | 8 m M | Argemone alba | 1 | 1 | C | Ingst | Unt-G | 2 | | |
| See Also case 770, 930, 1244, 1644 Pharmaceutical Exposures | | | | | | | | | | |
| | | Analgesics | | | | | | | | |
| 328i | 1 y M | methadone | 1 | 1 | U | Unk | Unt-G | 1 | | |
| 329p | 1 y F | methadone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | heroin | 2 | 2 | | | | | | |
| [330pha] | 2 y M | methadone | 1 | 1 | A | Ingst | Unk | 1 | methadone | 0.45 mg/L In Blood (unspecified) @ Autopsy |
| 331phai | 3 y M | methadone | 1 | 1 | A | Ingst | Unt-G | 1 | | |
| 332hi | 14 y F | methadone | 1 | 1 | U | Ingst | Int-S | 1 | | |
| | | colchicine | 1 | 1 | | | | | | |
| | | lisinopril | 2 | 2 | | | | | | |
| | | ciprofloxacin | 3 | 3 | | | | | | |
| | | tizanidine | 4 | 4 | | | | | | |
| | | meloxicam | 5 | 5 | | | | | | |
| | | iron | 6 | 6 | | | | | | |
| 333 | 15 y F | acetaminophen | 1 | 1 | A | Ingst | Int-M | 2 | acetaminophen (apap) | 30.8 mcg/mL In Serum @ Unknown |
| 334pha | 15 y F | hydromorphone | 1 | 1 | A | Ingst | Int-S | 1 | hydromorphone | 232 ng/mL In Blood (unspecified) @ Unknown |
| | | fluoxetine | 2 | 2 | | | | | fluoxetine | 68 ng/mL In Blood (unspecified) @ Unknown |
| | | cyclobenzaprine | 3 | 3 | | | | | cyclobenzaprine | 69 ng/mL In Blood (unspecified) @ Unknown |
| 335i | 15 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 336ai | 15 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 337h | 16 y F | colchicine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | lisinopril | 2 | 2 | | | | | | |
| | | mirtazapine | 3 | 3 | | | | | | |
| | | clonidine | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| 338ai | 16 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | |
| 339i | 16 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| 340ai | 17 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 341i | 17 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 342ai | 17 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 343h | 17 y M | | | | A | Ingst | Int-S | 2 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | dextromethorphan | 3 | 3 | | | | | | |
| | | hydromorphone | 4 | 4 | | | | | | |
| | | hydroxyzine | 5 | 5 | | | | | | |
| 344h | 17 y F | | | | A | Ingst | Int-S | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | pregabalin | 2 | 2 | | | | | | |
| | | THC homolog | 3 | 3 | | | | | | |
| | | acetaminophen/bupropion/ caffeine/codeine | 4 | 4 | | | | | | |
| 345h | 17 y F | | | | A | Ingst | Int-S | 1 | | |
| | | colchicine | 1 | 1 | | | | | | |
| | | hydroxyzine | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| | | acetaminophen | 4 | 4 | | | | | acetaminophen (apap) | 54 mcg/mL In Serum @ 4 h (pe) |
| 346ai | 17 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 347ai | 17 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 348pa | 18 y F | | | | U | Ingst | Int-S | 1 | | |
| | | fentanyl | 1 | 1 | | | | | cyclopropylfentanyl | 1 mcg/mL In Blood (unspecified) @ Unknown |
| | | beta blocker | 2 | 2 | | | | | | |
| 349ai | 18 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 350i | 18 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 351pha | 18 y M | | | | A | Ingst | Int-U | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 11 ng/mL In Blood (unspecified) @ Autopsy |
| | | oxycodone | 2 | 2 | | | | | | |
| 352pha | 18 y M | acetaminophen/oxycodone | 1 | 1 | U | Inhal | Int-A | 2 | | |
| 353 | 18 y F | | | | C | Ingst | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 229 mcg/mL In Serum @ 20 h (pe) |
| 354p | 18 y F | | | | A | Ingst | Int-S | 2 | | |
| | | acetaminophen | 2 | 1 | | | | | acetaminophen (apap) | 15.6 mcg/mL In Serum @ Unknown |
| | | drug, unknown | 1 | 1 | | | | | | |
| | | salicylate | 3 | 2 | | | | | salicylate | 6.6 mg/dL In Serum @ Unknown |
| 355h | 18 y F | | | | A | Ingst | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| 356ai | 18 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 357ai | 18 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 358ai | 18 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 359ai | 18 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 360ai | 18 y M | narcotic, other/unknown | 1 | 1 | U | Unk | Int-A | 1 | | |
| 361h | 19 y F | | | | A | Ingst | Int-U | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 30 mcg/mL In Blood (unspecified) @ Unknown |
| | | lithium | 2 | 2 | | | | | lithium | 1.7 mmol/L In Blood (unspecified) @ Unknown |
| 362p | 19 y M | | | | U | Ingst | Unk | 2 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 363pha | 19 y M | | | | A | Ingst | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 10 ng/mL In Serum @ 1 d (pe) |
| | | benzodiazepine | 2 | 2 | | | | | alprazolam | 250 ng/mL In Serum @ 1 d (pe) |
| 364i | 19 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 365ai | 19 y M | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|---------------|--------|-----|------------|--|
| 366ai | 19 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 367ai | 19 y M | | | | U | Unk | Int-S | 1 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | propranolol | 3 | 3 | | | | | | |
| 368pa | 19 y M | | | | U | Inhal | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 369ai | 19 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | amphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 370ai | 19 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | marijuana | 2 | 2 | | | | | | |
| 371ai | 19 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | citalopram | 3 | 3 | | | | | | |
| | | cocaine | 4 | 4 | | | | | | |
| 372ai | 19 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | valproic acid | 2 | 2 | | | | | | |
| 373ai | 19 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 374h | 20 y F | | | | C | Ingst | Int-M | 2 | | |
| | | naproxen | 1 | 1 | | | | | | |
| | | trazodone | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | | |
| | | hydroxyzine | 4 | 4 | | | | | | |
| 375ha | 20 y F | | | | A | Ingst | Int-S | 1 | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 72 mg/dL In Blood (unspecified) @ Autopsy |
| 376p | 20 y M | | | | A | Ingst + Inhal | Int-A | 2 | | |
| | | acetaminophen/oxycodone | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| [377pha] | 20 y M | | | | U | Inhal | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 5.6 ng/mL In Serum @ Unknown |
| 378ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 379ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 380i | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 381ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 382i | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 383i | 20 y M | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 384ha | 20 y M | | | | U | Ingst + Inhal | Int-A | 2 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | Codeine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | amphetamine (hallucinogenic) | 4 | 4 | | | | | | |
| | | cathinone | | | | | | | | |
| | | marijuana | 5 | 5 | | | | | | |
| 385ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | antihistamine | 3 | 3 | | | | | | |
| 386ai | 20 y M | | | | U | Unk | Int-U | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 387ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 388ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 389ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 390ai | 20 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|-------------------------------|----------------|------------|------------|-------|--------|-----|---------|----------------------------|----------------------|--|
| 391ai | 20 y M | cocaine | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 392ai | 20 y F | alprazolam | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| 393a | 21 y F | methamphetamine | 3 | 3 | A | Ingst | Int-U | 1 | | | | |
| | | acetaminophen | 1 | 1 | | | | | | | acetaminophen (apap) | 126 mcg/mL In Blood (unspecified) @ 4 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | | | acetaminophen (apap) | 174 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | | | acetaminophen (apap) | 45 mcg/mL In Blood (unspecified) @ 36 h (pe) |
| | | acetaminophen/oxycodone | 2 | 2 | | | | | | | | |
| | | naproxen | 3 | 3 | | | | | | | | |
| 394ai | 21 y M | naproxen | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| 395ai | 21 y M | alprazolam | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| 396ai | 21 y M | alprazolam | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 397ai | 21 y M | dextromethorphan | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 398ai | 21 y F | alprazolam | 2 | 2 | U | Unk | Int-S | 1 | | | | |
| | | bupropion | 3 | 3 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 399ai | 21 y M | bupropion | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| 400ai | 21 y F | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | benztropine | 2 | 2 | | | | | | | | |
| 401ai | 21 y M | fluoxetine | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | | |
| 402ph | 22 y M | methamphetamine | 3 | 3 | A | Ingst | Unk | 2 | | | | |
| | | trazodone | 4 | 4 | | | | | | | | |
| | | marijuana | 5 | 5 | | | | | | | | |
| | | heroin | 2 | 2 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 403ai | 22 y M | marijuana | 5 | 5 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 404i | 22 y M | cocaine | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 405ai | 22 y M | cocaine | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 406ai | 22 y M | alprazolam | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 407ai | 22 y M | alprazolam | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 408i | 22 y M | alprazolam | 3 | 3 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 409i | 22 y F | oxycodone | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 410i | 22 y M | alprazolam | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 411 | 22 y F | alprazolam | 2 | 2 | A | Ingst | Int-S | 1 | | | | |
| | | acetaminophen | 1 | 1 | | | | | | | acetaminophen (apap) | 182 mcg/mL In Serum @ 18 h (pe) |
| | | diphenhydramine | 2 | 1 | | | | | | | | |
| 412h | 22 y M | ibuprofen | 3 | 2 | A | Ingst | Int-S | 1 | | | | |
| | | acetaminophen/diphenhydramine | 1 | 1 | | | | | | | acetaminophen (apap) | 29 mcg/mL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 2 | 2 | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| | | salicylate | 3 | 3 | | | | | salicylate | 15 mg/dL In Blood (unspecified) @ Unknown |
| | | ethanol | 4 | 4 | | | | | ethanol | 57 mg/dL In Blood (unspecified) @ Unknown |
| 413h | 22 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 89.4 mg/L In Serum @ Unknown |
| | | drug, unknown | 2 | 2 | | | | | | |
| 414a | 22 y M | acetaminophen/ | 1 | 1 | U | Ingst | Unk | 2 | | |
| | | diphenhydramine | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 415a | 22 y F | | | | U | Ingst + Inhal | Int-A | 3 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 416pa | 22 y M | | | | A | Unk | Int-A | 1 | fentanyl | 0.019 mg/L In Blood (unspecified) @ Autopsy |
| | | fentanyl | 1 | 1 | | | | | | |
| 417ai | 22 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 418ai | 22 y M | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 419ai | 22 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | tramadol | 2 | 2 | | | | | | |
| 420ai | 22 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 421ai | 22 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 422pha | 23 y M | | | | A | Unk | Int-A | 1 | fentanyl | 2.4 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | fentanyl | 1 | 1 | | | | | | |
| 423pha | 23 y M | | | | A | Par + Unk | Int-A | 1 | norfentanyl | 0.95 ng/mL In Blood (unspecified) @ Unknown |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 5.1 ng/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| | | amphetamine | 4 | 4 | | | | | amphetamine | 57 ng/mL In Blood (unspecified) @ Unknown |
| 424pa | 23 y F | | | | A | Par | Int-A | 1 | fentanyl | 0.08 mg/L In Blood (unspecified) @ Autopsy |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | alprazolam | 0.027 mg/L In Blood (unspecified) @ Autopsy |
| 425ai | 23 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 426i | 23 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | amphetamine | 2 | 2 | | | | | | |
| | | amphetamine (hallucinogenic) | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| | | cocaine | 5 | 5 | | | | | | |
| 427ai | 23 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 428ai | 23 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 429ai | 23 y F | | | | U | Unk | Int-A | 2 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 430ai | 23 y M | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 431ai | 23 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 432ai | 23 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 433ha | 23 y M | | | | A | Ingst | Int-S | 1 | salicylate | 113.8 mg/dL In Blood (unspecified) @ 15 h (pe) |
| | | salicylate | 1 | 1 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------------------|-------------------------------------|-----------------|---|------------|-------------|--------|-----|-----------------|--|----------|---|
| 434pa | 23 y M | salicylate | 1 | 1 | A | Unk | Int-A | 1 | salicylate | 13 mg/dL In Blood (unspecified) ⓐ Unknown | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 2.6 mg/dL In Blood (unspecified) ⓐ Unknown | | |
| | | clonazepam | 2 | 2 | | | | | ethanol | 42 mg/dL In Blood (unspecified) ⓐ Unknown | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| | | phenibut | 4 | 4 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | fentanyl | 0.01 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | cocaine | 2 | 2 | | | | | | | cocaine | 0.2 mg/L In Blood (unspecified) ⓐ Autopsy |
| cocaine | 2 | 2 | benzoylecognine | 2.4 mg/L In Blood (unspecified) ⓐ Autopsy | | | | | | | | |
| ethanol | 3 | 3 | ethanol | 0.03 % (wt/Vol) In Blood (unspecified) ⓐ Autopsy | | | | | | | | |
| 435ai | 23 y M | | | U | Unk | Int-A | 1 | | | | | |
| 436ai | 23 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | heroin | 2 | 2 | | | | | | | | |
| 437ai | 23 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | tramadol | 2 | 2 | | | | | | | | |
| 438ai | 23 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | heroin | 2 | 2 | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| 439ai | 23 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| 440ai | 23 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | alprazolam | 2 | 2 | | | | | | | | |
| 441ai | 23 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 442ai | 23 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 443pa | 24 y F | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.022 mg/L In Blood (unspecified) ⓐ Autopsy | | |
| | | heroin | 2 | 1 | | | | | morphine (free) | 21 mcg/L In Blood (unspecified) ⓐ Autopsy | | |
| | | cocaine | 3 | 3 | | | | | benzoylecognine | 1.6 mg/L In Blood (unspecified) ⓐ Autopsy | | |
| 444h | 24 y M | morphine | 1 | 1 | A | Ingst + Par | Int-A | 1 | | | | |
| | | fentanyl | 2 | 2 | | | | | | | | |
| | | fentanyl analog, acetyl fentanyl | 3 | 3 | | | | | | | | |
| 445ai | 24 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| 446i | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-M | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | |
| 447ai | 24 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 448ai | 24 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| 449ai | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| 450i | 24 y M | alprazolam | 2 | 2 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 451ai | 24 y F | diphenhydramine | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| | | methadone | 1 | 1 | | | | | | | | |
| 452ai | 24 y M | methadone | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 3 | 3 | | | | | | | | |
| 453pha | 24 y M | fentanyl | 1 | 1 | A | Inhal | Int-A | 1 | fentanyl | 7.1 ng/mL In Blood (unspecified) ⓐ Unknown | | |
| | | alprazolam | 2 | 2 | | | | | benzoylecognine | 634 ng/mL In Blood (unspecified) ⓐ Unknown | | |
| | | methamphetamine | 3 | 3 | | | | | | | | |
| 454h | 24 y F-Pregnant | | | | C | Ingst | Int-M | 1 | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 11 mcg/mL In Plasma @ Unknown |
| 455i | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 456ai | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 457ai | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 458ai | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 459ai | 24 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 460pa | 25 y F | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.03 mg/L In Blood (unspecified) @ Autopsy |
| 461pa | 25 y M | fentanyl | 1 | 1 | A | Inhal | Int-A | 1 | fentanyl | 0.026 mg/L In Blood (unspecified) @ Autopsy |
| 462ha | 25 y M | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 106 mcg/mL In Serum @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 115 mcg/mL In Serum @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 116 mcg/mL In Serum @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 17 mcg/mL In Serum @ Unknown |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ibuprofen | 3 | 3 | | | | | | |
| 463h | 25 y M | ibuprofen | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | risperidone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 464pa | 25 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.019 mg/L In Blood (unspecified) @ Autopsy |
| 465ai | 25 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 466i | 25 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | dextromethorphan | 3 | 3 | | | | | | |
| 467i | 25 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 468ai | 25 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 469ai | 25 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 470ai | 25 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 471ai | 25 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | Mitragyna speciosa korthals | 2 | 2 | | | | | | |
| 472ai | 25 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methylenedioxy methamphetamine (MDMA) | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 473ph | 25 y M | fentanyl | 1 | 1 | U | Inhal | Unt-G | 1 | | |
| 474 | 25 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 96.3 mcg/mL In Serum @ Unknown |
| | | tramadol | 2 | 2 | | | | | | |
| | | ibuprofen | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| | | citalopram | 5 | 5 | | | | | | |
| 475pha | 25 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.001 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 2 | 2 | | | | | | |
| 476ai | 25 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 477ai | 25 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 478ai | 25 y F | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| | | ethanol | 2 | 2 | | | | | | |
| 479ai | 25 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| 480 | 26 y F | fentanyl | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 481ai | 26 y F | acetaminophen | 1 | 1 | U | Unk | Int-A | 1 | acetaminophen (apap) | 84 mcg/mL In Serum @ Unknown |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 482i | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 483ai | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | buprenorphine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 484ai | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | methadone | 1 | 1 | | | | | | |
| 485pa | 26 y M | ethanol | 2 | 2 | A | Par | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.019 mg/L In Blood (unspecified) @ Autopsy |
| 486 | 26 y M | ethanol | 2 | 2 | U | Ingst | Int-A | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 487ph | 26 y F | ethanol | 2 | 2 | A | Par | Int-A | 2 | | |
| | | narcotic, other/unknown | 1 | 1 | | | | | | |
| 488h | 26 y F | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 11 mcg/mL In Serum @ 15 m (pe) |
| 489ai | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | morphine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 490ai | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 491ai | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | nonsteroidal antiinflammatory | 2 | 2 | | | | | | |
| 492ai | 26 y F | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 493ai | 26 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 494p | 27 y M | ethanol | 2 | 2 | A | Ingst + Unk | Int-U | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.015 mg/L In Blood (unspecified) @ Autopsy |
| | | morphine | 2 | 2 | | | | | morphine (free) | 16 mcg/L In Blood (unspecified) @ Autopsy |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.03 % (wt/Vol) In Vitreous @ Autopsy |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.04 % (wt/Vol) In Blood (unspecified) @ Autopsy |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.06 % (wt/Vol) In Blood (unspecified) @ Autopsy |
| 495a | 27 y F | ethanol | 2 | 2 | A/C | Ingst | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 62 mcg/mL In Blood (unspecified) @ Unknown |
| | | isopropanol | 2 | 2 | | | | | | |
| | | ethanol (non-beverage) | 3 | 3 | | | | | | |
| 496i | 27 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | lorazepam | 2 | 2 | | | | | | |
| 497ai | 27 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 498i | 27 y F | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 499ai | 27 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | narcotic, other/unknown | 1 | 1 | | | | | | |
| | | amphetamine | 2 | 2 | | | | | | |
| 500pa | 27 y M | ethanol | 2 | 2 | U | Par | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 8.3 ng/mL In Blood (unspecified) @ Autopsy |
| | | bupropion | 2 | 2 | | | | | bupropion | 330 ng/mL In Blood (unspecified) @ Autopsy |
| 501ph | 27 y M | ethanol | 2 | 2 | A | Ingst | Int-A | 2 | | |
| | | acetaminophen/oxycodone | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| 502ai | 27 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 1 | | |
| | | buprenorphine | 1 | 1 | | | | | | |
| | | diazepam | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| 503ai | 27 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 504ai | 27 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | hydrocodone | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 505ai | 27 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | donazepam | 2 | 2 | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | |
| 506ai | 27 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 507ai | 27 y M | | | | U | Unk | Int-A | 1 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | morphine | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| | | benzodiazepine | 4 | 4 | | | | | | |
| 508h | 28 y F | | | | U | Unk | Int-U | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 35 mcg/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 2 | 1 | | | | | | |
| 509ph | 28 y F | | | | A/C | Ingst | Int-A | 2 | | |
| | | tramadol | 1 | 1 | | | | | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | |
| 510pha | 28 y M | | | | U | Ingst | Unk | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.26 ng/mL In Blood (unspecified) @ 1 h (pe) |
| 511ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 512ai | 28 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 513ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| 514ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 515ai | 28 y F | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 516i | 28 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | doxylamine | 3 | 3 | | | | | | |
| 517ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | amphetamine (hallucinogenic) | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 518ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 519ai | 28 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 520ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 521ai | 28 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 522i | 29 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 523ai | 29 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 524h | 29 y M | | | | A/C | Ingst | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 174.7 mcg/mL In Serum @ 1 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 23.9 mcg/mL In Serum @ 4 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 252.3 mcg/mL In Serum @ 0 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 41.8 mcg/mL In Serum @ 3 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 82.2 mcg/mL In Serum @ 2 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 9.9 mcg/mL In Serum @ 5 d (pe) |
| 525ph | 29 y F | | | | A | Ingst | Int-A | 2 | | |
| | | buprenorphine/naloxone (sublingual tablet) | 1 | 1 | | | | | | |
| 526ai | 29 y M | | | | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|-----------------|-----------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 527ai | 29 y F | fentanyl | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 528ai | 29 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 529ai | 29 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 530ai | 29 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 531ai | 29 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 532ai | 29 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 533pha | 30 y M | fentanyl | 1 | 1 | A | Unk | Int-U | 2 | fentanyl | 2 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | methamphetamine | 2 | 2 | | | | | methamphetamine | 113 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | methamphetamine | 2 | 2 | | | | | amphetamine | 24 ng/mL In Blood (unspecified) ⓐ Unknown |
| 534pha | 30 y M | fentanyl | 1 | 1 | A/C | Par + Unk | Int-A | 1 | norfentanyl | 1.9 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 14 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | cocaine | 2 | 2 | | | | | benzoylecognine | 1200 mg/mL In Blood (unspecified) ⓐ Autopsy |
| 535ai | 30 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 536ai | 30 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 537ai | 30 y F | alprazolam | 2 | 2 | U | Unk | Unk | 3 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| 538p | 30 y M | duloxetine | 2 | 2 | A | Ingst | Int-A | 2 | | |
| | | olanzapine | 3 | 3 | | | | | | |
| 539ha | 30 y M | fentanyl | 1 | 1 | A | Ingst | Int-M | 1 | | |
| 540pa | 30 y F-Pregnant | acetaminophen | 1 | 1 | A | Par | Int-A | 1 | acetaminophen (apap) | 23.4 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.074 mg/L In Blood (unspecified) ⓐ Autopsy |
| 541h | 30 y F | acetaminophen/ diphenhydramine | 1 | 1 | C | Ingst | Int-A | 2 | acetaminophen (apap) | 30 mcg/mL In Blood (unspecified) ⓐ Unknown |
| 542h | 30 y M | fentanyl | 1 | 1 | U | Ingst | Unk | 2 | | |
| 543ai | 30 y M | cocaine | 2 | 2 | | | | | | |
| | | nalmexone | 3 | 3 | | | | | | |
| | | trazodone | 4 | 4 | | | | | | |
| | | gabapentin | 5 | 5 | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 544ai | 30 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 545ai | 30 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 546ai | 30 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 547ai | 30 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 548ai | 30 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|---------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|---|-----------|--|
| 549ai | 30 y F | sertraline | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 550ai | 30 y M | methamphetamine | 2 | 2 | U | Unk | Int-A | 1 | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | |
| 551ai | 30 y M | cocaine | 2 | 2 | U | Unk | Int-A | 2 | | | | |
| 552p | 31 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.034 mg/L In Blood (unspecified) @ Autopsy | | |
| | | cocaine | 2 | 2 | | | | | benzoyllecognine | 1.4 mg/L In Blood (unspecified) @ Autopsy | | |
| 553h | 31 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 2 | | | | |
| 554pha | 31 y M | acetaminophen/hydrocodone | 2 | 1 | A/C | Ingst | Int-S | 1 | | | | |
| | | oxycodone | 1 | 1 | | | | | | | oxycodone | 182 ng/mL In Blood (unspecified) @ Unknown |
| | | lorazepam | 3 | 3 | | | | | | | lorazepam | 150 ng/mL In Blood (unspecified) @ Unknown |
| | | | | | | | | | | | | |
| 555h | 31 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 52.5 mcg/mL In Blood (unspecified) @ 5 h (pe) | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 75 mcg/mL In Blood (unspecified) @ 30 m (pe) | | |
| | | drug, unknown | 2 | 2 | | | | | | | | |
| 556ai | 31 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | heroin | 2 | 2 | | | | | | | | |
| 557i | 31 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 558ai | 31 y M | oxycodone | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 559p | 31 y F | oxycodone | 1 | 1 | A | Ingst | Int-S | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 560ai | 31 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | methadone | 2 | 2 | | | | | | | | |
| 561ai | 31 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| 562pa | 32 y M | fentanyl | 1 | 1 | A | Unk | Unk | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | ethanol | 0.13 % (wt/Vol) In Blood (unspecified) @ Autopsy |
| | | ethanol | 2 | 2 | | | | | | | ethanol | 0.14 % (wt/Vol) In Blood (unspecified) @ Autopsy |
| | | ethanol | 2 | 2 | | | | | | | ethanol | 0.17 % (wt/Vol) In Vitreous @ Autopsy |
| 563pha | 32 y F | ethanol | 2 | 2 | U | Unk | Unk | 1 | ethanol | 0.2 % (wt/Vol) In Urine (quantitative only) @ Autopsy | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 5.4 ng/mL In Blood (unspecified) @ Autopsy | | |
| | | oxycodone | 2 | 2 | | | | | oxycodone | 58 ng/mL In Blood (unspecified) @ Autopsy | | |
| | | | | | | | | | | | | |
| 564pa | 32 y F | fentanyl | 1 | 1 | U | Inhal + Unk | Int-A | 1 | fentanyl | 15 ng/mL In Blood (unspecified) @ Autopsy | | |
| | | fentanyl | 1 | 1 | | | | | norfentanyl | 5 ng/mL In Blood (unspecified) @ Autopsy | | |
| | | cocaine | 2 | 2 | | | | | cocaine | 210 ng/mL In Blood (unspecified) @ Autopsy | | |
| | | clonazepam | 3 | 3 | | | | | 7-aminodiazepam | 42 ng/mL In Blood (unspecified) @ Autopsy | | |
| 565ai | 32 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | cocaine | 2 | 2 | | | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | | | |
| 566ai | 32 y M | narcotic, other/unknown | 1 | 1 | U | Unk | Int-A | 1 | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | | | |
| 567ha | 32 y F | tramadol | 1 | 1 | A/C | Ingst + Unk | Int-S | 1 | tramadol | 19 mg/L In Blood (unspecified) @ Autopsy | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | | | |
|-------------------------------------|--------|-------------------------------------|----------------|-------------------------------------|-----------------|------------------------------------|------------------|-----------------------------------|----------------------|--|-----------------|--|-------------|---|------------------|---|-----------|--|-------------------------|--|-------|-----|-------|-----|---------|--|
| 568pha | 32 y M | tramadol | 1 | 1 | U | Unk | AR-O | 1 | tramadol | 200 mg/L In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | duloxetine | 2 | 2 | | | | | fentanyl | 0.014 mg/L In Whole Blood @ Autopsy | | | | | | | | | | | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | | cyclobenzaprine | 0.06 mg/L In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| | | amphetamine | 4 | 4 | | | | | | | levetiracetam | 17 mg/L In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| | | levetiracetam | 5 | 5 | | | | | | | | | topiramate | 14 mg/L In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | topiramate | 6 | 6 | | | | | | | | | | | fentanyl | 0.014 mg/L In Whole Blood @ Autopsy | | | | | | | | | | |
| fentanyl | 1 | 1 | morphine | 0.057 mg/L In Whole Blood @ Autopsy | | | | | | | | | | | | | | | | | | | | | | |
| fentanyl analog, acetyl fentanyl | 2 | 2 | | | methamphetamine | 0.15 mg/L In Whole Blood @ Autopsy | | | | | | | | | | | | | | | | | | | | |
| heroin | 3 | 3 | | | | | benzoyllecognine | 1.6 mg/L In Whole Blood @ Autopsy | | | | | | | | | | | | | | | | | | |
| methamphetamine | 4 | 4 | | | | | | | acetaminophen (apap) | 129 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | |
| cocaine | 5 | 5 | | | | | | | | | acetaminophen | 129 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | |
| 569h | 32 y F | acetaminophen | | | | | | | | | | | 1 | 1 | A | Ingst | Int-S | 2 | fentanyl | 0.023 mg/L In Blood (unspecified) @ Autopsy | | | | | | |
| | | 570pa | 32 y M | fentanyl | | | | | | | | | 1 | 1 | | | | | | | U | Unk | Int-A | 1 | ethanol | 0.06 mg/dL In Blood (unspecified) @ Autopsy |
| | | | | cocaine | 2 | 2 | | | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| 571pha | 32 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | morphine (free) | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | heroin | 2 | 2 | | | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 572ai | 32 y F | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | diphenhydramine | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 573ai | 32 y M | diphenhydramine | 3 | 3 | U | Unk | Int-A | 1 | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 574ai | 32 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | heroin | 2 | 2 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 575ai | 32 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | heroin | 2 | 2 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 576ai | 32 y M | ethanol | 3 | 3 | U | Ingst + Unk | Int-A | 1 | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 577ai | 32 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 578p | 33 y F | ethanol | 3 | 3 | A/C | Ingst | Int-S | 2 | | | | | ethanol | 200 mg/dL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | methadone | 1 | 1 | | | | | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | clonazepam | 2 | 2 | | | | | | | heroin | 29 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| 579pha | 33 y F | cyclobenzaprine | 3 | 3 | U | Ingst | Int-S | 1 | | | | | norfentanyl | 2.7 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 8.5 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | alprazolam | 28 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | | | | | | benzoyllecognine | 413 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | | | | | | | | oxycodone | 33 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | |
| | | cocaine | 4 | 4 | | | | | | | | | | | | | | | narcotic, other/unknown | 1 | | | | | | |
| oxycodone | 5 | 5 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | |
| narcotic, other/unknown | 1 | 1 | | | | | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | |
| fentanyl | 1 | 1 | | | | | | | | | U | Unk | Int-A | 1 | | | | | | | | | | | | |
| ethanol | 2 | 2 | | | | | | | | | | | | | U | Unk | | | | | Int-A | 1 | | | | |
| 582ai | 33 y F | fentanyl | | | | | | | | | | | | | | | 1 | 1 | | | | | U | Unk | Int-A | 1 |
| | | 583ai | | | | | | | | | | | | | | | 33 y M | fentanyl | 1 | 1 | | | | | | |
| 584ai | 33 y M | Mitragyna speciosa korthals | 2 | 2 | U | Ingst + Unk | | | | | | | | | | | Int-A | 1 | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | |
| | | fentanyl | 1 | 1 | | | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | |
| 585i | 33 y M | methamphetamine | 2 | 2 | U | Unk | | | | | Int-A | 1 | fentanyl | 1.2 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | |
| | | ethanol | 3 | 3 | | | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | | | | U | Unk | Int-A | 1 | | | | | | | | |
| methamphetamine | 2 | 2 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | |
| cocaine | 3 | 3 | | | | | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 586ai | 33 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 alprazolam | 2 | 2 | | | | | | |
| 587ai | 33 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 cocaine | 2 | 2 | | | | | | |
| | | 3 ethanol | 3 | 3 | | | | | | |
| 588ai | 33 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 alprazolam | 2 | 2 | | | | | | |
| 589ai | 33 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 fluoxetine | 2 | 2 | | | | | | |
| | | 3 gabapentin | 3 | 3 | | | | | | |
| 590pha | 34 y M | 1 fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.17 mg/L In Blood (unspecified) ① Autopsy |
| 591ph | 34 y M | 1 fentanyl | 1 | 1 | A | Unk | Int-U | 2 | | |
| | | 2 synthetic opiate | 2 | 2 | | | | | | |
| | | 3 cocaine | 3 | 3 | | | | | | |
| | | 4 amphetamine | 4 | 4 | | | | | | |
| 592ai | 34 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 ethylbenzene | 2 | 2 | | | | | | |
| | | 3 xylene | 3 | 3 | | | | | | |
| 593i | 34 y M | 1 fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | 2 ethanol | 2 | 2 | | | | | | |
| 594ai | 34 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 cocaine | 2 | 2 | | | | | | |
| | | 3 ethanol | 3 | 3 | | | | | | |
| 595ai | 34 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | 2 codeine | 2 | 2 | | | | | | |
| | | 3 ethanol | 3 | 3 | | | | | | |
| 596ai | 34 y M | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 cocaine | 2 | 2 | | | | | | |
| | | 3 ethanol | 3 | 3 | | | | | | |
| 597i | 34 y F | 1 methadone | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | 2 cocaine | 2 | 2 | | | | | | |
| | | 3 alprazolam | 3 | 3 | | | | | | |
| 598ai | 34 y M | 1 methadone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | 2 diazepam | 2 | 2 | | | | | | |
| 599h | 34 y M | 1 fentanyl | 1 | 1 | A/C | Inhal | Int-A | 2 | | |
| | | 2 methamphetamine | 2 | 2 | | | | | | |
| | | 3 amphetamine | 3 | 3 | | | | | | |
| | | 4 buprenorphine | 4 | 4 | | | | | | |
| 600pha | 34 y F | 1 fentanyl | 1 | 1 | U | Par | Int-A | 1 | fentanyl | 14 ng/mL In Blood (unspecified) ① Autopsy |
| | | 2 cocaine | 2 | 2 | | | | | cocaine | 46 ng/mL In Blood (unspecified) ① Autopsy |
| 601pa | 34 y F | 1 fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.029 mg/L In Blood (unspecified) ① Autopsy |
| | | 2 cocaine | 2 | 2 | | | | | cocaine | 0.7 mg/L In Blood (unspecified) ① Autopsy |
| | | 2 cocaine | 2 | 2 | | | | | benzoylecognine | 2.4 mg/L In Blood (unspecified) ① Autopsy |
| | | 3 ethanol | 3 | 3 | | | | | ethanol | 0.02 % (wt/Vol) In Blood (unspecified) ① Autopsy |
| 602ai | 34 y F | 1 fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | 2 cyclobenzaprine | 2 | 2 | | | | | | |
| 603pha | 35 y F | 1 acetaminophen/hydrocodone | 1 | 1 | A/C | Ingst | Int-S | 1 | acetaminophen (apap) | 12.5 mcg/mL In Blood (unspecified) ① Unknown |
| | | 1 acetaminophen/hydrocodone | 1 | 1 | | | | | hydrocodone | 220 ng/mL In Blood (unspecified) ① Unknown |
| | | 1 acetaminophen/hydrocodone | 1 | 1 | | | | | hydromorphone | 60 ng/mL In Blood (unspecified) ① Unknown |
| | | 2 quetiapine | 2 | 2 | | | | | | |
| | | 3 clonazepam | 3 | 3 | | | | | | |
| | | 4 trazodone | 4 | 4 | | | | | trazodone | 0.97 mcg/mL In Blood (unspecified) ① Unknown |
| | | 5 ziprasidone | 5 | 5 | | | | | | |
| | | 6 hydrochlorothiazide | 6 | 6 | | | | | | |
| | | 7 oxybutynin | 7 | 7 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------------|--------|-----|---------|----------------------------|---|--|--|
| 604ph | 35 y M | valproic acid | 8 | 8 | A | Unk | Int-A | 2 | | | | | |
| | | doxycycline | 9 | 9 | | | | | | | | | |
| 605pa | 35 y M | narcotic, other/unknown | 1 | 1 | A | Ingst | Int-S | 1 | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | fentanyl | 0.044 mg/L In Blood (unspecified) ⓐ Autopsy | |
| | | heroin | 2 | 2 | | | | | | | morphine (free) | 64 mcg/L In Blood (unspecified) ⓐ Autopsy | |
| 606pa | 35 y F | ethanol | 3 | 3 | A | Ingst | Unk | 2 | | ethanol | 0.17 % (wt/Vol) In Blood (unspecified) ⓐ Autopsy | | |
| | | methadone | 1 | 1 | | | | | | | | methadone | 320 ng/mL In Blood (unspecified) ⓐ Unknown |
| 607h | 35 y M | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | | acetaminophen (apap) | 15 mcg/mL In Serum @ 72 h (pe) | | |
| 608ai | 35 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | | |
| 609ai | 35 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | | |
| | | hydrocodone | 2 | 2 | | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | | |
| 610ai | 35 y M | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | | | | |
| | | alprazolam | 2 | 2 | | | | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | | | | |
| 611ha | 35 y M | salicylate | 1 | 1 | A | Unk | Unk | 1 | | salicylate | 450 mcg/mL In Blood (unspecified) ⓐ Autopsy | | |
| | | | | | | | | | | | | | |
| 612pha | 35 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | | fentanyl | 17 ng/mL In Blood (unspecified) ⓐ Autopsy | | |
| | | alprazolam | 2 | 2 | | | | | | | | alprazolam | 17 ng/mL In Blood (unspecified) ⓐ Autopsy |
| 613h | 35 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | | salicylate | 120 mg/dL In Serum @ 3.75 h (pe) | | |
| | | salicylate | 1 | 1 | | | | | | | | salicylate | 58.9 mg/dL In Serum @ 30 m (pe) |
| 614pa | 35 y M | fentanyl | 1 | 1 | U | Par | Int-A | 1 | | fentanyl | 1.5 ng/mL In Blood (unspecified) ⓐ Autopsy | | |
| | | | | | | | | | | | | | |
| 615ai | 35 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | | |
| 616ai | 35 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | | |
| | | morphine | 2 | 2 | | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | | |
| 617ai | 35 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | |
| 618ai | 35 y M | fentanyl | 1 | 1 | U | Unk | Int-U | 1 | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | |
| 619ai | 35 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | | | |
| | | buprenorphine | 3 | 3 | | | | | | | | | |
| 620ai | 35 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | |
| 621ai | 35 y M | methadone | 1 | 1 | U | Unk | Int-A | 2 | | | | | |
| | | lorazepam | 2 | 2 | | | | | | | | | |
| 622 | 36 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | | | | | |
| 623pha | 36 y F | acetaminophen/oxycodone | 2 | 2 | U | Unk | Int-A | 1 | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | fentanyl | 4 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | narcotic, other/unknown | 2 | 2 | | | | | | | | acetyl fentanyl | 0.43 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | heroin | 3 | 3 | | | | | | | | 6-mam (6-monoacetylmorphine) | 150 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | methadone | 4 | 4 | | | | | | | | methadone | 67 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | cocaine | 5 | 5 | | | | | | | | cocaine | 170 ng/mL In Blood (unspecified) ⓐ Unknown |
| 624ha | 36 y F | acetaminophen | 1 | 1 | A/C | Ingst | Int-M | 1 | | | | | |
| 625h | 36 y F | acetaminophen/ diphenhydramine | 1 | 1 | A/C | Ingst | Int-S | 2 | | acetaminophen (apap) | 110 mcg/mL In Blood (unspecified) ⓐ Unknown | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| 626pha | 36 y M | acetaminophen/ diphenhydramine | 1 | 1 | A | Ingst + Unk | Int-S | 1 | acetaminophen (apap) | 49 mcg/mL In Blood (unspecified) @ Unknown |
| | | oxycodone | 1 | 1 | | | | | oxymorphone | 0.02 mg/L In Blood (unspecified) @ Unknown |
| | | oxycodone | 1 | 1 | | | | | oxycodone (free) | 0.26 mg/L In Blood (unspecified) @ Unknown |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 2.2 ng/mL In Blood (unspecified) @ Unknown |
| | | fentanyl | 2 | 2 | | | | | norfentanyl | 4.7 ng/mL In Blood (unspecified) @ Unknown |
| 627pa | 36 y M | benzodiazepine | 3 | 3 | A/C | Unk | Int-A | 1 | alprazolam | 0.046 mg/L In Blood (unspecified) @ Unknown |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 2.4 mcg/L In Whole Blood @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 0.171 % In Whole Blood @ Autopsy |
| | | heroin | 3 | 3 | | | | | morphine | 0.047 mg/L In Whole Blood @ Autopsy |
| | | cocaine | 4 | 4 | | | | | benzoyllecognine | 0.018 mg/L In Whole Blood @ Autopsy |
| 628p | 36 y F | fentanyl | 1 | 1 | A | Inhal | Int-A | 1 | fentanyl | 0.018 mg/L In Blood (unspecified) @ Autopsy |
| | | salicylate | 1 | 1 | | | | | salicylate | 81.2 mg/mL In Blood (unspecified) @ Unknown |
| 629h | 36 y F | diphenhydramine drug, unknown | 2 3 | 2 3 | A | Ingst | Int-S | 2 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |
| 630i | 36 y M | ethanol | 4 | 4 | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |
| 631ai | 36 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 632ai | 36 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 633ai | 36 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 634ai | 36 y M | cocaine | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 635ai | 36 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 636i | 36 y M | ketamine | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 637ai | 36 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | phenobarbital | 3 | 3 | | | | | | |
| 638ai | 36 y M | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 639i | 36 y M | tramadol | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | amphetamine | 3 | 3 | | | | | | |
| 640ai | 36 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 641h | 36 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 642ai | 36 y F | fentanyl | 1 | 1 | U | Unk | Int-U | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 643ai | 36 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 644ai | 36 y M | fentanyl | 1 | 1 | U | Unk | Unk | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 645ai | 36 y M | ephedrine | 3 | 3 | U | Unk | Unk | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 646ai | 36 y M | fluoxetine | 3 | 3 | U | Unk | Unk | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 647a | 37 y M | | | | A | Ingst | Int-S | 3 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 648ai | 37 y M | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 46 mcg/mL In Blood (unspecified) @ Unknown |
| | | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 649ai | 37 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 650ai | 37 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | heroin | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 651i | 37 y M | | | | U | Unk | Int-S | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 652ai | 37 y F | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 653ai | 37 y M | methadone | 1 | 1 | U | Unk | Int-A | 1 | | |
| 654i | 37 y F | | | | U | Unk | Int-A | 2 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| 655ai | 37 y M | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| 656h | 37 y F | | | | A | Ingst | Int-S | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| | | diazepam | 3 | 2 | | | | | | |
| | | salicylate | 2 | 2 | | | | | | |
| | | lorazepam | 4 | 3 | | | | | | |
| 657 | 37 y F | | | | A | Ingst | Int-S | 1 | | |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 1190 mg/L In Serum @ Unknown |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 464 mg/L In Serum @ Unknown |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 505 mg/L In Serum @ Unknown |
| 658ai | 37 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 659ai | 37 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 660ai | 37 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 661ai | 37 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 662ai | 37 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 663ai | 37 y M | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 664ai | 38 y F | | | | U | Unk | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | baclofen | 3 | 3 | | | | | | |
| 665ai | 38 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | Mitragyna speciosa korthals | 3 | 3 | | | | | | |
| 666i | 38 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 667ai | 38 y F | | | | U | Unk | Int-S | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | codeine | 2 | 2 | | | | | | |
| | | morphine | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| | | acetaminophen | 5 | 5 | | | | | | |
| [668ha] | 38 y M | oxycodone | 1 | 1 | A | Par | Int-U | 3 | oxycodone | 283 ng/mL In Blood (unspecified) @ Autopsy |
| 669h | 38 y M | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 670pha | 38 y M | | | | A | Inhal + Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|----------------------------------|----------------|------------|------------|---------|--------|-----|----------------------|---|
| | | fentanyl | 1 | 1 | | | | | fentanyl | 16 ng/mL In Blood (unspecified) @ Autopsy |
| 671 | 38 y F | fentanyl analog, acetyl fentanyl | 2 | 2 | A | Ingst | Int-S | 2 | acetyl fentanyl | 6.1 ng/mL In Blood (unspecified) @ Autopsy |
| | | acetaminophen | 1 | 1 | | | | | | |
| | | ibuprofen | 2 | 2 | | | | | | |
| 672ai | 38 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | citalopram | 3 | 3 | | | | | | |
| 673ai | 38 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 674ai | 38 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 675ai | 38 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | heroin | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 676ai | 38 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 677ai | 38 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 678ai | 38 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 679ph | 39 y M | | | | A | Par+Unk | Int-A | 2 | | |
| | | narcotic, other/unknown | 1 | 1 | | | | | | |
| 680ai | 39 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 681i | 39 y M | | | | U | Unk | Int-A | 3 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| 682ai | 39 y F | | | | U | Unk | Unk | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | oxymorphone | 3 | 3 | | | | | | |
| 683h | 39 y F | | | | C | Ingst | Int-M | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 32.4 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| | | acetaminophen/diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.064 g/dL In Blood (unspecified) @ 1 h (pe) |
| 684ph | 39 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 2 ng/mL In Blood (unspecified) @ 30 m (pe) |
| | | ethanol | 2 | 2 | | | | | ethanol | 90 mg/dL In Blood (unspecified) @ 30 m (pe) |
| 685h | 39 y F | | | | A/C | Ingst | Int-M | 1 | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 70.1 mcg/mL In Serum @ Unknown |
| | | acetaminophen/diphenhydramine | 2 | 2 | | | | | | |
| 686ha | 39 y F | | | | U | Ingst | Int-S | 1 | | |
| | | colchicine | 1 | 1 | | | | | colchicine | 25 ng/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 10 mcg/mL In Blood (unspecified) @ Unknown |
| 687ai | 39 y M | | | | U | Unk | Int-A | 1 | | |
| | | codeine | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 688ai | 39 y F | | | | U | Unk | Int-S | 1 | | |
| | | colchicine | 1 | 1 | | | | | | |
| 689ai | 39 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 690ai | 39 y F | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | nonsteroidal antiinflammatory | 3 | 3 | | | | | | |
| 691pi | 39 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 692ai | 39 y M | | | | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 693ai | 39 y M | methadone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | carisoprodol | 3 | 3 | | | | | | |
| 694ai | 39 y F | narcotic, other/unknown | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | carbon monoxide | 3 | 3 | | | | | | |
| 695ai | 39 y M | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 696ai | 39 y M | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| 697pa | 40 y M | fentanyl | 1 | 1 | A | Unk | Unk | 1 | fentanyl | 0.04 mg/L In Blood (unspecified) @ Autopsy |
| | | methadone | 2 | 2 | | | | | methadone | 0.05 mg/L In Blood (unspecified) @ Autopsy |
| | | morphine | 3 | 3 | | | | | morphine (free) | 12 mcg/L In Blood (unspecified) @ Autopsy |
| 698 | 40 y F | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 54 mg/dL In Serum @ 26 h (pe) |
| | | salicylate | 1 | 1 | | | | | salicylate | 62 mg/dL In Serum @ 20 h (pe) |
| | | salicylate | 1 | 1 | | | | | salicylate | 63 mg/dL In Serum @ 24 h (pe) |
| | | salicylate | 1 | 1 | | | | | salicylate | 65 mg/dL In Serum @ 19 h (pe) |
| 699ai | 40 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| | | morphine | 4 | 4 | | | | | | |
| 700ha | 40 y F | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 116 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 271 mcg/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 36 mg/dL In Blood (unspecified) @ Unknown |
| 701h | 40 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 5.1 mcg/mL In Blood (unspecified) @ Unknown |
| 702ph | 40 y M | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 553 mcg/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 219 mg/dL In Blood (unspecified) @ Unknown |
| | | naproxen | 3 | 3 | | | | | | |
| | | acetaminophen/ caffeine/salicylate | 4 | 4 | | | | | salicylate | 8.8 mg/dL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 5 | 5 | | | | | | |
| | | alprazolam | 6 | 6 | | | | | | |
| 703ai | 40 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 704ai | 40 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 705ai | 40 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | dextromethorphan | 3 | 3 | | | | | | |
| 706ai | 40 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 707ai | 40 y F | hydrocodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 708ai | 40 y M | methadone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 709ai | 40 y M | narcotic, other/unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 710h | 41 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 27.7 mg/L In Serum @ Unknown |
| 711 | 41 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 99.2 mg/dL In Serum @ Unknown |
| 712ai | 41 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 713h | 41 y F | amphetamine | 2 | 2 | A/C | Ingst | Int-S | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | citalopram | 3 | 3 | | | | | | | 714ph | 41 y F | methadone | 1 | 1 | U | Ingst | Int-S | 2 | | | acetaminophen/codeine | 1 | 1 | acetaminophen | 2 | 2 | acetaminophen (apap) | 11 mcg/mL In Blood (unspecified) @ Unknown | acetaminophen | 2 | 2 | acetaminophen (apap) | 171 mcg/mL In Blood (unspecified) @ Unknown | acetaminophen | 2 | 2 | acetaminophen (apap) | 548 mcg/mL In Blood (unspecified) @ Unknown | acetaminophen | 2 | 2 | acetaminophen (apap) | 6 mcg/mL In Blood (unspecified) @ Unknown | acetaminophen | 2 | 2 | acetaminophen (apap) | 710 mcg/mL In Blood (unspecified) @ Unknown | alcohol, unknown | 3 | 3 | ethanol | 161 mg/dL In Blood (unspecified) @ Unknown | ibuprofen | 4 | 4 | | | diphenhydramine/naproxen | 5 | 5 | | | clonazepam | 6 | 6 | | | amphetamine/dextroamphetamine | 7 | 7 | | | 715ph | 41 y F | | | | A/C | Ingst | Int-S | 1 | | | acetaminophen/hydrocodone | 1 | 1 | 716ha | 41 y M | clonazepam | 2 | 2 | A | Ingst | Int-S | 1 | | | acetaminophen | 1 | 1 | acetaminophen (apap) | 68 mcg/mL In Blood (unspecified) @ 1 d (pe) | 717h | 41 y M | acetaminophen | 1 | 1 | A/C | Ingst | Int-M | 3 | | 94 mcg/mL In Blood (unspecified) @ 15 m (pe) | acetaminophen/diphenhydramine | 1 | 1 | 718ai | 41 y F | | | | U | Unk | Int-A | 1 | | | fentanyl | 1 | 1 | dextromethorphan | 2 | 2 | 719ai | 41 y F | ethanol | 3 | 3 | U | Unk | Int-U | 2 | | | morphine | 1 | 1 | hydromorphone | 2 | 2 | 720pa | 42 y F | chlordiazepoxide | 3 | 3 | U | Ingst | Int-S | 1 | | | oxycodone | 1 | 1 | oxycodone | 450 ng/mL In Blood (unspecified) @ Autopsy | oxycodone | 1 | 1 | oxymorphone | 6.6 ng/mL In Blood (unspecified) @ Autopsy | tramadol | 2 | 2 | o-demethyl tramadol | 3500 ng/mL In Blood (unspecified) @ Autopsy | tramadol | 2 | 2 | tramadol | 7200 ng/mL In Blood (unspecified) @ Autopsy | clonazepam | 3 | 3 | clonazepam | 430 ng/mL In Blood (unspecified) @ Autopsy | trazodone | 4 | 4 | | | topiramate | 5 | 5 | trazodone | 0.31 mcg/mL In Blood (unspecified) @ Autopsy | acetaminophen | 6 | 6 | acetaminophen (apap) | 51.3 mcg/mL In Blood (unspecified) @ 1 h (pe) | acetaminophen | 6 | 6 | acetaminophen (apap) | 55 mcg/mL In Blood (unspecified) @ Autopsy | 721ai | 42 y M | | | | U | Ingst + Unk | Int-A | 1 | | | fentanyl | 1 | 1 | cocaine | 2 | 2 | 722ai | 42 y F | ethanol | 3 | 3 | U | Ingst + Unk | Int-A | 1 | | | fentanyl | 1 | 1 | methamphetamine | 2 | 2 | chlordiazepoxide | 3 | 3 | 723 | 42 y F | ethanol | 4 | 4 | A | Ingst | Unk | 1 | | | acetaminophen | 1 | 1 | 724a | 42 y F | | | | A | Ingst | Int-S | 1 | | | salicylate | 1 | 1 | salicylate | 69 mg/dL In Blood (unspecified) @ Unknown | oxycodone | 2 | 2 | | | doxepin | 3 | 3 | doxepin | 45 ng/mL In Blood (unspecified) @ Unknown | sertraline | 4 | 4 | sertraline | 190 ng/mL In Blood (unspecified) @ Unknown | sertraline | 4 | 4 | desmethylsertraline | 570 ng/mL In Blood (unspecified) @ Unknown | naproxen | 5 | 5 | | | 725ph | 42 y F | narcotic, other/unknown | 1 | 1 | U | Unk | Int-U | 2 | | | 726h | 42 y F | | | | A/C | Ingst | Int-S | 1 | | | acetaminophen | 1 | 1 | acetaminophen (apap) | 183.9 mg/L In Serum @ 31 h (pe) | | | acetaminophen |
| 714ph | 41 y F | methadone | 1 | 1 | U | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/codeine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | | | | acetaminophen (apap) | 11 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | | | | acetaminophen (apap) | 171 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | | | | acetaminophen (apap) | 548 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | | | | acetaminophen (apap) | 6 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | | | | acetaminophen (apap) | 710 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | alcohol, unknown | 3 | 3 | | | | | | | | | ethanol | 161 mg/dL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ibuprofen | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | diphenhydramine/naproxen | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| clonazepam | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| amphetamine/dextroamphetamine | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 715ph | 41 y F | | | | A/C | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 716ha | 41 y M | clonazepam | 2 | 2 | A | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 1 | 1 | | | | | | | acetaminophen (apap) | 68 mcg/mL In Blood (unspecified) @ 1 d (pe) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 717h | 41 y M | acetaminophen | 1 | 1 | A/C | Ingst | Int-M | 3 | | 94 mcg/mL In Blood (unspecified) @ 15 m (pe) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/diphenhydramine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 718ai | 41 y F | | | | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | dextromethorphan | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 719ai | 41 y F | ethanol | 3 | 3 | U | Unk | Int-U | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | morphine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | hydromorphone | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 720pa | 42 y F | chlordiazepoxide | 3 | 3 | U | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | oxycodone | 1 | 1 | | | | | | | oxycodone | 450 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | oxycodone | 1 | 1 | | | | | | | oxymorphone | 6.6 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | tramadol | 2 | 2 | | | | | | | o-demethyl tramadol | 3500 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | tramadol | 2 | 2 | | | | | | | tramadol | 7200 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | | clonazepam | 430 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | trazodone | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | topiramate | 5 | 5 | | | | | | | trazodone | 0.31 mcg/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 6 | 6 | | | | | | | acetaminophen (apap) | 51.3 mcg/mL In Blood (unspecified) @ 1 h (pe) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| acetaminophen | 6 | 6 | acetaminophen (apap) | 55 mcg/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 721ai | 42 y M | | | | U | Ingst + Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 722ai | 42 y F | ethanol | 3 | 3 | U | Ingst + Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | chlordiazepoxide | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 723 | 42 y F | ethanol | 4 | 4 | A | Ingst | Unk | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 724a | 42 y F | | | | A | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | salicylate | 1 | 1 | | | | | | | salicylate | 69 mg/dL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | doxepin | 3 | 3 | | | | | | | doxepin | 45 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | sertraline | 4 | 4 | | | | | | | sertraline | 190 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | sertraline | 4 | 4 | | | | | | | desmethylsertraline | 570 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | naproxen | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 725ph | 42 y F | narcotic, other/unknown | 1 | 1 | U | Unk | Int-U | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 726h | 42 y F | | | | A/C | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 1 | 1 | | | | | | | acetaminophen (apap) | 183.9 mg/L In Serum @ 31 h (pe) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 250 mg/L In Serum @ 23 h (pe) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 727pha | 42 y F | acetaminophen | 1 | 1 | A/C | Ingst | Unt-T | 1 | acetaminophen (apap) | 287.2 mg/L In Serum @ 21 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 380 mg/L In Serum @ 16 h (pe) |
| | | venlafaxine (extended release) | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| | | ibuprofen | 4 | 4 | | | | | | |
| 728 | 42 y F | morphine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 729pha | 43 y F | acetaminophen | 1 | 1 | U | Unk | Int-A | 1 | acetaminophen (apap) | 292 mcg/mL In Blood (unspecified) @ 23 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 600 mcg/mL In Blood (unspecified) @ 12 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 600 mcg/mL In Blood (unspecified) @ 18 h (pe) |
| | | morphine | 1 | 1 | | | | | morphine (free) | 260 ng/mL In Blood (unspecified) @ Autopsy |
| | | clonazepam | 2 | 2 | | | | | clonazepam | 5.2 ng/mL In Blood (unspecified) @ Autopsy |
| 730ha | 43 y M | methylphenidate | 3 | 3 | A | Ingst + Aspir | Int-S | 1 | methylphenidate | 8.6 ng/mL In Blood (unspecified) @ Autopsy |
| | | sertraline | 4 | 4 | | | | | sertraline | 71 ng/mL In Blood (unspecified) @ Autopsy |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | | | | | | | | | |
| 731ai | 43 y M | acetaminophen | 1 | 1 | U | Unk | Int-S | 1 | | |
| 732ai | 43 y M | ethanol | 2 | 2 | U | Unk | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| 733i | 43 y M | acetaminophen | 1 | 1 | U | Unk | Int-A | 1 | | |
| 734ai | 43 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 735ai | 43 y F | hydrocodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | tramadol | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 736 | 43 y F | citalopram | 3 | 3 | A | Ingst | Int-S | 1 | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 60 mg/dL In Serum @ 15 m (pe) |
| 737h | 43 y F | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 1 | acetaminophen (apap) | 26 mcg/mL In Serum @ 12 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 33 mcg/mL In Serum @ 15 m (pe) |
| | | ibuprofen | 2 | 2 | | | | | | |
| | | | | | | | | | | |
| 738 | 43 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 305 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 405 mcg/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | sertraline | 4 | 4 | | | | | sertraline | 100 ng/mL In Blood (unspecified) @ Unknown |
| | | sertraline | 4 | 4 | | | | | desmethylsertraline | 190 ng/mL In Blood (unspecified) @ Unknown |
| 739phi | 43 y M | | | | A/C | Ingst | Int-S | 3 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | amphetamine/ dextroamphetamine | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| 740pa | 43 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.025 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 2 | 2 | | | | | cocaine | 0.2 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 2 | 2 | | | | | benzoyllecognine | 2.4 mg/L In Blood (unspecified) @ Autopsy |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.02 % (wt/Vol) In Blood (unspecified) @ Autopsy |
| 741pha | 43 y M | | | | U | Unk | Unk | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 4.7 ng/mL In Blood (unspecified) @ 5 m (pe) |
| | | alprazolam | 2 | 2 | | | | | alprazolam | 0.056 mg/L In Blood (unspecified) @ 5 m (pe) |
| | | ethanol | 3 | 2 | | | | | ethanol | 102 mg/dL In Serum @ 5 m (pe) |
| | | ethanol | 3 | 2 | | | | | ethanol | 80 mg/dL In Blood (unspecified) @ 5 m (pe) |
| 742ph | 43 y F | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 120.9 mg/dL In Serum @ 2 h (pe) |
| 743ai | 43 y F | morphine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 744ph | 44 y M | zolpidem | 3 | 3 | | | | | | |
| | | acetaminophen/oxycodone | 1 | 1 | C | Ingst | Int-S | 2 | acetaminophen (apap) | 13 mcg/mL In Blood (unspecified) @ Unknown |
| 745ai | 44 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 746ai | 44 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | doxylamine | 3 | 3 | | | | | | |
| 747h | 44 y F | salicylate | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | acetaminophen/ antihistamine/ dextromethorphan | 3 | 3 | | | | | | |
| 748 | 44 y F | acetaminophen | 1 | 1 | U | Ingst | Int-U | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 749 | 44 y M | salicylate | 1 | 1 | A | Unk | Int-S | 1 | salicylate | 106 mg/dL In Plasma @ Unknown |
| 750ai | 44 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 751ai | 44 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 752ai | 44 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | amitriptyline | 3 | 3 | | | | | | |
| 753ai | 44 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| 754ai | 45 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 755ai | 45 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 756ai | 45 y M | morphine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 757pa | 45 y M | fentanyl | 1 | 1 | A/C | Par | Int-A | 1 | fentanyl | 11 ng/mL In Blood (unspecified) @ Autopsy |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | acetyl fentanyl | 1.3 ng/mL In Blood (unspecified) @ Autopsy |
| 758ha | 45 y F | acetaminophen | 1 | 1 | A/C | Ingst | Int-U | 1 | acetaminophen (apap) | 105 mcg/mL In Blood (unspecified) @ Autopsy |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 99 mcg/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 27 mg/dL In Blood (unspecified) @ Unknown |
| | | lidocaine | 3 | 3 | | | | | lidocaine | 1.5 mcg/mL In Blood (unspecified) @ Autopsy |
| | | sertraline | 4 | 4 | | | | | sertraline | 162 ng/mL In Blood (unspecified) @ Autopsy |
| | | quetiapine | 5 | 5 | | | | | quetiapine | 201 ng/mL In Blood (unspecified) @ Autopsy |
| 759ha | 45 y F | salicylate | 1 | 1 | U | Ingst | Unk | 2 | salicylate | 40 mg/dL In Serum @ 1 h (pe) |
| 760ph | 45 y F | narcotic, other/unknown | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | barbiturate (long acting) | 3 | 3 | | | | | | |
| 761h | 45 y F | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 26.5 mcg/mL In Plasma @ Unknown |
| 762ai | 45 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 763ai | 45 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | | |
| 764ai | 45 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 765a | 46 y M | | | | A | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ③ Time |
|------------------|--------|-------------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|---|
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.02 mg/L In Blood (unspecified) ④ Autopsy |
| 766ph | 46 y F | narcotic, other/unknown | 1 | 1 | A | Inhal | Int-A | 2 | | |
| 767ai | 46 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 768ai | 46 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 769i | 46 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| | | methadone | 3 | 3 | | | | | | |
| 770i | 46 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | plant, mitragyna | 2 | 2 | | | | | | |
| | | dipyrone | 3 | 3 | | | | | | |
| 771ai | 46 y M | hydrocodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | carisoprodol | 2 | 2 | | | | | | |
| | | hydromorphone | 3 | 3 | | | | | | |
| 772ai | 46 y F | morphine | 1 | 1 | U | Unk | Unk | 2 | | |
| | | lidocaine | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 773i | 46 y M | oxycodone | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 774ph | 46 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 2 | | |
| 775ha | 46 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | carisoprodol | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 776ai | 46 y M | methadone | 1 | 1 | U | Ingst + Unk | Unk | 1 | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| 777ai | 46 y F | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 778pha | 47 y F | methadone | 1 | 1 | A/C | Ingst + Aspir | Int-S | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | temazepam | 3 | 3 | | | | | | |
| | | trazodone | 4 | 4 | | | | | | |
| | | imipramine | 5 | 5 | | | | | | |
| [779ha] | 47 y M | tramadol | 1 | 1 | A/C | Ingst | Unt-T | 1 | tramadol | 22000 ng/mL In Blood (unspecified) ④ Autopsy |
| | | tramadol | 1 | 1 | | | | | o-demethyl tramadol | 750 ng/mL In Blood (unspecified) ④ Autopsy |
| 780ai | 47 y F | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| | | temazepam | 4 | 4 | | | | | | |
| 781i | 47 y M | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |
| 782p | 47 y M | narcotic, other/unknown | 1 | 1 | A | Ingst | Unk | 3 | | |
| 783ph | 47 y F | tapentadol (extended release) | 1 | 1 | A/C | Ingst | Unk | 1 | | |
| 784 | 47 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 2 | acetaminophen (apap) | 200 mcg/mL In Serum ④ Unknown |
| 785ai | 47 y F | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 786ai | 47 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |
| 787ai | 47 y M | morphine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 788ai | 47 y M | oxycodone | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-------------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| 789ph | 48 y M | acetaminophen/ diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 0 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 790 | 48 y F | acetaminophen | 1 | 1 | U | Ingst | Int-U | 3 | acetaminophen (apap) | 166 mcg/mL In Blood (unspecified) ⓐ Unknown |
| 791 | 48 y M | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 31 mcg/mL In Serum @ Unknown |
| 792hai | 48 y M | acetaminophen | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 793ai | 48 y M | hydrocodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | |
| 794pa | 48 y M | fentanyl | 1 | 1 | U | Par | Int-A | 1 | fentanyl | 4.7 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | acetyl fentanyl | 0.3 ng/mL In Blood (unspecified) ⓐ Autopsy |
| 795h | 48 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 3 | acetaminophen (apap) | 20 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| 796h | 48 y M | acetaminophen | 1 | 1 | U | Ingst | Unk | 2 | | |
| 797h | 48 y M | acetaminophen | 1 | 1 | U | Ingst + Unk | Int-S | 2 | acetaminophen (apap) | 6 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | phencyclidine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| | | benzodiazepine | 4 | 4 | | | | | | |
| 798ai | 48 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 799ai | 48 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 800ai | 48 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 801ai | 48 y F | hydrocodone | 1 | 1 | U | Unk | Int-S | 2 | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 802ai | 48 y M | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| [803ha] | 49 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 321 mcg/mL In Blood (unspecified) ⓐ Unknown |
| 804 | 49 y F | acetaminophen | 1 | 1 | A | Ingst | Int-U | 2 | acetaminophen (apap) | 29.04 mcg/mL In Serum @ Unknown |
| 805 | 49 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 806p | 49 y F | acetaminophen/oxycodone | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 23.8 mcg/mL In Serum @ Unknown |
| | | carisoprodol | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 807ai | 49 y F | fentanyl | 1 | 1 | U | Unk | Unk | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 808ai | 49 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| 809i | 49 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 810ai | 49 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 811i | 49 y M | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 812h | 49 y F | | | | U | Ingst | Int-S | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------|--------|-----|----------------------|--|
| 813h | 49 y M | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 55 mcg/mL In Serum @ Unknown |
| | | acetaminophen | 1 | 1 | C | Ingst | Int-M | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 814 | 49 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 154 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 208 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 243 mcg/mL In Blood (unspecified) @ Unknown |
| 815h | 49 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 148.8 mcg/mL In Blood (unspecified) @ Unknown |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 816ai | 49 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 817ai | 49 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | levamisole | 2 | 2 | | | | | | |
| 818ai | 49 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 819ai | 49 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 820ai | 49 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 821ai | 49 y M | morphine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 822 | 50 y M | acetaminophen/ diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 309 mcg/mL In Blood (unspecified) @ Unknown |
| | | loperamide | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 823h | 50 y F | narcotic, other/unknown | 1 | 1 | A | Unk | Unk | 2 | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 26 mcg/mL In Blood (unspecified) @ Unknown |
| 824 | 50 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 3 | acetaminophen (apap) | 126 mcg/mL In Plasma @ Unknown |
| | | isopropanol | 2 | 2 | | | | | | |
| 825ph | 50 y F | fentanyl | 1 | 1 | A/C | Ingst | Int-U | 1 | fentanyl | 129 ng/mL In Urine (quantitative only) @ Unknown |
| | | fentanyl | 1 | 1 | | | | | norfentanyl | 226 ng/mL In Urine (quantitative only) @ Unknown |
| | | alprazolam | 2 | 2 | | | | | alpha-oh-alprazolam | 549 ng/mL In Urine (quantitative only) @ Unknown |
| | | ethanol | 3 | 3 | | | | | ethanol | 37 mg/dL In Blood (unspecified) @ Unknown |
| | | hydrocodone | 4 | 4 | | | | | hydrocodone | 197 ng/mL In Urine (quantitative only) @ Unknown |
| | | hydrocodone | 4 | 4 | | | | | hydromorphone | 54 ng/mL In Urine (quantitative only) @ Unknown |
| 826ph | 50 y M | buprenorphine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 827ai | 50 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 828h | 50 y M | acetaminophen | 1 | 1 | A/C | Ingst | Unt-T | 3 | | |
| 829ai | 50 y M | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| 830ai | 50 y F | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| 831a | 51 y F | acetaminophen/hydrocodone | 1 | 1 | A/C | Ingst | Int-S | 3 | acetaminophen (apap) | 46.4 mcg/mL In Blood (unspecified) @ Unknown |
| | | clonazepam | 2 | 2 | | | | | | |
| 832h | 51 y F | salicylate | 1 | 1 | U | Ingst | Int-M | 1 | salicylate | 162 mg/dL In Serum @ 1 h (pe) |
| | | salicylate | 1 | 1 | | | | | salicylate | 173 mg/dL In Serum @ 2 h (pe) |
| 833ai | 51 y M | oxycodone | 1 | 1 | U | Unk | Unt-M | 1 | | |
| | | citalopram | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---------------------------|--------|--|----------------|------------------------|----------------------|------------------------------|--------|-----|--------------------------------|--|
| 834pa | 51 y M | cyclobenzaprine | 3 | 3 | U | Par | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 3.9 ng/mL In Blood (unspecified) @ Autopsy |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | acetyl fentanyl | 0.69 ng/mL In Blood (unspecified) @ Autopsy |
| | | heroin | 3 | 3 | | | | | 6-mam (6-monoacetylmorphine) | 3.2 ng/mL In Blood (unspecified) @ Autopsy |
| | | clonazepam | 4 | 4 | | | | | 7-aminoclonazepam | 9.2 ng/mL In Blood (unspecified) @ Autopsy |
| | | phenobarbital | 5 | 5 | | | | | phenobarbital | 12 mcg/mL In Blood (unspecified) @ Autopsy |
| 835pa | 51 y F | carbamazepine | 6 | 6 | A | Ingst | Int-S | 2 | carbamazepine | 2.6 mcg/mL In Blood (unspecified) @ Autopsy |
| | | oxycodone | 1 | 1 | | | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | alprazolam | 17 ng/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 4 | 4 | | | | | | |
| | | 836ph | 51 y F | fentanyl (transdermal) | | | | | 1 | 1 |
| morphine | 2 | | | 2 | | | | | | |
| acetaminophen/hydrocodone | 3 | | | 3 | acetaminophen (apap) | 50 mcg/mL In Serum @ Unknown | | | | |
| hydromorphone | 4 | | | 4 | | | | | | |
| trazodone | 5 | | | 5 | | | | | | |
| diazepam | 6 | | | 6 | | | | | | |
| 837pha | 51 y F | fentanyl | 1 | 1 | A | Par + Unk | Int-A | 1 | fentanyl | 326 % In Liver @ Autopsy |
| | | fentanyl analog, despropionyl fentanyl | 2 | 2 | | | | | despropionyl fentanyl (4-anpp) | 0.99 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | methamphetamine | 3 | 3 | | | | | amphetamine | 0.03 mg/L In Blood (unspecified) @ 1 h (pe) |
| | | methamphetamine | 3 | 3 | | | | | methamphetamine | 0.2 mg/L In Blood (unspecified) @ 1 h (pe) |
| 838ai | 51 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 839a | 52 y F | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 57 mg/mL In Blood (unspecified) @ Autopsy |
| | | salicylate | 1 | 1 | | | | | salicylate | 64.9 mg/dL In Blood (unspecified) @ Unknown |
| | | salicylate | 1 | 1 | | | | | salicylate | 72.4 mg/dL In Blood (unspecified) @ Unknown |
| 840h | 52 y M | ethanol | 2 | 2 | C | Ingst | Int-M | 2 | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 52.6 mg/dL In Serum @ Unknown |
| | | salicylate | 1 | 1 | | | | | salicylate | 62.1 mg/dL In Serum @ Unknown |
| 841pha | 52 y M | ethanol | 2 | 2 | U | Ingst + Par | Unk | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 3.8 ng/mL In Blood (unspecified) @ Autopsy |
| 842i | 52 y M | ethanol | 2 | 2 | A | Ingst | Int-S | 1 | ethanol | 365 mg/dL In Serum @ Autopsy |
| | | salicylate | 1 | 1 | | | | | | |
| 843i | 52 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 844ai | 52 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 845ai | 52 y M | dextromethorphan | 3 | 3 | U | Unk | Int-S | 1 | | |
| | | morphine | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 846ai | 52 y F | alprazolam | 3 | 3 | U | Unk | Unk | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | diazepam | 2 | 2 | | | | | | |
| 847ai | 52 y M | alprazolam | 3 | 3 | U | Ingst + Unk | Int-U | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 848i | 52 y F | tramadol | 1 | 1 | U | Unk | Unk | 2 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 849ph | 52 y M | buprenorphine | 1 | 1 | A | Inhal | Int-U | 2 | | |
| 850ai | 52 y F | fentanyl | 1 | 1 | U | Unk | Unk | 2 | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|--------------|--------|-----|--------------------------------------|---|
| 851h | 52 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 144 mcg/mL In Serum @ Unknown |
| | | trazodone | 2 | 2 | | | | | | |
| | | risperidone | 3 | 3 | | | | | | |
| 852h | 52 y M | acetaminophen | 1 | 1 | A | Ingst + Derm | Int-S | 2 | acetaminophen (apap) | 104 mcg/mL In Blood (unspecified) @ 2 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 16.4 mcg/mL In Blood (unspecified) @ 2 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 220 mcg/mL In Blood (unspecified) @ 1 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 36.4 mcg/mL In Blood (unspecified) @ 2 d (pe) |
| | | glyphosate | 2 | 2 | | | | | | |
| | | insecticide, unknown | 3 | 3 | | | | | | |
| 853 | 52 y F | acetaminophen | 1 | 1 | U | Ingst | Unk | 3 | acetaminophen (apap) | 172 mcg/mL In Blood (unspecified) @ Unknown |
| 854h | 52 y F | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 25.3 mcg/mL In Serum @ 1 m (pe) |
| 855ph | 52 y F | acetaminophen/oxycodone | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| 856h | 52 y F | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 194 mcg/mL In Serum @ Unknown |
| 857ai | 52 y F | hydrocodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | sertraline | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 858h | 53 y F | acetaminophen | 1 | 1 | U | Ingst | Int-U | 2 | acetaminophen (apap) | 43.1 mcg/mL In Serum @ Unknown |
| 859ha | 53 y F | acetaminophen/opioid | 1 | 1 | U | Ingst + Unk | Int-M | 1 | acetaminophen (apap) | 184 mcg/mL In Blood (unspecified) @ Unknown |
| | | oxycodone | 2 | 2 | | | | | | |
| 860 | 53 y F | acetaminophen/hydrocodone | 1 | 1 | A | Ingst | Unt-U | 2 | acetaminophen (apap) | 1.5 mcg/mL In Serum @ Unknown |
| | | ethanol | 2 | 2 | | | | | | |
| 861ai | 53 y F | acetaminophen | 1 | 1 | U | Unk | Unt-M | 2 | | |
| 862ai | 53 y F | methadone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | duloxetine | 2 | 2 | | | | | | |
| | | amitriptyline | 3 | 3 | | | | | | |
| 863pha | 53 y F | fentanyl | 1 | 1 | A | Ingst + Unk | Int-U | 1 | fentanyl | 3.8 ng/mL In Blood (unspecified) @ Unknown |
| | | fentanyl | 1 | 1 | | | | | norfentanyl | 6.4 ng/mL In Blood (unspecified) @ Unknown |
| | | fentanyl analog, 4-fluoroisobutyrylfentanyl | 2 | 2 | | | | | para-fluorobutyryl fentanyl (p-fibf) | 5.1 ng/mL In Blood (unspecified) @ Unknown |
| | | beta blocker | 3 | 3 | | | | | | |
| | | THC homolog | 4 | 4 | | | | | | |
| | | sertraline | 5 | 5 | | | | | sertraline | 140 ng/mL In Blood (unspecified) @ Unknown |
| | | sertraline | 5 | 5 | | | | | desmethylsertraline | 370 ng/mL In Blood (unspecified) @ Unknown |
| | | clonidine | 6 | 6 | | | | | clonidine | 3.2 ng/mL In Blood (unspecified) @ Unknown |
| | | heroin | 7 | 7 | | | | | | |
| 864ai | 53 y F | methadone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| 865pha | 53 y F | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 810 mcg/mL In Blood (unspecified) @ 30 m (pe) |
| | | salicylate | 1 | 1 | | | | | salicylate | 88.9 mg/dL In Blood (unspecified) @ 30 m (pe) |
| | | ethanol | 2 | 2 | | | | | ethanol | 0.03 g/dL In Blood (unspecified) @ 30 m (pe) |
| | | ethanol | 2 | 2 | | | | | ethanol | 0.1 g/dL In Urine (quantitative only) @ 30 m (pe) |
| 866h | 53 y F | acetaminophen/diphenhydramine | 1 | 1 | A/C | Ingst | Int-U | 3 | | |
| | | metaxalone | 2 | 2 | | | | | | |
| 867 | 53 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 60 mg/dL In Serum @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 190.4 mg/dL In Serum @ Unknown |
| [868h] | 53 y F | phenazopyridine | 1 | 1 | A/C | Ingst | AR-D | 1 | methemoglobin | 20.3 % In Blood (unspecified) @ 24 h (pe) |
| | | phenazopyridine | 1 | 1 | | | | | methemoglobin | 20.9 % In Blood (unspecified) @ 16 h (pe) |
| | | phenazopyridine | 1 | 1 | | | | | methemoglobin | 35.9 % In Blood (unspecified) @ 2 h (pe) |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|----------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| | | phenazopyridine | 1 | 1 | | | | | methemoglobin | 46 % In Blood (unspecified) @ 10 m (pe) |
| 869ph | 53 y F | acetaminophen | 1 | 1 | C | Ingst | Int-S | 2 | | |
| 870pa | 53 y M | fentanyl | 1 | 1 | A | Inhal + Unk | Int-A | 1 | fentanyl | 14 ng/mL In Blood (unspecified) @ Autopsy |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | acetyl fentanyl | 2.6 ng/mL In Blood (unspecified) @ Autopsy |
| | | cocaine | 3 | 3 | | | | | cocaine | 260 ng/mL In Blood (unspecified) @ Autopsy |
| | | ethanol | 4 | 4 | | | | | ethanol | 71 mg/dL In Blood (unspecified) @ Autopsy |
| 871pa | 53 y F | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.037 mg/L In Blood (unspecified) @ Autopsy |
| | | heroin | 2 | 1 | | | | | morphine (free) | 10 mcg/L In Blood (unspecified) @ Autopsy |
| 872ai | 53 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 873ai | 53 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 874ai | 53 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 875ai | 53 y F | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | dextromethorphan | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 876ai | 53 y F | tramadol | 1 | 1 | U | Unk | Unk | 1 | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 877h | 54 y M | acetaminophen | 1 | 1 | U | Unk | Unk | 1 | acetaminophen (apap) | 500 mcg/mL In Blood (unspecified) @ 1 d (pe) |
| | | methemoglobin causing chemical | 2 | 2 | | | | | methemoglobin | 32 % In Blood (unspecified) @ 1 d (pe) |
| 878 | 54 y F | acetaminophen | 1 | 1 | A | Ingst | Int-M | 2 | | |
| 879ai | 54 y M | fentanyl | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 880ai | 54 y F | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | oxymorphone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 881ha | 54 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 42 mcg/mL In Blood (unspecified) @ Unknown |
| | | barbiturate | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 882h | 54 y M | caffeine/salicylate | 1 | 1 | A | Ingst | Int-S | 2 | salicylate | 59.5 mg/dL In Blood (unspecified) @ Unknown |
| 883h | 54 y F | acetaminophen/diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 36.1 mcg/mL In Blood (unspecified) @ Unknown |
| | | promethazine | 2 | 2 | | | | | | |
| 884ha | 54 y M | colchicine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | carvedilol | 2 | 2 | | | | | | |
| | | rivaroxaban | 3 | 3 | | | | | | |
| | | sacubitril/valsartan | 4 | 4 | | | | | | |
| | | diphenhydramine/ibuprofen | 5 | 5 | | | | | | |
| 885h | 54 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 92 mcg/mL In Blood (unspecified) @ 3 d (pe) |
| 886h | 54 y F | acetaminophen | 1 | 1 | C | Ingst | Int-M | 3 | acetaminophen (apap) | 45 mcg/mL In Blood (unspecified) @ 1 d (pe) |
| 887ai | 54 y F | oxycodone | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 888ai | 54 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 889ai | 54 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | morphine | 3 | 3 | | | | | | |
| 890ai | 54 y M | methadone | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | olanzapine | 2 | 2 | | | | | | |
| 891ai | 54 y M | oxycodone | 1 | 1 | A/C | Unk | Int-A | 2 | | |
| | | oxymorphone | 2 | 2 | | | | | | |
| 892ai | 54 y F | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | hydroxyzine | 3 | 3 | | | | | | |
| 893ha | 55 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 2 | acetaminophen (apap) | 51 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | hydrocodone | 56 ng/mL In Blood (unspecified) @ Unknown |
| 894h | 55 y M | salicylate | 1 | 1 | U | Ingst | Int-U | 1 | salicylate | 95 mg/dL In Serum @ 30 m (pe) |
| | | salicylate | 1 | 1 | | | | | salicylate | 97.3 mg/dL In Serum @ 3.5 d (pe) |
| 895pha | 55 y M | oxycodone | 1 | 1 | A | Ingst | Int-S | 1 | oxycodone (free) | 120 ng/mL In Blood (unspecified) @ Autopsy |
| | | acetaminophen/codeine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | diazepam | 130 ng/mL In Blood (unspecified) @ Autopsy |
| | | diazepam | 3 | 3 | | | | | nordiazepam | 53 ng/mL In Blood (unspecified) @ Autopsy |
| | | alprazolam | 4 | 4 | | | | | | |
| 896ph | 55 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 24 mcg/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 2 | 2 | | | | | | |
| 897 | 55 y F | salicylate | 1 | 1 | U | Ingst | Unk | 1 | salicylate | 39.6 mg/dL In Blood (unspecified) @ Unknown |
| 898ai | 55 y F | buprenorphine | 1 | 1 | U | Unk | Unk | 2 | | |
| 899i | 55 y F | methadone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | | |
| 900ai | 55 y M | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 901 | 55 y F | salicylate | 1 | 1 | A | Ingst + Aspir | Int-S | 1 | salicylate | 56 mg/dL In Plasma @ Unknown |
| | | cleaner (alkali) | 2 | 2 | | | | | | |
| | | acetaminophen/ dextromethorphan/ doxylamine | 3 | 3 | | | | | acetaminophen (apap) | 14 mcg/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 4 | 4 | | | | | | |
| 902ha | 55 y M | acetaminophen | 1 | 1 | A | Ingst | Unk | 3 | | |
| 903pha | 55 y M | fentanyl | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.08 mg/L In Blood (unspecified) @ Autopsy |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | acetyl fentanyl | 0.055 mg/L In Blood (unspecified) @ Autopsy |
| 904ai | 55 y F | acetaminophen | 1 | 1 | U | Unk | Unk | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| 905ai | 55 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 906ai | 55 y F | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 907ai | 55 y M | morphine | 1 | 1 | U | Unk | Unk | 1 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | |
| 908ha | 55 y M | acetaminophen/hydrocodone | 1 | 1 | A/C | Ingst | Int-U | 3 | acetaminophen (apap) | 28 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | hydrocodone (free) | 78 ng/mL In Blood (unspecified) @ Unknown |
| | | lorazepam | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |
| 909 | 56 y M | | | | U | Ingst | Int-U | 3 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------|----------------|------------|------------|-------|--------|-----|----------------------|---|
| 910h | 56 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 10 mcg/mL In Plasma @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 48 mcg/mL In Serum @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 20.8 mg/dL In Serum @ Unknown |
| | | diphenhydramine | 3 | 3 | | | | | | |
| | | amoxicillin | 4 | 4 | | | | | | |
| 911i | 56 y F | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 1 | acetaminophen (apap) | 25 mcg/mL In Serum @ Unknown |
| 912ai | 56 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 913i | 56 y F | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | promethazine | 3 | 3 | | | | | | |
| 914ha | 56 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 810 mcg/mL In Blood (unspecified) @ Autopsy |
| 915h | 56 y F | glipizide | 2 | 2 | A | Ingst | Int-S | 1 | | |
| 916ai | 56 y F | acetaminophen | 1 | 1 | U | Unk | Int-A | 1 | acetaminophen (apap) | 537 mcg/mL In Plasma @ Unknown |
| 917ai | 56 y F | narcotic, other/unknown | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| | | morphine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 918ai | 56 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 919 | 57 y F | acetaminophen/hydrocodone | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 4.7 mcg/mL In Plasma @ Unknown |
| 920ph | 57 y F | acetaminophen | 1 | 1 | A | Ingst | Unk | 1 | acetaminophen (apap) | 119 mg/L In Plasma @ 30 m (pe) |
| | | drug, unknown | 2 | 1 | | | | | | |
| | | ethanol | 3 | 2 | | | | | ethanol | 250 mg/dL In Plasma @ 30 m (pe) |
| 921ph | 57 y M | methadone | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 300 mg/dL In Blood (unspecified) @ Unknown |
| | | hydroxyzine | 3 | 2 | | | | | | |
| 922h | 57 y M | acetaminophen/hydrocodone | 1 | 1 | C | Ingst | Int-A | 3 | acetaminophen (apap) | 5 mcg/mL In Blood (unspecified) @ Unknown |
| 923ha | 57 y F | acetaminophen/oxycodone | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 338 mcg/mL In Blood (unspecified) @ Unknown |
| | | diphenhydramine | 2 | 2 | | | | | diphenhydramine | 750 ng/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 3 | 3 | | | | | alprazolam | 990 ng/mL In Blood (unspecified) @ Unknown |
| 924i | 57 y F | fentanyl | 1 | 1 | U | Unk | Unk | 3 | | |
| | | sertraline | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| 925ai | 57 y F | morphine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 926i | 57 y F | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methadone | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 927ai | 57 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 928ai | 57 y M | tramadol | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| | | temazepam | 4 | 4 | | | | | | |
| 929h | 57 y F | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 3 | acetaminophen (apap) | 14 mcg/mL In Blood (unspecified) @ 4 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 16 mcg/mL In Blood (unspecified) @ 4 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 33 mcg/mL In Blood (unspecified) @ 3 d (pe) |
| 930pa | 57 y M | | | | A | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-------------------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.012 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | oxycodone | 2 | 2 | | | | | oxycodone | 0.1 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | plant, mitragyna | 3 | 3 | | | | | mirtazapine | 0.1 mg/L In Blood (unspecified) ⓐ Autopsy |
| 931 | 57 y F | acetaminophen/hydrocodone | 1 | 1 | A | Ingst | Int-S | 3 | | |
| 932h | 57 y M | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 933h | 57 y M | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 22 mcg/mL In Blood (unspecified) ⓐ Unknown |
| 934ha | 57 y F | acetaminophen/hydrocodone | 1 | 1 | A | Ingst + Aspir | Int-S | 1 | acetaminophen (apap) | 57 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 75 mg/L In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | hydrocodone | 870 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | diazepam | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| | | morphine | 4 | 4 | | | | | morphine | 20 ng/mL In Blood (unspecified) ⓐ Unknown |
| 935pa | 57 y M | | | | A | Par | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 3.9 ng/mL In Blood (unspecified) ⓐ Autopsy |
| 936ai | 57 y F | | | | U | Unk | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| | | carisoprodol | 2 | 2 | | | | | | |
| | | hydrocodone | 3 | 3 | | | | | | |
| 937ai | 57 y F | | | | U | Ingst + Unk | Int-S | 1 | | |
| | | hydrocodone | 1 | 1 | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| | | morphine | 5 | 5 | | | | | | |
| 938ai | 57 y F | | | | U | Unk | Int-A | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | dextromethorphan | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| 939h | 58 y F | | | | A | Ingst | Int-U | 3 | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 92 mg/dL In Blood (unspecified) ⓐ Unknown |
| 940pai | 58 y M | | | | A | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.035 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | oxycodone | 2 | 2 | | | | | oxycodone | 0.1 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | methadone | 3 | 3 | | | | | methadone | 0.2 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | methadone | 3 | 3 | | | | | methadone | 0.3 mg/L In Blood (unspecified) ⓐ Autopsy |
| 941pa | 58 y F | | | | A | Ingst | Int-S | 2 | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 970 mcg/mL In Blood (unspecified) @ 1 m (pe) |
| | | ethanol | 2 | 2 | | | | | | |
| 942ai | 58 y F | | | | U | Unk | Int-M | 1 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 943ai | 58 y F | | | | U | Unk | Unk | 3 | | |
| | | fentanyl | 1 | 1 | | | | | | |
| 944h | 58 y M | | | | U | Ingst | Int-S | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 442 mcg/mL In Serum @ Unknown |
| | | mirtazapine | 2 | 2 | | | | | | |
| | | antihistamine | 3 | 3 | | | | | | |
| 945pha | 58 y M | | | | U | Unk | Int-U | 1 | | |
| | | fentanyl | 1 | 1 | | | | | acetyl fentanyl | 0.77 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | fentanyl | 1 | 1 | | | | | norfentanyl | 0.78 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 3.1 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | fentanyl analog, acetyl fentanyl | 2 | 2 | | | | | | |
| | | nicotine | 3 | 3 | | | | | | |
| 946pa | 58 y M | | | | A | Par | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | acetyl fentanyl | 0.014 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.49 mg/L In Blood (unspecified) ⓐ Autopsy |
| 947ha | 58 y M | | | | U | Ingst | Unt-T | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 201 mg/mL In Serum @ 2 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 300.1 mcg/mL In Serum @ 0.5 d (pe) |
| | | metformin | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--|------------------|------------------|------------|-------------|--------|-----|--|--|
| 948ha | 58 y F | acetaminophen acetaminophen | 1 1 | 1 1 | C | Ingst | Unt-T | 1 | acetaminophen (apap) acetaminophen (apap) | 30.9 mcg/mL In Serum @ 5 m (pe) 44 mg/L In Blood (unspecified) @ 5 m (pe) |
| 949h | 58 y F | acetaminophen/oxycodone | 1 | 1 | A | Unk | Unk | 2 | | |
| 950ai | 58 y F | fentanyl oxycodone gabapentin | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 951ai | 58 y F | fentanyl alprazolam | 1 2 | 1 2 | U | Unk | Int-A | 1 | | |
| 952ai | 58 y F | oxycodone lorazepam mirtazapine | 1 2 3 | 1 2 3 | U | Unk | Unk | 2 | | |
| 953ai | 58 y F | oxycodone alprazolam ethanol | 1 2 3 | 1 2 3 | U | Unk | Int-A | 2 | | |
| 954ai | 58 y F | oxycodone ethanol gabapentin | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 955ai | 58 y M | tramadol ethanol | 1 2 | 1 2 | U | Ingst + Unk | Int-A | 3 | | |
| 956 | 59 y M | acetaminophen | 1 | 1 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 84 mcg/mL In Blood (unspecified) @ Unknown |
| 957ha | 59 y F | salicylate salicylate acetaminophen acetaminophen | 1 1 2 2 | 1 1 2 2 | U | Ingst | Int-S | 1 | salicylate salicylate acetaminophen (apap) acetaminophen (apap) | 33 mg/dL In Serum @ Unknown 43.5 mg/dL In Serum @ Unknown 172 mcg/mL In Serum @ Unknown 352.7 mcg/mL In Serum @ Unknown |
| 958h | 59 y F | acetaminophen/hydrocodone | 1 | 1 | A/C | Ingst | Int-S | 1 | acetaminophen (apap) | 47.9 mcg/mL In Blood (unspecified) @ Unknown |
| 959ai | 59 y M | benzodiazepine fentanyl oxycodone baclofen | 2 1 2 3 | 2 1 2 3 | U | Unk | Int-A | 1 | | |
| 960ai | 59 y M | fentanyl oxycodone ethanol | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 961ai | 59 y M | hydrocodone diphenhydramine alprazolam ethanol | 1 2 3 4 | 1 2 3 4 | U | Ingst + Unk | Int-A | 1 | | |
| 962ai | 59 y F | oxycodone citalopram ethanol | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 963i | 59 y F | oxycodone citalopram | 1 2 | 1 2 | U | Unk | Int-U | 1 | | |
| 964h | 59 y M | acetaminophen/oxycodone | 1 | 1 | U | Ingst | Unk | 3 | acetaminophen (apap) | 10.4 mcg/mL In Blood (unspecified) @ 2 d (pe) |
| 965h | 59 y F | acetaminophen | 1 | 1 | C | Ingst + Par | AR-D | 3 | | |
| 966h | 59 y F | acetaminophen/hydrocodone acetaminophen | 1 2 | 1 2 | A/C | Ingst | Unt-T | 3 | acetaminophen (apap) | 85 mcg/mL In Blood (unspecified) @ Unknown |
| 967 | 60 y F | methadone | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 968h | 60 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 130 mcg/mL In Serum @ 12 h (pe) |
| 969ph | 60 y F | acetaminophen/hydrocodone fluoxetine clonazepam | 1 2 3 | 1 2 3 | A | Ingst | Int-S | 1 | | |
| 970h | 60 y M | salicylate salicylate ethanol | 1 1 2 | 1 1 2 | A | Ingst | Int-S | 2 | salicylate salicylate | 45 mg/dL In Blood (unspecified) @ Unknown 50 mg/dL In Blood (unspecified) @ Unknown |
| 971i | 60 y M | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------|----------------|------------|------------|-------|--------|-----|----------------------|--|
| 972a | 60 y M | acetaminophen | 1 | 1 | C | Ingst | Int-U | 2 | acetaminophen (apap) | 240 mcg/mL In Blood (unspecified) @ Autopsy |
| 973pi | 2 m M | methadone | 1 | 1 | U | Unk | Oth-M | 2 | methadone | 1 mg/mL In Other @ Autopsy |
| | | methadone | 1 | 1 | | | | | methadone | 4 mg/mL In Urine (quantitative only) @ Autopsy |
| 974ha | 60 y M | acetaminophen | 1 | 1 | A/C | Ingst | Unt-T | 2 | acetaminophen (apap) | 106 mg/L In Serum @ 9.5 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 24.9 mg/L In Serum @ 33 h (pe) |
| 975h | 60 y F | acetaminophen | 1 | 1 | A | Ingst | Int-M | 2 | acetaminophen (apap) | 66 mg/L In Serum @ 1 h (pe) |
| 976p | 60 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 28 mg/dL In Serum @ Unknown |
| | | salicylate | 1 | 1 | | | | | salicylate | 33 mg/dL In Serum @ Unknown |
| | | heroin | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 118 mcg/mL In Plasma @ Unknown |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 185 mcg/mL In Plasma @ Unknown |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 545 mcg/mL In Plasma @ Unknown |
| 977ai | 60 y F | fentanyl | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 978ai | 60 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 979ai | 60 y M | methadone | 1 | 1 | U | Unk | Int-A | 1 | | |
| 980ai | 60 y M | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| 981a | 61 y M | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 336.8 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 627 mg/L In Blood (unspecified) @ Autopsy |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 800 mcg/mL In Blood (unspecified) @ Unknown |
| 982h | 61 y F | tramadol | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | marijuana | 2 | 2 | | | | | | |
| 983h | 61 y F | tapentadol | 1 | 1 | U | Ingst | Int-S | 1 | | |
| | | metoprolol | 2 | 2 | | | | | | |
| | | fentanyl (transdermal) | 3 | 3 | | | | | | |
| | | lorazepam | 4 | 4 | | | | | | |
| | | amiodarone | 5 | 5 | | | | | | |
| | | albuterol | 6 | 6 | | | | | | |
| | | arformoterol | 7 | 7 | | | | | | |
| | | budesonide | 8 | 8 | | | | | | |
| | | fluticasone/vilanterol | 9 | 9 | | | | | | |
| | | gabapentin | 10 | 10 | | | | | | |
| | | duloxetine | 11 | 11 | | | | | | |
| | | bupropion | 12 | 12 | | | | | | |
| | | insulin (lispro) | 13 | 13 | | | | | | |
| | | metformin | 14 | 14 | | | | | | |
| | | spironolactone | 15 | 15 | | | | | | |
| | | bumetanide | 16 | 16 | | | | | | |
| | | acetazolamide | 17 | 17 | | | | | | |
| | | losartan | 18 | 18 | | | | | | |
| | | benztropine | 19 | 19 | | | | | | |
| | | haloperidol | 20 | 20 | | | | | | |
| | | carvedilol | 21 | 21 | | | | | | |
| 984ai | 61 y F | acetaminophen | 1 | 1 | U | Unk | Unk | 1 | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 985ai | 61 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 986i | 61 y M | hydrocodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | lorazepam | 2 | 2 | | | | | | |
| 987ph | 61 y F | oxycodone | 1 | 1 | A | Ingst | Int-S | 1 | oxymorphone | 2.9 ng/mL In Blood (unspecified) @ Unknown |
| | | oxycodone | 1 | 1 | | | | | oxycodone | 210 ng/mL In Blood (unspecified) @ Unknown |
| | | hydrocodone | 2 | 2 | | | | | hydrocodone | 58 ng/mL In Blood (unspecified) @ Unknown |
| | | benzodiazepine | 3 | 3 | | | | | diazepam | 100 ng/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 4 | 4 | | | | | alprazolam | 8.4 ng/mL In Blood (unspecified) @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 988pa | 61 y M | fentanyl | 1 | 1 | U | Unk | Unk | 1 | fentanyl | 0.012 mg/L In Blood (unspecified) @ Autopsy |
| 989 | 61 y M | colchicine | 1 | 1 | A | Ingst | Int-M | 2 | | |
| 990ha | 61 y F | ibuprofen | 1 | 1 | A | Ingst | Int-S | 3 | ibuprofen | 22 mg/L In Blood (unspecified) @ Unknown |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 50 mg/dL In Blood (unspecified) @ Unknown |
| 991h | 61 y M | ethanol | 3 | 3 | A | Ingst | Int-S | 2 | ethanol | 63 mg/dL In Serum @ 15 m (pe) |
| | | narcotic, other/unknown | 1 | 1 | | | | | | |
| | | brexipiprazole | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| | | melatonin | 4 | 4 | | | | | | |
| 992ai | 61 y M | methadone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | carisoprodol | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| | | diphenhydramine | 5 | 5 | | | | | | |
| | | lorazepam | 6 | 6 | | | | | | |
| 993ai | 61 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 994ai | 61 y M | oxycodone | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 995ha | 62 y M | tramadol | 1 | 1 | A | Ingst | Int-S | 1 | tramadol | 1.1 mg/dL In Blood (unspecified) @ Autopsy |
| | | metformin | 2 | 2 | | | | | | |
| | | salicylate | 3 | 3 | | | | | salicylate | 8.7 mg/dL In Blood (unspecified) @ Unknown |
| 996h | 62 y M | acetaminophen | 1 | 1 | C | Ingst | Int-M | 2 | acetaminophen (apap) | 15.7 mcg/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 21 mg/dL In Blood (unspecified) @ Unknown |
| 997ha | 62 y M | oxycodone | 1 | 1 | A | Ingst + Inhal | Int-M | 3 | oxycodone | 0.02 mg/mL In Blood (unspecified) @ 1 h (pe) |
| | | oxycodone | 1 | 1 | | | | | oxymorphone (total) | 0.18 mg/L In Blood (unspecified) @ 1 h (pe) |
| | | hydrocodone | 2 | 2 | | | | | hydrocodone | 0.06 mg/L In Blood (unspecified) @ 1 h (pe) |
| 998h | 62 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 107 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 84 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 85 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 94 mcg/mL In Blood (unspecified) @ Unknown |
| 999ha | 62 y M | oxycodone | 1 | 1 | A | Ingst | Int-M | 3 | | |
| | | methadone | 2 | 2 | | | | | | |
| 1000pha | 62 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 2 | salicylate | 59.3 mg/dL In Blood (unspecified) @ Unknown |
| | | salicylate | 1 | 1 | | | | | salicylate | 73 mg/dL In Blood (unspecified) @ Unknown |
| | | codeine | 2 | 2 | | | | | codeine | 1.4 mg/L In Blood (unspecified) @ Autopsy |
| | | oxycodone | 3 | 3 | | | | | oxycodone (total) | 0.54 mg/L In Blood (unspecified) @ Autopsy |
| | | acetaminophen | 4 | 4 | | | | | acetaminophen (apap) | 34 mcg/mL In Blood (unspecified) @ Unknown |
| 1001ai | 62 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1002i | 62 y F | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | ibuprofen | 3 | 3 | | | | | | |
| 1003p | 62 y F | methadone | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | barbiturate | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 1004h | 62 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 2 | acetaminophen (apap) | 169.9 mcg/mL In Serum @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 6 mg/dL In Serum @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------------------|----------------------------|------------|-------------|--------|-----|---|---|
| 1005h | 62 y F | acetaminophen drug, unknown | 1 2 | 1 2 | U | Ingst | Int-S | 3 | | |
| 1006p | 62 y M | morphine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1007ai | 62 y F | acetaminophen diphenhydramine carbamazepine | 1 2 3 | 1 2 3 | U | Unk | Unk | 1 | | |
| 1008ai | 62 y F | fentanyl heroin oxycodone | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 1009a | 63 y F | acetaminophen/hydrocodone baclofen quetiapine | 1 2 3 | 1 2 3 | A | Ingst | Unk | 1 | hydrocodone | 340 ng/mL In Blood (unspecified) @ 7 h (pe) |
| 1010 | 63 y M | acetaminophen hydromorphone diazepam morphine | 1 2 3 4 | 1 2 3 4 | U | Ingst | Int-U | 2 | acetaminophen (apap) | 10.4 mcg/mL In Serum @ Unknown |
| 1011ai | 63 y M | acetaminophen diphenhydramine | 1 2 | 1 2 | U | Unk | Unk | 2 | | |
| 1012ai | 63 y M | acetaminophen diphenhydramine | 1 2 | 1 2 | U | Unk | Unt-M | 1 | | |
| 1013ai | 63 y M | fentanyl heroin methadone oxycodone | 1 2 3 4 | 1 2 3 4 | U | Unk | Int-A | 3 | | |
| 1014i | 63 y M | fentanyl morphine hydrocodone | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 1015ai | 63 y F | morphine oxycodone lorazepam | 1 2 3 | 1 2 3 | U | Unk | Unk | 2 | | |
| 1016ai | 63 y F | tramadol diphenhydramine salicylate | 1 2 3 | 1 2 3 | U | Unk | Unk | 1 | | |
| 1017pa | 63 y F | fentanyl cocaine cocaine | 1 2 2 | 1 2 2 | A | Unk | Unk | 1 | fentanyl cocaine benzoylceognine | 0.032 mg/L In Blood (unspecified) @ Autopsy 0.1 mg/L In Blood (unspecified) @ Autopsy 2.4 mg/L In Blood (unspecified) @ Autopsy |
| 1018h | 63 y F | acetaminophen ibuprofen | 1 2 | 1 2 | C | Ingst | Int-M | 1 | acetaminophen (apap) | 198.3 mcg/mL In Blood (unspecified) @ Unknown |
| 1019h | 63 y F | salicylate acetaminophen valproic acid loratadine furosemide atorvastain | 1 2 3 4 5 6 | 1 2 3 4 5 6 | A | Ingst | Int-S | 2 | salicylate acetaminophen (apap) valproic acid | 19.7 mg/dL In Plasma @ Unknown 50 mcg/mL In Blood (unspecified) @ Unknown 115 mcg/mL In Plasma @ Unknown |
| 1020h | 63 y M | acetaminophen | 1 | 1 | C | Ingst | Int-M | 3 | acetaminophen (apap) | 62 mcg/mL In Blood (unspecified) @ Unknown |
| 1021p | 63 y M | acetaminophen/hydrocodone morphine alprazolam | 1 2 3 | 1 2 3 | A/C | Ingst | Int-A | 2 | | |
| 1022ai | 63 y M | acetaminophen diphenhydramine | 1 2 | 1 2 | U | Unk | Unt-M | 1 | | |
| 1023ai | 63 y M | buprenorphine gabapentin dextromethorphan | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 1024ai | 63 y M | methadone hydromorphone ethanol | 1 2 3 | 1 2 3 | U | Ingst + Unk | Int-A | 1 | | |
| 1025h | 64 y F | acetaminophen | 1 | 1 | A/C | Ingst | Int-U | 2 | acetaminophen (apap) | 44 mcg/mL In Blood (unspecified) @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 1026h | 64 y F | | | | A | Ingst | Int-S | 1 | | |
| | | acetaminophen/oxycodone | 1 | 1 | | | | | | |
| 1027ai | 64 y M | | | | U | Unk | Int-S | 1 | | |
| | | hydrocodone | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1028ai | 64 y M | | | | U | Unk | Unk | 1 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | sertraline | 2 | 2 | | | | | | |
| 1029hi | 64 y F | | | | U | Ingst | Int-S | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| 1030h | 64 y F | | | | A | Ingst | Int-S | 1 | | |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 176.9 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 207 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 323 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/ diphenhydramine | 1 | 1 | | | | | acetaminophen (apap) | 62.7 mcg/mL In Blood (unspecified) ⓐ Unknown |
| 1031h | 64 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | acetaminophen/codeine | 1 | 1 | | | | | acetaminophen (apap) | 51 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | lamotrigine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 1032ai | 64 y M | | | | U | Unk | Int-S | 1 | | |
| | | codeine | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1033ai | 64 y F | | | | U | Ingst + Unk | Int-A | 1 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | hydromorphone | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| 1034ph | 65 y F | | | | A/C | Ingst | Int-U | 2 | | |
| | | acetaminophen/oxycodone | 1 | 1 | | | | | acetaminophen (apap) | 276 mcg/mL In Blood (unspecified) ⓐ Unknown |
| | | alprazolam | 2 | 2 | | | | | | |
| 1035 | 65 y F | | | | A | Ingst | Unk | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 7 mcg/mL In Serum ⓐ Unknown |
| 1036ai | 65 y F | | | | U | Unk | Unk | 2 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 1037pai | 65 y F | | | | U | Unk | Unt-M | 1 | | |
| | | morphine | 1 | 1 | | | | | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| 1038ai | 65 y F | | | | U | Unk | Unt-M | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | tramadol | 2 | 2 | | | | | | |
| 1039i | 65 y M | | | | U | Ingst + Unk | Int-S | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1040ha | 65 y F | | | | A/C | Ingst + Inhal | Int-S | 2 | | |
| | | nonsteroidal antiinflammatory drug | 1 | 1 | | | | | | |
| | | carbon monoxide | 2 | 2 | | | | | | |
| | | suvorexant | 3 | 3 | | | | | | |
| | | mirtazapine | 4 | 4 | | | | | | |
| | | tizanidine | 5 | 5 | | | | | | |
| 1041hi | 65 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | tramadol | 1 | 1 | | | | | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 1042h | 65 y M | | | | A | Ingst | Int-S | 2 | | |
| | | ibuprofen | 1 | 1 | | | | | | |
| | | marijuana (oil) | 2 | 2 | | | | | | |
| | | saw palmetto | 3 | 3 | | | | | | |
| | | fish oil | 4 | 4 | | | | | | |
| | | dietary supplement | 5 | 5 | | | | | | |
| 1043pai | 65 y F | | | | U | Unk | Int-A | 1 | | |
| | | methadone | 1 | 1 | | | | | | |
| | | citalopram | 2 | 2 | | | | | | |
| 1044h | 66 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 187 mcg/mL In Serum @ 1 h (pe) |
| 1045h | 66 y M | | | | U | Ingst | Int-U | 2 | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 175.7 mcg/mL In Serum @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 225 mg/dL In Serum @ 1 h (pe) |
| 1046ha | 66 y F | | | | A | Ingst | Int-S | 2 | | |
| | | methadone | 1 | 1 | | | | | methadone | 271 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | benzodiazepine | 2 | 2 | | | | | diazepam | 1143 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | benzodiazepine | 2 | 2 | | | | | temazepam | 295 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | benzodiazepine | 3 | 3 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------|--------|-----|----------------------|--|
| 1047h | 66 y F | | | | A | Ingst | Int-S | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 94 mcg/mL In Serum @ 15 m (pe) |
| 1048ha | 66 y F | salicylate | 1 | 1 | U | Ingst | Int-S | 1 | salicylate | 51.5 mg/dL In Blood (unspecified) @ 4 h (pe) |
| | | olanzapine | 2 | 2 | | | | | olanzapine | 340 ng/mL In Blood (unspecified) @ 4 h (pe) |
| 1049ha | 66 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 3 | acetaminophen (apap) | 110 mcg/mL In Serum @ 1 h (pe) |
| 1050a | 66 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 710 mcg/mL In Blood (unspecified) @ Unknown |
| 1051ai | 66 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1052hi | 67 y M | | | | U | Ingst | Int-M | 2 | | |
| | | acetaminophen | 1 | 1 | | | | | | |
| | | acetaminophen/codeine | 2 | 2 | | | | | | |
| | | bismuth subsalicylate | 3 | 3 | | | | | | |
| | | acetaminophen/oxycodone | 4 | 4 | | | | | | |
| | | ibuprofen | 5 | 5 | | | | | | |
| 1053ha | 67 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 140 mcg/mL In Plasma @ Unknown |
| | | bupropion | 2 | 2 | | | | | bupropion | 22 ng/mL In Blood (unspecified) @ Unknown |
| | | bupropion | 2 | 2 | | | | | hydroxybupropion | 690 ng/mL In Blood (unspecified) @ Unknown |
| | | diphenhydramine | 3 | 3 | | | | | diphenhydramine | 67 ng/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 4 | 3 | | | | | ethanol | 84 mg/dL In Serum @ Unknown |
| 1054pai | 67 y M | | | | A | Unk | Int-A | 1 | | |
| | | fentanyl | 1 | 1 | | | | | fentanyl | 0.04 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 3 | 2 | | | | | benzoylecgonine | 0.6 mg/L In Blood (unspecified) @ Autopsy |
| | | fentanyl analog, despropionyl fentanyl | 2 | 2 | | | | | | |
| 1055h | 67 y F | | | | U | Ingst | Unk | 3 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 45.4 mcg/mL In Serum @ 15 m (pe) |
| | | quetiapine | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| | | lamotrigine | 5 | 5 | | | | | | |
| | | hydroxyzine | 6 | 6 | | | | | | |
| | | clonazepam | 7 | 7 | | | | | | |
| | | dextromethorphan | 8 | 8 | | | | | | |
| | | sertraline | 9 | 9 | | | | | | |
| | | sedative/hypnotic/anti-anxiety/anti-psychotic | 10 | 10 | | | | | | |
| | | quetiapine | 11 | 11 | | | | | | |
| | | ibuprofen | 12 | 12 | | | | | | |
| 1056h | 67 y F | | | | A/C | Ingst | Unk | 3 | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 152 mcg/mL In Serum @ Unknown |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 48 mcg/mL In Serum @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 20.8 mg/dL In Serum @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 28 mg/dL In Serum @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 34.9 mg/dL In Serum @ Unknown |
| | | morphine | 3 | 3 | | | | | | |
| | | oxycodone | 4 | 4 | | | | | | |
| 1057ai | 67 y F | | | | U | Unk | Int-A | 2 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1058p | 68 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 13.6 mcg/mL In Blood (unspecified) @ 48 h (pe) |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 280 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 73.3 mcg/mL In Blood (unspecified) @ 24 h (pe) |
| 1059ai | 68 y F | | | | U | Unk | Int-G | 3 | | |
| | | salicylate | 1 | 1 | | | | | | |
| 1060ha | 68 y M | | | | A/C | Ingst | Int-S | 1 | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 137 mcg/mL In Serum @ Unknown |
| 1061pha | 68 y M | | | | A/C | Ingst | Int-S | 3 | | |
| | | acetaminophen/oxycodone | 1 | 1 | | | | | oxycodone | 0.02 mg/L In Blood (unspecified) @ Unknown |
| 1062ai | 68 y F | | | | U | Unk | Int-S | 1 | | |
| | | oxycodone | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 1063ai | 68 y F | | | | U | Unk | Unk | 3 | | |
| | | salicylate | 1 | 1 | | | | | | |
| 1064h | 68 y F | | | | U | Ingst | Int-S | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 50 mcg/mL In Blood (unspecified) @ Unknown |
| | | metformin | 2 | 2 | | | | | | |
| | | rivaroxaban | 3 | 3 | | | | | | |
| | | benztropine | 4 | 4 | | | | | | |
| | | venlafaxine | 5 | 5 | | | | | | |
| | | zolpidem | 6 | 6 | | | | | | |
| | | diltiazem | 7 | 7 | | | | | | |
| | | methocarbamol | 8 | 8 | | | | | | |
| | | angiotensin converting enzyme inhibitor | 9 | 9 | | | | | | |
| | | simvastatin | 10 | 10 | | | | | | |
| | | montelukast | 11 | 11 | | | | | | |
| | | ephedrine/theophylline | 12 | 12 | | | | | | |
| | | albuterol | 13 | 13 | | | | | | |
| 1065ha | 68 y M | acetaminophen | 1 | 1 | A | Ingst + Unk | Int-S | 1 | acetaminophen (apap) | 44 mcg/mL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1066h | 68 y M | salicylate | 1 | 1 | A/C | Ingst | Int-M | 2 | salicylate | 60 mg/dL In Serum @ Unknown |
| 1067h | 68 y M | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 1 | acetaminophen (apap) | 11.2 mcg/mL In Blood (unspecified) @ 2 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 26.3 mcg/mL In Blood (unspecified) @ 24 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 73.4 mcg/mL In Blood (unspecified) @ 8 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 96.7 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| 1068ai | 68 y M | acetaminophen | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ibuprofen | 2 | 2 | | | | | | |
| 1069ai | 68 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 1070ai | 68 y F | oxycodone | 1 | 1 | U | Ingst + Unk | Unk | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | duloxetine | 3 | 3 | | | | | | |
| 1071h | 69 y F | acetaminophen/hydrocodone | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 109 mcg/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 9 mg/dL In Blood (unspecified) @ Unknown |
| 1072pha | 69 y M | meperidine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | tramadol | 2 | 2 | | | | | | |
| 1073 | 69 y F | acetaminophen | 1 | 1 | A/C | Ingst | Int-M | 2 | | |
| 1074 | 69 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 167 mcg/mL In Plasma @ Unknown |
| 1075ha | 69 y F | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 408 mcg/mL In Plasma @ Unknown |
| 1076h | 69 y F | acetaminophen | 1 | 1 | A/C | Ingst | Int-S | 3 | acetaminophen (apap) | 37.8 mg/dL In Blood (unspecified) @ Unknown |
| | | nitroglycerin | 2 | 2 | | | | | | |
| 1077h | 69 y M | acetaminophen/codeine | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | metronidazole | 2 | 2 | | | | | | |
| | | allopurinol | 3 | 3 | | | | | | |
| 1078ha | 69 y M | acetaminophen | 1 | 1 | C | Ingst | Unt-T | 1 | acetaminophen (apap) | 40 mcg/mL In Blood (unspecified) @ Unknown |
| 1079h | 69 y F | salicylate | 1 | 1 | U | Unk | Int-S | 1 | salicylate | 107 mg/dL In Blood (unspecified) @ Unknown |
| 1080 | 70 y F | acetaminophen/oxycodone | 1 | 1 | U | Ingst | Int-S | 3 | | |
| | | benzonatate | 2 | 2 | | | | | | |
| 1081p | 70 y F | acetaminophen/hydrocodone | 1 | 1 | A/C | Ingst | Int-S | 2 | acetaminophen (apap) | 171 mcg/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 2 | 2 | | | | | | |
| 1082ai | 70 y F | oxycodone | 1 | 1 | U | Unk | Unk | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| 1083 | 70 y F | acetaminophen | 1 | 1 | A | Ingst | Unt-G | 2 | acetaminophen (apap) | 487 mcg/mL In Serum @ 2 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 538 mcg/mL In Serum @ 1 d (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 761 mcg/mL In Serum @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------------------|----------------|------------|------------|-------|--------|-----|----------------------|--|
| 1084ph | 70 y F | tramadol | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| | | acetaminophen/codeine | 2 | 2 | | | | | | |
| 1085h | 70 y F | caffeine/salicylamide/salicylate | 1 | 1 | C | Ingst | Unt-T | 2 | | |
| 1086h | 71 y M | acetaminophen | 1 | 1 | A | Ingst | Int-S | 3 | acetaminophen (apap) | 397.5 mcg/mL In Serum @ Unknown |
| 1087 | 71 y F | acetaminophen | 1 | 1 | U | Ingst | Int-M | 3 | acetaminophen (apap) | 47 mg/L In Serum @ Unknown |
| 1088h | 71 y M | acetaminophen | 1 | 1 | U | Ingst | Unk | 1 | acetaminophen (apap) | 342 mcg/mL In Serum @ Unknown |
| 1089h | 71 y M | acetaminophen | 1 | 1 | U | Ingst | Unk | 2 | acetaminophen (apap) | 45 mcg/mL In Blood (unspecified) @ Unknown |
| 1090ai | 71 y F | morphine | 1 | 1 | U | Unk | Unk | 3 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| 1091ai | 71 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | zolpidem | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1092ai | 71 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | lorazepam | 2 | 2 | | | | | | |
| 1093h | 72 y M | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 113 mcg/mL In Blood (unspecified) @ Unknown |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| 1094 | 72 y F | tramadol | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | acetaminophen/oxycodone | 2 | 2 | | | | | | |
| | | morphine | 3 | 3 | | | | | | |
| 1095h | 72 y M | acetaminophen | 2 | 1 | A | Ingst | Int-S | 2 | | |
| | | acetaminophen/ butalbital/caffeine | 1 | 1 | | | | | acetaminophen (apap) | 215 mcg/mL In Blood (unspecified) @ Unknown |
| 1096ai | 72 y F | morphine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | dextromethorphan | 3 | 3 | | | | | | |
| 1097ha | 73 y F | oxycodone | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | losartan | 2 | 2 | | | | | | |
| | | acetaminophen/ caffeine/salicylate | 3 | 3 | | | | | | |
| | | sertraline | 4 | 4 | | | | | | |
| | | antihyperlipidemic | 5 | 5 | | | | | | |
| | | quetiapine | 6 | 6 | | | | | | |
| 1098h | 73 y F | acetaminophen | 1 | 1 | A | Ingst | Int-U | 1 | acetaminophen (apap) | 50 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| 1099h | 73 y F | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 147 mg/dL In Blood (unspecified) @ 14 h (pe) |
| 1100i | 73 y M | hydrocodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | temazepam | 3 | 3 | | | | | | |
| 1101h | 73 y F | acetaminophen | 1 | 1 | A | Ingst | Unk | 2 | | |
| 1102h | 73 y F | acetaminophen/hydrocodone | 1 | 1 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 291 mg/mL In Blood (unspecified) @ 1 d (pe) |
| 1103h | 73 y F | acetaminophen/codeine | 2 | 1 | A/C | Ingst | Int-S | 3 | | |
| | | acetaminophen/ hydrocodone | 1 | 1 | | | | | | |
| | | iron | 3 | 3 | | | | | | |
| | | tramadol | 4 | 4 | | | | | | |
| | | levothyroxine | 5 | 5 | | | | | | |
| | | metoprolol | 6 | 6 | | | | | | |
| 1104ai | 73 y F | morphine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1105h | 74 y F | acetaminophen | 1 | 1 | U | Ingst | Unt-T | 1 | acetaminophen (apap) | 183 mcg/mL In Blood (unspecified) @ Unknown |
| | | metformin | 2 | 2 | | | | | | |
| 1106ai | 74 y F | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------|--------|-----|----------------------|---|
| 1107ha | 74 y M | methadone | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | hydrocodone (free) | 0.02 mg/L In Vitreous @ Autopsy |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | morphine (free) | 0.04 mg/L In Vitreous @ Autopsy |
| 1108ai | 74 y F | codeine | 1 | 1 | | Unk | Int-S | 1 | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| 1109h | 75 y F | hydromorphone | 1 | 1 | A/C | Ingst | Unk | 3 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 1110h | 75 y M | acetaminophen | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | ibuprofen | 2 | 2 | | | | | | |
| | | acetaminophen/ dextromethorphan/ doxylamine/ pseudoephedrine | 3 | 3 | | | | | | |
| 1111h | 75 y F | acetaminophen | 1 | 1 | C | Ingst | Unt-M | 2 | acetaminophen (apap) | 0 mcg/mL In Serum @ Unknown |
| 1112 | 75 y M | salicylate | 1 | 1 | A | Ingst | Int-S | 1 | salicylate | 60.4 mg/dL In Blood (unspecified) @ Unknown |
| | | salicylate | 1 | 1 | | | | | salicylate | 69 mg/dL In Blood (unspecified) @ 11 h (pe) |
| 1113ai | 75 y F | methadone | 1 | 1 | | Unk | Unk | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| | | cyclobenzaprine | 4 | 4 | | | | | | |
| | | gabapentin | 5 | 5 | | | | | | |
| | | lorazepam | 6 | 6 | | | | | | |
| 1114ai | 75 y F | oxycodone | 1 | 1 | | Unk | Unk | 2 | | |
| | | duloxetine | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | |
| 1115h | 76 y M | acetaminophen | 1 | 1 | U | Ingst | Int-S | 2 | acetaminophen (apap) | 300 mcg/mL In Blood (unspecified) @ 30 m (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 365 mcg/mL In Blood (unspecified) @ 24 h (pe) |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 600 mcg/mL In Blood (unspecified) @ 12 h (pe) |
| | | ibuprofen | 2 | 2 | | | | | | |
| 1116h | 76 y F | tramadol | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | beta blocker | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 1117h | 76 y F | salicylate | 1 | 1 | A/C | Ingst | Int-S | 2 | salicylate | 50 mg/dL In Plasma @ Unknown |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | escitalopram | 3 | 3 | | | | | | |
| 1118ai | 76 y F | hydrocodone | 1 | 1 | | Unk | Int-S | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 1119h | 77 y F | acetaminophen | 1 | 1 | A | Ingst | Unk | 2 | acetaminophen (apap) | 40 mcg/mL In Blood (unspecified) @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 8.4 mg/dL In Blood (unspecified) @ Unknown |
| | | alcohol, unknown | 3 | 3 | | | | | ethanol | 65 mg/dL In Blood (unspecified) @ Unknown |
| 1120i | 77 y F | oxycodone | 1 | 1 | U | Unk | Unk | 2 | | |
| | | lorazepam | 2 | 2 | | | | | | |
| 1121ha | 77 y F | oxycodone | 1 | 1 | A/C | Ingst | Int-S | 2 | oxycodone (free) | 280 ng/mL In Blood (unspecified) @ Unknown |
| 1122ph | 77 y F | amitriptyline/perphenazine | 2 | 2 | A | Ingst | Int-S | 1 | acetaminophen (apap) | 906.1 mcg/mL In Serum @ Unknown |
| 1123 | 78 y M | salicylate | 1 | 1 | C | Ingst | Int-M | 2 | salicylate | 56 mg/dL In Serum @ Unknown |
| 1124ai | 78 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| 1125ai | 79 y M | morphine | 1 | 1 | U | Unk | Unk | 3 | | |
| 1126ai | 79 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1127ai | 79 y M | morphine | 1 | 1 | U | Unk | Unk | 2 | | |
| 1128ai | 79 y F | oxycodone | 1 | 1 | U | Unk | Int-S | 2 | | |
| 1129ha | 79 y F | oxycodone | 1 | 1 | A | Ingst | Int-S | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | |
|------------------|--------|---------------------------|----------------|------------|------------|-------------|--------|-----|-------------------------|--|-------|---|----------------------|---|
| 1130h | 80 y M | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 188.9 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | hydrocodone | 2 | 2 | | | | | hydrocodone | 233 ng/mL In Blood (unspecified) @ Autopsy | | | | |
| | | codeine | 3 | 3 | | | | | codeine | 242 ng/mL In Blood (unspecified) @ Autopsy | | | | |
| | | doxylamine | 4 | 4 | | | | | doxylamine | 13051 ng/mL In Blood (unspecified) @ Autopsy | | | | |
| 1131ha | 80 y F | acetaminophen | 1 | 1 | A | Ingst | Int-S | 2 | acetaminophen (apap) | 512 mcg/mL In Blood (unspecified) @ 1 h (pe) | | | | |
| 1132h | 80 y M | acetaminophen/oxycodone | 1 | 1 | A | Ingst | Unt-U | 1 | acetaminophen (apap) | 221 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 107 mg/dL In Blood (unspecified) @ 8 h (pe) | | | | |
| 1133h | 80 y F | salicylate | 1 | 1 | A/C | Ingst | Int-S | 2 | salicylate | 137 mg/dL In Blood (unspecified) @ 9 h (pe) | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | acetaminophen (apap) | 449 mg/L In Serum @ 7.5 h (pe) | | | | |
| 1134 | 80 y F | diazepam | 2 | 2 | A/C | Ingst | Int-S | 3 | acetaminophen (apap) | 51 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| 1135h | 81 y F | acetaminophen/oxycodone | 1 | 1 | A/C | Ingst | Int-U | 3 | acetaminophen (apap) | 51 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| 1136ha | 81 y F | acetaminophen | 1 | 1 | C | Ingst | Unk | 2 | acetaminophen (apap) | 51 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| | | acetaminophen | 1 | 1 | | | | | acetaminophen (apap) | 51 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 72.9 mg/dL In Blood (unspecified) @ 3 h (pe) | | | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 77.9 mg/dL In Blood (unspecified) @ 6 h (pe) | | | | |
| | | oxycodone | 1 | 1 | | | | | U | Unk | Int-S | 1 | oxycodone | 0.033 mg/L In Blood (unspecified) @ Autopsy |
| 1140ha | 83 y M | hydrocodone | 2 | 2 | U | Ingst | Int-S | 3 | hydrocodone | 0.3 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | temazepam | 3 | 3 | | | | | temazepam | 0.4 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | narcotic, other/unknown | 1 | 1 | | | | | narcotic, other/unknown | 0.4 mg/L In Blood (unspecified) @ Autopsy | | | | |
| 1141h | 84 y F | acetaminophen | 2 | 2 | A | Ingst | Int-U | 2 | acetaminophen (apap) | 26 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 67 mg/L In Blood (unspecified) @ Unknown | | | | |
| | | carbon monoxide | 3 | 3 | | | | | carbon monoxide | 4.1 % In Blood (unspecified) @ Unknown | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | U | Unk | Int-S | 1 | acetaminophen (apap) | 158 mcg/mL In Blood (unspecified) @ Unknown |
| | | venlafaxine | 2 | 2 | | | | | U | Ingst | Int-S | 1 | acetaminophen (apap) | 18 mcg/mL In Blood (unspecified) @ Unknown |
| | | diphenhydramine | 3 | 3 | | | | | U | Ingst | Int-S | 1 | acetaminophen (apap) | 18 mcg/mL In Blood (unspecified) @ Unknown |
| 1142h | 84 y F | acetaminophen/hydrocodone | 1 | 1 | A | Inhal + Unk | Int-S | 1 | acetaminophen (apap) | 158 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 72.9 mg/dL In Blood (unspecified) @ 3 h (pe) | | | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 77.9 mg/dL In Blood (unspecified) @ 6 h (pe) | | | | |
| | | salicylate | 1 | 1 | | | | | salicylate | 77.9 mg/dL In Blood (unspecified) @ 6 h (pe) | | | | |
| 1143ai | 84 y M | oxycodone | 1 | 1 | U | Unk | Int-S | 1 | oxycodone | 0.033 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | hydrocodone | 2 | 2 | | | | | hydrocodone | 0.3 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | temazepam | 3 | 3 | | | | | temazepam | 0.4 mg/L In Blood (unspecified) @ Autopsy | | | | |
| 1144pa | 85 y F | narcotic, other/unknown | 1 | 1 | A | Inhal + Unk | Int-S | 1 | hydromorphone | 0.033 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | narcotic, other/unknown | 1 | 1 | | | | | normeperidine | 0.3 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | narcotic, other/unknown | 1 | 1 | | | | | meperidine | 0.4 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 26 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 67 mg/L In Blood (unspecified) @ Unknown | | | | |
| | | carbon monoxide | 3 | 3 | | | | | carbon monoxide | 4.1 % In Blood (unspecified) @ Unknown | | | | |
| 1145ai | 85 y F | salicylate | 1 | 1 | U | Unk | Int-S | 1 | salicylate | 72.9 mg/dL In Blood (unspecified) @ 3 h (pe) | | | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 26 mg/L In Blood (unspecified) @ Autopsy | | | | |
| | | diphenhydramine | 3 | 3 | | | | | diphenhydramine | 0.4 mg/L In Blood (unspecified) @ Autopsy | | | | |
| 1146h | 86 y M | acetaminophen/hydrocodone | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 158 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| 1147h | 86 y M | acetaminophen | 1 | 1 | C | Ingst | Int-A | 3 | acetaminophen (apap) | 18 mcg/mL In Blood (unspecified) @ Unknown | | | | |
| 1148h | 86 y M | morphine | 1 | 1 | A/C | Ingst | Int-S | 2 | acetaminophen (apap) | 18 mcg/mL In Blood (unspecified) @ Unknown | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------------------|---|----------------|------------|------------|---------------|--------|-----|--|---|--------|--------|---------------|---|---|---|-------|-------|---|------------|--------------------------------------|---------------------------|---|---|---------|---|---|------|--------|---------------|---|---|---|-------|-------|---|--|--|--------|--------|--|--|--|-----|-------|-------|---|--|---|---------------------------|---|---|---------------------------|---|---|---------------------------|---|---|-------|--------|----------|---|---|---|-------|-------|---|--|--|------------|---|---|--------|--------|------------|---|---|---|-----|-------|---|--|--|-------------|---|---|--------|--------|--|--|--|-----|-------|-------|---|----------------------|--|---------------|---|---|-------|--------|-------------------------|---|---|---|-----|-----|---|--|--|---------|--------|-------------|---|---|---|-----|-----|---|--|--|--------|---------|--|--|--|---|-----|-------|---|--|---|----------|---|---|---------|---|---|---------|---|---|---|---|---|-------|---------|-------------------------|---|---|---|-----|-------|---|--|--|--------|----------------------------|--|--|--|---|-------|-------|---|--|--|---------------------------|---|---|---------------------------|---|---|------------|---|---|--------|---------------|--|--|--|---|-------|-------|---|------------|-------------------------------|------------|---|---|---|--|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|--|---------|--------|---------------|---|---|---|---------------|-------|---|--|--|----------|--------|----------------|---|---|---|-------|-------|---|---------------|--|---------------|---|---|-----------|--------|--|--|--|---|-------|-------|---|-------------------------|--|----------|---|---|----------|---|---|--------|--------|-----------|---|---|---|-----|------|---|--|--|-------------|---|---|-----------|--------|--|--|--|---|-------|-------|---|------------|--|------------|---|---|--------|--------|-------------|---|---|---|-------|-------|---|--|--|----------|--------|-----------|---|---|---|-----|-------|---|--|--|--------|-------|-----------|---|---|---|-----|-------|---|--|--|-----------|---|---|---|--|--|--|--|--|--|--|--|--|--|------------------------------|--|--|--|--|--|--|--|--|--|--|--------|--------|----------|
| 1149h | 86 y M | oxycodone | 2 | 2 | C | Ingst | Unt-G | 1 | acetaminophen (apap) | 128 mcg/mL In Serum @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | | 1150ha | 87 y M | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | salicylate | 109.9 mg/dL In Whole Blood @ Unknown | acetaminophen/hydrocodone | 2 | 2 | ethanol | 2 | 2 | 1151 | 89 y F | acetaminophen | 1 | 1 | C | Ingst | Int-U | 1 | | | 1152ha | 90 y F | | | | A/C | Ingst | Int-S | 2 | hydrocodone acetaminophen (apap) hydromorphone | 1895 ng/mL In Serum @ 30 m (pe) 200 mcg/mL In Serum @ 30 m (pe) 43 ng/mL In Serum @ 30 m (pe) | acetaminophen/hydrocodone | 1 | 1 | acetaminophen/hydrocodone | 1 | 1 | acetaminophen/hydrocodone | 1 | 1 | 1153h | 91 y M | warfarin | 2 | 2 | A | Ingst | Unt-M | 2 | | | colchicine | 1 | 1 | 1154ai | 91 y M | furosemide | 2 | 2 | U | Unk | Int-S | 1 | | | hydrocodone | 1 | 1 | 1155ha | 92 y M | | | | A/C | Ingst | Unt-G | 2 | acetaminophen (apap) | 357 mg/dL In Blood (unspecified) @ Unknown | acetaminophen | 1 | 1 | 1156h | 13 m F | narcotic, other/unknown | 1 | 1 | A | Unk | Unk | 2 | | | 1157phi | 17 m M | hydrocodone | 1 | 1 | A | Unk | Unk | 1 | | | 1158ha | 20+ y F | | | | A | Unk | Int-A | 1 | fentanyl benzoylecognine benzoylecognine | 0.013 mg/L In Blood (unspecified) @ Autopsy 0.8 mg/L In Blood (unspecified) @ Autopsy 1.2 mg/L In Blood (unspecified) @ Autopsy | fentanyl | 1 | 1 | cocaine | 2 | 2 | cocaine | 2 | 2 | fentanyl analog, 4-fluoroisobutyrfentanyl | 3 | 3 | 1159p | 20+ y M | narcotic, other/unknown | 1 | 1 | A | Par | Int-A | 2 | | | 1160pa | Unknown adult (>=20 yrs) M | | | | A | Ingst | Int-S | 2 | | | acetaminophen/hydrocodone | 1 | 1 | acetaminophen/hydrocodone | 2 | 2 | gabapentin | 3 | 3 | 1161ph | Unknown age M | | | | A | Ingst | Int-S | 1 | salicylate | 76.4 mg/dL In Serum @ Unknown | salicylate | 1 | 1 | See Also case 18, 34, 42, 49, 88, 187, 188, 189, 210, 269, 1172, 1178, 1179, 1192, 1197, 1199, 1204, 1224, 1231, 1236, 1237, 1238, 1249, 1252, 1261, 1263, 1267, 1269, 1270, 1274, 1278, 1288, 1293, 1296, 1297, 1299, 1300, 1307, 1313, 1315, 1321, 1323, 1328, 1329, 1333, 1334, 1335, 1339, 1342, 1357, 1361, 1368, 1378, 1380, 1386, 1387, 1403, 1410, 1412, 1417, 1423, 1425, 1433, 1442, 1445, 1452, 1468, 1476, 1488, 1489, 1492, 1496, 1498, 1506, 1522, 1535, 1545, 1550, 1562, 1571, 1580, 1584, 1591, 1600, 1603, 1604, 1609, 1634, 1639, 1641, 1645, 1646, 1673, 1675, 1676, 1691, 1716, 1720, 1727, 1728, 1732, 1739, 1742, 1743, 1745, 1752, 1754, 1756, 1759, 1762, 1764, 1766, 1773, 1791, 1797, 1798, 1802, 1803, 1808, 1809, 1811, 1817, 1818, 1834, 1841, 1842, 1847, 1848, 1860, 1861, 1863, 1864, 1872, 1873, 1876, 1891, 1892, 1900, 1901, 1906, 1917, 1921, 1924, 1939, 1942, 1945, 1946, 1949, 1958, 1959, 1960, 1965, 1966, 1971, 1973, 1974, 1979, 1990, 1992, 2003, 2012, 2020, 2021, 2024, 2030, 2039, 2041, 2047, 2050, 2055, 2058, 2061, 2062, 2068, 2069, 2078, 2082, 2083, 2092, 2095, 2104, 2107, 2110, 2114, 2118, 2119, 2123, 2126, 2131, 2142, 2146, 2151, 2153, 2160, 2164, 2168, 2177, 2178, 2180, 2184, 2186, 2191, 2196, 2202, 2212, 2214, 2226, 2230, 2238, 2242, 2252, 2257, 2265, 2267, 2275, 2278, 2279, 2280, 2282, 2293, 2295, 2296, 2300, 2301, 2302, 2303, 2315, 2316, 2319, 2326, 2328, 2338, 2339, 2344, 2349, 2356, 2363, 2368, 2394, 2401, 2403, 2407, 2409, 2414, 2417, 2424, 2426, 2429, 2430, 2436, 2437, 2438, 2439, 2443, 2448, 2452, 2461, 2466, 2477, 2478, 2483, 2488, 2490, 2492, 2497, 2501, 2508, 2531, 2538, 2545, 2555, 2566, 2580, 2582 | | | | | | | | | | | Anesthetics | | | | | | | | | | | 1162pha | 19 y M | nitrous oxide | 1 | 1 | A | Ingst + Inhal | Unt-U | 3 | | | [1163ha] | 30 y M | benzodiazepine | 2 | 2 | U | Inhal | Int-A | 3 | nitrous oxide | 71 mcg/mL In Blood (unspecified) @ Autopsy | nitrous oxide | 1 | 1 | [1164pha] | 34 y M | | | | A | Inhal | Int-A | 1 | ketamine norketamine | 13189 ng/mL In Blood (unspecified) @ Unknown 16439 ng/mL In Blood (unspecified) @ Unknown | ketamine | 1 | 1 | ketamine | 1 | 1 | 1165ph | 43 y F | lidocaine | 1 | 1 | A | Par | AR-D | 2 | | | bupivacaine | 2 | 2 | [1166pha] | 46 y M | | | | A | Inhal | Unt-E | 2 | isoflurane | 0.29 mcg/mL In Blood (unspecified) @ Unknown | isoflurane | 1 | 1 | 1167pa | 60 y M | sevoflurane | 1 | 1 | A | Inhal | Int-S | 2 | | | [1168ph] | 78 y M | lidocaine | 1 | 1 | A | Par | Unt-T | 1 | | | 1169pi | 6 m F | lidocaine | 1 | 1 | A | Rec | Unt-T | 1 | | | lidocaine | 1 | 1 | See Also case 33, 636, 758, 772, 1693, 1709, 1854, 2066, 2196, 2529 | | | | | | | | | | | Anticholinergic Drugs | | | | | | | | | | | 1170ph | 59 y F | atropine |
| 1150ha | 87 y M | acetaminophen | 1 | 1 | U | Ingst | Int-S | 1 | salicylate | 109.9 mg/dL In Whole Blood @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1151 | 89 y F | acetaminophen | 1 | 1 | C | Ingst | Int-U | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1152ha | 90 y F | | | | A/C | Ingst | Int-S | 2 | hydrocodone acetaminophen (apap) hydromorphone | 1895 ng/mL In Serum @ 30 m (pe) 200 mcg/mL In Serum @ 30 m (pe) 43 ng/mL In Serum @ 30 m (pe) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1153h | 91 y M | warfarin | 2 | 2 | A | Ingst | Unt-M | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | colchicine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1154ai | 91 y M | furosemide | 2 | 2 | U | Unk | Int-S | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | hydrocodone | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1155ha | 92 y M | | | | A/C | Ingst | Unt-G | 2 | acetaminophen (apap) | 357 mg/dL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1156h | 13 m F | narcotic, other/unknown | 1 | 1 | A | Unk | Unk | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1157phi | 17 m M | hydrocodone | 1 | 1 | A | Unk | Unk | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1158ha | 20+ y F | | | | A | Unk | Int-A | 1 | fentanyl benzoylecognine benzoylecognine | 0.013 mg/L In Blood (unspecified) @ Autopsy 0.8 mg/L In Blood (unspecified) @ Autopsy 1.2 mg/L In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | fentanyl | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | fentanyl analog, 4-fluoroisobutyrfentanyl | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1159p | 20+ y M | narcotic, other/unknown | 1 | 1 | A | Par | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1160pa | Unknown adult (>=20 yrs) M | | | | A | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1161ph | Unknown age M | | | | A | Ingst | Int-S | 1 | salicylate | 76.4 mg/dL In Serum @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | salicylate | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| See Also case 18, 34, 42, 49, 88, 187, 188, 189, 210, 269, 1172, 1178, 1179, 1192, 1197, 1199, 1204, 1224, 1231, 1236, 1237, 1238, 1249, 1252, 1261, 1263, 1267, 1269, 1270, 1274, 1278, 1288, 1293, 1296, 1297, 1299, 1300, 1307, 1313, 1315, 1321, 1323, 1328, 1329, 1333, 1334, 1335, 1339, 1342, 1357, 1361, 1368, 1378, 1380, 1386, 1387, 1403, 1410, 1412, 1417, 1423, 1425, 1433, 1442, 1445, 1452, 1468, 1476, 1488, 1489, 1492, 1496, 1498, 1506, 1522, 1535, 1545, 1550, 1562, 1571, 1580, 1584, 1591, 1600, 1603, 1604, 1609, 1634, 1639, 1641, 1645, 1646, 1673, 1675, 1676, 1691, 1716, 1720, 1727, 1728, 1732, 1739, 1742, 1743, 1745, 1752, 1754, 1756, 1759, 1762, 1764, 1766, 1773, 1791, 1797, 1798, 1802, 1803, 1808, 1809, 1811, 1817, 1818, 1834, 1841, 1842, 1847, 1848, 1860, 1861, 1863, 1864, 1872, 1873, 1876, 1891, 1892, 1900, 1901, 1906, 1917, 1921, 1924, 1939, 1942, 1945, 1946, 1949, 1958, 1959, 1960, 1965, 1966, 1971, 1973, 1974, 1979, 1990, 1992, 2003, 2012, 2020, 2021, 2024, 2030, 2039, 2041, 2047, 2050, 2055, 2058, 2061, 2062, 2068, 2069, 2078, 2082, 2083, 2092, 2095, 2104, 2107, 2110, 2114, 2118, 2119, 2123, 2126, 2131, 2142, 2146, 2151, 2153, 2160, 2164, 2168, 2177, 2178, 2180, 2184, 2186, 2191, 2196, 2202, 2212, 2214, 2226, 2230, 2238, 2242, 2252, 2257, 2265, 2267, 2275, 2278, 2279, 2280, 2282, 2293, 2295, 2296, 2300, 2301, 2302, 2303, 2315, 2316, 2319, 2326, 2328, 2338, 2339, 2344, 2349, 2356, 2363, 2368, 2394, 2401, 2403, 2407, 2409, 2414, 2417, 2424, 2426, 2429, 2430, 2436, 2437, 2438, 2439, 2443, 2448, 2452, 2461, 2466, 2477, 2478, 2483, 2488, 2490, 2492, 2497, 2501, 2508, 2531, 2538, 2545, 2555, 2566, 2580, 2582 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anesthetics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1162pha | 19 y M | nitrous oxide | 1 | 1 | A | Ingst + Inhal | Unt-U | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [1163ha] | 30 y M | benzodiazepine | 2 | 2 | U | Inhal | Int-A | 3 | nitrous oxide | 71 mcg/mL In Blood (unspecified) @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | nitrous oxide | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [1164pha] | 34 y M | | | | A | Inhal | Int-A | 1 | ketamine norketamine | 13189 ng/mL In Blood (unspecified) @ Unknown 16439 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ketamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ketamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1165ph | 43 y F | lidocaine | 1 | 1 | A | Par | AR-D | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | bupivacaine | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [1166pha] | 46 y M | | | | A | Inhal | Unt-E | 2 | isoflurane | 0.29 mcg/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | isoflurane | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1167pa | 60 y M | sevoflurane | 1 | 1 | A | Inhal | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [1168ph] | 78 y M | lidocaine | 1 | 1 | A | Par | Unt-T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1169pi | 6 m F | lidocaine | 1 | 1 | A | Rec | Unt-T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | lidocaine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| See Also case 33, 636, 758, 772, 1693, 1709, 1854, 2066, 2196, 2529 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anticholinergic Drugs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1170ph | 59 y F | atropine | 1 | 1 | A | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---|--------|----------------------------------|----------------|------------|------------|-------|--------|-----|----------------------|---|
| See Also case 400, 983, 1064, 1181, 1280, 1316, 1417, 1550, 1822, 2100, 2165 | | | | | | | | | | |
| Anticoagulants | | | | | | | | | | |
| 1171h | 65 y M | warfarin | 1 | 1 | C | Unk | Unk | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1172h | 79 y F | rivaroxaban | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | diltiazem | 2 | 2 | | | | | | |
| | | losartan | 3 | 3 | | | | | | |
| | | salicylate | 4 | 4 | | | | | | |
| | | acetaminophen | 5 | 5 | | | | | acetaminophen (apap) | 18 mcg/mL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 6 | 6 | | | | | | |
| | | cetirizine | 7 | 7 | | | | | | |
| 1173ha | 87 y M | apixaban | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| See Also case 884, 1064, 1139, 1152, 1241, 1298, 1305, 1403, 1468, 1484, 1490, 1501, 1505, 1517, 1535, 1537, 1557, 1560, 1566, 1580, 1627, 1645, 1814 | | | | | | | | | | |
| Anticonvulsants | | | | | | | | | | |
| 1174pha | 15 y F | lamotrigine | 3 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | propranolol | 1 | 1 | | | | | propranolol | 3.5 mg/L In Blood (unspecified) @ 2 h (pe) |
| | | venlafaxine | 2 | 1 | | | | | | |
| | | melatonin | 4 | 4 | | | | | | |
| 1175p | 21 y M | lamotrigine | 1 | 1 | A | Ingst | Int-S | 3 | | |
| 1176ha | 21 y M | lamotrigine | 1 | 1 | A | Ingst | Int-S | 1 | lamotrigine | 9.6 mcg/mL In Blood (unspecified) @ Unknown |
| | | bupropion | 2 | 2 | | | | | hydroxybupropion | 160 ng/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 3 | 3 | | | | | alprazolam | 110 ng/mL In Blood (unspecified) @ Unknown |
| | | diazepam | 4 | 4 | | | | | diazepam | 110 ng/mL In Blood (unspecified) @ Unknown |
| 1177h | 25 y F | lamotrigine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | bupirone | 2 | 2 | | | | | | |
| | | venlafaxine (extended release) | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 1178ph | 26 y M | gabapentin | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | methadone | 2 | 2 | | | | | | |
| 1179pha | 32 y M | valproic acid (extended release) | 1 | 1 | A | Ingst | Int-S | 2 | valproic acid | 139.5 mcg/mL In Blood (unspecified) @ Unknown |
| | | sertraline | 2 | 2 | | | | | | |
| | | quetiapine | 3 | 3 | | | | | | |
| | | salicylate | 4 | 4 | | | | | | |
| | | acetaminophen | 5 | 5 | | | | | | |
| | | ethanol | 6 | 6 | | | | | ethanol | 11 mg/dL In Blood (unspecified) @ Unknown |
| 1180pha | 32 y M | gabapentin | 1 | 1 | A | Ingst | Int-S | 1 | gabapentin | 17.5 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| | | lamotrigine | 2 | 2 | | | | | lamotrigine | 1 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| | | bupropion | 3 | 3 | | | | | bupropion | 1300 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | bupropion | 3 | 3 | | | | | hydroxybupropion | 2200 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | ethanol | 4 | 4 | | | | | ethanol | 0.122 g/dL In Blood (unspecified) @ 1 h (pe) |
| 1181ph | 34 y F | valproic acid (extended release) | 1 | 1 | A/C | Ingst | Int-S | 1 | valproic acid | 135 mcg/mL In Serum @ Unknown |
| | | gabapentin | 2 | 2 | | | | | | |
| | | venlafaxine (extended release) | 3 | 3 | | | | | | |
| | | chlorpromazine | 4 | 4 | | | | | | |
| | | chlorpromazine | 5 | 5 | | | | | | |
| | | benztropine | 6 | 6 | | | | | | |
| | | clonazepam | 7 | 7 | | | | | | |
| 1182pha | 39 y F | gabapentin | 1 | 1 | U | Ingst | Int-A | 2 | | |
| | | carisoprodol | 3 | 2 | | | | | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| 1183ai | 46 y M | valproic acid | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | loxapine | 3 | 3 | | | | | | |
| 1184ai | 46 y M | valproic acid | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | loxapine | 3 | 3 | | | | | | |
| 1185ha | 47 y M | | | | A | Ingst | Int-S | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|-------|--------|-----|--------------------|---|
| 1186ai | 48 y F | gabapentin | 1 | 1 | U | Unk | Int-S | 1 | gabapentin | 72.2 mcg/mL In Blood (unspecified) @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 128 % (wt/Vol) In Blood (unspecified) @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 204 mg/dL In Blood (unspecified) @ 1 h (pe) |
| | | dextromethorphan/guaifenesin | 3 | 3 | | | | | dextromethorphan | 308 ng/mL In Blood (unspecified) @ Autopsy |
| | | valproic acid | 1 | 1 | | | | | | |
| 1187p | 50 y M | bupirone | 2 | 2 | A | Ingst | Int-S | 2 | | |
| | | duloxetine | 3 | 3 | | | | | | |
| 1188a | 52 y M | carbamazepine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | valproic acid | 1 | 1 | | | | | clonazepam | 520 ng/mL In Blood (unspecified) @ Unknown |
| 1189ha | 58 y F | valproic acid | 1 | 1 | A | Ingst | Int-S | 1 | valproic acid | 859 ng/mL In Blood (unspecified) @ Unknown |
| | | clonazepam | 2 | 2 | | | | | | |
| 1190ai | 59 y F | gabapentin | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | valproic acid | 1 | 1 | | | | | | |
| | | lamotrigine | 2 | 2 | | | | | | |
| 1191h | 59 y F | risperidone | 3 | 3 | A/C | Ingst | Int-U | 3 | | |
| | | gabapentin | 1 | 1 | | | | | | |
| 1192pha | 61 y F | gabapentin | 1 | 1 | A | Ingst | Int-S | 3 | gabapentin | 25 mcg/mL In Blood (unspecified) @ Unknown |
| | | hydrocodone | 2 | 2 | | | | | hydrocodone (free) | 13 mcg/mL In Blood (unspecified) @ Unknown |
| | | quetiapine | 3 | 3 | | | | | quetiapine | 160 ng/mL In Blood (unspecified) @ Unknown |
| | | citalopram | 4 | 4 | | | | | citalopram | 77 ng/mL In Blood (unspecified) @ Unknown |
| | | amitriptyline | 5 | 5 | | | | | | |
| 1193h | 63 y F | valproic acid | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | venlafaxine | 2 | 2 | | | | | | |
| | | lurasidone | 3 | 3 | | | | | | |
| | | oxcarbazepine | 4 | 4 | | | | | | |
| 1194ha | 70 y F | valproic acid | 1 | 1 | A/C | Ingst | Unk | 1 | valproic acid | 252 mcg/mL In Plasma @ Unknown |
| | | vilazodone | 2 | 2 | | | | | | |
| [1195ha] | 81 y M | lacosamide | 1 | 1 | A/C | Ingst | Int-U | 1 | | |
| levetiracetam | 2 | 2 | | | | | | | | |

See Also case 159, 344, 358, 372, 513, 542, 567, 589, 603, 695, 720, 772, 777, 798, 807, 834, 875, 876, 887, 950, 954, 983, 992, 1007, 1019, 1023, 1031, 1033, 1036, 1041, 1055, 1113, 1118, 1139, 1160, 1199, 1202, 1210, 1212, 1230, 1231, 1236, 1237, 1238, 1253, 1257, 1260, 1261, 1270, 1274, 1275, 1278, 1281, 1291, 1294, 1298, 1310, 1314, 1328, 1339, 1378, 1380, 1403, 1411, 1416, 1417, 1425, 1428, 1444, 1457, 1459, 1462, 1463, 1468, 1471, 1475, 1492, 1501, 1507, 1532, 1545, 1549, 1563, 1580, 1585, 1586, 1671, 1679, 1682, 1686, 1694, 1718, 1721, 1727, 1728, 1729, 1745, 1751, 1755, 1765, 1767, 1768, 1772, 1786, 1790, 1798, 1814, 1854, 1973, 2087, 2100, 2119, 2182, 2252, 2289, 2318, 2319, 2351, 2455, 2524, 2572

Antidepressants

| | | | | | | | | | | |
|--------|--------|------------------------------|---|---|-----|---------------|-------|---|---------------------|--|
| 1196 | 13 y F | venlafaxine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | propranolol | 2 | 2 | | | | | | |
| | | duloxetine | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| | | hydroxyzine | 5 | 5 | | | | | | |
| 1197ha | 14 y M | bupropion (extended release) | 1 | 1 | A | Ingst + Inhal | Int-S | 1 | hydroxybupropion | 1400 ng/mL In Blood (unspecified) @ Unknown |
| | | bupropion (extended release) | 1 | 1 | | | | | bupropion | 1800 ng/mL In Blood (unspecified) @ Unknown |
| | | bupropion (extended release) | 1 | 1 | | | | | hydroxybupropion | 4500 ng/mL In Blood (unspecified) @ Autopsy |
| | | bupropion (extended release) | 1 | 1 | | | | | bupropion | 8700 ng/mL In Blood (unspecified) @ Autopsy |
| | | marijuana | 2 | 2 | | | | | delta-9-carboxy-thc | 8.9 ng/mL In Blood (unspecified) @ Unknown |
| 1198pa | 14 y F | ibuprofen | 3 | 3 | A | Ingst | Int-S | 1 | | |
| | | venlafaxine | 1 | 1 | | | | | | |
| | | mirtazapine | 2 | 2 | | | | | | |
| | | quetiapine | 3 | 3 | | | | | | |
| | | fluoxetine | 4 | 4 | | | | | | |
| | | melatonin | 5 | 5 | | | | | | |
| 1199ha | 15 y M | lorazepam | 6 | 6 | A/C | Ingst | Int-S | 1 | citalopram | 1400 ng/mL In Blood (unspecified) @ 2 h (pe) |
| | | escitalopram | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | sertraline | 120 ng/mL In Blood (unspecified) @ 2 h (pe) |
| | | lamotrigine | 4 | 4 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|---|
| | | diclofenac | 5 | 5 | | | | | | |
| | | lisinopril | 6 | 6 | | | | | | |
| | | cyclobenzaprine | 7 | 7 | | | | | | |
| | | vitamin D | 8 | 8 | | | | | | |
| 1200ph | 15 y F | bupropion (extended release) | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 1201h | 16 y F | bupropion (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | escitalopram | 2 | 2 | | | | | | |
| 1202ha | 19 y F | bupropion | 1 | 1 | U | Ingst + Aspir | Int-S | 1 | | |
| | | pregabalin | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| 1203a | 20 y F | bupropion | 1 | 1 | A | Ingst | Int-S | 1 | fluoxetine | 3100 ng/mL In Blood (unspecified) @ Unknown |
| | | bupropion | 1 | 1 | | | | | bupropion | 5900 ng/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 2 | 2 | | | | | | |
| | | amphetamine | 3 | 3 | | | | | | |
| 1204pa | 20 y F | bupropion | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 14.7 mcg/mL In Serum @ Unknown |
| 1205p | 21 y F | venlafaxine (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | sertraline | 2 | 2 | | | | | | |
| | | drug, unknown | 3 | 3 | | | | | | |
| 1206ai | 21 y F | nortriptyline | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 1207pha | 22 y M | bupropion | 1 | 1 | A | Ingst | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| | | heroin | 4 | 4 | | | | | | |
| 1208ph | 23 y F | amitriptyline | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | propranolol (extended release) | 2 | 2 | | | | | | |
| | | venlafaxine | 3 | 3 | | | | | | |
| 1209ha | 23 y F | bupropion (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | bupropion | 18 mcg/mL In Blood (unspecified) @ Autopsy |
| | | sertraline | 2 | 2 | | | | | sertraline | 5 mcg/mL In Blood (unspecified) @ Autopsy |
| | | lurasidone | 3 | 3 | | | | | | |
| 1210pa | 23 y F | bupropion | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | lamotrigine | 2 | 2 | | | | | lamotrigine | 14 mg/L In Blood (unspecified) @ 3 d (pe) |
| | | lamotrigine | 2 | 2 | | | | | lamotrigine | 21 mg/L In Blood (unspecified) @ Autopsy |
| | | lamotrigine | 2 | 2 | | | | | lamotrigine | 22 mg/L In Blood (unspecified) @ Unknown |
| | | ethanol | 3 | 3 | | | | | | |
| 1211 | 25 y M | trazodone | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 1212ph | 27 y M | bupropion (extended release) | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | atenolol | 2 | 2 | | | | | | |
| | | olanzapine | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| 1213ha | 27 y F | doxepin | 1 | 1 | A | Ingst | Int-S | 1 | doxepin | 0.39 mcg/mL In Serum @ Unknown |
| | | methamphetamine | 2 | 2 | | | | | methamphetamine | 0.14 mcg/mL In Serum @ Unknown |
| 1214ph | 28 y F | bupropion | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1215ha | 29 y M | amitriptyline | 1 | 1 | A | Ingst | Int-S | 1 | lorazepam | 0.02 mg/L In Blood (unspecified) @ Autopsy |
| | | amitriptyline | 1 | 1 | | | | | nortriptyline | 0.05 mg/L In Blood (unspecified) @ Autopsy |
| | | amitriptyline | 1 | 1 | | | | | amitriptyline | 0.07 mg/L In Blood (unspecified) @ Autopsy |
| | | amitriptyline | 1 | 1 | | | | | nortriptyline | 0.17 mg/L In Blood (unspecified) @ 2 h (pe) |
| | | amitriptyline | 1 | 1 | | | | | amitriptyline | 0.28 mg/L In Blood (unspecified) @ 2 h (pe) |
| | | amitriptyline | 1 | 1 | | | | | lidocaine | 0.81 mg/L In Blood (unspecified) @ Autopsy |
| 1216p | 29 y M | doxepin | 1 | 1 | A | Ingst | Int-S | 1 | | |
| [1217ha] | 29 y M | clomipramine | 1 | 1 | A/C | Ingst | Int-S | 1 | clomipramine | 2153 ng/mL In Blood (unspecified) @ Autopsy |
| | | perphenazine | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|--------------------------------|----------------|------------|------------|-------------|--------|-----|---------------------|---|---------------|--|
| 1218p | 30 y F | paroxetine | 3 | 3 | U | Ingst | Int-S | 2 | paroxetine | 988 ng/mL In Blood (unspecified) ④ Autopsy | | |
| | | diphenhydramine | 4 | 4 | | | | | 7-aminoclonazepam | 10.9 ng/mL In Blood (unspecified) ④ Autopsy | | |
| | | clonazepam | 5 | 5 | | | | | | | | |
| | | clonazepam | 5 | 5 | | | | | | | | |
| | | hydroxyzine | 6 | 6 | | | | | | | hydroxyzine | 593 ng/mL In Blood (unspecified) ④ Autopsy |
| | | atomoxetine | 7 | 7 | | | | | | | amitriptyline | 990 ng/mL In Blood (unspecified) ④ Unknown |
| | | cetirizine | 8 | 8 | | | | | | | | |
| | | amitriptyline | 1 | 1 | | | | | | | | |
| amitriptyline | 1 | 1 | | | | | | | | | | |
| 1219h | 30 y F | | | | A | Ingst | Int-S | 2 | | | | |
| 1220hi | 30 y F | bupropion | 1 | 1 | U | Ingst | Int-S | 2 | | | | |
| | | trazodone | 2 | 2 | | | | | | | | |
| 1221ai | 30 y F | cyclic antidepressant, unknown | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | |
| | | duloxetine | 1 | 1 | | | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | | | |
| 1222pa | 32 y M | ethanol | 3 | 3 | U | Ingst | Int-A | 3 | | | | |
| | | bupropion | 1 | 1 | | | | | | | | |
| 1223 | 32 y M | bupropion | 1 | 1 | U | Rec | Int-A | 1 | | | | |
| 1224h | 32 y F | bupropion | 1 | 1 | A/C | Ingst | Int-U | 2 | | | | |
| | | bupropion | 1 | 1 | | | | | | | | |
| | | lisinopril | 2 | 2 | | | | | | | | |
| | | metoclopramide | 3 | 3 | | | | | | | | |
| | | salicylate | 4 | 4 | | | | | | | salicylate | 12.1 mg/dL In Blood (unspecified) ④ Unknown |
| [1225ha] | 32 y M | bupropion (extended release) | 1 | 1 | U | Ingst | Int-S | 1 | bupropion | 701 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| 1226pha | 32 y F | ethanol | 2 | 2 | A | Ingst + Unk | Int-S | 1 | venlafaxine | 0.24 mg/L In Blood (unspecified) ④ Unknown | | |
| | | venlafaxine | 1 | 1 | | | | | | | | |
| 1227 | 32 y M | amitriptyline | 2 | 2 | A | Ingst | Int-G | 2 | amitriptyline | 1.39 mg/L In Blood (unspecified) ④ Unknown | | |
| | | amitriptyline | 2 | 2 | | | | | | | | |
| 1228h | 33 y M | nortriptyline | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| 1229pa | 33 y F | bupropion | 1 | 1 | A | Ingst | Int-S | 1 | hydroxybupropion | 3500 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| | | bupropion | 1 | 1 | | | | | bupropion | 4600 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| | | clonazepam | 2 | 2 | | | | | clonazepam | 14 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| | | clonazepam | 2 | 2 | | | | | 7-aminoclonazepam | 82 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| | | sertraline | 3 | 3 | | | | | sertraline | 19 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| | | sertraline | 3 | 3 | | | | | desmethylsertraline | 300 ng/mL In Blood (unspecified) @ 1 h (pe) | | |
| | | ethanol | 4 | 4 | | | | | ethanol | 100 mg/dL In Blood (unspecified) @ 1 h (pe) | | |
| | | ethanol | 4 | 4 | | | | | | | | |
| 1230ha | 34 y F | bupropion | 1 | 1 | A/C | Ingst | Int-S | 1 | valproic acid | 12 mcg/mL In Blood (unspecified) ④ Unknown | | |
| | | valproic acid | 2 | 2 | | | | | | | | |
| | | trazodone | 3 | 3 | | | | | | | trazodone | 4.2 mg/L In Blood (unspecified) ④ Autopsy |
| 1231ai | 34 y F | amitriptyline | 1 | 1 | U | Unk | Int-M | 1 | | | | |
| 1232pha | 34 y F | gabapentin | 2 | 2 | A | Ingst | Unk | 1 | bupropion | 9.7 mg/L In Blood (unspecified) ④ Autopsy | | |
| | | oxycodone | 3 | 3 | | | | | | | | |
| | | morphine | 4 | 4 | | | | | | | | |
| | | bupropion | 1 | 1 | | | | | | | | |
| 1233ph | 34 y M | doxepin | 2 | 2 | A | Ingst | Int-S | 1 | doxepin | 20 mg/L In Blood (unspecified) ④ Autopsy | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.15 % (wt/Vol) In Blood (unspecified) ④ Autopsy | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| 1233ph | 34 y M | doxepin | 1 | 1 | A | Ingst | Int-S | 1 | ethanol | 192 mg/dL In Blood (unspecified) ④ Unknown | | |
| | | ethanol | 2 | 2 | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|---------------|--------|-----|------------------|---|
| 1234h | 35 y F | | | | A/C | Ingst | AR-D | 2 | | |
| | | lithium | 1 | 1 | | | | | lithium | 4.13 mmol/L In Plasma @ Unknown |
| 1235pai | 35 y F | venlafaxine | 1 | 1 | | Unk | Unk | 1 | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | quetiapine | 3 | 3 | | | | | | |
| 1236 | 36 y M | | | | A/C | Ingst | Int-S | 2 | | |
| | | bupropion | 1 | 1 | | | | | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | mirtazapine | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| | | ibuprofen | 5 | 5 | | | | | | |
| | | ethanol | 6 | 6 | | | | | | |
| 1237ai | 36 y F | bupropion | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 1238ha | 38 y F | | | | A/C | Ingst | Int-U | 1 | | |
| | | amitriptyline | 1 | 1 | | | | | | |
| | | prazosin | 2 | 2 | | | | | | |
| | | valproic acid | 3 | 3 | | | | | | |
| | | risperidone | 4 | 4 | | | | | | |
| | | bupirone | 5 | 5 | | | | | | |
| | | alprazolam | 6 | 6 | | | | | alprazolam | 25 ng/mL In Blood (unspecified) @ Autopsy |
| | | lorazepam | 7 | 7 | | | | | lorazepam | 25.2 ng/mL In Blood (unspecified) @ Autopsy |
| | | acetaminophen/hydrocodone | 8 | 8 | | | | | hydrocodone | 28.1 ng/mL In Blood (unspecified) @ Autopsy |
| 1239h | 38 y M | | | | A/C | Ingst | Int-S | 2 | | |
| [1240pha] | 39 y M | doxepin | 1 | 1 | A | Ingst + Inhal | Int-S | 3 | | |
| | | bupropion | 1 | 1 | | | | | bupropion | 170 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | bupropion | 1 | 1 | | | | | hydroxybupropion | 1700 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | hydrocarbon, fluorinated | 2 | 2 | | | | | acetone | 2.5 mg/dL In Blood (unspecified) @ 1 h (pe) |
| 1241ha | 39 y M | | | | A/C | Ingst | Int-S | 1 | | |
| | | bupropion | 1 | 1 | | | | | threobupropion | 0.94 mg/L In Blood (unspecified) @ 2.5 h (pe) |
| | | venlafaxine | 2 | 2 | | | | | | |
| | | carvedilol | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | ethanol | 86 mg/dL In Serum @ 15 m (pe) |
| | | rivaroxaban | 5 | 5 | | | | | | |
| 1242pha | 40 y F | | | | A | Ingst | Int-S | 2 | | |
| | | bupropion | 1 | 1 | | | | | | |
| | | venlafaxine | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | ethanol | 297 mg/dL In Serum @ Unknown |
| 1243i | 40 y F | | | | U | Ingst + Unk | Int-S | 1 | | |
| | | bupropion | 1 | 1 | | | | | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| | | venlafaxine | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 1244i | 40 y F | | | | U | Unk | Int-U | 3 | | |
| | | bupropion | 1 | 1 | | | | | | |
| | | phentermine | 2 | 2 | | | | | | |
| | | plant, mitragyna | 3 | 3 | | | | | | |
| 1245ph | 40 y F | | | | A | Ingst | Int-S | 2 | | |
| | | cyclic antidepressant, unknown | 1 | 1 | | | | | | |
| 1246ha | 40 y M | | | | U | Ingst | Int-S | 1 | | |
| | | bupropion | 1 | 1 | | | | | bupropion | 3300 ng/mL In Whole Blood @ Autopsy |
| | | bupropion | 1 | 1 | | | | | hydroxybupropion | 890 ng/mL In Whole Blood @ Autopsy |
| | | propranolol | 2 | 2 | | | | | propranolol | 3400 ng/mL In Whole Blood @ Autopsy |
| | | sertraline | 3 | 3 | | | | | sertraline | 3.9 mg/L In Whole Blood @ Autopsy |
| | | ethanol | 4 | 4 | | | | | ethanol | 39 mg/dL In Serum @ 1 h (pe) |
| 1247h | 42 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | citalopram | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 121 mg/dL In Blood (unspecified) @ Unknown |
| 1248h | 42 y F | | | | A/C | Ingst | Int-S | 1 | | |
| 1249h | 42 y F | | | | A | Ingst | Int-S | 2 | | |
| | | sertraline | 1 | 1 | | | | | | |
| | | ondansetron | 2 | 2 | | | | | | |
| | | hydromorphone | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 1250ha | 43 y M | | | | A | Ingst | Int-S | 2 | | |
| | | amitriptyline | 1 | 1 | | | | | amitriptyline | 0.54 mg/L In Blood (unspecified) @ Unknown |
| | | amitriptyline | 1 | 1 | | | | | amitriptyline | 0.72 mg/L In Blood (unspecified) @ Autopsy |
| 1251i | 43 y M | | | | U | Unk | Unk | 2 | | |
| | | citalopram | 1 | 1 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | |
|------------------|--------|---|----------------|--------------------------------|------------|-------|--------|-------|------------------|---|----------------------|---|-------|-------|-------|---|--|
| 1252pha | 43 y F | cyclobenzaprine | 2 | 2 | A/C | Ingst | Int-S | 1 | | | | | | | | | |
| | | hydroxyzine | 3 | 3 | | | | | | | | | | | | | |
| | | bupropion | 1 | 1 | | | | | | | | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | | | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | | acetaminophen (apap) | 20.4 mcg/mL In Blood (unspecified) @ 1 h (pe) | | | | | |
| | | ethanol | 4 | 4 | | | | | | | ethanol | 0.256 g/dL In Blood (unspecified) @ 1 h (pe) | | | | | |
| | | hydrocodone | 5 | 5 | | | | | | | | | | | | | |
| 1253i | 44 y F | oxycodone | 6 | 6 | A/C | Ingst | Int-S | 2 | | | | | | | | | |
| | | naproxen | 7 | 7 | | | | | | | | | | | | | |
| | | amitriptyline | 1 | 1 | | | | | | | | | | | | | |
| | | zolpidem | 2 | 2 | | | | | | | | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | | | | | | | | |
| | | donazepam | 4 | 4 | | | | | | | | | | | | | |
| | | topiramate | 5 | 5 | | | | | | | | | | | | | |
| 1254h | 44 y F | bupropion (extended release) | 1 | 1 | A/C | Ingst | Int-S | 3 | | | | | | | | | |
| | | 1255h | 44 y F | venlafaxine (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | |
| | | doxylamine | 2 | 2 | | | | | | | | | | | | | |
| | | ondansetron | 3 | 3 | | | | | | | | | | | | | |
| | | spironolactone | 4 | 4 | | | | | | | | | | | | | |
| | | 1256h | 46 y M | bupropion (extended release) | | | | | | | 1 | 1 | U | Ingst | Int-S | 1 | |
| 1257h | 46 y F | | | | A/C | Ingst | Unk | 2 | | | | | | | | | |
| | | trazodone | 1 | 1 | | | | | | | | | | | | | |
| | | gabapentin | 2 | 2 | | | | | | | | | | | | | |
| 1258ai | 46 y M | drug, unknown | 3 | 3 | U | Unk | Int-S | 1 | | | | | | | | | |
| | | 1259ai | 46 y F | amitriptyline | | | | | | | 1 | 1 | U | Unk | Int-A | 1 | |
| | | paroxetine | 1 | 1 | | | | | | | U | Unk | Int-S | 3 | | | |
| ethanol | 2 | 2 | | | | | | | | | | | | | | | |
| baclofen | 3 | 3 | | | | | | | | | | | | | | | |
| 1260h | 47 y M | | | | U | Unk | Int-S | 3 | | | | | | | | | |
| | | bupropion (extended release) | 1 | 1 | | | | | | | | | | | | | |
| | | olanzapine | 2 | 2 | | | | | | | | | | | | | |
| | | lamotrigine | 3 | 3 | | | | | | | | | | | | | |
| 1261ha | 47 y M | escitalopram | 4 | 4 | A/C | Ingst | Int-S | 1 | | | | | | | | | |
| | | trazodone | 1 | 1 | | | | | | | trazodone | 480 ng/mL In Blood (unspecified) @ Autopsy | | | | | |
| | | pregabalin | 2 | 2 | | | | | | | | | | | | | |
| | | topiramate | 3 | 3 | | | | | | | | | | | | | |
| | | metoprolol | 4 | 4 | | | | | | | | | | | | | |
| | | pramipexole | 5 | 5 | | | | | | | | | | | | | |
| | | ibuprofen | 6 | 6 | | | | | | | | | | | | | |
| | | hydroxyzine | 7 | 7 | | | | | | | | | | | | | |
| | | valproic acid | 8 | 8 | | | | | | | | | | | | | |
| | | metformin | 9 | 9 | | | | | | | | | | | | | |
| | | amlodipine | 10 | 10 | | | | | | | | | | | | | |
| | | guanfacine | 11 | 11 | | | | | | | | | | | | | |
| | | canagliflozin | 12 | 12 | | | | | | | | | | | | | |
| | | lurasidone | 13 | 13 | | | | | | | | | | | | | |
| pantoprazole | 14 | 14 | | | | | | | | | | | | | | | |
| 1262pha | 47 y M | nortriptyline | 1 | 1 | A | Ingst | Int-U | 1 | nortriptyline | 4100 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | |
| 1263p | 48 y M | | | | A/C | Ingst | Int-S | 2 | | | | | | | | | |
| | | nortriptyline | 1 | 1 | | | | | | | | | | | | | |
| | | paroxetine | 2 | 2 | | | | | | | | | | | | | |
| | | hypochlorite | 3 | 3 | | | | | | | | | | | | | |
| | | metformin | 4 | 4 | | | | | | | | | | | | | |
| | | salicylate | 5 | 5 | | | | | | | | | | | | | |
| | | angiotensin converting enzyme inhibitor | 6 | 6 | | | | | | | | | | | | | |
| 1264ha | 48 y F | simvastatin | 7 | 7 | A/C | Ingst | Int-S | 2 | hydroxybupropion | 160 ng/mL In Blood (unspecified) @ Autopsy | | | | | | | |
| 1265h | 49 y M | bupropion | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | | quetiapine | 970 ng/mL In Whole Blood @ Autopsy | | | | | |
| | | lithium | 1 | 1 | | | | | | | lithium | 0.1 mEq/L In Blood (unspecified) @ 1 h (pe) | | | | | |
| | | lithium | 1 | 1 | | | | | | | lithium | 2.1 mEq/L In Blood (unspecified) @ 1 d (pe) | | | | | |
| | | lithium | 1 | 1 | | | | | | | lithium | 2.5 mEq/L In Blood (unspecified) @ 2 d (pe) | | | | | |
| | | lithium | 1 | 1 | | | | | | | lithium | 4.4 mEq/L In Blood (unspecified) @ 1 d (pe) | | | | | |
| | | lithium | 1 | 1 | | | | | | | lithium | 5.5 mEq/L In Blood (unspecified) @ 1 d (pe) | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------|--------|-----|-------------------------|---|
| 1266h | 49 y F | lithium | 1 | 1 | A | Ingst | Int-S | 2 | lithium | 5.6 mEq/L In Blood (unspecified) @ 1 d (pe) |
| | | lithium | 1 | 1 | | | | | lithium | 5.7 mEq/L In Blood (unspecified) @ 1 d (pe) |
| | | lithium | 1 | 1 | | | | | lithium | 6 mEq/L In Blood (unspecified) @ 9 h (pe) |
| | | asenapine | 2 | 2 | | | | | | |
| | | amitriptyline | 1 | 1 | | | | | | |
| 1267pha | 51 y F | venlafaxine | 1 | 1 | U | Ingst | Int-S | 1 | acetaminophen (apap) | 17.1 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/butalbital/caffeine/codeine | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| | | promethazine | 4 | 4 | | | | | | |
| | | tizanidine | 5 | 5 | | | | | | |
| 1268pha | 51 y F | drug, unknown | 6 | 6 | A | Ingst | Int-S | 1 | | |
| | | nortriptyline | 1 | 1 | | | | | | |
| | | asenapine | 2 | 2 | | | | | | |
| | | bupropion | 1 | 1 | | | | | | |
| | | bupropion | 1 | 1 | | | | | | |
| 1269h | 51 y F | acetaminophen/hydrocodone | 2 | 2 | A/C | Ingst | Int-S | 2 | hydroxybupropion | 1900 ng/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | bupropion | 420 ng/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | hydrocodone (free) | 190 ng/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | acetaminophen (apap) | 42.6 mcg/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 3 | 3 | | | | | ethanol | 0.236 % (wt/Vol) In Blood (unspecified) @ Unknown |
| | | escitalopram | 4 | 4 | | | | | citalopram | 149 ng/mL In Blood (unspecified) @ Unknown |
| | | desvenlafaxine | 1 | 1 | | | | | o-desmethyl-venlafaxine | 2318 ng/mL In Blood (unspecified) @ Unknown |
| | | cyclic antidepressant, unknown | 2 | 2 | | | | | | |
| | | quetiapine | 3 | 3 | | | | | quetiapine | 1199 ng/mL In Blood (unspecified) @ Unknown |
| | | citalopram | 4 | 4 | | | | | | |
| 1270ha | 51 y F | oxcarbazepine | 5 | 5 | A/C | Ingst | Int-S | 1 | 10-hydroxycarbazepine | 160 mcg/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 6 | 6 | | | | | acetaminophen (apap) | 8.5 mcg/mL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 7 | 7 | | | | | | |
| | | bupropion (extended release) | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| | | lurasidone | 3 | 3 | | | | | | |
| | | dicyclomine | 4 | 4 | | | | | | |
| | | venlafaxine | 1 | 1 | | | | | | |
| | | paroxetine | 1 | 1 | | | | | | |
| | | clonazepam | 2 | 2 | | | | | | |
| 1271h | 51 y F | clonazepam | 2 | 2 | A | Ingst | Int-S | 2 | 7-aminoclonazepam | 49 ng/mL In Blood (unspecified) @ Autopsy |
| | | bupropion (extended release) | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| | | lurasidone | 3 | 3 | | | | | | |
| | | dicyclomine | 4 | 4 | | | | | | |
| 1272 | 52 y F | venlafaxine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | paroxetine | 1 | 1 | | | | | paroxetine | 4500 ng/mL In Blood (unspecified) @ Autopsy |
| | | clonazepam | 2 | 2 | | | | | clonazepam | 2.9 ng/mL In Blood (unspecified) @ Autopsy |
| | | clonazepam | 2 | 2 | | | | | 7-aminoclonazepam | 49 ng/mL In Blood (unspecified) @ Autopsy |
| | | | | | | | | | | |
| 1273ha | 52 y M | bupropion (extended release) | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| | | diclofenac | 4 | 4 | | | | | | |
| | | | | | | | | | | |
| 1274ph | 52 y F | doxepin | 1 | 1 | A/C | Ingst | Int-S | 2 | doxepin | 1300 ng/mL In Blood (unspecified) @ Autopsy |
| | | doxepin | 1 | 1 | | | | | desmethyldoxepin | 250 ng/mL In Blood (unspecified) @ Autopsy |
| | | oxcarbazepine | 2 | 2 | | | | | 10-hydroxycarbazepine | 17 mcg/mL In Plasma @ Unknown |
| | | lamotrigine | 3 | 3 | | | | | lamotrigine | 9.3 mcg/mL In Blood (unspecified) @ Autopsy |
| | | vortioxetine | 4 | 4 | | | | | | |
| | | hydrochlorothiazide/lisinopril | 5 | 5 | | | | | | |
| | | risperidone | 6 | 6 | | | | | risperidone | 490 ng/mL In Blood (unspecified) @ Autopsy |
| | | risperidone | 6 | 6 | | | | | 9-hydroxyrisperidone | 66 ng/mL In Blood (unspecified) @ Autopsy |
| | | levothyroxine | 7 | 7 | | | | | | |
| | | | | | | | | | | |
| 1275a | 52 y F | doxepin | 1 | 1 | A | Ingst | Int-S | 1 | doxepin | 1300 ng/mL In Blood (unspecified) @ Autopsy |
| | | doxepin | 1 | 1 | | | | | desmethyldoxepin | 250 ng/mL In Blood (unspecified) @ Autopsy |
| 1276 | 52 y M | oxcarbazepine | 2 | 2 | U | Ingst | Int-S | 1 | 10-hydroxycarbazepine | 17 mcg/mL In Plasma @ Unknown |
| | | lamotrigine | 3 | 3 | | | | | lamotrigine | 9.3 mcg/mL In Blood (unspecified) @ Autopsy |
| 1277ai | 52 y F | vortioxetine | 4 | 4 | U | Ingst | Int-S | 1 | | |
| | | hydrochlorothiazide/lisinopril | 5 | 5 | | | | | | |
| | | risperidone | 6 | 6 | | | | | risperidone | 490 ng/mL In Blood (unspecified) @ Autopsy |
| | | risperidone | 6 | 6 | | | | | 9-hydroxyrisperidone | 66 ng/mL In Blood (unspecified) @ Autopsy |
| | | levothyroxine | 7 | 7 | | | | | | |
| 1278 | 52 y M | amitriptyline | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | bupropion | 1 | 1 | | | | | | |
| 1278 | 52 y M | tramadol | 2 | 2 | A/C | Ingst | Int-S | 1 | | |
| | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | |
|------------------|--------|-----------------------------------|----------------|---|------------|-------------|--------|-----|------------|---|--------|---------------|-------|-------|-------|---|------------------|--|---|-------|-------|---|--|--|
| 1279ph | 52 y F | temazepam | 3 | 3 | A | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | | | | | | | | | | | | | | | |
| | | duloxetine | 5 | 5 | | | | | | | | | | | | | | | | | | | | |
| | | levothyroxine | 6 | 6 | | | | | | | | | | | | | | | | | | | | |
| 1280h | 52 y M | amitriptyline | 1 | 1 | A | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | |
| | | doxepin | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| | | olanzapine | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | baclofen | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| | | benztropine | 4 | 4 | | | | | | | | | | | | | | | | | | | | |
| | | lithium | 5 | 5 | | | | | | | | | | | | | | | | | | | | |
| | | quetiapine | 6 | 6 | | | | | | | | | | | | | | | | | | | | |
| | | hydroxyzine | 7 | 7 | | | | | | | | | | | | | | | | | | | | |
| | | naltrexone | 8 | 8 | | | | | | | | | | | | | | | | | | | | |
| | | fluoxetine | 9 | 9 | | | | | | | | | | | | | | | | | | | | |
| | | benztropine | 10 | 10 | | | | | | | | | | | | | | | | | | | | |
| 1281h | 52 y M | diphenhydramine | 11 | 11 | A/C | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | |
| | | bupropion | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| | | citalopram | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | hydrochlorothiazide/lisinopril | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | | | | | | | | | | | | | | | |
| | | 1282ha | 53 y F | bupropion | | | | | | | 1 | 1 | U | Ingst | Int-S | 1 | hydroxybupropion | 1.8 mg/L In Blood (unspecified) ⓐ Unknown | | | | | | |
| | | | | bupropion | | | | | | | 1 | 1 | | | | | bupropion | 2.3 mg/L In Blood (unspecified) ⓐ Unknown | | | | | | |
| | | | | 1283 | | | | | | | 54 y M | nortriptyline | | | | | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | | | | | | | | | | | hydroxyzine | | | | | 2 | 2 | | | | | | |
| | | quetiapine | 3 | | | | | | | | | 3 | | | | | | | | | | | | |
| | | vilazodone | 4 | | | | | | | | | 4 | | | | | | | | | | | | |
| glimepiride | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | |
| paroxetine | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | |
| lisinopril | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | |
| tamsulosin | 8 | 8 | | | | | | | | | | | | | | | | | | | | | | |
| lorazepam | 9 | 9 | | | | | | | | | | | | | | | | | | | | | | |
| atorvastatin | 10 | 10 | | | | | | | | | | | | | | | | | | | | | | |
| levothyroxine | 11 | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 1284h | 54 y M | finasteride | 12 | 12 | A/C | Ingst | Int-S | 3 | | | | | | | | | | | | | | | | |
| | | lithium | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| 1285h | 54 y F | metoprolol | 2 | 2 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | |
| | | bupropion | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| 1286h | 55 y F | venlafaxine | 2 | 2 | A | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | |
| | | propranolol | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| | | amphetamine/ dextroamphetamine | 4 | 4 | | | | | | | | | | | | | | | | | | | | |
| | | hydrochlorothiazide | 5 | 5 | | | | | | | | | | | | | | | | | | | | |
| | | benzodiazepine | 6 | 6 | | | | | | | | | | | | | | | | | | | | |
| | | tamoxifen | 7 | 7 | | | | | | | | | | | | | | | | | | | | |
| | | amitriptyline | 1 | 1 | | | | | | | U | Unk | Int-S | 1 | | | | | | | | | | |
| ethanol | 2 | 2 | ethanol | 109 mg/dL In Blood (unspecified) ⓐ Unknown | | | | | | | | | | | | | | | | | | | | |
| 1287ai | 55 y M | doxepin | 1 | 1 | U | Unk | Int-S | 1 | | | | | | | | | | | | | | | | |
| 1288ai | 55 y M | sertraline | 1 | 1 | U | Ingst + Unk | Unt-M | 1 | | | | | | | | | | | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| 1289pa | 56 y F | trazodone | 1 | 1 | A | Ingst | Int-S | 1 | trazodone | 6 mg/L In Blood (unspecified) ⓐ Autopsy | | | | | | | | | | | | | | |
| | | citalopram | 2 | 2 | | | | | citalopram | 0.43 mg/L In Blood (unspecified) ⓐ Autopsy | | | | | | | | | | | | | | |
| | | alcohol, unknown | 3 | 3 | | | | | ethanol | 0.21 % In Whole Blood @ Autopsy | | | | | | | | | | | | | | |
| 1290h | 57 y F | amitriptyline | 1 | 1 | A/C | Ingst | Int-S | 1 | | | | | | | | | | | | | | | | |
| | | doxepin | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | risperidone | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| 1291ai | 57 y F | amitriptyline | 1 | 1 | U | Unk | Int-S | 1 | | | | | | | | | | | | | | | | |
| | | temazepam | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| 1292p | 57 y F | bupropion | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | |
| | | amlodipine | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | sertraline | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| 1293h | 57 y M | mirtazapine | 1 | 1 | A/C | Ingst | Int-S | 3 | | | | | | | | | | | | | | | | |
| | | ropinirole | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| | | naproxen | 3 | 3 | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------------|--------|-----|-----------------|---|
| 1294ph | 58 y F | amitriptyline | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | metoprolol | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| | | levetiracetam | 4 | 4 | | | | | | |
| | | lorazepam | 5 | 5 | | | | | | |
| 1295h | 58 y F | nortriptyline | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | antipsychotic (atypical) | 2 | 2 | | | | | | |
| 1296i | 58 y F | doxepin | 1 | 1 | U | Ingst + Unk | Unk | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 1297ha | 58 y M | nortriptyline | 1 | 1 | A/C | Ingst | Int-S | 1 | nortriptyline | 11000 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | tramadol | 2 | 2 | | | | | tramadol | 440 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | morphine | 3 | 3 | | | | | morphine (free) | 0.11 mcg/mL In Blood (unspecified) ⓐ Autopsy |
| 1298h | 58 y M | doxepin | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | tizanidine | 2 | 2 | | | | | | |
| | | warfarin | 3 | 3 | | | | | | |
| | | pregabalin | 4 | 4 | | | | | | |
| 1299h | 58 y F | amitriptyline | 1 | 1 | U | Ingst | Int-M | 3 | nortriptyline | 188 ng/mL In Serum @ 1 h (pe) |
| | | amitriptyline | 1 | 1 | | | | | amitriptyline | 936 ng/mL In Serum @ 1 h (pe) |
| | | acetaminophen/ diphenhydramine | 2 | 2 | | | | | | |
| | | temazepam | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 1300ai | 59 y M | amitriptyline | 1 | 1 | U | Unk | Unk | 2 | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| | | morphine | 3 | 3 | | | | | | |
| 1301i | 59 y M | bupropion | 1 | 1 | U | Ingst + Unk | Unt-M | 1 | | |
| | | zolpidem | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1302h | 59 y F | amitriptyline | 1 | 1 | U | Ingst | Int-S | 1 | | |
| 1303 | 59 y M | trazodone | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| 1304 | 59 y F | venlafaxine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1305h | 59 y M | venlafaxine | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| | | apixiban | 2 | 2 | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | |
| 1306ai | 60 y F | amitriptyline | 1 | 1 | U | Unk | Unk | 2 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 1307pha | 61 y F | amitriptyline | 1 | 1 | U | Ingst | Unk | 2 | amitriptyline | 1.5 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | oxycodone | 2 | 2 | | | | | | |
| 1308p | 61 y F | bupropion | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 1309ai | 61 y F | amitriptyline | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1310p | 61 y M | trazodone | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | |
| 1311h | 61 y F | amitriptyline | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 1312p | 61 y F | paroxetine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | quetiapine | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| 1313ai | 61 y F | amitriptyline | 1 | 1 | U | Unk | Unk | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1314ai | 61 y F | trazodone | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | donepezil | 2 | 2 | | | | | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|-------|--------|-----|-----------------|--|
| 1315pa | 62 y F | gabapentin | 3 | 3 | U | Ingst | Int-S | 2 | | |
| | | levetiracetam | 4 | 4 | | | | | | |
| | | cyclic antidepressant, unknown | 1 | 1 | | | | | | |
| 1316h | 63 y F | paroxetine | 2 | 2 | A/C | Ingst | Int-S | 2 | | |
| | | oxycodone | 3 | 3 | | | | | | |
| | | bupropion | 1 | 1 | | | | | | |
| | | risperidone | 2 | 2 | | | | | | |
| | | quetiapine | 3 | 3 | | | | | | |
| | | escitalopram | 4 | 4 | | | | | | |
| 1317h | 64 y F | clorazepate | 5 | 5 | A | Ingst | Int-S | 2 | | |
| | | benzotropine | 6 | 6 | | | | | | |
| | | bupropion | 1 | 1 | | | | | | |
| 1318ph | 65 y F | quetiapine | 2 | 2 | A | Ingst | Int-S | 2 | | |
| | | Lorazepam | 3 | 3 | | | | | | |
| | | bupropion | 1 | 1 | | | | | | |
| 1319h | 65 y M | escitaopram | 2 | 2 | A/C | Ingst | Int-S | 2 | | |
| | | amphetamine/dextroamphetamine | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| | | bupropion (extended release) | 1 | 1 | | | | | | |
| 1320ai | 65 y F | buspirone | 2 | 2 | U | Unk | Unk | 1 | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | fluoxetine | 1 | 1 | | | | | | |
| 1321ai | 66 y F | cyclobenzaprine | 2 | 2 | U | Unk | Unk | 2 | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| | | doxepin | 1 | 1 | | | | | | |
| 1322ph | 66 y M | hydromorphone | 2 | 2 | A | Ingst | Int-S | 2 | | |
| | | morphine | 3 | 3 | | | | | | |
| | | amitriptyline | 1 | 1 | | | | | | |
| 1323h | 67 y F | bupropion (extended release) | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | methadone | 2 | 2 | | | | | | |
| 1324 | 68 y F | | | | A/C | Ingst | Unt-U | 2 | | |
| 1325ai | 68 y F | doxepin | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | trazodone | 1 | 1 | | | | | | |
| 1326h | 69 y M | alprazolam | 2 | 2 | A | Ingst | Int-S | 1 | | |
| | | amitriptyline | 1 | 1 | | | | | | |
| 1327h | 69 y F | venlafaxine (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | venlafaxine (extended release) | 1 | 1 | | | | | | |
| 1328h | 69 y F | clonazepam | 2 | 2 | A/C | Ingst | Int-S | 3 | | |
| | | duloxetine | 1 | 1 | | | | | | |
| | | hydroxyzine | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| | | lorazepam | 4 | 4 | | | | | | |
| 1329ph | 71 y M | diclofenac | 5 | 5 | A/C | Ingst | Int-S | 2 | | |
| | | domipramine | 1 | 1 | | | | | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | doxepin | 1 | 1 | | | | | | |
| | | venlafaxine | 2 | 2 | | | | | | |
| 1330ph | 71 y F | venlafaxine (extended release) | 3 | 3 | A/C | Ingst | Int-S | 2 | | |
| | | diazepam | 4 | 4 | | | | | | |
| | | doxepin | 1 | 1 | | | | | | |
| | | venlafaxine | 2 | 2 | | | | | | |
| 1331 | 72 y F | venlafaxine (extended release) | 3 | 3 | A/C | Ingst | Int-S | 2 | | |
| | | nortriptyline | 1 | 1 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| 1332ai | 72 y F | nortriptyline | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | insulin | 2 | 2 | | | | | | |
| 1333ha | 73 y F | bupropion (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | bupropion | 35 mg/L In Blood (unspecified) @ Autopsy |
| | | bupropion (extended release) | 1 | 1 | | | | | bupropion | 40 mg/L In Blood (unspecified) @ Autopsy |
| | | hydromorphone | 2 | 2 | | | | | morphine (free) | 380 mcg/L In Blood (unspecified) @ Autopsy |
| | | oxycodone | 3 | 3 | | | | | | |
| | | duloxetine | 4 | 4 | | | | | | |
| 1334p | 73 y M | mirtazapine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | salicylate | 2 | 2 | | | | | salicylate | 26 mg/dL In Serum @ 15 m (pe) |
| | | metformin | 3 | 3 | | | | | | |
| | | temazepam | 4 | 4 | | | | | | |
| | | temazepam | 4 | 4 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|--------------------------------|----------------|------------|------------|---------------|--------|-----|-------------------------|--|
| 1335ai | 75 y F | amitriptyline | 1 | 1 | U | Unk | Unk | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1336 | 76 y F | trazodone | 1 | 1 | U | Ingst | Int-S | 2 | | |
| [1337ha] | 77 y M | venlafaxine (extended release) | 1 | 1 | A/C | Ingst | Int-S | 1 | venlafaxine | 29000 ng/mL In Serum @ 1 h (pe) |
| | | venlafaxine (extended release) | 1 | 1 | | | | | o-desmethyl-venlafaxine | 4300 ng/mL In Serum @ 1 h (pe) |
| 1338 | 78 y M | amitriptyline | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1339 | 82 y F | doxepin | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | venlafaxine | 2 | 2 | | | | | | |
| | | salicylate | 3 | 3 | | | | | salicylate | 29.7 mg/dL In Blood (unspecified) @ Unknown |
| | | salicylate | 3 | 3 | | | | | salicylate | 33.8 mg/dL In Blood (unspecified) @ Unknown |
| | | alprazolam | 4 | 4 | | | | | | |
| | | levetiracetam | 5 | 5 | | | | | | |
| See Also case 29, 44, 45, 51, 70, 112, 117, 140, 159, 334, 337, 361, 367, 371, 374, 385, 398, 400, 402, 415, 474, 500, 513, 526, 537, 542, 548, 567, 589, 603, 646, 672, 696, 712, 720, 724, 726, 729, 735, 738, 752, 758, 778, 808, 829, 833, 836, 851, 857, 862, 863, 864, 876, 892, 899, 904, 924, 938, 944, 952, 962, 963, 969, 983, 984, 1028, 1037, 1040, 1043, 1053, 1055, 1064, 1070, 1097, 1113, 1114, 1117, 1121, 1124, 1140, 1144, 1174, 1176, 1177, 1179, 1180, 1181, 1183, 1184, 1186, 1192, 1193, 1194, 1344, 1357, 1361, 1366, 1377, 1380, 1400, 1401, 1403, 1404, 1412, 1416, 1417, 1423, 1424, 1431, 1433, 1435, 1440, 1446, 1448, 1452, 1456, 1457, 1458, 1459, 1460, 1468, 1473, 1478, 1485, 1486, 1490, 1496, 1519, 1532, 1535, 1536, 1537, 1543, 1544, 1545, 1552, 1562, 1563, 1566, 1570, 1572, 1580, 1591, 1592, 1593, 1599, 1607, 1611, 1620, 1623, 1641, 1651, 1662, 1666, 1667, 1682, 1686, 1688, 1695, 1710, 1717, 1719, 1720, 1727, 1728, 1737, 1741, 1751, 1752, 1753, 1756, 1757, 1759, 1761, 1763, 1766, 1775, 1776, 1777, 1779, 1780, 1783, 1792, 1798, 1814, 1825, 1901, 1946, 2016, 2019, 2067, 2079, 2082, 2100, 2136, 2158, 2165, 2167, 2274, 2289, 2332, 2352, 2390, 2405, 2456, 2524, 2545, 2557, 2579 | | | | | | | | | | |
| Antihistamines | | | | | | | | | | |
| 1340pa | 2 y M | diphenhydramine | 1 | 1 | A | Ingst | Unt-G | 1 | midazolam | 0.034 mg/L In Blood (unspecified) @ Autopsy |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 40 mg/L In Blood (unspecified) @ Autopsy |
| 1341ph | 13 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1342 | 14 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | acetaminophen/salicylate | 2 | 2 | | | | | | |
| 1343ph | 15 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | diphenhydramine | 100 ng/mL In Serum @ 2 d (pe) |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 2400 ng/mL In Serum @ 1 h (pe) |
| 1344ai | 16 y M | diphenhydramine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | | |
| 1345h | 16 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1346p | 17 y M | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1347pha | 18 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | diphenhydramine | 18000 ng/mL In Whole Blood @ 1 h (pe) |
| 1348a | 19 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1349pha | 20 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 1350ph | 21 y F | diphenhydramine | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 256 mg/dL In Blood (unspecified) @ Unknown |
| 1351h | 22 y M | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1352 | 25 y F | antihistamine | 1 | 1 | A | Ingst + Inhal | Int-S | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1353ai | 26 y F | diphenhydramine | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1354ai | 27 y M | diphenhydramine | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1355h | 28 y M | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | antihelmintic | 2 | 2 | | | | | | |
| 1356p | 29 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1357ph | 31 y F | hydroxyzine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| | | sertraline | 4 | 4 | | | | | | |
| | | tizanidine | 5 | 5 | | | | | | |
| 1358ph | 32 y F | diphenhydramine | 1 | 1 | A | Ingst | Unk | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1359h | 32 y M | | | | A | Ingst | Int-S | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| [1360pha] | 33 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | diphenhydramine | 1000 ng/mL In Serum @ 4 d (pe) |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 29.8 mg/L In Blood (unspecified) @ Autopsy |
| 1361hai | 33 y M | diphenhydramine | 1 | 1 | U | Unk | Int-S | 1 | diphenhydramine | 29.8 mg/L In Serum @ Unknown |
| | | diphenhydramine | 1 | 1 | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| | | venlafaxine | 3 | 3 | | | | | | |
| 1362pa | 37 y M | diphenhydramine | 1 | 1 | A | Unk | Int-A | 1 | diphenhydramine | 13 mg/L In Blood (unspecified) @ Autopsy |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 8 mg/L In Blood (unspecified) @ Autopsy |
| | | dextromethorphan | 2 | 2 | | | | | dextromethorphan | 10 mg/L In Blood (unspecified) @ Autopsy |
| | | dextromethorphan | 2 | 2 | | | | | dextromethorphan | 7.2 mg/L In Blood (unspecified) @ Autopsy |
| 1363ha | 37 y F | | | | A | Ingst | Int-S | 3 | | |
| 1364ai | 37 y M | diphenhydramine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | diphenhydramine | 1 | 1 | | | | | | |
| | | phentermine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1365h | 38 y M | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | ethylene glycol (antifreeze) | 2 | 2 | | | | | | |
| 1366 | 38 y F | antihistamine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | citalopram | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 1367ha | 41 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | diphenhydramine | 6300 ng/mL In Blood (unspecified) @ Autopsy |
| 1368pa | 44 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | hydroxyzine | 2 | 1 | | | | | lorazepam | 130 ng/mL In Blood (unspecified) @ Autopsy |
| | | hydroxyzine | 2 | 1 | | | | | oxycodone | 35 ng/mL In Blood (unspecified) @ Autopsy |
| | | hydroxyzine | 2 | 1 | | | | | hydroxyzine | 56 ng/mL In Blood (unspecified) @ Autopsy |
| | | hydroxyzine | 2 | 1 | | | | | oxycodone (free) | 670 ng/mL In Blood (unspecified) @ Autopsy |
| | | oxycodone | 1 | 1 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| 1369ai | 44 y M | diphenhydramine | 1 | 1 | U | Ingst + Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | hyperthermia | 3 | 3 | | | | | | |
| 1370ai | 49 y F | diphenhydramine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1371ph | 59 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1372 | 59 y F | promethazine | 1 | 1 | A | Ingst | Int-U | 3 | | |
| 1373ai | 60 y M | diphenhydramine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1374p | 62 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1375ai | 63 y F | diphenhydramine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1376pha | 63 y M | diphenhydramine | 1 | 1 | U | Unk | Int-S | 2 | diphenhydramine | 4.57 mg/L In Blood (unspecified) @ 1 h (pe) |
| | | alprazolam | 2 | 2 | | | | | alprazolam | 0.2 mg/L In Blood (unspecified) @ 1 h (pe) |
| 1377ha | 67 y F | diphenhydramine | 1 | 1 | A | Ingst | Int-S | 1 | diphenhydramine | 47000 ng/mL In Blood (unspecified) @ Autopsy |
| | | sertraline | 2 | 2 | | | | | sertraline | 1500 mg/mL In Blood (unspecified) @ Autopsy |
| 1378pha | 68 y F | diphenhydramine | 1 | 1 | U | Ingst | Int-S | 1 | diphenhydramine | 1.85 mg/L In Blood (unspecified) @ Unknown |
| | | gabapentin | 2 | 1 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 8 mcg/mL In Blood (unspecified) @ Unknown |
| | | lorazepam | 4 | 4 | | | | | lorazepam | 143 ng/mL In Serum @ Unknown |
| | | zolpidem | 5 | 5 | | | | | | |
| 1379pa | 68 y M | diphenhydramine | 1 | 1 | U | Ingst | Oth-M | 2 | diphenhydramine | 1300 ng/mL In Vitreous @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---|--------|---|----------------|------------|------------|-------------|--------|-----|---------------------------------|--|
| 1380ha | 70 y F | diphenhydramine | 1 | 1 | U | Ingst | Int-S | 1 | diphenhydramine | 2.4 mcg/mL In Blood (unspecified) @ Unknown |
| | | phendimetrazine | 2 | 2 | | | | | phendimetrazine / phenmetrazine | 0.8 mcg/mL In Blood (unspecified) @ Unknown |
| | | phendimetrazine | 2 | 2 | | | | | phendimetrazine / phenmetrazine | 1.3 mcg/mL In Blood (unspecified) @ Unknown |
| | | phendimetrazine | 2 | 2 | | | | | phendimetrazine / phenmetrazine | 1.5 mcg/mL In Blood (unspecified) @ Unknown |
| | | phendimetrazine | 2 | 2 | | | | | phendimetrazine / phenmetrazine | 2 mcg/mL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 3 | 3 | | | | | | |
| | | salicylate | 4 | 4 | | | | | salicylate | 126 mg/L In Serum @ 2 d (pe) |
| | | salicylate | 4 | 4 | | | | | salicylate | 137 mg/L In Serum @ 19 h (pe) |
| | | salicylate | 4 | 4 | | | | | salicylate | 171 mg/L In Serum @ 13 h (pe) |
| | | salicylate | 4 | 4 | | | | | salicylate | 188 mg/L In Serum @ 7 h (pe) |
| | | salicylate | 4 | 4 | | | | | salicylate | 93 mg/L In Serum @ 1 h (pe) |
| | | lithium | 5 | 5 | | | | | lithium | 0.8 mmol/L In Serum @ 7 h (pe) |
| | | lithium | 5 | 5 | | | | | lithium | 0.9 mmol/L In Serum @ 1 h (pe) |
| | | quetiapine | 6 | 6 | | | | | | |
| | | lamotrigine | 7 | 7 | | | | | | |
| | | citalopram | 8 | 8 | | | | | | |
| 1381ai | 91 y F | | | | U | Unk | Int-S | 1 | | |
| 1382a | 4 m F | | | | A | Ingst | Unk | 2 | | |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 216 ng/mL In Blood (unspecified) @ Autopsy |
| 1383p | 6 m M | | | | A | Ingst | Unk | 2 | | |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 290 ng/mL In Blood (unspecified) @ Unknown |
| 1384pi | 9 m M | | | | U | Unk | Oth-M | 2 | | |
| | | diphenhydramine | 1 | 1 | | | | | diphenhydramine | 4 mg/L In Blood (unspecified) @ Autopsy |
| | | loratadine | 2 | 2 | | | | | | |
| See Also case 17, 29, 45, 47, 119, 140, 343, 345, 374, 385, 411, 450, 462, 572, 629, 638, 652, 673, 687, 705, 706, 747, 776, 789, 801, 816, 820, 883, 892, 906, 910, 913, 918, 921, 923, 927, 944, 961, 977, 984, 990, 992, 994, 1007, 1011, 1012, 1016, 1019, 1022, 1053, 1055, 1096, 1117, 1140, 1145, 1172, 1196, 1217, 1221, 1251, 1261, 1267, 1280, 1283, 1306, 1320, 1328, 1438, 1452, 1486, 1493, 1495, 1500, 1502, 1507, 1531, 1532, 1544, 1545, 1591, 1639, 1662, 1666, 1688, 1700, 1714, 1720, 1741, 1753, 1803, 1822, 1862, 1922, 1968, 2016, 2059, 2067, 2128, 2130, 2181, 2257, 2289, 2300, 2324, 2453, 2461, 2463, 2474 | | | | | | | | | | |
| Antimicrobials | | | | | | | | | | |
| 1385ha | 13 y F | | | | A | Ingst | Int-S | 1 | | |
| | | hydroxychloroquine | 1 | 1 | | | | | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | esomeprazole | 3 | 3 | | | | | | |
| | | dindamycin | 4 | 4 | | | | | | |
| [1386ha] | 14 y F | | | | A | Ingst | Int-S | 1 | | |
| | | hydroxychloroquine | 1 | 1 | | | | | | |
| | | ibuprofen | 2 | 2 | | | | | | |
| | | naproxen | 3 | 3 | | | | | | |
| 1387ha | 24 y M | | | | A/C | Ingst + Unk | Int-S | 2 | | |
| | | cobistat/elvitegravir/emtricitabine/tenofovir | 1 | 1 | | | | | | |
| | | ibuprofen | 2 | 2 | | | | | | |
| | | drug, unknown | 3 | 3 | | | | | | |
| | | acetaminophen | 4 | 4 | | | | | acetaminophen (apap) | 58 mcg/mL In Serum @ Unknown |
| 1388 | 30 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | hydroxychloroquine | 1 | 1 | | | | | | |
| 1389h | 38 y M | | | | C | Ingst | Unt-T | 3 | | |
| | | amantadine | 1 | 1 | | | | | | |
| 1390h | 62 y F | | | | A/C | Ingst | AR-D | 2 | | |
| | | sulfamethoxazole/trimethoprim | 1 | 1 | | | | | | |
| 1391h | 63 y F | | | | A | Par | AR-D | 2 | | |
| | | azithromycin | 1 | 1 | | | | | | |
| | | ceftriaxone | 2 | 2 | | | | | | |
| 1392h | 65 y M | | | | U | Ingst | AR-D | 2 | | |
| | | tenofovir | 1 | 1 | | | | | | |
| | | methocarbamol | 2 | 2 | | | | | | |
| See Also case 332, 603, 817, 910, 1077, 1355, 1417, 1700, 1721, 1805 | | | | | | | | | | |
| Antineoplastics | | | | | | | | | | |
| 1393ph | 72 y M | | | | U | Par | AR-D | 2 | | |
| | | fluorouracil | 1 | 1 | | | | | | |
| [1394h] | 75 y F | | | | C | Ingst | Unt-T | 1 | | |
| | | methotrexate | 1 | 1 | | | | | methotrexate | 0.04 µmol/L In Blood (unspecified) @ 5 d (pe) |
| | | methotrexate | 1 | 1 | | | | | methotrexate | 0.05 µmol/L In Blood (unspecified) @ 2 d (pe) |
| | | methotrexate | 1 | 1 | | | | | methotrexate | 0.09 µmol/L In Blood (unspecified) @ Unknown |
| [1395h] | 79 y F | | | | C | Ingst | Unt-T | 1 | | |
| | | methotrexate | 1 | 1 | | | | | methotrexate | 0.04 microU/mL In Blood (unspecified) @ 108 h (pe) |
| | | methotrexate | 1 | 1 | | | | | methotrexate | 0.06 microU/mL In Blood (unspecified) @ 56 h (pe) |
| | | methotrexate | 1 | 1 | | | | | methotrexate | 0.5 mmol/L In Blood (unspecified) @ 18 h (pe) |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|-------------------------------------|--------|------------------------------|----------------|------------|------------|---------------------|--------|-----|----------------------|---|
| Asthma Therapies | | | | | | | | | | |
| 1396h | 34 y F | | | | U | Unk | Int-A | 2 | | |
| | | sympathomimetic | 1 | 1 | | | | | | |
| 1397h | 60 y F | | | | C | Ingst | AR-D | 3 | | |
| | | theophylline | 1 | 1 | | | | | | |
| 1398h | 89 y F | | | | C | Ingst | AR-D | 3 | | |
| | | ephedrine/theophylline | 1 | 1 | | | | | | |
| | | digoxin | 2 | 2 | | | | | digoxin | 9 ng/mL In Blood (unspecified) @ Unknown |
| See Also case 983, 1064, 1571, 1973 | | | | | | | | | | |
| Cardiovascular Drugs | | | | | | | | | | |
| 1399ai | 3 y F | | | | A | Ingst | Unt-G | 1 | | |
| | | verapamil | 1 | 1 | | | | | verapamil | 1551 ng/mL In Blood (unspecified) @ Unknown |
| 1400p | 13 y F | | | | A | Ingst | Int-S | 1 | | |
| | | metoprolol | 1 | 1 | | | | | | |
| | | fluvoxamine | 2 | 2 | | | | | | |
| | | bupropion (extended release) | 3 | 3 | | | | | | |
| | | risperidone | 4 | 4 | | | | | | |
| 1401 | 15 y F | | | | A | Ingst | Int-S | 1 | | |
| | | amlodipine/benazpril | 1 | 1 | | | | | | |
| | | risperidone | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| 1402 | 15 y F | | | | A | Ingst | Int-S | 2 | | |
| | | calcium antagonist | 1 | 1 | | | | | | |
| 1403ph | 17 y F | | | | A/C | Ingst + Aspir + Unk | Int-S | 2 | | |
| | | beta blocker | 1 | 1 | | | | | | |
| | | levetiracetam | 2 | 2 | | | | | | |
| | | aripiprazole | 3 | 3 | | | | | | |
| | | escitaopram | 4 | 4 | | | | | | |
| | | clopidogrel | 5 | 5 | | | | | | |
| | | salicylate | 6 | 6 | | | | | | |
| | | acetaminophen | 7 | 7 | | | | | | |
| | | atorvastatin | 8 | 8 | | | | | | |
| | | marijuana | 9 | 9 | | | | | | |
| 1404p | 17 y F | | | | A | Ingst | Int-S | 2 | | |
| | | propranolol | 1 | 1 | | | | | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| 1405p | 19 y F | | | | A | Ingst | Unt-G | 1 | | |
| | | metoprolol | 1 | 1 | | | | | | |
| | | metformin | 2 | 2 | | | | | | |
| | | omeprazole | 3 | 3 | | | | | | |
| 1406 | 22 y M | | | | A | Ingst | Int-S | 2 | | |
| | | verapamil | 1 | 1 | | | | | | |
| 1407 | 24 y M | | | | A/C | Ingst | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | hydroxyurea | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1408ph | 24 y F | | | | A | Ingst | Int-S | 2 | | |
| | | flecainide | 1 | 1 | | | | | | |
| | | metoprolol | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 192 mg/dL In Serum @ Unknown |
| [1409pha] | 25 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | propranolol | 1 | 1 | | | | | propranolol | 360 ng/mL In Other @ Unknown |
| 1410h | 26 y F | | | | A | Ingst | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | metformin | 2 | 2 | | | | | | |
| | | salicylate | 3 | 3 | | | | | | |
| 1411h | 27 y M | | | | A | Ingst | Int-S | 2 | | |
| | | propranolol | 1 | 1 | | | | | | |
| | | lamotrigine | 2 | 2 | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | |
| | | quetiapine | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| | | marijuana | 6 | 6 | | | | | | |
| | | cocaine | 7 | 7 | | | | | | |
| 1412h | 27 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | metoprolol | 1 | 1 | | | | | | |
| | | acetaminophen | 2 | 2 | | | | | acetaminophen (apap) | 441 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| | | trazodone | 3 | 3 | | | | | | |
| | | pindolol | 4 | 4 | | | | | | |
| | | lisinopril | 5 | 5 | | | | | | |
| | | losartan | 6 | 6 | | | | | | |
| | | mirtazapine | 7 | 7 | | | | | | |
| 1413i | 27 y F | | | | A/C | Ingst | Unk | 3 | | |
| | | diltiazem | 1 | 1 | | | | | | |
| | | digoxin | 2 | 2 | | | | | digoxin | 1.1 ng/mL In Serum @ Unknown |
| 1414ph | 29 y F | | | | A | Ingst | Int-S | 2 | | |
| | | propranolol | 1 | 1 | | | | | | |
| 1415a | 29 y M | | | | A | Ingst | Int-S | 1 | | |
| | | amlodipine | 1 | 1 | | | | | amlodipine | 0.6 mg/L In Blood (unspecified) @ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ③ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|--------------|--------|-----|----------------------|--|
| 1416 | 29 y F | cocaine | 2 | 2 | | | | | benzoyllecognine | 0.4 mg/L In Blood (unspecified) ③ Unknown |
| | | propranolol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 1417h | 30 y M | | | | A/C | Ingst | Int-S | 2 | | |
| | | propranolol | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| | | acetaminophen/ diphenhydramine | 3 | 3 | | | | | acetaminophen (apap) | 75 mcg/mL In Blood (unspecified) ③ Unknown |
| | | levetiracetam | 4 | 4 | | | | | | |
| | | amantadine | 5 | 5 | | | | | | |
| | | escitalopram | 6 | 6 | | | | | | |
| | | methylphenidate | 7 | 7 | | | | | | |
| | | trihexyphenidyl | 8 | 8 | | | | | | |
| | | phenobarbital | 9 | 9 | | | | | | |
| 1418h | 30 y F | beta blocker | 1 | 1 | U | Ingst | Int-S | 1 | | |
| 1419h | 31 y M | | | | A | Ingst | Int-S | 2 | | |
| | | diltiazem | 1 | 1 | | | | | | |
| | | beta blocker | 2 | 2 | | | | | | |
| 1420 | 31 y F | | | | A | Ingst | Int-S | 2 | | |
| | | calcium antagonist | 1 | 1 | | | | | | |
| | | beta blocker | 2 | 2 | | | | | | |
| | | indapamide | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 1421 | 33 y M | | | | U | Ingst | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| 1422h | 33 y F | | | | A | Ingst | Int-S | 2 | | |
| | | verapamil | 1 | 1 | | | | | | |
| 1423h | 34 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | labetalol | 1 | 1 | | | | | | |
| | | amlodipine | 2 | 2 | | | | | | |
| | | acetaminophen/tramadol | 3 | 3 | | | | | | |
| | | clonidine | 4 | 4 | | | | | | |
| | | trazodone | 5 | 5 | | | | | | |
| | | diuretic, unknown | 6 | 6 | | | | | | |
| | | levothyroxine | 7 | 7 | | | | | | |
| | | atorvastatin | 8 | 8 | | | | | | |
| 1424a | 35 y F | | | | A | Ingst | Int-S | 1 | | |
| | | metoprolol | 1 | 1 | | | | | | |
| | | amlodipine | 2 | 2 | | | | | | |
| | | venlafaxine | 3 | 3 | | | | | | |
| | | amphetamine/ dextroamphetamine | 4 | 4 | | | | | | |
| | | zolpidem | 5 | 5 | | | | | | |
| | | ethanol | 6 | 6 | | | | | | |
| 1425ph | 36 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | propranolol | 1 | 1 | | | | | | |
| | | pregabalin | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 78 mcg/mL In Blood (unspecified) ③ Unknown |
| 1426pha | 36 y F | metoprolol (extended release) | 1 | 1 | U | Ingst | Int-S | 1 | metoprolol | 320 ng/mL In Blood (unspecified) ③ Autopsy |
| 1427pha | 36 y F | | | | U | Unk | Unk | 1 | | |
| | | flecainide | 1 | 1 | | | | | flecainide | 3.2 mcg/mL In Blood (unspecified) ③ Autopsy |
| | | methylphenidate | 2 | 2 | | | | | methylphenidate | 150 ng/mL In Blood (unspecified) ③ Autopsy |
| | | amphetamine | 3 | 3 | | | | | amphetamine | 68 ng/mL In Blood (unspecified) ③ Autopsy |
| | | clonazepam | 4 | 4 | | | | | 7-aminoclonazepam | 15 ng/mL In Blood (unspecified) ③ Autopsy |
| 1428 | 37 y M | | | | A | Ingst | Int-S | 2 | | |
| | | verapamil | 1 | 1 | | | | | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 1429h | 37 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | metoprolol (extended release) | 2 | 2 | | | | | | |
| | | hydralazine | 3 | 3 | | | | | | |
| | | lisinopril | 4 | 4 | | | | | | |
| | | metformin | 5 | 5 | | | | | | |
| 1430 | 38 y F | calcium antagonist | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1431pha | 38 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | verapamil | 1 | 1 | | | | | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| | | duloxetine | 4 | 4 | | | | | | |
| | | clonazepam | 5 | 5 | | | | | | |
| 1432ha | 38 y F | | | | A/C | Ingst + Derm | Int-S | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 1433i | 38 y F | metoprolol | 1 | 1 | U | Unk | Int-S | 1 | metoprolol | 3.9 mg/L In Blood (unspecified) @ 5 m (pe) |
| | | amlodipine | 2 | 2 | | | | | amlodipine | 0.17 mg/L In Blood (unspecified) @ 5 m (pe) |
| | | alprazolam | 3 | 3 | | | | | alprazolam | 0.046 mg/L In Blood (unspecified) @ 5 m (pe) |
| | | paint | 4 | 4 | | | | | | |
| | | verapamil | 1 | 1 | | | | | | |
| 1434h | 40 y M | trazodone | 2 | 2 | A | Ingst | Int-S | 2 | | |
| | | oxycodone | 3 | 3 | | | | | | |
| | | nifedipine | 1 | 1 | | | | | | |
| 1435p | 40 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | verapamil | 1 | 1 | | | | | | |
| 1436h | 40 y M | bupropion (extended release) | 2 | 2 | A | Ingst | Int-S | 2 | | |
| | | diltiazem (extended release) | 1 | 1 | | | | | | |
| 1437h | 41 y F | | | | A | Ingst | Int-S | 1 | | |
| | | diltiazem | 1 | 1 | | | | | | |
| | | prazosin | 2 | 2 | | | | | | |
| 1438ha | 41 y M | zolpidem | 3 | 3 | A | Ingst | Int-S | 2 | | |
| | | clonidine | 1 | 1 | | | | | clonidine | 11 ng/mL In Blood (unspecified) @ Autopsy |
| | | methylphenidate | 2 | 2 | | | | | methylphenidate | 6.5 ng/mL In Blood (unspecified) @ Autopsy |
| 1439h | 41 y M | diphenhydramine | 3 | 3 | A/C | Ingst | Int-S | 1 | diphenhydramine | 220 ng/mL In Blood (unspecified) @ Autopsy |
| | | amlodipine | 1 | 1 | | | | | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 1440h | 41 y M | angiotensin converting enzyme inhibitor | 3 | 3 | A/C | Ingst + Par | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | carvedilol | 2 | 2 | | | | | | |
| 1441ha | 41 y F | citalopram | 3 | 3 | A/C | Ingst + Unk | Int-S | 1 | | |
| | | lisinopril | 4 | 4 | | | | | | |
| | | insulin | 5 | 5 | | | | | | |
| | | diltiazem | 1 | 1 | | | | | | |
| | | alprazolam | 2 | 2 | | | | | alprazolam | 190 mcg/L In Blood (unspecified) @ 2 h (pe) |
| 1442h | 41 y M | ethanol | 3 | 3 | A | Ingst | Int-S | 2 | ethanol | 0.095 g/dL In Blood (unspecified) @ 2 h (pe) |
| | | verapamil (extended release) | 1 | 1 | | | | | | |
| | | lisinopril | 2 | 2 | | | | | | |
| | | dexlansoprazole | 3 | 3 | | | | | | |
| | | quetiapine | 4 | 4 | | | | | | |
| | | oxycodone | 5 | 5 | | | | | | |
| | | hydrochlorothiazide/triamterene | 6 | 6 | | | | | | |
| 1443 | 43 y F | | | | A/C | Ingst | Int-S | 1 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | losartan | 2 | 2 | | | | | | |
| 1444h | 43 y F | metoprolol | 3 | 3 | A/C | Ingst + Inhal | Int-S | 2 | | |
| | | clonidine | 1 | 1 | | | | | | |
| | | topiramate | 2 | 2 | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | ethanol | 0.056 g/dL In Blood (unspecified) @ 1 h (pe) |
| | | aripiprazole | 5 | 5 | | | | | | |
| 1445ha | 43 y F | marijuana | 6 | 6 | A/C | Ingst | Int-S | 1 | | |
| | | verapamil | 1 | 1 | | | | | verapamil | 0.28 mg/L In Blood (unspecified) @ 90 m (pe) |
| 1446h | 43 y F | acetaminophen | 2 | 2 | C | Ingst | Int-S | 1 | acetaminophen (apap) | 21 mcg/mL In Blood (unspecified) @ 90 m (pe) |
| | | atenolol | 1 | 1 | | | | | | |
| 1447pa | 44 y F | ropinerole | 2 | 2 | A | Ingst | Int-S | 1 | | |
| | | venlafaxine | 3 | 3 | | | | | | |
| | | amitriptyline | 4 | 4 | | | | | | |
| | | flecainide | 1 | 1 | | | | | flecainide | 5 mcg/mL In Blood (unspecified) @ Unknown |
| 1448h | 44 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | propranolol (extended release) | 1 | 1 | | | | | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | quetiapine | 3 | 3 | | | | | | |
| | | fluoxetine | 4 | 4 | | | | | | |
| clonazepam | 5 | 5 | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|-------------|--------|-----|---------------|--|
| 1449ha | 44 y F | amlodipine | 1 | 1 | U | Ingst | Int-S | 1 | amlodipine | 310 ng/mL In Blood (unspecified) @ Unknown |
| | | metoprolol | 2 | 2 | | | | | metoprolol | 2000 ng/mL In Blood (unspecified) @ Unknown |
| 1450 | 44 y M | diltiazem | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| 1451ph | 44 y F | labetalol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1452ai | 44 y F | verapamil | 1 | 1 | U | Ingst + Unk | Int-S | 1 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | lurasidone | 3 | 3 | | | | | | |
| | | sertraline | 4 | 4 | | | | | | |
| | | diphenhydramine | 5 | 5 | | | | | | |
| | | tramadol | 6 | 6 | | | | | | |
| | | zolpidem | 7 | 7 | | | | | | |
| 1453pha | 46 y M | verapamil | 1 | 1 | A | Ingst | Int-S | 1 | verapamil | 5300 ng/mL In Whole Blood @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 0.179 % In Whole Blood @ Autopsy |
| 1454h | 46 y M | diltiazem | 1 | 1 | A/C | Ingst | Unt-T | 1 | | |
| 1455h | 46 y M | diltiazem | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | atenolol | 2 | 2 | | | | | | |
| | | minoxidil | 3 | 3 | | | | | | |
| 1456ha | 47 y M | amlodipine | 1 | 1 | A | Ingst | Int-S | 2 | amlodipine | 0.038 mg/L In Blood (unspecified) @ Unknown |
| | | mirtazapine | 2 | 2 | | | | | mirtazapine | 0.01 mg/L In Blood (unspecified) @ Unknown |
| 1457ph | 47 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | diltiazem | 2 | 2 | | | | | | |
| | | ranolazine | 3 | 3 | | | | | | |
| | | duloxetine | 4 | 4 | | | | | | |
| | | pregabalin | 5 | 5 | | | | | | |
| | | ethanol | 6 | 6 | | | | | | |
| 1458pha | 47 y M | diltiazem | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | amitriptyline | 2 | 2 | | | | | nortriptyline | 1200 ng/mL In Blood (unspecified) @ Unknown |
| | | amitriptyline | 2 | 2 | | | | | amitriptyline | 960 ng/mL In Blood (unspecified) @ Unknown |
| 1459ha | 48 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | valproic acid | 2 | 1 | | | | | valproic acid | 104.2 mcg/mL In Blood (unspecified) @ Unknown |
| | | bupirone | 3 | 2 | | | | | | |
| | | duloxetine | 4 | 3 | | | | | | |
| | | lisinopril | 5 | 4 | | | | | | |
| 1460pha | 48 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 1 | amlodipine | 84 ng/mL In Blood (unspecified) @ Unknown |
| | | beta blocker | 2 | 2 | | | | | metoprolol | 2000 ng/mL In Blood (unspecified) @ Unknown |
| | | phentermine | 3 | 3 | | | | | phentermine | 59 ng/mL In Blood (unspecified) @ Unknown |
| | | tizanidine | 4 | 4 | | | | | | |
| | | prednisone | 5 | 5 | | | | | | |
| | | sertraline | 6 | 6 | | | | | | |
| | | metformin | 7 | 7 | | | | | | |
| 1461h | 48 y F | diltiazem (extended release) | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| 1462h | 48 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | hydrochlorothiazide | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 231 mg/dL In Blood (unspecified) @ Unknown |
| | | levetiracetam | 4 | 4 | | | | | levetiracetam | 94 mcg/mL In Blood (unspecified) @ Unknown |
| 1463 | 48 y F | metoprolol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | lamotrigine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 390 mg/dL In Serum @ Unknown |
| 1464h | 48 y M | verapamil | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1465h | 49 y M | verapamil | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | atenolol | 2 | 2 | | | | | | |
| | | losartan | 3 | 3 | | | | | | |
| | | cyclobenzaprine | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| 1466h | 49 y M | | | | A/C | Ingst | Int-S | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|-------------------------------------|----------------|------------|------------|-------|--------|-----|-------------------|---|--------------|--|
| [1467ha] | 49 y M | labetalol | 1 | 1 | A/C | Ingst | Int-S | 1 | ethanol | 196 mg/dL In Blood (unspecified) ③ Unknown | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| | | verapamil (extended release) | 1 | 1 | | | | | | | verapamil | 30.8 mg/kg In Brain ③ Autopsy |
| | | verapamil (extended release) | 1 | 1 | | | | | | | norverapamil | 4.5 mg/L In Blood (unspecified) ③ Autopsy |
| 1468h | 49 y M | verapamil (extended release) | 1 | 1 | A | Ingst | Int-S | 2 | verapamil | 51.2 mg/L In Blood (unspecified) ③ Autopsy | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| | | carvedilol | 2 | 2 | | | | | | | | |
| | | metformin | 3 | 3 | | | | | | | | |
| | | sitagliptin | 4 | 4 | | | | | | | | |
| | | clopidogrel | 5 | 5 | | | | | | | | |
| | | gabapentin | 6 | 6 | | | | | | | | |
| | | vortioxetine | 7 | 7 | | | | | | | | |
| | | benzodiazepine | 8 | 8 | | | | | | | | |
| | | salicylate | 9 | 9 | | | | | | | | |
| 1469ha | 49 y M | acetaminophen | 10 | 10 | U | Ingst | Int-S | 1 | | | | |
| | | verapamil (extended release) | 1 | 1 | | | | | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| 1470 | 49 y M | | | | A/C | Ingst | Int-S | 1 | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| 1471h | 50 y F | ethanol | 2 | 2 | A/C | Ingst | Int-S | 3 | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| 1472ha | 50 y F | gabapentin | 2 | 2 | A/C | Ingst | Int-S | 1 | diltiazem | 0.34 mg/L In Blood (unspecified) @ 2 m (pe) | | |
| | | atorvastatin | 3 | 3 | | | | | | | | |
| | | diltiazem (extended release) | 1 | 1 | | | | | | | | |
| 1473ha | 50 y M | lisinopril | 2 | 2 | U | Ingst | Int-S | 1 | clonidine | 28 ng/mL In Blood (unspecified) ③ Autopsy | | |
| | | spironolactone | 3 | 3 | | | | | | | | |
| | | clonidine | 1 | 1 | | | | | | | | |
| 1474h | 50 y F | metformin | 2 | 2 | A/C | Ingst | Int-S | 2 | lorazepam | 5.4 ng/mL In Blood (unspecified) ③ Autopsy | | |
| | | lorazepam | 3 | 3 | | | | | clonazepam | 110 ng/mL In Blood (unspecified) ③ Autopsy | | |
| | | donazepam | 4 | 4 | | | | | 7-aminoclonazepam | 81 ng/mL In Blood (unspecified) ③ Autopsy | | |
| | | clonazepam | 4 | 4 | | | | | paroxetine | 11 ng/mL In Blood (unspecified) ③ Autopsy | | |
| | | paroxetine | 5 | 5 | | | | | ethanol | 76 mg/dL In Blood (unspecified) ③ Autopsy | | |
| | | ethanol | 6 | 6 | | | | | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| 1475ha | 50 y F | verapamil | 1 | 1 | A/C | Ingst | Int-S | 1 | verapamil | 240 ng/mL In Blood (unspecified) ③ Autopsy | | |
| | | metformin | 2 | 2 | | | | | metformin | 210 mcg/mL In Blood (unspecified) ③ Autopsy | | |
| | | pregabalin | 3 | 3 | | | | | | | | |
| | | hydrochlorothiazide/ triamterene | 4 | 4 | | | | | | | | |
| | | losartan | 5 | 5 | | | | | | | | |
| 1476h | 51 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| | | diphenhydramine/ibuprofen | 3 | 3 | | | | | | | | |
| 1477ph | 51 y F | | | | A/C | Ingst | Int-S | 2 | | | | |
| 1478h | 51 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-U | 1 | | | | |
| | | carvedilol | 1 | 1 | | | | | | | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | | | |
| | | atorvastatin | 4 | 4 | | | | | | | | |
| | | lisinopril | 5 | 5 | | | | | | | | |
| lorazepam | 6 | 6 | | | | | | | | | | |
| 1479a | 51 y F | atenolol | 1 | 1 | A | Ingst | Int-S | 1 | atenolol | 7329 ng/mL In Blood (unspecified) ③ Unknown | | |
| | | amlodipine | 2 | 2 | | | | | amlodipine | 382 ng/mL In Blood (unspecified) ③ Unknown | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 163 mg/dL In Blood (unspecified) ③ Unknown | | |
| 1480ph | 51 y F | | | | A/C | Ingst | Unk | 2 | | | | |
| 1481h | 51 y F | propranolol | 1 | 1 | U | Ingst | Unk | 1 | | | | |
| | | atenolol | 1 | 1 | | | | | atenolol | 26000 ng/mL In Blood (unspecified) ③ Unknown | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|-------|--------|-----|----------------------|---|
| | | atenolol | 1 | 1 | | | | | amlodipine | 830 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | amlodipine | 2 | 2 | | | | | | |
| | | dextromethorphan/ guaifenesen | 3 | 3 | | | | | | |
| [1482ph] | 52 y M | dopamine | 1 | 1 | A | Par | Unt-T | 1 | | |
| 1483h | 52 y M | verapamil | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | atenolol | 2 | 2 | | | | | | |
| | | fenofibrate | 3 | 3 | | | | | | |
| 1484 | 52 y M | carvedilol | 1 | 1 | A | Ingst | Unt-T | 2 | | |
| | | diltiazem | 2 | 2 | | | | | | |
| | | labetalol | 3 | 3 | | | | | | |
| | | furosemide | 4 | 4 | | | | | | |
| | | lisinopril | 5 | 5 | | | | | | |
| | | apixaban | 6 | 6 | | | | | | |
| 1485 | 52 y M | beta blocker | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | lurasidone | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | | |
| | | amphetamine/ dextroamphetamine | 4 | 4 | | | | | | |
| 1486 | 52 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | metoprolol | 2 | 2 | | | | | | |
| | | hydroxyzine | 3 | 3 | | | | | | |
| | | metaxalone | 4 | 4 | | | | | | |
| | | mirtazapine | 5 | 5 | | | | | | |
| 1487ph | 52 y M | propranolol | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1488ha | 52 y M | verapamil | 1 | 1 | A/C | Ingst | Int-S | 1 | verapamil | 5443 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | alprazolam | 2 | 2 | | | | | alprazolam | 50 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | oxycodone | 3 | 3 | | | | | oxycodone | 47 ng/mL In Blood (unspecified) ⓐ Autopsy |
| 1489ha | 53 y F | metoprolol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | hydrocodone | 3 | 3 | | | | | | |
| | | acetaminophen | 4 | 4 | | | | | acetaminophen (apap) | 144 mcg/mL In Blood (unspecified) ⓐ Unknown |
| 1490ha | 53 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 1 | amlodipine | 0.15 mg/L In Blood (unspecified) @ 30 m (pe) |
| | | metoprolol (extended release) | 2 | 2 | | | | | metoprolol | 4.3 mg/L In Blood (unspecified) @ 30 m (pe) |
| | | ethanol | 3 | 3 | | | | | ethanol | 180 mg/dL In Blood (unspecified) @ 30 m (pe) |
| | | ethanol | 3 | 3 | | | | | ethanol | 70 mg/dL In Blood (unspecified) ⓐ Autopsy |
| | | lisinopril | 4 | 4 | | | | | | |
| | | fluoxetine | 5 | 5 | | | | | norfluoxetine | 0.23 mg/L In Blood (unspecified) @ 30 m (pe) |
| | | fluoxetine | 5 | 5 | | | | | fluoxetine | 0.35 mg/L In Blood (unspecified) @ 30 m (pe) |
| | | warfarin | 6 | 6 | | | | | | |
| 1491h | 53 y F | verapamil (extended release) | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1492 | 53 y M | atenolol/chlorthalidone | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | |
| 1493pha | 53 y F | metoprolol | 1 | 1 | A | Ingst | Int-S | 1 | metoprolol | 44000 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 112 mg/dL In Blood (unspecified) ⓐ Unknown |
| | | diphenhydramine | 3 | 3 | | | | | diphenhydramine | 2200 ng/mL In Blood (unspecified) ⓐ Unknown |
| 1494a | 53 y M | metoprolol | 1 | 1 | A | Ingst | Int-S | 1 | metoprolol | 24000 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | amlodipine | 2 | 2 | | | | | amlodipine | 580 ng/mL In Blood (unspecified) ⓐ Unknown |
| 1495ha | 54 y M | nifedipine (extended release) | 1 | 1 | A/C | Ingst | Int-S | 1 | nifedipine | 100 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | lisinopril | 2 | 2 | | | | | | |
| | | risperidone | 3 | 3 | | | | | risperidone | 290 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | hydroxyzine | 4 | 4 | | | | | hydroxyzine | 40 ng/mL In Blood (unspecified) ⓐ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|---------------------------------------|-------------------|---|------------|-------------|--------|-----|------------|---|-----------------|---|
| 1496hi | 54 y M | zolpidem | 5 | 5 | A/C | Ingst | Int-S | 1 | | | | |
| | | simvastatin | 6 | 6 | | | | | | | | |
| | | dexlansoprazole | 7 | 7 | | | | | | | | |
| 1497h | 54 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| | | lisinopril | 2 | 2 | | | | | | | | |
| | | acetaminophen/ butalbital/caffeine | 3 | 3 | | | | | | | | |
| | | sertraline | 4 | 4 | | | | | | | | |
| 1498ha | 54 y F | amlodipine | 1 | 1 | A | Ingst + Par | Int-S | 1 | amlodipine | 120 ng/mL In Blood (unspecified) ⓐ Autopsy | | |
| | | acetaminophen/codeine | 2 | 2 | | | | | | | codeine | 355.8 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | insulin | 3 | 3 | | | | | | | | |
| | | diltiazem | 1 | 1 | | | | | | | | |
| 1499i | 55 y M | lisinopril | 2 | 2 | A/C | Ingst | Unt-T | 2 | | | | |
| | | | | | | | | | | | | |
| 1500ha | 55 y F | amlodipine | 1 | 1 | A/C | Ingst + Unk | Unt-G | 1 | | | | |
| | | atenolol | 2 | 2 | | | | | | | | |
| | | losartan | 3 | 3 | | | | | | | | |
| | | methamphetamine | 4 | 4 | | | | | | | methamphetamine | 0.025 mg/L In Blood (unspecified) ⓐ Unknown |
| | | cyclobenzaprine | 5 | 5 | | | | | | | | |
| 1501h | 55 y F | diphenhydramine | 6 | 6 | A | Ingst | Int-S | 1 | | | | |
| | | hydrochlorothiazide | 7 | 7 | | | | | | | | |
| | | diltiazem (extended release) | 1 | 1 | | | | | | | | |
| | | warfarin | 2 | 2 | | | | | | | | |
| 1502ha | 55 y M | levetiracetam | 3 | 3 | C | Ingst | Int-S | 1 | | | | |
| | | amlodipine | 1 | 1 | | | | | | | clonidine | 40 ng/mL In Whole Blood ⓐ Unknown |
| | | clonidine | 2 | 2 | | | | | | | | |
| hydroxyzine | 3 | 3 | | | | | | | | | | |
| 1503ai | 55 y F | zaleplon | 4 | 4 | U | Unk | Int-S | 1 | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| | | atenolol | 2 | 2 | | | | | | | | |
| | | losartan | 3 | 3 | | | | | | | | |
| 1504ha | 56 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 1 | | | | |
| | | lisinopril | 2 | 2 | | | | | | | | |
| 1505a | 56 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| | | diltiazem | 1 | 1 | | | | | | | | |
| | | carvedilol | 2 | 2 | | | | | | | | |
| | | warfarin | 3 | 3 | | | | | | | | |
| | | rivaroxaban | 4 | 4 | | | | | | | | |
| | | lisinopril | 5 | 5 | | | | | | | ethanol | 125 mg/dL In Blood (unspecified) ⓐ Unknown |
| ethanol | 6 | 6 | carboxyhemoglobin | 2.9 % In Blood (unspecified) ⓐ Unknown | | | | | | | | |
| 1506ph | 56 y M | carbon monoxide | 7 | 7 | A | Ingst | Int-S | 2 | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| | | baclofen | 2 | 2 | | | | | | | | |
| 1507a | 56 y F | nonsteroidal antiinflammatory drug | 3 | 3 | A/C | Ingst | Int-S | 1 | amlodipine | 44 ng/mL In Blood (unspecified) ⓐ Autopsy | | |
| | | amlodipine/benazpril | 1 | 1 | | | | | | | zolpidem | 0.91 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | zolpidem | 2 | 2 | | | | | | | ethanol | 0.18 g/dL In Blood (unspecified) ⓐ Autopsy |
| 1508 | 56 y F | ethanol | 4 | 4 | A/C | Ingst | Int-S | 2 | | | | |
| | | ethanol | 4 | 4 | | | | | | | ethanol | 0.229 g/dL In Blood (unspecified) ⓐ Unknown |
| | | hydroxyzine | 5 | 5 | | | | | | | | |
| | | buspirone | 6 | 6 | | | | | | | | |
| | | gabapentin | 7 | 7 | | | | | | | | |
| | | propranolol | 1 | 1 | | | | | | | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | | | |
| lorazepam | 3 | 3 | | | | | | | | | | |
| 1509h | 56 y F | amlodipine | 1 | 1 | A | Ingst | Int-S | 2 | | | | |
| 1510h | 56 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| | | verapamil | 1 | 1 | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|-------------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|--|------------------|--|
| 1511h | 56 y F | donazepam | 2 | 2 | A/C | Ingst | Int-S | 1 | ethanol | 293 mg/dL In Serum @ Unknown | | |
| | | eszopiclone | 3 | 3 | | | | | | | | |
| | | ethanol | 4 | 4 | | | | | | | | |
| 1512 | 56 y M | diltiazem (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| 1513h | 57 y M | verapamil | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| 1514ph | 57 y F | calcium antagonist | 1 | 1 | U | Ingst | Int-S | 3 | | | | |
| | | diltiazem | 1 | 1 | | | | | | | | |
| | | risperidone | 2 | 2 | | | | | | | | |
| 1515h | 57 y M | valbenazine | 3 | 3 | A/C | Ingst | Int-S | 2 | | | | |
| | | metoprolol | 1 | 1 | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 1516i | 57 y M | ethanol | | | A | Ingst | Int-S | 2 | | 270 mg/dL In Blood (unspecified) @ Unknown | | |
| | | carvedilol | 1 | 1 | | | | | | | | |
| | | diltiazem | 2 | 2 | | | | | | | | |
| 1517ha | 58 y F | drug, unknown | 3 | 3 | A/C | Ingst | Int-S | 2 | | | | |
| | | metoprolol | 1 | 1 | | | | | | | | |
| | | metformin | 2 | 2 | | | | | | | | |
| 1518h | 58 y F | apixaban | 3 | 3 | A/C | Ingst | Int-S | 2 | | | | |
| | | ethanol | 4 | 4 | | | | | | | | |
| | | drug, unknown | 5 | 5 | | | | | | | | |
| 1519ph | 58 y M | metoprolol (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | diltiazem | 1200 ng/mL In Blood (unspecified) @ Autopsy | | |
| | | bupropion | 2 | 2 | | | | | | | hydroxybupropion | 550 ng/mL In Blood (unspecified) @ Autopsy |
| | | bupropion | 2 | 2 | | | | | | | bupropion | 7800 ng/mL In Blood (unspecified) @ Autopsy |
| 1520h | 58 y F | verapamil | 1 | 1 | A/C | Ingst | Int-S | 1 | | | | |
| 1521 | 58 y M | verapamil | 1 | 1 | A | Ingst | Int-S | 1 | | | | |
| | | atenolol | 2 | 2 | | | | | | | | |
| | | tamsulosin | 3 | 3 | | | | | | | | |
| | | sildenafil | 4 | 4 | | | | | | | | |
| | | ethanol | 5 | 5 | | | | | | | | |
| 1522ph | 58 y F | amlodipine/olmesartan | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | | | |
| 1523ha | 59 y M | acetaminophen/hydrocodone | 2 | 2 | A/C | Ingst | Int-S | 1 | acetaminophen (apap) | 95 mcg/mL In Serum @ 9 h (pe) | | |
| | | metoprolol | 1 | 1 | | | | | | | metoprolol | 5500 ng/mL In Blood (unspecified) @ Unknown |
| 1524ha | 59 y F | metoprolol | 1 | 1 | A | Ingst | Int-S | 1 | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | |
| | | losartan | 2 | 2 | | | | | | | | |
| 1525h | 59 y M | ethanol | 3 | 3 | A/C | Ingst | Unk | 1 | | | | |
| | | propranolol | 1 | 1 | | | | | | | | |
| | | | | | | | | | | | | |
| 1526a | 59 y F | propranolol | 1 | 1 | A | Ingst | Int-M | 1 | verapamil | 310 ng/mL In Blood (unspecified) @ Unknown | | |
| | | verapamil | 1 | 1 | | | | | | | | |
| 1527pha | 59 y M | carvedilol | 1 | 1 | A | Ingst | Int-S | 1 | | | | |
| 1528h | 59 y M | propranolol | 1 | 1 | A | Ingst | Int-S | 2 | | | | |
| 1529ha | 59 y F | propranolol | 1 | 1 | U | Ingst | Int-S | 1 | | | | |
| | | diltiazem | 1 | 1 | | | | | | | | |
| 1530h | 59 y F | diltiazem | 1 | 1 | A/C | Ingst | Int-S | 1 | | | | |
| 1531ph | 59 y M | verapamil | 1 | 1 | A | Ingst | Int-S | 2 | | | | |
| | | metoprolol | 1 | 1 | | | | | | | | |
| | | methimazole | 2 | 2 | | | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | | | |
| 1532ha | 60 y F | diphenhydramine | 4 | 4 | U | Ingst | Int-S | 1 | | | | |
| | | propranolol | 1 | 1 | | | | | | | | |
| | | alpha-adrenergic blocker | 2 | 2 | | | | | | | | |
| | | primidone | 3 | 3 | | | | | | | | |
| | | antipsychotic (atypical) | 4 | 4 | | | | | | | | |
| | | duloxetine | 5 | 5 | | | | | | | | |
| | | lamotrigine | 6 | 6 | | | | | | | | |
| antihistamine | 7 | 7 | | | | | | | | | | |
| 1533h | 60 y F | antihistamine | 7 | 7 | A/C | Ingst + Par | Int-S | 1 | | | | |
| | | verapamil | 1 | 1 | | | | | | | | |
| | | lipid emulsion | 2 | 2 | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|-------|--------|-----|------------------------------------|--|
| 1534ha | 60 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | lisinopril | 2 | 2 | | | | | | |
| | | hydralazine | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | ethanol | 79 mg/dL In Serum @ 5 m (pe) |
| 1535 | 61 y M | atenolol | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | amlodipine | 2 | 2 | | | | | | |
| | | colchicine | 3 | 3 | | | | | | |
| | | alopurinol | 4 | 4 | | | | | | |
| | | apixaban | 5 | 5 | | | | | | |
| | | hydrochlorothiazide | 6 | 6 | | | | | | |
| | | sertraline | 7 | 7 | | | | | | |
| | | salicylate | 8 | 8 | | | | | salicylate | 14.3 mg/dL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 9 | 9 | | | | | acetaminophen (apap) | 300 mcg/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 10 | 10 | | | | | ethanol | 178 mg/dL In Blood (unspecified) @ Unknown |
| 1536h | 61 y F | amlodipine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | escitalopram | 2 | 2 | | | | | | |
| 1537h | 61 y M | metoprolol | 1 | 1 | A/C | Ingst | Unk | 2 | | |
| | | apixaban | 2 | 2 | | | | | | |
| | | fluoxetine | 3 | 3 | | | | | | |
| | | diuretics, potassium sparing | 4 | 4 | | | | | | |
| | | losartan | 5 | 5 | | | | | | |
| 1538 | 61 y F | digoxin | 1 | 1 | C | Ingst | Int-S | 2 | | |
| 1539h | 61 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 1540pha | 61 y M | amlodipine | 1 | 1 | A | Ingst | Int-S | 1 | amlodipine | 1200 ng/mL In Blood (unspecified) @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 133 mg/dL In Blood (unspecified) @ Unknown |
| | | alopurinol | 3 | 3 | | | | | | |
| 1541ha | 61 y M | verapamil | 1 | 1 | U | Ingst | Int-S | 1 | verapamil | 1.8 mg/L In Serum @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 0.13 % In Whole Blood @ Unknown |
| | | ethanol | 2 | 2 | | | | | ethanol | 197 mg/dL In Blood (unspecified) @ Unknown |
| 1542ai | 61 y M | verapamil | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1543h | 62 y F | flecainide | 1 | 1 | A/C | Ingst | Unt-T | 2 | | |
| | | sertraline | 2 | 2 | | | | | | |
| 1544ha | 62 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 104 mg/dL In Blood (unspecified) @ 2 d (pe) |
| | | diazepam | 3 | 3 | | | | | | |
| | | chlorpheniramine | 4 | 4 | | | | | chlorpheniramine | 22 ng/mL In Blood (unspecified) @ 2 d (pe) |
| | | chlorpheniramine | 4 | 4 | | | | | meta-chlorophenylpiperazine (mcpp) | 33 ng/mL In Blood (unspecified) @ 2 d (pe) |
| | | trazodone | 5 | 5 | | | | | trazodone | 1.1 mcg/mL In Blood (unspecified) @ 2 d (pe) |
| | | lisinopril | 6 | 6 | | | | | | |
| 1545h | 62 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| | | hydroxyzine | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | | |
| | | lisinopril | 4 | 4 | | | | | | |
| | | gabapentin | 5 | 5 | | | | | | |
| | | trazodone | 6 | 6 | | | | | | |
| | | ibuprofen | 7 | 7 | | | | | | |
| | | prednisone | 8 | 8 | | | | | | |
| 1546a | 63 y M | metoprolol | 1 | 1 | A | Ingst | Int-S | 1 | metoprolol | 210 ng/mL In Blood (unspecified) @ Unknown |
| | | quetiapine | 2 | 2 | | | | | | |
| | | medizine | 3 | 3 | | | | | | |
| 1547 | 64 y F | amiodarone | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 1548h | 64 y M | flecainide | 1 | 1 | U | Ingst | Unk | 2 | flecainide | 3 mcg/mL In Blood (unspecified) @ 1 h (pe) |
| [1549ha] | 65 y F | | | | A | Ingst | Int-S | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|-------|--------|-----|------------|--|
| 1550 | 65 y M | ranolazine | 1 | 1 | C | Ingst | Int-S | 2 | ranolazine | 50 mg/L In Blood (unspecified) @ Unknown |
| | | carvedilol | 1 | 1 | | | | | | |
| | | amlodipine | 2 | 2 | | | | | | |
| | | ibuprofen | 3 | 3 | | | | | | |
| | | cyclobenzaprine | 4 | 4 | | | | | | |
| | | clonidine | 5 | 5 | | | | | | |
| | | metformin | 6 | 6 | | | | | | |
| | | lisinopril | 7 | 7 | | | | | | |
| 1551 | 65 y F | benztropine | 8 | 8 | A | Ingst | Int-S | 2 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| 1552ha | 65 y F | amlodipine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | lisinopril | 3 | 3 | | | | | | |
| | | atorvastatin | 4 | 4 | | | | | | |
| | | hydrochlorothiazide | 5 | 5 | | | | | | |
| | | levothyroxine | 6 | 6 | | | | | | |
| 1553 | 65 y M | beta blocker | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | zolpidem | 2 | 2 | | | | | | |
| 1554h | 66 y M | digoxin | 1 | 1 | A/C | Ingst | AR-D | 3 | | |
| 1555h | 66 y M | diltiazem | 1 | 1 | A | Ingst | Unt-T | 2 | | |
| 1556 | 66 y M | amlodipine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1557ha | 66 y F | verapamil (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | verapamil | 9500 ng/mL In Blood (unspecified) @ Autopsy |
| | | warfarin | 2 | 2 | | | | | | |
| 1558h | 66 y F | metoprolol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | nifedipine | 2 | 2 | | | | | | |
| 1559a | 67 y F | verapamil (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | verapamil | 40 ng/mL In Blood (unspecified) @ Autopsy |
| | | mirtazapine | 2 | 2 | | | | | | |
| | | zolpidem | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | | |
| 1560h | 67 y M | carvedilol | 1 | 1 | U | Ingst | Int-S | 3 | | |
| | | clopidogrel | 2 | 2 | | | | | | |
| | | furosemide | 3 | 3 | | | | | | |
| [1561ha] | 67 y M | diltiazem (extended release) | 1 | 1 | A/C | Ingst | Int-S | 1 | diltiazem | 900 ng/mL In Blood (unspecified) @ Unknown |
| 1562h | 67 y M | | | | A/C | Ingst | Int-S | 2 | | |
| | | metoprolol | 1 | 1 | | | | | | |
| | | amlodipine | 2 | 2 | | | | | | |
| | | nortriptyline | 3 | 3 | | | | | | |
| | | baclofen | 4 | 4 | | | | | | |
| | | venlafaxine (extended release) | 5 | 5 | | | | | | |
| | | acetaminophen/hydrocodone | 6 | 6 | | | | | | |
| | | cleanser (anionic/nonionic) | 7 | 7 | | | | | | |
| | | ethanol | 8 | 8 | | | | | | |
| atorvastatin | 9 | 9 | | | | | | | | |
| 1563h | 67 y F | calcium antagonist | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| | | clozapine | 2 | 2 | | | | | | |
| | | losartan | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| | | fluoxetine | 5 | 5 | | | | | | |
| 1564a | 67 y M | nifedipine (extended release) | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1565h | 67 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1566h | 67 y M | amlodipine | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | clopidogrel | 3 | 3 | | | | | | |
| | | pravastatin | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| 1567h | 68 y M | | | | A/C | Ingst | Int-S | 1 | | |
| | | amlodipine/olmesartan | 1 | 1 | | | | | | |
| 1568h | 68 y F | lorazepam | 2 | 2 | A | Ingst | Int-S | 2 | | |
| | | nifedipine | 1 | 1 | | | | | | |
| 1569h | 68 y M | ethanol | 2 | 2 | A | Ingst | Int-S | 2 | ethanol | 149 mg/dL In Blood (unspecified) @ 30 m (pe) |
| | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1570h | 68 y F | metoprolol | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | | 1571a | 69 y F | donidine | 1 | 1 | A/C | Ingst | Int-S | 2 | | | citalopram | 2 | 2 | donazepam | 3 | 3 | flecainide | 1 | 1 | 1572 | 69 y F | salicylate | 2 | 2 | A/C | Ingst | Int-S | 2 | | | donazepam | 3 | 3 | montelukast | 4 | 4 | melatonin | 5 | 5 | amlodipine | 1 | 1 | 1573ha | 69 y M | fluoxetine | 2 | 2 | A | Ingst | Int-S | 1 | nifedipine | 610 ng/mL In Blood (unspecified) @ Unknown | medizine | 3 | 3 | amlopidine | 290 ng/mL In Blood (unspecified) @ Unknown | pantoprazole | 4 | 4 | ethanol | 0.1 % In Blood (unspecified) @ Unknown | alcohol, unknown | 3 | 3 | | | 1574h | 69 y M | propranolol | 4 | 4 | A/C | Ingst | Unt-T | 3 | | | 1575 | 70 y M | nadolol | 1 | 1 | C | Ingst | AR-D | 3 | digoxin | 6.4 ng/mL In Blood (unspecified) @ Unknown | [1576ha] | 70 y M | cardiac glycoside | 1 | 1 | A/C | Ingst | Int-S | 1 | digoxin | 16 ng/mL In Plasma @ Autopsy | 1577h | 70 y F | digoxin | 1 | 1 | C | Ingst | AR-D | 2 | digoxin | 4.7 ng/mL In Serum @ Unknown | 1578h | 70 y M | digoxin | 1 | 1 | A/C | Ingst | Unt-T | 2 | | | 1579h | 70 y F | flecainide | 1 | 1 | A/C | Ingst | Unt-T | 2 | | | 1580h | 70 y F | metoprolol (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | | 1581 | 71 y F | sotolol | 1 | 1 | A/C | Ingst | Unt-T | 2 | | | carvedilol | 2 | 2 | acarbose | 3 | 3 | furosemide | 4 | 4 | potassium salts | 5 | 5 | thyroid preparation | 6 | 6 | bupropion | 7 | 7 | sertraline | 8 | 8 | salicylate | 9 | 9 | rosuvastatin | 10 | 10 | prasugrel | 11 | 11 | gabapentin | 12 | 12 | pantoprazole | 13 | 13 | risperidone | 14 | 14 | 1582h | 71 y F | metoprolol | 1 | 1 | A/C | Ingst | Unt-G | 3 | | | 1583h | 72 y F | digoxin | 1 | 1 | A | Ingst | Unt-T | 3 | | | 1584 | 72 y F | diltiazem | 1 | 1 | A/C | Ingst | Int-S | 2 | | | 1585h | 73 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 3 | | | ibuprofen | 2 | 2 | diltiazem (extended release) | 1 | 1 | 1586 | 73 y M | metaxalone | 2 | 2 | A/C | Ingst | Int-S | 2 | | | lamotrigine | 3 | 3 | diltiazem | 1 | 1 | 1587 | 73 y F | ethanol | 2 | 2 | A | Ingst | Unk | 2 | | | gabapentin | 3 | 3 | verapamil | 1 | 1 | 1588ph | 74 y F | nifedipine | 2 | 2 | A/C | Ingst | Unt-U | 1 | | | amlodipine | 1 | 1 | 1589 | 74 y M | amlodipine | 1 | 1 | C | Ingst | AR-D | 3 | | | 1590h | 74 y F | diltiazem | 1 | 1 | A/C | Ingst | Unk | 1 | | | metoprolol (extended release) | 2 | 2 | 1591h | 75 y F | carvedilol | 1 | 1 | A | Ingst | Int-S | 2 | | | amlodipine | 1 | 1 | buspiron | 2 | 2 | | | quetiapine |
| 1571a | 69 y F | donidine | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | citalopram | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | donazepam | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | flecainide | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1572 | 69 y F | salicylate | 2 | 2 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | donazepam | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | montelukast | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | melatonin | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1573ha | 69 y M | fluoxetine | 2 | 2 | A | Ingst | Int-S | 1 | nifedipine | 610 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | medizine | 3 | 3 | | | | | | | amlopidine | 290 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | pantoprazole | 4 | 4 | | | | | | | | | ethanol | 0.1 % In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | alcohol, unknown | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1574h | 69 y M | propranolol | 4 | 4 | A/C | Ingst | Unt-T | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1575 | 70 y M | nadolol | 1 | 1 | C | Ingst | AR-D | 3 | digoxin | 6.4 ng/mL In Blood (unspecified) @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [1576ha] | 70 y M | cardiac glycoside | 1 | 1 | A/C | Ingst | Int-S | 1 | digoxin | 16 ng/mL In Plasma @ Autopsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1577h | 70 y F | digoxin | 1 | 1 | C | Ingst | AR-D | 2 | digoxin | 4.7 ng/mL In Serum @ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1578h | 70 y M | digoxin | 1 | 1 | A/C | Ingst | Unt-T | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1579h | 70 y F | flecainide | 1 | 1 | A/C | Ingst | Unt-T | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1580h | 70 y F | metoprolol (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1581 | 71 y F | sotolol | 1 | 1 | A/C | Ingst | Unt-T | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | carvedilol | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | acarbose | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | furosemide | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | potassium salts | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | thyroid preparation | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | bupropion | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | sertraline | 8 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | salicylate | 9 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | rosuvastatin | 10 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | prasugrel | 11 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | gabapentin | 12 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | pantoprazole | 13 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | risperidone | 14 | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1582h | 71 y F | metoprolol | 1 | 1 | A/C | Ingst | Unt-G | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1583h | 72 y F | digoxin | 1 | 1 | A | Ingst | Unt-T | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1584 | 72 y F | diltiazem | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1585h | 73 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | diltiazem (extended release) | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1586 | 73 y M | metaxalone | 2 | 2 | A/C | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | lamotrigine | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | diltiazem | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1587 | 73 y F | ethanol | 2 | 2 | A | Ingst | Unk | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | verapamil | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1588ph | 74 y F | nifedipine | 2 | 2 | A/C | Ingst | Unt-U | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1589 | 74 y M | amlodipine | 1 | 1 | C | Ingst | AR-D | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1590h | 74 y F | diltiazem | 1 | 1 | A/C | Ingst | Unk | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | metoprolol (extended release) | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1591h | 75 y F | carvedilol | 1 | 1 | A | Ingst | Int-S | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | amlodipine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | buspiron | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | quetiapine | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------|----------------|------------|------------|-------|--------|-----|------------------------------|--|
| 1592h | 75 y F | fluoxetine | 4 | 4 | A/C | Ingst | Int-S | 1 | | |
| | | tizanidine | 5 | 5 | | | | | | |
| | | diphenhydramine | 6 | 6 | | | | | | |
| | | acetaminophen/salicylate | 7 | 7 | | | | | | |
| 1593ha | 75 y M | verapamil | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | amlodipine | 2 | 2 | | | | | | |
| | | amitriptyline | 3 | 3 | | | | | | |
| | | fluoxetine | 4 | 4 | | | | | | |
| | | hydrochlorothiazide/lisinopril | 5 | 5 | | | | | | |
| 1594 | 76 y F | digoxin | 1 | 1 | A/C | Ingst | Unt-G | 2 | digoxin | 2 mcg/mL In Blood (unspecified) @ 1 d (pe) |
| | | metoprolol (extended release) | 2 | 2 | | | | | | |
| 1595h | 76 y M | digoxin | 1 | 1 | C | Ingst | Unk | 3 | digoxin | 3 ng/mL In Blood (unspecified) @ Unknown |
| 1596h | 76 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-U | 1 | | |
| 1597ha | 76 y F | flecainide | 1 | 1 | A/C | Ingst | Int-S | 1 | flecainide | 20 mg/L In Blood (unspecified) @ Autopsy |
| | | beta blocker | 2 | 2 | | | | | metoprolol | 1.1 mg/L In Blood (unspecified) @ Autopsy |
| 1598 | 77 y F | cardiac glycoside | 1 | 1 | A | Ingst | Int-S | 1 | digoxin | 10.9 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | beta blocker | 2 | 2 | | | | | | |
| 1599h | 77 y F | verapamil | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| atenolol | 2 | 2 | | | | | | | | |
| sertraline | 3 | 3 | | | | | | | | |
| 1600i | 77 y F | diltiazem | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | salicylate | 2 | 2 | | | | | | |
| | | morphine | 3 | 3 | | | | | | |
| 1601h | 77 y M | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1602h | 77 y F | flecainide | 1 | 1 | A | Ingst | AR-D | 3 | | |
| 1603ha | 77 y F | diltiazem | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | diclofenac | 2 | 2 | | | | | | |
| 1604p | 78 y F | beta blocker | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| 1605ha | 78 y F | diltiazem (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1606h | 78 y F | diltiazem (extended release) | 1 | 1 | A/C | Ingst | Unt-T | 2 | 7-aminoclonazepam | 19 ng/mL In Serum @ Autopsy |
| | | | | clonazepam | | | | | 6.9 ng/mL In Serum @ Autopsy | |
| 1607h | 78 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | escitalopram | 2 | 2 | | | | | | |
| | | pravastatin | 3 | 3 | | | | | | |
| 1608ha | 78 y M | amlodipine | 1 | 1 | A | Ingst | Int-S | 1 | amlodipine | 130 ng/mL In Blood (unspecified) @ Unknown |
| | | beta blocker | 2 | 2 | | | | | metoprolol | 500 ng/mL In Blood (unspecified) @ Unknown |
| 1609i | 79 y F | diltiazem | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | |
| 1610h | 80 y M | digoxin | 1 | 1 | C | Ingst | AR-D | 2 | digoxin | 4.1 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | | | | | | | | | |
| 1611h | 80 y F | metoprolol (extended release) | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | escitalopram | 2 | 2 | | | | | | |
| | | losartan | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| | | alprazolam | 5 | 5 | | | | | | |
| 1612ha | 82 y M | amlodipine | 1 | 1 | U | Ingst | Int-S | 1 | amlodipine | 140 ng/mL In Blood (unspecified) @ Unknown |
| | | atenolol | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|--|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 1613ha | 82 y F | losartan | 3 | 3 | | | | | | |
| 1614ha | 82 y F | digoxin | 1 | 1 | A/C | Ingst | Unt-U | 1 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | methocarbamol | 2 | 2 | | | | | | |
| | | pseudoephedrine | 3 | 3 | | | | | pseudoephedrine | 4.9 mg/L In Blood (unspecified) @ Autopsy |
| 1615h | 83 y F | diltiazem (extended release) | 1 | 1 | C | Ingst | Int-S | 2 | | |
| 1616 | 83 y F | amlodipine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | hydralazine | 2 | 2 | | | | | | |
| 1617h | 83 y F | verapamil | 1 | 1 | A/C | Ingst | Unt-T | 3 | | |
| 1618h | 85 y F | digoxin | 1 | 1 | A/C | Ingst | AR-D | 3 | digoxin | 1.9 ng/mL In Serum @ Unknown |
| | | metoprolol | 2 | 2 | | | | | | |
| 1619h | 86 y F | digoxin | 1 | 1 | C | Ingst | AR-D | 3 | digoxin | 3.3 ng/mL In Blood (unspecified) @ Unknown |
| 1620 | 86 y F | | | | A | Ingst | Int-S | 1 | | |
| | | amlodipine | 1 | 1 | | | | | | |
| | | carvedilol | 2 | 2 | | | | | | |
| | | lisinopril | 3 | 3 | | | | | | |
| | | fluoxetine | 4 | 4 | | | | | | |
| | | olanzapine | 5 | 5 | | | | | | |
| | | levothyroxine | 6 | 6 | | | | | | |
| | | pravastatin | 7 | 7 | | | | | | |
| 1621 | 87 y M | | | | C | Ingst | AR-D | 3 | | |
| | | metoprolol | 1 | 1 | | | | | | |
| 1622h | 87 y F | diltiazem | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1623ph | 87 y F | | | | A | Ingst | Int-S | 2 | | |
| | | metoprolol (extended release) | 1 | 1 | | | | | | |
| | | lisinopril | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| | | sertraline | 4 | 4 | | | | | | |
| 1624h | 89 y F | amlodipine | 1 | 1 | A | Ingst | Unt-T | 3 | | |
| 1625ai | 89 y F | flecainide | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1626ha | 90 y F | amlodipine | 1 | 1 | A/C | Ingst | Int-S | 1 | amlodipine | 890 ng/mL In Blood (unspecified) @ Autopsy |
| 1627h | 91 y F | | | | A/C | Ingst | Unk | 3 | | |
| | | diltiazem | 1 | 1 | | | | | | |
| | | metoprolol | 2 | 2 | | | | | | |
| | | warfarin | 3 | 3 | | | | | | |
| 1628h | 93 y F | digoxin | 1 | 1 | A/C | Ingst | Unt-U | 2 | digoxin | 4.9 ng/mL In Blood (unspecified) @ 1 h (pe) |
| 1629h | 96 y F | digoxin | 1 | 1 | C | Ingst | Unk | 2 | digoxin | 2.9 ng/mL In Blood (unspecified) @ Unknown |
| 1630p | 96 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | sotalol | 1 | 1 | | | | | | |
| See Also case 133, 332, 337, 348, 367, 863, 884, 983, 1019, 1064, 1076, 1097, 1103, 1116, 1138, 1172, 1174, 1196, 1199, 1208, 1212, 1224, 1238, 1241, 1246, 1261, 1263, 1275, 1281, 1283, 1284, 1285, 1292, 1294, 1398, 1645, 1670, 1671, 1672, 1673, 1676, 1682, 1686, 1688, 1696, 1697, 1699, 1708, 1720, 1755, 1756, 1769, 1779, 1807, 1810, 1811, 1814, 1961, 2064, 2100, 2298, 2352, 2524, 2532 | | | | | | | | | | |
| Cold and Cough Preparations | | | | | | | | | | |
| [1631ha] | 7 y F | | | | A/C | Ingst | Unk | 3 | | |
| | | acetaminophen/ dextromethorphan/ guaifenesin/ pseudoephedrine | 1 | 1 | | | | | acetaminophen (apap) | 167 mcg/mL In Blood (unspecified) @ Unknown |
| | | salicylate | 2 | 2 | | | | | salicylate | 11.7 mg/dL In Blood (unspecified) @ Unknown |
| 1632ph | 22 y F | | | | A | Ingst + Unk | Int-A | 2 | | |
| | | acetaminophen/ antihistamine/ dextromethorphan | 1 | 1 | | | | | | |
| | | heroin | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| | | marijuana | 4 | 4 | | | | | | |
| | | drug, unknown | 5 | 5 | | | | | | |
| 1633ha | 33 y F | dextromethorphan/ guaifenesin | 1 | 1 | A | Ingst | Int-U | 3 | dextromethorphan | 0.21 mg/L In Blood (unspecified) @ 13 h (pe) |
| 1634 | 34 y M | acetaminophen/ dextromethorphan/ doxylamine | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | tramadol | 2 | 2 | | | | | | |
| 1635ph | 35 y M | dextromethorphan | 1 | 1 | A/C | Ingst + Aspir | Int-M | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|--|----------------|------------|------------|-------|--------|-----|----------------------|--|
| 1636 | 45 y M | cyclobenzaprine | 2 | 2 | | | | | | |
| | | acetaminophen/ dextromethorphan/ doxylamine/ pseudoephedrine | 1 | 1 | A/C | Ingst | Int-M | 1 | | |
| | | acetaminophen/ dextromethorphan/ guaifenesin/ pseudoephedrine | 2 | 2 | | | | | | |
| | | acetaminophen/pheniramine/ phenylephrine | 3 | 3 | | | | | acetaminophen (apap) | 12 mcg/mL In Serum @ Unknown |
| 1637h | 47 y F | ethanol | 4 | 4 | | | | | ethanol | 23 mg/dL In Serum @ Unknown |
| | | acetaminophen/ antihistamine/ dextromethorphan | 1 | 1 | C | Ingst | Int-A | 2 | | |
| 1638pha | 53 y M | dextromethorphan/ guaifenesin | 1 | 1 | A | Ingst | Int-U | 1 | | |
| 1639 | 59 y M | cough and cold preparation | 1 | 1 | C | Ingst | Int-M | 3 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 0 mcg/mL In Serum @ Unknown |
| 1640 | 83 y M | brompheniramine/ dextromethorphan/ pseudoephedrine | 1 | 1 | A | Ingst | Int-U | 3 | | |
| | | dextromethorphan/ guaifenesin | 2 | 2 | | | | | | |
| 1641p | 84 y F | medizine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | escitalopram | 3 | 3 | | | | | | |
| | | cyclobenzaprine | 4 | 4 | | | | | | |
| | | acetaminophen | 5 | 5 | | | | | acetaminophen (apap) | 19 mcg/mL In Blood (unspecified) @ Unknown |
| See Also case 72, 343, 396, 466, 516, 705, 718, 746, 747, 844, 875, 901, 938, 1023, 1055, 1080, 1096, 1110, 1129, 1185, 1362, 1481, 1546, 1572, 1614, 1663, 1669, 1714, 1757, 2016, 2229, 2231, 2398, 2464 | | | | | | | | | | |
| Dietary Supplements/Herbals/Homeopathic | | | | | | | | | | |
| [1642ha] | 22 y M | ayahuasca | 1 | 1 | A | Ingst | Int-A | 3 | | |
| 1643h | 30 y M | dietary supplement | 1 | 1 | C | Ingst | Unk | 2 | | |
| [1644ha] | 40 y M | ephedra | 1 | 1 | A | Ingst | Int-U | 1 | | |
| | | yohimbine | 2 | 2 | | | | | | |
| | | caffeine | 3 | 3 | | | | | caffeine | 120 mcg/mL In Blood (unspecified) @ Autopsy |
| See Also case 166, 991, 1042, 1174, 1198, 1571 | | | | | | | | | | |
| Electrolytes and Minerals | | | | | | | | | | |
| 1645ph | 16 y F | iron | 1 | 1 | A | Ingst | Int-S | 1 | iron | 2000 mcg/dL In Blood (unspecified) @ Unknown |
| | | iron | 1 | 1 | | | | | iron | 698 mcg/dL In Blood (unspecified) @ Unknown |
| | | metoprolol | 2 | 2 | | | | | | |
| | | rivaroxaban | 3 | 3 | | | | | | |
| | | amiodarone | 4 | 4 | | | | | | |
| | | ibuprofen | 5 | 5 | | | | | | |
| | | lovastatin | 6 | 6 | | | | | | |
| [1646h] | 16 y F | ferrous sulfate | 1 | 1 | A | Ingst | Int-S | 1 | iron | 110 mcg/dL In Blood (unspecified) @ 8 h (pe) |
| | | ferrous sulfate | 1 | 1 | | | | | iron | 112 mcg/dL In Blood (unspecified) @ 2 d (pe) |
| | | ferrous sulfate | 1 | 1 | | | | | iron | 347 mcg/dL In Blood (unspecified) @ 12 h (pe) |
| | | ferrous sulfate | 1 | 1 | | | | | iron | 3953 mcg/dL In Blood (unspecified) @ 8 h (pe) |
| | | ferrous sulfate | 1 | 1 | | | | | iron | 4206 mcg/dL In Blood (unspecified) @ 1 h (pe) |
| | | ferrous sulfate | 1 | 1 | | | | | iron | 4300 mcg/dL In Blood (unspecified) @ 3 h (pe) |
| | | salicylate | 2 | 2 | | | | | salicylate | 10.1 mg/dL In Blood (unspecified) @ 1 h (pe) |
| | | salicylate | 2 | 2 | | | | | salicylate | 4.2 mg/dL In Blood (unspecified) @ 8 h (pe) |
| [1647ha] | 21 y F | fluoride | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1648ai | 45 y M | potassium chloride | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | quetiapine | 2 | 2 | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | |
| 1649a | 59 y F | sodium bicarbonate | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | shampoo | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|--|----------------|------------|------------|---------------------|--------|-----|--------------------|---|
| 1650 | 70 y F | potassium salts | 1 | 1 | A | Ingst | AR-D | 3 | | |
| See Also case 332, 1103, 1580, 1811 | | | | | | | | | | |
| Gastrointestinal Preparations | | | | | | | | | | |
| 1651ph | 16 y M | loperamide | 1 | 1 | A | Ingst + Unk | Int-S | 1 | loperamide | 260 ng/mL In Blood (unspecified) @ 15 m (pe) |
| | | loperamide | 1 | 1 | | | | | desmethyloperamide | 410 ng/mL In Blood (unspecified) @ 15 m (pe) |
| | | duloxetine | 2 | 2 | | | | | duloxetine | 25.7 ng/mL In Blood (unspecified) @ 15 m (pe) |
| | | lithium | 3 | 3 | | | | | lithium | 0.31 mEq/L In Blood (unspecified) @ 15 m (pe) |
| | | alprazolam | 4 | 4 | | | | | alprazolam | 26.5 ng/mL In Blood (unspecified) @ 15 m (pe) |
| 1652hi | 21 y M | loperamide | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | Mitragyna speciosa korthals | 2 | 2 | | | | | | |
| 1653i | 22 y M | loperamide | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | Mitragyna speciosa korthals | 2 | 2 | | | | | | |
| 1654pha | 25 y M | loperamide | 1 | 1 | A | Ingst | Int-A | 1 | desmethyloperamide | 240 ng/mL In Blood (unspecified) @ Autopsy |
| | | loperamide | 1 | 1 | | | | | loperamide | 97 ng/mL In Blood (unspecified) @ Autopsy |
| 1655ai | 25 y M | loperamide | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| [1656ph] | 27 y M | loperamide | 1 | 1 | C | Ingst | Int-A | 1 | desmethyloperamide | 340 ng/mL In Serum @ Unknown |
| | | loperamide | 1 | 1 | | | | | loperamide | 83 ng/mL In Serum @ Unknown |
| 1657ph | 27 y M | loperamide | 1 | 1 | A | Ingst | Int-A | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 1658ph | 28 y M | loperamide | 1 | 1 | A | Ingst | Int-A | 2 | | |
| 1659pha | 29 y M | loperamide | 1 | 1 | C | Ingst | Int-A | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 1660pha | 29 y M | loperamide | 1 | 1 | C | Ingst | Int-A | 2 | | |
| 1661p | 31 y M | loperamide | 1 | 1 | U | Ingst | Int-S | 1 | | |
| 1662pha | 33 y M | loperamide | 1 | 1 | U | Ingst | Int-U | 1 | desmethyloperamide | 2100 ng/mL In Blood (unspecified) @ Autopsy |
| | | loperamide | 1 | 1 | | | | | loperamide | 420 ng/mL In Blood (unspecified) @ Autopsy |
| | | diphenhydramine | 2 | 2 | | | | | diphenhydramine | 1800 ng/mL In Blood (unspecified) @ Autopsy |
| | | lithium | 3 | 3 | | | | | lithium | 0.34 mEq/L In Blood (unspecified) @ Autopsy |
| 1663ph | 36 y F | loperamide | 1 | 1 | C | Ingst | Int-M | 1 | loperamide | 170 ng/mL In Blood (unspecified) @ Unknown |
| | | loperamide | 1 | 1 | | | | | desmethyloperamide | 830 ng/mL In Blood (unspecified) @ Unknown |
| | | acetaminophen/ antihistamine/ dextromethorphan | 2 | 2 | | | | | dextromethorphan | 49 ng/mL In Blood (unspecified) @ Unknown |
| | | benzodiazepine | 3 | 3 | | | | | alprazolam | 43 ng/mL In Blood (unspecified) @ Unknown |
| 1664ai | 36 y M | loperamide | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | amphetamine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 1665pa | 39 y F | loperamide | 1 | 1 | A | Ingst | Int-A | 2 | | |
| 1666ai | 57 y F | loperamide | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | venlafaxine | 3 | 3 | | | | | | |
| See Also case 603, 822, 1052, 1224, 1249, 1255, 1261, 1271, 1385, 1405, 1442, 1495, 1572, 1580, 1631, 1700, 1744, 1756, 1936, 2524 | | | | | | | | | | |
| Hormones and Hormone Antagonists | | | | | | | | | | |
| 1667h | 23 y F | insulin (aspart) | 1 | 1 | A/C | Ingst + Aspir + Par | Int-S | 2 | | |
| | | liraglutide | 2 | 2 | | | | | | |
| | | metformin | 3 | 3 | | | | | | |
| | | bupropion (extended release) | 4 | 4 | | | | | | |
| | | fluoxetine | 5 | 5 | | | | | | |
| | | alprazolam | 6 | 6 | | | | | | |
| | | cyclobenzaprine | 7 | 7 | | | | | | |
| 1668 | 25 y F | | | | A/C | Derm | Int-S | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------------|--------|-----|----------------------|--|
| 1669h | 26 y M | insulin | 1 | 1 | U | Ingst + Par | Unt-T | 1 | | |
| | | insulin (isophane/regular) | 1 | 1 | | | | | | |
| | | acetaminophen/ dextromethorphan/ doxylamine | 2 | 2 | | | | | | |
| 1670 | 32 y F | metformin | 1 | 1 | A/C | Ingst | Int-S | 3 | metformin | 210 mcg/mL In Blood (unspecified) @ Autopsy |
| | | lisinopril | 2 | 2 | | | | | | |
| 1671 | 35 y M | levothyroxine | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | valproic acid | 2 | 2 | | | | | | |
| | | amphetamine | 3 | 3 | | | | | | |
| | | clonidine | 4 | 4 | | | | | | |
| | | propranolol | 5 | 5 | | | | | | |
| | | topiramate | 6 | 6 | | | | | | |
| | | metformin | 7 | 7 | | | | | | |
| 1672h | 35 y F | insulin | 1 | 1 | A | Ingst + Par | Int-S | 1 | | |
| | | lorazepam | 2 | 2 | | | | | | |
| | | metoprolol | 3 | 3 | | | | | | |
| 1673h | 40 y F | metformin | 1 | 1 | A | Ingst | Int-S | 1 | metformin | 110 mg/L In Blood (unspecified) @ 10 h (pe) |
| | | glipizide | 2 | 2 | | | | | | |
| | | lisinopril | 3 | 3 | | | | | | |
| | | acetaminophen | 4 | 4 | | | | | acetaminophen (apap) | 28 mcg/mL In Blood (unspecified) @ Unknown |
| 1674h | 43 y M | insulin (glargine) | 1 | 1 | A/C | Par | Int-S | 2 | | |
| | | insulin (aspart) | 2 | 2 | | | | | | |
| 1675a | 43 y F | metformin | 1 | 1 | A/C | Ingst | Int-S | 1 | metformin | 210 mcg/mL In Blood (unspecified) @ Unknown |
| | | ibuprofen | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 66 mg/dL In Blood (unspecified) @ Unknown |
| 1676 | 45 y M | metformin | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | lisinopril | 2 | 2 | | | | | | |
| | | acetaminophen/ diphenhydramine | 3 | 3 | | | | | | |
| | | tramadol | 4 | 4 | | | | | | |
| | | cyclobenzaprine | 5 | 5 | | | | | | |
| 1677h | 46 y M | metformin | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 1678ha | 47 y F | insulin | 1 | 1 | A | Par | Int-S | 1 | | |
| 1679 | 47 y M | metformin | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | valproic acid | 2 | 2 | | | | | | |
| | | drug, unknown | 3 | 3 | | | | | | |
| 1680h | 48 y M | oral hypoglycemic (sulfonylurea) | 1 | 1 | A | Ingst | Int-U | 2 | | |
| 1681h | 48 y M | metformin | 1 | 1 | A/C | Ingst + Unk | Int-S | 1 | | |
| | | marijuana | 2 | 2 | | | | | | |
| 1682ha | 49 y M | metformin | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | carvedilol | 2 | 2 | | | | | | |
| | | lisinopril | 3 | 3 | | | | | | |
| | | gabapentin | 4 | 4 | | | | | | |
| | | mirtazapine | 5 | 5 | | | | | | |
| 1683ha | 49 y F | metformin | 1 | 1 | A | Ingst | Int-S | 1 | metformin | 270 mcg/mL In Blood (unspecified) @ Autopsy |
| 1684 | 50 y M | metformin | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | sitagliptin | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | ethanol | 250 mg/dL In Serum @ 30 m (pe) |
| 1685 | 50 y F | metformin | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1686a | 52 y F | glyburide | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | amlodipine | 2 | 2 | | | | | amlodipine | 2000 ng/mL In Whole Blood @ Autopsy |
| | | benzodiazepine | 3 | 3 | | | | | 7-aminoclonazepam | 130 ng/mL In Blood (unspecified) @ Autopsy |
| | | benzodiazepine | 3 | 3 | | | | | clonazepam | 3.6 ng/mL In Blood (unspecified) @ Autopsy |
| | | bupropion | 4 | 4 | | | | | bupropion | 71 ng/mL In Blood (unspecified) @ Autopsy |
| | | lamotrigine | 5 | 5 | | | | | lamotrigine | 6.2 mcg/mL In Blood (unspecified) @ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|---|-----------------------|-----------------------|------------|-------------|--------|-----|------------------------------|---|
| | | antipsychotic (atypical) | 6 | 6 | | | | | ziprasidone | 18 ng/mL In Blood (unspecified) @ Autopsy |
| 1687 | 54 y M | oral hypoglycemic (sulfonylurea) | 7 | 7 | A | Ingst | Int-S | 2 | | |
| 1688ha | 57 y F | metformin drug, unknown | 1 2 | 1 2 | A/C | Ingst | Int-S | 1 | metformin diphenhydramine | 17 mg/mL In Whole Blood @ Unknown 320 ng/mL In Whole Blood @ Unknown |
| 1689 | 57 y M | metformin diphenhydramine metoprolol venlafaxine | 1 2 3 4 | 1 2 2 3 | A/C | Ingst | Unk | 2 | o-desmethyl-venlafaxine | 49 ng/mL In Whole Blood @ Unknown |
| 1690 | 57 y M | mirtazapine | 1 | 1 | | | | | metformin | 5.7 ng/mL In Blood (unspecified) @ Unknown |
| 1691h | 58 y F | ethanol | 2 | 2 | A/C | Ingst | AR-D | 3 | | |
| 1692ha | 58 y M | metformin | 1 | 1 | A/C | Ingst + Par | Int-S | 2 | | |
| 1693ph | 58 y F | insulin (detemir) tramadol | 1 2 | 1 2 | A/C | Ingst | Int-S | 2 | | |
| 1694 | 59 y M | metformin | 1 | 1 | A | Ingst + Unk | Int-S | 3 | | |
| 1695pa | 63 y M | sitagliptin ethanol ketamine | 1 2 3 | 1 2 3 | A | Ingst | Int-S | 2 | | |
| 1696ha | 65 y M | metformin gabapentin linagliptin | 1 2 3 | 1 2 3 | A/C | Ingst + Par | Int-S | 3 | | |
| 1697 | 65 y M | insulin mirtazapine zolpidem | 1 2 3 | 1 2 3 | A | Ingst | Int-S | 3 | | |
| 1698h | 68 y F | metformin amlodipine | 1 2 | 1 2 | A | Ingst | Int-S | 2 | | |
| 1699hi | 71 y M | metformin lisinopril carvedilol | 1 2 3 | 1 2 3 | A | Ingst | Unk | 3 | | |
| 1700ha | 71 y M | metformin substance (non-drug), unknown | 1 2 | 1 1 | A/C | Ingst + Par | Int-S | 1 | | |
| 1701h | 71 y M | insulin (aspart) amlodipine | 1 2 | 1 2 | A/C | Ingst | Int-S | 1 | | |
| 1702h | 74 y M | metformin ciprofloxacin omeprazole diphenhydramine pantoprazole | 1 2 3 4 5 | 1 2 3 4 5 | C | Ingst | AR-D | 3 | | |
| 1703 | 76 y F | metformin | 1 | 1 | A/C | Ingst | AR-D | 3 | | |
| 1704 | 78 y M | metformin | 1 | 1 | C | Ingst | AR-D | 2 | | |
| 1705h | 81 y F | metformin | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| 1706 | 86 y F | metformin | 1 | 1 | C | Ingst | AR-D | 3 | | |
| 1707 | 86 y F | metformin | 1 | 1 | C | Ingst | Oth-M | 3 | | |
| 1708 | 91 y F | metformin/pioglitazone | 1 | 1 | A | Ingst | AR-D | 3 | | |
| | | metformin furosemide thyroid preparation lisinopril simvastatin | 1 2 3 4 5 | 1 2 3 4 5 | A/C | Ingst | Unt-U | 1 | | |
| See Also case 42, 58, 111, 189, 914, 947, 983, 995, 1064, 1103, 1105, 1138, 1140, 1261, 1263, 1275, 1278, 1283, 1285, 1332, 1334, 1405, 1410, 1423, 1429, 1440, 1460, 1468, 1473, 1475, 1498, 1517, 1531, 1545, 1550, 1552, 1559, 1580, 1620, 1779, 1797, 1801, 1810, 1822, 2524, 2545 | | | | | | | | | | |
| Miscellaneous Drugs | | | | | | | | | | |
| [1709h] | 4 y M | lipid emulsion ropivacaine | 2 1 | 1 1 | A/C | Par + Oth | AR-D | 1 | | |
| 1710p | 15 y M | ropivacaine | 1 | 1 | A/C | Ingst | Int-S | 2 | ropivacaine | 1.4 mcg/mL In Serum @ Autopsy |
| | | atomoxetine fluoxetine | 1 2 | 1 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|--------|-------------------------------|----------------|------------|------------|-------------|--------|-----|-----------------|---|
| 1711h | 51 y F | sodium polystyrene sulfonate | 1 | 1 | A | Par | Unt-T | 1 | | |
| 1712h | 57 y F | hemoglobin glutamer | 1 | 1 | A | Par | AR-D | 3 | | |
| See Also case 1077, 1217, 1261, 1283, 1293, 1314, 1407, 1446, 1514, 1533, 1535, 1540, 1547, 1814 | | | | | | | | | | |
| Muscle Relaxants | | | | | | | | | | |
| 1713 | 2 y M | baclofen | 1 | 1 | A/C | Ingst | Unt-T | 3 | | |
| 1714ai | 25 y F | cyclobenzaprine | 1 | 1 | U | Unk | Unk | 3 | | |
| | | dextromethorphan | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 1715p | 37 y M | cyclobenzaprine | 1 | 1 | A | Ingst | Int-A | 2 | | |
| 1716 | 39 y M | baclofen | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | ibuprofen | 2 | 2 | | | | | | |
| 1717i | 39 y F | cyclobenzaprine | 1 | 1 | U | Ingst + Unk | Unk | 1 | | |
| | | paroxetine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1718ai | 39 y F | cyclobenzaprine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 1719h | 49 y M | cyclobenzaprine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | doxepin | 2 | 2 | | | | | | |
| 1720ha | 51 y F | baclofen | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| | | cocaine | 4 | 4 | | | | | | |
| 1721h | 57 y M | metaxalone | 1 | 1 | A/C | Ingst | Unt-U | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| | | ritonavir | 4 | 4 | | | | | | |
| | | darunivir | 5 | 5 | | | | | | |
| | | emtricitabine/tenofovir | 6 | 6 | | | | | | |
| 1722ha | 58 y M | methocarbamol | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 1723pha | 58 y F | tizanidine | 1 | 1 | U | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 232 mg/dL In Serum @ Unknown |
| 1724 | 58 y F | tizanidine | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1725i | 59 y F | baclofen | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | quetiapine | 2 | 2 | | | | | | |
| 1726hi | 62 y F | baclofen | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1727ha | 62 y F | cyclobenzaprine | 1 | 1 | A/C | Ingst | Int-U | 2 | cyclobenzaprine | 1.3 mg/L In Blood (unspecified) @ Autopsy |
| | | cyclobenzaprine | 1 | 1 | | | | | cyclobenzaprine | 20 mg/kg In Liver @ Autopsy |
| | | hydrocodone | 2 | 2 | | | | | hydrocodone | 0.054 mg/L In Blood (unspecified) @ Unknown |
| | | gabapentin | 3 | 3 | | | | | gabapentin | 5.6 mg/L In Blood (unspecified) @ Unknown |
| | | alprazolam | 4 | 4 | | | | | alprazolam | 0.11 mg/L In Blood (unspecified) @ Unknown |
| | | duloxetine (extended release) | 5 | 4 | | | | | | |
| 1728ph | 64 y F | tizanidine | 1 | 1 | C | Ingst | Unk | 2 | | |
| | | duloxetine | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| | | quetiapine | 4 | 4 | | | | | | |
| | | morphine | 5 | 5 | | | | | | |
| | | acetaminophen/hydrocodone | 6 | 6 | | | | | | |
| 1729 | 64 y F | baclofen | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 1730p | 69 y M | carisoprodol | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1731 | 72 y F | baclofen | 1 | 1 | A | Unk | Int-S | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 1732ha | 77 y F | | | | A/C | Ingst | Int-S | 3 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|---|--------|---------------------------|----------------|------------|------------|-------|--------|-----|----------------------|--|
| | | baclofen | 1 | 1 | | | | | | |
| | | acetaminophen/oxycodone | 2 | 2 | | | | | oxycodone | 40.6 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | acetaminophen/oxycodone | 2 | 2 | | | | | acetaminophen (apap) | 81 mcg/mL In Plasma @ 1 h (pe) |
| 1733h | 91 y M | baclofen | 1 | 1 | A | Ingst | AR-D | 3 | | |
| See Also case 57, 85, 332, 334, 549, 567, 578, 602, 610, 654, 664, 693, 771, 775, 802, 806, 833, 850, 866, 874, 924, 936, 937, 959, 992, 1002, 1009, 1040, 1064, 1113, 1182, 1199, 1251, 1253, 1259, 1267, 1274, 1280, 1298, 1320, 1357, 1385, 1392, 1460, 1465, 1478, 1486, 1500, 1506, 1507, 1508, 1550, 1562, 1585, 1591, 1614, 1635, 1641, 1667, 1676, 1753, 1893, 1959, 2131, 2242, 2281, 2464 | | | | | | | | | | |
| Sedative/Hypnotics/Antipsychotics | | | | | | | | | | |
| 1734 | 17 y F | | | | A/C | Ingst | Int-S | 2 | | |
| | | quetiapine | 1 | 1 | | | | | | |
| 1735ph | 17 y M | | | | A | Ingst | Int-S | 2 | | |
| | | benzodiazepine | 1 | 1 | | | | | | |
| 1736pha | 20 y M | | | | A/C | Ingst | Int-A | 2 | | |
| | | alprazolam | 1 | 1 | | | | | | |
| 1737pha | 21 y M | | | | U | Ingst | Int-S | 1 | | |
| | | olanzapine | 1 | 1 | | | | | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| 1738h | 21 y F | | | | U | Ingst | Int-S | 3 | | |
| | | barbiturate (long acting) | 1 | 1 | | | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | |
| 1739h | 22 y M | | | | A/C | Ingst | Int-U | 3 | | |
| | | alprazolam | 1 | 1 | | | | | | |
| | | tramadol | 2 | 2 | | | | | | |
| 1740ai | 22 y M | | | | U | Unk | Int-A | 1 | | |
| | | clonazepam | 1 | 1 | | | | | | |
| 1741ai | 24 y M | | | | U | Unk | Int-S | 1 | | |
| | | quetiapine | 1 | 1 | | | | | | |
| | | trazodone | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 1742pa | 25 y M | | | | U | Ingst | Int-A | 2 | | |
| | | alprazolam | 1 | 1 | | | | | alprazolam | 64.2 ng/mL In Blood (unspecified) @ Unknown |
| | | amphetamine | 2 | 2 | | | | | amphetamine | 136 ng/mL In Blood (unspecified) @ Unknown |
| | | fentanyl | 3 | 3 | | | | | fentanyl | 3.2 ng/mL In Blood (unspecified) @ Unknown |
| | | methamphetamine | 4 | 4 | | | | | methamphetamine | 473 ng/mL In Blood (unspecified) @ Unknown |
| 1743pa | 25 y M | | | | A | Ingst | Int-U | 1 | | |
| | | alprazolam | 1 | 1 | | | | | alprazolam | 74 ng/mL In Blood (unspecified) @ Unknown |
| | | narcotic, other/unknown | 2 | 2 | | | | | fentanyl | 5.1 ng/mL In Blood (unspecified) @ Unknown |
| 1744ph | 27 y F | | | | A | Ingst | Int-S | 2 | | |
| | | zolpidem | 1 | 1 | | | | | | |
| 1745 | 28 y M | | | | A/C | Ingst | Int-S | 2 | | |
| | | alprazolam | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 1746ai | 29 y M | | | | U | Unk | Int-A | 1 | | |
| | | benzodiazepine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1747ai | 29 y M | | | | U | Unk | Int-A | 1 | | |
| | | benzodiazepine | 1 | 1 | | | | | | |
| | | ethanol (non-beverage) | 2 | 2 | | | | | | |
| 1748p | 30 y M | | | | A | Ingst | Int-S | 2 | | |
| | | quetiapine | 1 | 1 | | | | | | |
| 1749ph | 30 y M | | | | U | Ingst | Int-S | 2 | | |
| | | benzodiazepine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1750ph | 30 y M | | | | A | Ingst | Int-S | 2 | | |
| | | alprazolam | 1 | 1 | | | | | | |
| 1751p | 33 y M | | | | C | Ingst | AR-D | 2 | | |
| | | risperidone | 1 | 1 | | | | | 9-hydroxyrisperidone | 21 ng/mL In Blood (unspecified) @ Autopsy |
| | | risperidone | 1 | 1 | | | | | risperidone | 39 ng/mL In Blood (unspecified) @ Autopsy |
| | | paroxetine | 2 | 2 | | | | | paroxetine | 260 ng/mL In Blood (unspecified) @ Autopsy |
| | | dozapine | 3 | 3 | | | | | norclozapine | 400 ng/mL In Blood (unspecified) @ Autopsy |
| | | clozapine | 3 | 3 | | | | | clozapine | 840 ng/mL In Blood (unspecified) @ Autopsy |
| | | valproic acid | 4 | 4 | | | | | | |
| | | quetiapine | 5 | 5 | | | | | | |
| 1752ai | 33 y M | | | | U | Unk | Unk | 1 | | |
| | | alprazolam | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| 1753ai | 34 y M | | | | U | Unk | Unk | 1 | | |
| | | quetiapine | 1 | 1 | | | | | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | citalopram | 3 | 3 | | | | | | |
| | | sertraline | 4 | 4 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | |
|------------------|--------|--------------------------------|----------------|------------|------------|-------------|--------|-----|---------------|---|----------------------|--|
| 1754ai | 35 y M | diphenhydramine | 5 | 5 | U | Ingst + Unk | Int-M | 1 | | | | |
| | | zolpidem | 6 | 6 | | | | | | | | |
| | | chlordiazepoxide | 1 | 1 | | | | | | | | |
| | | codeine | 2 | 2 | | | | | | | | |
| | | diazepam | 3 | 3 | | | | | | | | |
| 1755 | 35 y F | ethanol | 4 | 4 | A | Ingst | Int-S | 2 | | | | |
| | | alprazolam | 1 | 1 | | | | | | | | |
| | | lamotrigine | 2 | 2 | | | | | | | | |
| | | propranolol | 3 | 3 | | | | | | | | |
| | | ethanol | 4 | 4 | | | | | | | | |
| 1756ha | 35 y F | drug, unknown | 5 | 5 | A | Par | Int-A | 1 | | | | |
| | | zolpidem | 1 | 1 | | | | | | | zolpidem | 272 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | | hydrocodone | 113 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | | acetaminophen (apap) | 13.5 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | mirtazapine | 3 | 3 | | | | | | | mirtazapine | 149 ng/mL In Blood (unspecified) ⓐ Unknown |
| 1757i | 36 y M | mirtazapine | 3 | 3 | U | Ingst + Unk | Unk | 1 | | | | |
| | | amlodipine | 4 | 4 | | | | | | | amlodipine | 249 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | metoclopramide | 5 | 5 | | | | | | | | 19.1 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | quetiapine | 1 | 1 | | | | | | | | |
| | | fluoxetine | 2 | 2 | | | | | | | | |
| [1758pha] | 36 y F | dextromethorphan | 3 | 3 | A | Par | Int-S | 1 | | | | |
| | | ethanol | 4 | 4 | | | | | | | | |
| 1759ph | 36 y F | pentobarbital | 1 | 1 | A | Ingst | Int-A | 2 | pentobarbital | 10 mcg/mL In Serum @ 7.5 h (pe) | | |
| 1760ph | 39 y M | alprazolam | 1 | 1 | U | Ingst | Int-S | 2 | | | | |
| | | fentanyl | 2 | 2 | | | | | | | | |
| | | cyclic antidepressant, unknown | 3 | 3 | | | | | | | | |
| 1761ai | 41 y F | quetiapine | 1 | 1 | U | Ingst + Unk | Unk | 1 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |
| 1762h | 42 y F | olanzapine | 1 | 1 | A/C | Ingst + Unk | Int-S | 2 | | | | |
| | | citalopram | 2 | 2 | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | |
| 1763p | 43 y F | clonazepam | 1 | 1 | A | Ingst | Int-S | 2 | | | | |
| | | narcotic, other/unknown | 2 | 2 | | | | | | | | |
| 1764ai | 45 y M | quetiapine | 1 | 1 | U | Unk | Int-S | 1 | | | | |
| | | lithium | 2 | 2 | | | | | | | lithium | 0.5 mmol/L In Blood (unspecified) ⓐ Unknown |
| | | lorazepam | 3 | 3 | | | | | | | | |
| | | alcohol, unknown | 4 | 4 | | | | | | | ethanol | 130 mg/dL In Blood (unspecified) ⓐ Unknown |
| 1765 | 46 y F | alprazolam | 1 | 1 | A/C | Ingst | Int-S | 2 | | | | |
| | | ibuprofen | 2 | 2 | | | | | | | | |
| 1766ai | 46 y F | quetiapine | 1 | 1 | U | Unk | Unk | 1 | | | | |
| | | pregabalin | 2 | 2 | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | |
| 1767ai | 46 y M | alprazolam | 1 | 1 | U | Unk | Unk | 2 | | | | |
| | | amitriptyline | 2 | 2 | | | | | | | | |
| | | tramadol | 3 | 3 | | | | | | | | |
| 1768a | 47 y F | quetiapine | 1 | 1 | A | Ingst | Int-U | 2 | olanzapine | 430 ng/mL In Blood (unspecified) ⓐ Autopsy | | |
| | | gabapentin | 2 | 2 | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | |
| 1769i | 48 y F | olanzapine | 1 | 1 | U | Ingst + Unk | Unk | 1 | | | | |
| | | chlordiazepoxide | 1 | 1 | | | | | | | | |
| | | clonidine | 2 | 2 | | | | | | | | |
| 1770ai | 48 y F | ethanol | 3 | 3 | U | Unk | Unk | 2 | | | | |
| | | quetiapine | 1 | 1 | | | | | | | | |
| 1771ai | 49 y M | alprazolam | 1 | 1 | U | Unk | Unk | 2 | | | | |
| | | ethanol | 2 | 2 | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------|----------------|------------|------------|---------------|--------|-----|----------------------|--|
| 1772p | 49 y M | quetiapine | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 1773pha | 50 y F | alprazolam | 1 | 1 | A | Ingst | Int-S | 2 | alprazolam | 70 mcg/L In Blood (unspecified) ⓐ Unknown |
| | | morphine (extended release) | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| 1774h | 50 y F | ziprasidone | 1 | 1 | A/C | Ingst | Int-S | 3 | | |
| 1775ph | 50 y F | zolpidem | 1 | 1 | C | Ingst | Int-S | 2 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | trazodone | 3 | 3 | | | | | | |
| 1776ai | 50 y F | alprazolam | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | trazodone | 2 | 2 | | | | | | |
| 1777ai | 50 y M | quetiapine | 1 | 1 | U | Unk | Unk | 2 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| 1778ai | 51 y M | olanzapine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | temazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1779pha | 52 y F | alprazolam | 1 | 1 | A/C | Ingst | Int-S | 1 | alpha-oh-alprazolam | 15 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | alprazolam | 1 | 1 | | | | | alprazolam | 300 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | bupropion | 2 | 2 | | | | | bupropion | 1600 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | bupropion | 2 | 2 | | | | | hydroxybupropion | 3800 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | escitalopram | 3 | 3 | | | | | escitalopram | 1200 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | simvastatin | 4 | 4 | | | | | | |
| | | glipizide | 5 | 5 | | | | | glipizide | 5300 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | sitagliptin | 6 | 6 | | | | | | |
| | | marijuana | 7 | 7 | | | | | delta-9-thc | 0.6 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | marijuana | 7 | 7 | | | | | delta-9-carboxy-thc | 7.4 ng/mL In Whole Blood @ Unknown |
| 1780 | 52 y M | clozapine | 1 | 1 | C | Ingst | Unt-T | 2 | norclozapine | 4500 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | clozapine | 1 | 1 | | | | | clozapine | 8000 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | fluvoxamine | 2 | 2 | | | | | fluvoxamine | 5000 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | domipramine | 3 | 3 | | | | | clomipramine | 1600 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | clomipramine | 3 | 3 | | | | | desmethyldomipramine | 700 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | aripiprazole | 4 | 4 | | | | | aripiprazole | 430 ng/mL In Blood (unspecified) ⓐ Autopsy |
| 1781h | 52 y M | | | | A/C | Ingst | Int-U | 3 | | |
| 1782pha | 53 y M | alprazolam | 1 | 1 | U | Ingst | Int-A | 1 | alprazolam | 0.17 mg/L In Blood (unspecified) ⓐ Autopsy |
| | | ethanol (non-beverage) | 2 | 2 | | | | | ethanol | 200 mg/dL In Blood (unspecified) ⓐ Autopsy |
| 1783i | 54 y F | quetiapine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | duloxetine | 2 | 2 | | | | | | |
| 1784ph | 54 y F | alprazolam | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| 1785ha | 55 y M | quetiapine | 1 | 1 | A | Ingst | Int-S | 3 | | |
| 1786ha | 55 y F | alprazolam | 1 | 1 | A/C | Ingst + Inhal | Int-S | 1 | alprazolam | 0.4 mg/L In Blood (unspecified) @ 15 h (pe) |
| | | gabapentin | 2 | 2 | | | | | gabapentin | 8.3 mg/L In Blood (unspecified) @ 15 h (pe) |
| | | amphetamine drug, unknown | 3 | 3 | | | | | | |
| | | drug, unknown | 4 | 4 | | | | | | |
| 1787ai | 55 y F | pentobarbital | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1788ai | 56 y F | diazepam | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1789ai | 57 y F | benzodiazepine | 1 | 1 | U | Unk | Unt-M | 1 | | |
| 1790h | 58 y M | antipsychotic (atypical) | 1 | 1 | A | Ingst | Int-S | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 1791ai | 58 y M | gabapentin | 2 | 2 | | | | | | |
| | | alprazolam | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | buprenorphine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 1792ai | 59 y F | alprazolam | 1 | 1 | U | Unk | Unk | 2 | | |
| | | duloxetine | 2 | 2 | | | | | | |
| 1793ai | 59 y M | quetiapine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1794ai | 60 y M | diazepam | 1 | 1 | U | Ingst + Unk | Int-A | 3 | | |
| | | oxazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1795p | 60 y F | alprazolam | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 1796ai | 60 y M | benzodiazepine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 1797ha | 61 y M | alprazolam | 1 | 1 | A | Ingst + Unk | Unt-G | 1 | alprazolam | 118 ng/mL In Serum @ Unknown |
| | | oxycodone | 2 | 2 | | | | | | |
| | | metformin | 3 | 3 | | | | | | |
| | | oral hypoglycemic, dipeptidyl peptidase-4 (DPP-4) inhibitor | 4 | 4 | | | | | | |
| 1798ph | 61 y F | alprazolam | 1 | 1 | U | Ingst | Int-S | 1 | alprazolam | 0.06 mg/L In Blood (unspecified) @ Autopsy |
| | | alprazolam | 1 | 1 | | | | | alpha-oh-alprazolam | 0.08 mg/L In Blood (unspecified) @ Autopsy |
| | | alprazolam | 1 | 1 | | | | | alpha-oh-alprazolam | 0.239 mg/L In Serum @ 1 h (pe) |
| | | alprazolam | 1 | 1 | | | | | alprazolam | 0.314 mg/L In Serum @ 1 h (pe) |
| | | quetiapine | 2 | 2 | | | | | quetiapine | 110 ng/mL In Blood (unspecified) @ 1 h (pe) |
| | | quetiapine | 2 | 2 | | | | | quetiapine | 310 ng/mL In Whole Blood @ Autopsy |
| | | lithium | 3 | 3 | | | | | lithium | 1.3 mmol/L In Serum @ 1 h (pe) |
| | | acetaminophen/hydrocodone | 4 | 4 | | | | | | |
| | | lamotrigine | 5 | 5 | | | | | | |
| 1799ph | 61 y F | quetiapine | 1 | 1 | U | Ingst | Unk | 3 | | |
| 1800ai | 61 y M | alprazolam | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1801h | 63 y F | quetiapine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | metformin | 2 | 2 | | | | | | |
| 1802 | 63 y M | benzodiazepine | 1 | 1 | A | Ingst | Int-S | 3 | | |
| | | acetaminophen/oxycodone | 2 | 2 | | | | | acetaminophen (apap) | 0 mcg/mL In Serum @ Unknown |
| 1803ai | 63 y F | antipsychotic (atypical) | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | hydroxyzine | 3 | 3 | | | | | | |
| 1804hi | 65 y M | haloperidol | 1 | 1 | A | Ingst | AR-D | 2 | | |
| 1805 | 65 y M | benzodiazepine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | cobicistat/darunivir | 2 | 2 | | | | | | |
| | | sulfamethoxazole/trimethoprim | 3 | 3 | | | | | | |
| 1806ai | 66 y F | quetiapine | 1 | 1 | U | Unk | Unk | 1 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| 1807h | 67 y F | quetiapine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | labetalol | 2 | 2 | | | | | | |
| | | clonazepam | 3 | 3 | | | | | | |
| | | furosemide | 4 | 4 | | | | | | |
| 1808 | 68 y F | zolpidem | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | temazepam | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| | | acetaminophen | 4 | 4 | | | | | acetaminophen (apap) | 20.9 mcg/mL In Serum @ Unknown |
| 1809ha | 68 y F | alprazolam | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| 1810 | 70 y F | alprazolam | 1 | 1 | U | Ingst | Int-S | 1 | | |
| | | metoprolol | 2 | 2 | | | | | | |
| | | lisinopril | 3 | 3 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-------------------------|----------------|------------|------------|-------------|--------|-----|----------------------|---|
| 1811h | 71 y F | temazepam | 4 | 4 | A/C | Ingst + Unk | Int-S | 2 | | |
| | | thyroid preparation | 5 | 5 | | | | | | |
| | | amlodipine | 6 | 6 | | | | | | |
| | | zolpidem | 1 | 1 | | | | | | |
| | | potassium chloride | 2 | 2 | | | | | | |
| | | beta blocker | 3 | 3 | | | | | | |
| 1812 | 74 y F | acetaminophen | 4 | 4 | C | Ingst | Unt-G | 3 | acetaminophen (apap) | 70 mcg/mL In Serum @ Unknown |
| | | narcotic, other/unknown | 5 | 5 | | | | | | |
| | | benzodiazepine | 1 | 1 | | | | | | |
| 1813h | 76 y M | alprazolam | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1814pha | 76 y F | olanzapine | 1 | 1 | A/C | Ingst | Int-S | 2 | olanzapine | 9900 ng/mL In Blood (unspecified) @ Autopsy |
| | | desipramine | 2 | 2 | | | | | | |
| | | lamotrigine | 3 | 3 | | | | | | |
| | | midodrine | 4 | 4 | | | | | | |
| | | sotalol | 5 | 5 | | | | | | |
| | | warfarin | 6 | 6 | | | | | | |
| | | atorvastatin | 7 | 7 | | | | | | |
| 1815 | 79 y M | clonazepam | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 1816i | 80 y F | alprazolam | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | lorazepam | 2 | 2 | | | | | | |
| 1817h | 81 y F | quetiapine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| 1818h | 81 y M | alprazolam | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | |
| 1819p | 81 y F | phenobarbital | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 1820h | 85 y M | alprazolam | 1 | 1 | A | Ingst | Int-S | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1821 | 85 y M | olanzapine | 1 | 1 | A/C | Par | Unt-T | 3 | | |
| 1822h | 87 y F | quetiapine | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | benztropine | 3 | 3 | | | | | | |
| | | vitamin D | 4 | 4 | | | | | | |
| | | levothyroxine | 5 | 5 | | | | | | |
| | | famotidine | 6 | 6 | | | | | | |
| 1823ha | 87 y F | benzodiazepine | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 1824 | 88 y F | zolpidem | 1 | 1 | A | Ingst | Unk | 2 | | |
| 1825ha | 90 y M | zolpidem | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | mirtazapine | 2 | 2 | | | | | | |

See Also case 34, 38, 112, 119, 133, 140, 187, 188, 226, 228, 286, 308, 338, 346, 347, 349, 356, 363, 371, 376, 379, 383, 387, 388, 389, 390, 391, 394, 395, 398, 405, 407, 410, 420, 424, 425, 426, 432, 433, 440, 446, 449, 452, 458, 459, 463, 468, 472, 482, 483, 489, 496, 497, 502, 504, 505, 507, 526, 531, 536, 537, 544, 548, 554, 564, 566, 578, 579, 586, 588, 597, 598, 603, 609, 610, 612, 616, 621, 626, 638, 642, 645, 650, 651, 656, 659, 660, 667, 677, 678, 680, 690, 693, 694, 702, 707, 708, 714, 715, 719, 720, 722, 726, 727, 729, 735, 738, 739, 741, 743, 758, 760, 762, 764, 773, 775, 776, 778, 780, 788, 793, 797, 811, 815, 825, 826, 831, 834, 835, 836, 845, 846, 848, 851, 855, 864, 872, 881, 890, 895, 896, 908, 923, 928, 934, 937, 951, 952, 953, 958, 961, 969, 977, 983, 986, 987, 991, 992, 1003, 1009, 1010, 1015, 1021, 1031, 1034, 1039, 1040, 1046, 1048, 1055, 1062, 1064, 1071, 1081, 1082, 1090, 1091, 1092, 1097, 1100, 1104, 1106, 1113, 1116, 1120, 1133, 1140, 1143, 1148, 1162, 1173, 1176, 1177, 1179, 1181, 1183, 1184, 1186, 1188, 1190, 1192, 1193, 1196, 1198, 1199, 1209, 1212, 1217, 1228, 1229, 1235, 1238, 1249, 1253, 1255, 1260, 1261, 1264, 1265, 1267, 1268, 1270, 1271, 1273, 1275, 1278, 1280, 1283, 1285, 1290, 1291, 1294, 1295, 1296, 1299, 1301, 1305, 1306, 1309, 1310, 1312, 1316, 1317, 1318, 1319, 1325, 1327, 1328, 1331, 1334, 1339, 1368, 1376, 1378, 1380, 1400, 1401, 1403, 1411, 1417, 1424, 1427, 1428, 1431, 1432, 1437, 1439, 1441, 1442, 1444, 1448, 1452, 1459, 1468, 1469, 1473, 1478, 1485, 1488, 1495, 1502, 1507, 1508, 1510, 1514, 1531, 1532, 1539, 1544, 1546, 1549, 1553, 1559, 1563, 1567, 1569, 1570, 1571, 1580, 1591, 1593, 1605, 1611, 1620, 1623, 1648, 1651, 1655, 1663, 1664, 1667, 1672, 1686, 1695, 1720, 1722, 1725, 1727, 1728, 1829, 1832, 1843, 1845, 1846, 1847, 1848, 1860, 1863, 1874, 1894, 1899, 1902, 1909, 1911, 1917, 1945, 1961, 1966, 1971, 1974, 1982, 2004, 2011, 2033, 2034, 2035, 2036, 2039, 2041, 2052, 2061, 2068, 2083, 2100, 2104, 2105, 2136, 2177, 2182, 2206, 2209, 2210, 2225, 2238, 2239, 2245, 2274, 2279, 2281, 2286, 2298, 2300, 2309, 2314, 2326, 2329, 2339, 2375, 2383, 2397, 2403, 2407, 2433, 2453, 2468, 2524, 2528, 2529, 2540, 2570, 2572, 2579

Stimulants and Street Drugs

| | | | | | | | | | | |
|---------|--------|-----------------|---|---|---|-------|-------|---|----------------------------|--|
| 1826p | 8 y M | methamphetamine | 1 | 1 | A | Ingst | Unt-M | 1 | methamphetamine | 18000 ng/mL In Blood (unspecified) @ Autopsy |
| 1827pha | 16 y M | marjuana | 1 | 1 | A | Inhal | Int-A | 3 | thc (tetrahydrocannabinol) | 3 ng/mL In Blood (unspecified) @ Autopsy |
| | | | | | | | | | | |
| 1828ai | 17 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1829ph | 17 y M | cocaine | 1 | 1 | U | Unk | Int-U | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 1830pha | 18 y F | | | | A | Unk | Unk | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ③ Time |
|------------------|--------|---|----------------|------------|------------|---------------|--------|-----|-----------------|--|
| | | methamphetamine | 1 | 1 | | | | | methamphetamine | 0.33 mg/L In Blood (unspecified) ④ Unknown |
| | | cocaine | 2 | 2 | | | | | cocaine | 0.03 mg/L In Blood (unspecified) ④ Unknown |
| | | cocaine | 2 | 2 | | | | | benzoylecognine | 0.2 mg/L In Blood (unspecified) ④ Unknown |
| 1831 | 18 y M | methamphetamine | 1 | 1 | A | Ingst | Int-A | 2 | | |
| 1832ai | 18 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 1833ai | 18 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1834ai | 18 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1835ha | 18 y M | methamphetamine | 1 | 1 | A | Ingst | Unk | 1 | methamphetamine | 2.76 mg/L In Blood (unspecified) ④ Unknown |
| 1836h | 18 y F | amphetamine (hallucinogenic) | 1 | 1 | A | Ingst + Inhal | Int-A | 2 | | |
| | | 3,4-methylenedioxyamphetamine | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 1837ai | 18 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | isopropanol | 2 | 2 | | | | | | |
| 1838ai | 18 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1839ai | 18 y M | methamphetamine | 1 | 1 | U | Unk | Int-S | 1 | | |
| 1840a | 19 y M | methamphetamine | 1 | 1 | A | Ingst + Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | ethanol | 114 mg/dL In Blood (unspecified) ④ Unknown |
| | | cocaine | 1 | 1 | | | | | benzoylecognine | 440 ng/mL In Blood (unspecified) ④ Unknown |
| | | ethanol | 2 | 2 | | | | | | |
| 1841pai | 19 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1842pha | 19 y M | heroin | 1 | 1 | A | Unk | Int-A | 1 | morphine (free) | 260 mcg/L In Blood (unspecified) ④ Autopsy |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 0.013 mg/L In Blood (unspecified) ④ Autopsy |
| | | methadone | 3 | 3 | | | | | methadone | 0.3 mg/L In Blood (unspecified) ④ Autopsy |
| | | methadone | 3 | 3 | | | | | methadone | 0.5 mg/L In Blood (unspecified) ④ Autopsy |
| 1843ai | 19 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| [1844pha] | 19 y F | methylenedioxy methamphetamine (MDMA) | 1 | 1 | A | Ingst | Int-A | 1 | | |
| 1845ph | 20 y M | methamphetamine | 1 | 1 | A | Ingst + Par | Int-M | 2 | | |
| | | propofol | 2 | 2 | | | | | | |
| 1846ai | 20 y M | fentanyl | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 1847ai | 20 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1848ai | 20 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1849h | 20 y M | methylenedioxy methamphetamine (MDMA) | 1 | 1 | U | Ingst | Int-A | 3 | | |
| 1850h | 20 y M | methamphetamine | 1 | 1 | U | Unk | Int-U | 2 | | |
| 1851ph | 20 y M | amphetamine (hallucinogenic) | 1 | 1 | A | Unk | Int-A | 2 | | |
| | | flakka | 1 | 1 | | | | | | |
| 1852pha | 20 y M | | | | A | Ingst + Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--|----------------|-----------------|------------|---------------|--------|-----|--|---|
| 1853h | 20 y F | heroin | 1 | 1 | A | Ingst | Int-A | 2 | ethanol | 242 mg/dL In Blood (unspecified) @ 1 h (pe) |
| | | ethanol | 2 | 2 | | | | | | |
| 1854ai | 20 y M | amphetamine/ dextroamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 1855ai | 20 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ketamine | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 1856ai | 20 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 1857pa | 21 y M | methamphetamine | 1 | 1 | A | Par | Int-U | 1 | | |
| 1858ai | 21 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| [1859ha] | 21 y M | heroin | 1 | 1 | A | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 1860pha | 21 y F | methamphetamine | 1 | 1 | U | Unk | Int-U | 1 | amphetamine | 0.02 mg/L In Blood (unspecified) @ 5 m (pe) |
| | | | | methamphetamine | | | | | 7.5 mg/L In Blood (unspecified) @ 5 m (pe) | |
| | | cocaine | 1 | 1 | | | | | benzoyllecognine | 210 ng/mL In Blood (unspecified) @ Unknown |
| | | alprazolam | 2 | 2 | | | | | alprazolam | 13 ng/mL In Blood (unspecified) @ Unknown |
| | | fentanyl | 3 | 3 | | | | | fentanyl | 12 ng/mL In Blood (unspecified) @ Unknown |
| 1861ai | 21 y F | buprenorphine/naloxone (sublingual film) | 4 | 4 | U | Unk | Int-A | 1 | | |
| | | heroin | 5 | 5 | | | | | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1862ai | 21 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1863ai | 21 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1864ai | 21 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | methylenedioxy methamphetamine (MDMA) | 2 | 2 | | | | | | |
| | | methadone | 3 | 3 | | | | | | |
| 1865pha | 22 y M | synthetic opiate | 1 | 1 | A | Unk | Int-U | 1 | cyclopropylfentanyl | 1.9 ng/mL In Blood (unspecified) @ Autopsy |
| 1866ha | 22 y M | methamphetamine | 1 | 1 | A | Ingst + Inhal | Int-A | 2 | | |
| | | amphetamine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 1867ph | 22 y F | amphetamine (hallucinogenic) | 1 | 1 | A | Ingst | Int-A | 2 | | |
| 1868ph | 22 y F | cocaine | 1 | 1 | A | Ingst | Unk | 3 | | |
| 1869 | 22 y M | drug, unknown stimulant or street drug | 1 | 1 | U | Unk | Int-A | 2 | | |
| 1870 | 22 y M | methamphetamine | 1 | 1 | A | Ingst | Int-M | 1 | | |
| 1871ph | 22 y M | methamphetamine | 1 | 1 | A | Unk | Int-A | 2 | | |
| 1872ai | 22 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1873pha | 23 y M | methadone | 3 | 3 | A | Par | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | fentanyl analog, acetyl fentanyl | 3 | 3 | | | | | | 19 ng/mL In Blood (unspecified) @ Autopsy |
| | | heroin | 4 | 4 | | | | | | |
| | | | | | | | | | | |
| | | cocaine | 1 | 1 | | | | | cocaine | 130 ng/mL In Blood (unspecified) @ Autopsy |
| | | cocaine | 1 | 1 | | | | | benzoyllecognine | 1500 ng/mL In Blood (unspecified) @ Autopsy |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 56 ng/mL In Blood (unspecified) @ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|------------------------------|----------------|------------|------------|-------------|--------|-----|-------------|--|
| 1874h | 23 y M | cocaine | 1 | 1 | A | Inhal | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 1875 | 23 y F | cocaine | 1 | 1 | A | Unk | Unk | 2 | | |
| | | heroin | 2 | 2 | | | | | | |
| | | drug, unknown | 3 | 3 | | | | | | |
| 1876ai | 23 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1877ai | 23 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1878ai | 23 y F | heroin | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1879p | 23 y M | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 1880p | 23 y M | heroin | 1 | 1 | U | Par | Int-S | 1 | | |
| 1881p | 23 y M | heroin | 1 | 1 | A | Inhal + Unk | Int-A | 2 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | marijuana | 2 | 2 | | | | | | |
| 1882ai | 23 y F | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1883ai | 23 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1884ai | 23 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1885h | 24 y M | methamphetamine | 1 | 1 | U | Ingst | Int-U | 1 | | |
| 1886h | 24 y M | methamphetamine | 1 | 1 | A | Ingst | Int-A | 2 | | |
| | | amphetamine | 1 | 1 | | | | | | |
| | | marijuana | 2 | 2 | | | | | | |
| | | amphetamine (hallucinogenic) | 3 | 3 | | | | | | |
| 1887h | 24 y M | methamphetamine | 1 | 1 | A | Ingst | Unk | 2 | | |
| 1888 | 24 y M | methamphetamine | 1 | 1 | A | Ingst | Int-A | 2 | | |
| | | marijuana | 2 | 2 | | | | | | |
| 1889pai | 24 y M | heroin | 1 | 1 | A | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1890ph | 24 y M | Mitragyna speciosa korthals | 1 | 1 | C | Ingst | Int-A | 2 | mitragynine | 1300 ng/mL In Blood (unspecified) @ 5 m (pe) |
| 1891i | 24 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | amphetamine | 3 | 3 | | | | | | |
| 1892pi | 25 y F | heroin | 1 | 1 | A/C | Ingst + Par | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| | | fentanyl | 4 | 4 | | | | | | |
| 1893i | 25 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| 1894ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | temazepam | 3 | 3 | | | | | | |
| 1895ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 1896p | 25 y M | heroin | 1 | 1 | A | Par | Int-A | 2 | | |
| 1897h | 25 y F | methamphetamine | 1 | 1 | U | Unk | Int-U | 3 | | |
| 1898ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1899ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1900ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------------------|----------------|------------|------------|---------------|--------|-----|-----------------|--|
| 1901ai | 25 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1902ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1903ai | 25 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1904pa | 26 y M | heroin | 1 | 1 | A | Unk | Int-A | 1 | | |
| | | body stuffer | 2 | 2 | | | | | | |
| 1905ph | 26 y F | cocaine | 1 | 1 | A/C | Unk | Int-A | 2 | | |
| | | amphetamine | 2 | 2 | | | | | | |
| 1906ai | 26 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | amphetamine | 3 | 3 | | | | | | |
| 1907ai | 26 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1908ai | 26 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1909i | 26 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | midazolam | 3 | 3 | | | | | | |
| 1910ai | 26 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | Mitragyna speciosa korthals | 2 | 2 | | | | | | |
| 1911i | 26 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| | | alprazolam | 4 | 4 | | | | | | |
| 1912i | 26 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1913ai | 26 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1914i | 26 y M | methylenedioxy methamphetamine (MDMA) | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1915a | 26 y M | THC homolog | 1 | 1 | A | Inhal | Int-A | 1 | cocaine | 26 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | THC homolog | 1 | 1 | | | | | benzoylecognine | 820 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | cocaine | 2 | 2 | | | | | cocaine | 26 ng/mL In Blood (unspecified) ⓐ Unknown |
| 1916h | 26 y M | methamphetamine | 1 | 1 | A | Unk | Oth-M | 3 | | |
| 1917h | 26 y F | methamphetamine | 1 | 1 | A | Ingst | Unk | 3 | methamphetamine | 78 ng/mL In Serum @ 1 h (pe) |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 1918h | 26 y F | heroin | 1 | 1 | A | Par | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1919h | 26 y M | methamphetamine | 1 | 1 | U | Ingst + Inhal | Int-U | 1 | amphetamine | 110 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | methamphetamine | 1 | 1 | | | | | methamphetamine | 4700 ng/mL In Blood (unspecified) ⓐ Unknown |
| 1920ai | 26 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1921ai | 26 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1922ai | 26 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | hydroxyzine | 3 | 3 | | | | | | |
| 1923ai | 26 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1924ai | 26 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1925ai | 26 y M | | | | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ③ Time |
|------------------|--------|---|----------------|------------|------------|---------------|--------|-----|----------------------------|---|
| 1926pha | 27 y M | methamphetamine | 1 | 1 | A | Ingst + Inhal | Int-S | 2 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1927ai | 27 y M | heroin | 1 | 1 | C | Unk | Int-A | 1 | | |
| 1928pha | 27 y F | heroin | 1 | 1 | A | Unk | Int-A | 1 | fentanyl | 0.006 mg/L In Blood (unspecified) ③ Autopsy |
| | | cocaine | 2 | 2 | | | | | benzoyllecognine | 1.9 mg/L In Blood (unspecified) ③ Autopsy |
| 1929ha | 27 y M | methamphetamine | 1 | 1 | A | Unk | Int-A | 1 | | |
| | | drug, unknown stimulant or street drug | 2 | 2 | | | | | | |
| 1930i | 27 y F | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1931i | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1932ai | 27 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1933ai | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1934i | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1935i | 27 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 1936ai | 27 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | loperamide | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1937i | 27 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1938ha | 27 y M | methamphetamine | 1 | 1 | U | Unk | Unk | 1 | methamphetamine | 6.88 mg/L In Blood (unspecified) ③ Unknown |
| 1939ai | 27 y M | cocaine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 1940ai | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1941ai | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1942ai | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1943ai | 27 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1944h | 28 y M | methamphetamine | 1 | 1 | A/C | Par + Unk | Int-A | 2 | | |
| | | THC homolog | 2 | 2 | | | | | | |
| 1945ai | 28 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 1946ai | 28 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | sertraline | 3 | 3 | | | | | | |
| 1947ai | 28 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1948ai | 28 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1949pa | 28 y F | cocaine | 1 | 1 | A | Ingst + Inhal | Int-U | 2 | | |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 1950ha | 28 y M | methamphetamine | 1 | 1 | A | Ingst | Unk | 1 | amphetamine | 145 ng/mL In Blood (unspecified) ③ 5 h (pe) |
| | | methamphetamine | 1 | 1 | | | | | methamphetamine | 4622 ng/mL In Blood (unspecified) ③ 5 h (pe) |
| | | marijuana | 2 | 2 | | | | | thc (tetrahydrocannabinol) | 1 ng/mL In Blood (unspecified) ③ 5 h (pe) |
| [1951pha] | 28 y M | amphetamine (hallucinogenic), n-ethyl pentylone | 1 | 1 | A | Unk | Unk | 1 | n-ethyl pentylone | 1100 ng/mL In Blood (unspecified) ③ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ⓐ Time |
|------------------|--------|-----------------------------------|----------------|------------|------------|--------------|--------|-----|------------------|--|
| | | amphetamine (hallucinogenic) | 2 | 2 | | | | | | |
| 1952h | 28 y M | methamphetamine | 1 | 1 | A | Ingst | Int-U | 2 | | |
| 1953h | 28 y M | methamphetamine | 1 | 1 | A/C | Ingst | Int-A | 1 | | |
| 1954ai | 28 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1955pha | 29 y M | methamphetamine | 1 | 1 | A | Unk | Unk | 1 | methamphetamine | 988 ng/mL In Blood (unspecified) ⓐ Unknown |
| 1956pha | 29 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 1957i | 29 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1958ai | 29 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1959ai | 29 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| 1960pa | 29 y M | heroin | 1 | 1 | A | Unk | Int-A | 1 | morphine (free) | 20 mcg/L In Blood (unspecified) ⓐ Autopsy |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 0.025 mg/L In Blood (unspecified) ⓐ Autopsy |
| 1961 | 29 y F | amphetamine/ dextroamphetamine | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | propranolol (extended release) | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| | | ethanol | 4 | 4 | | | | | ethanol | 127 mg/dL In Serum ⓐ Unknown |
| 1962ph | 29 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-S | 2 | | |
| | | alcohol, unknown | 2 | 2 | | | | | ethanol | 0.1 % In Blood (unspecified) ⓐ 1 h (pe) |
| 1963ai | 29 y M | cocaine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 1964ai | 29 y F | heroin | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1965ai | 29 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 1966ai | 29 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1967ai | 29 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1968ai | 29 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | heroin | 3 | 3 | | | | | | |
| 1969ai | 29 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | hyperthermia | 3 | 3 | | | | | | |
| 1970p | 30 y M | THC homolog | 1 | 1 | U | Inhal + Unk | Int-A | 2 | | |
| | | amphetamine | 2 | 2 | | | | | | |
| 1971ai | 30 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 1972hi | 30 y M | methamphetamine | 1 | 1 | A | Inhal + Derm | Int-M | 2 | | |
| 1973pha | 30 y M | methamphetamine | 1 | 1 | U | Unk | Unk | 1 | methamphetamine | 330 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | methamphetamine | 1 | 1 | | | | | amphetamine | 40 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | gabapentin | 2 | 2 | | | | | | |
| | | hydrocodone | 3 | 3 | | | | | hydrocodone | 6.9 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | buprenorphine | 4 | 4 | | | | | buprenorphine | 2.7 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | buprenorphine | 4 | 4 | | | | | norbuprenorphine | 3.2 ng/mL In Blood (unspecified) ⓐ Autopsy |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-------------------------|----------------|------------|------------|---------------|--------|-----|-----------------------|---|
| 1974ai | 30 y M | albuterol/tirotropium | 5 | 5 | U | Unk | Int-A | 1 | | |
| | | montelukast | 6 | 6 | | | | | | |
| | | cocaine | 1 | 1 | | | | | | |
| 1975ai | 30 y M | narcotic, other/unknown | 2 | 2 | U | Ingst + Unk | Int-A | 1 | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| | | heroin | 1 | 1 | | | | | | |
| 1976ai | 30 y F | ethanol | 2 | 2 | U | Unk | Int-S | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 1977ai | 30 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| [1978ha] | 30 y M | methamphetamine | 1 | 1 | A/C | Unk | Int-A | 1 | amphetamine | 2 mg/L In Whole Blood @ Autopsy |
| 1979ha | 30 y F | methamphetamine | 1 | 1 | U | Unk | Unk | 1 | methamphetamine | 6.7 mg/L In Whole Blood @ Autopsy |
| | | cocaine | 1 | 1 | | | | | ecgonine methyl ester | 0.027 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 1 | 1 | | | | | benzoylecognine | 0.125 mg/L In Blood (unspecified) @ Autopsy |
| | | fentanyl | 2 | 2 | | | | | norfentanyl | 0.006 mg/L In Blood (unspecified) @ Autopsy |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 0.016 mg/L In Blood (unspecified) @ Autopsy |
| | | morphine | 3 | 3 | | | | | morphine | 0.021 mg/L In Blood (unspecified) @ Autopsy |
| 1980h | 30 y M | amphetamine | 1 | 1 | A | Unk | Int-M | 2 | | |
| | | marijuana | 2 | 2 | | | | | | |
| 1981ai | 30 y F | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1982ai | 30 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 1983ai | 30 y F | heroin | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1984ai | 30 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 1985ai | 30 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1986ai | 30 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 1987ai | 30 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | hyperthermia | 3 | 3 | | | | | | |
| 1988h | 31 y M | methamphetamine | 1 | 1 | A/C | Ingst | Int-A | 1 | | |
| 1989ai | 31 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1990ai | 31 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 1991ai | 31 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 1992ai | 31 y F | methamphetamine | 1 | 1 | U | Unk | Int-M | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | tramadol | 3 | 3 | | | | | | |
| 1993ai | 31 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 1994ai | 31 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 1995i | 31 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 1996 | 31 y M | THC homolog | 1 | 1 | A | Inhal | Int-A | 2 | | |
| 1997ha | 31 y M | methamphetamine | 1 | 1 | U | Ingst + Inhal | Int-A | 1 | amphetamine | 306 ng/mL In Blood (unspecified) @ Unknown |
| | | methamphetamine | 1 | 1 | | | | | methamphetamine | 4984 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 2 | 2 | | | | | benzoylecognine | 206 ng/mL In Blood (unspecified) @ Unknown |
| | | marijuana | 3 | 3 | | | | | | |
| | | cocaine | 1 | 1 | | | | | | |
| 1998 | 31 y M | drug, unknown | 2 | 2 | U | Unk | Int-U | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--------------------------------------|----------------|------------|------------|---------------------|--------|-----|--------------------------------------|--|
| 1999pha | 31 y M | | | | A | Ingst | Int-A | 1 | | |
| | | 3,4-methylenedioxy amphetamine (MDA) | 1 | 1 | | | | | mda (3,4-methylenedioxy amphetamine) | 3300 ng/mL In Blood (unspecified) @ Autopsy |
| 2000pa | 31 y F | cocaine | 1 | 1 | | Oth | Int-A | 1 | norfentanyl | 0.82 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 1 | 1 | | | | | acetyl fentanyl | 1.8 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 1 | 1 | | | | | benzoylecognine | 1500 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 1 | 1 | | | | | cocaethylene | 44 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 1 | 1 | | | | | fentanyl | 6.8 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 1 | 1 | | | | | cocaine | 68 ng/mL In Blood (unspecified) @ Unknown |
| 2001ai | 31 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 2002ai | 31 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2003ai | 31 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2004ai | 31 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 2005ai | 31 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2006ai | 31 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2007ai | 31 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2008ai | 31 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | hyperthermia | 2 | 2 | | | | | | |
| 2009a | 32 y M | cocaine | 1 | 1 | A | Ingst | Int-M | 1 | cocaine | 0.024 mg/L In Blood (unspecified) @ 105 m (pe) |
| | | cocaine | 1 | 1 | | | | | cocaethylene | 0.73 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 1 | 1 | | | | | benzoylecognine | 1.5 mg/L In Blood (unspecified) @ 105 m (pe) |
| | | cocaine | 1 | 1 | | | | | benzoylecognine | 4.1 mg/L In Blood (unspecified) @ Autopsy |
| | | cocaine | 1 | 1 | | | | | cocaine | 9.1 mg/L In Blood (unspecified) @ Autopsy |
| | | ethanol | 2 | 2 | | | | | ethanol | 100 mg/dL In Blood (unspecified) @ Autopsy |
| 2010ha | 32 y M | methamphetamine | 1 | 1 | U | Unk | Unk | 1 | methamphetamine | 6600 ng/mL In Blood (unspecified) @ Autopsy |
| | | methamphetamine | 1 | 1 | | | | | amphetamine | 92 ng/mL In Whole Blood @ Autopsy |
| 2011pha | 32 y M | heroin | 1 | 1 | U | Ingst + Aspir + Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2012ai | 32 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methadone | 2 | 2 | | | | | | |
| 2013ai | 32 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2014ai | 32 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2015pha | 32 y M | methamphetamine | 1 | 1 | A | Unk | Int-U | 1 | methamphetamine | 8 mg/L In Blood (unspecified) @ Autopsy |
| | | amphetamine | 2 | 2 | | | | | amphetamine | 0.18 mg/L In Blood (unspecified) @ Autopsy |
| 2016pha | 32 y M | cocaine | 1 | 1 | U | Unk | Int-S | 1 | benzoylecognine | 870 ng/mL In Blood (unspecified) @ 5 m (pe) |
| | | cocaine | 1 | 1 | | | | | cocaine | 90 ng/mL In Blood (unspecified) @ 5 m (pe) |
| | | heroin | 2 | 2 | | | | | codeine | 13 ng/mL In Blood (unspecified) @ 5 m (pe) |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | |
|------------------|--------|------------------------------|----------------|---------------------------------------|------------|---|--------|-----|------------------------------|---|------------------|--|-----------------|---|------------------|--|
| 2017pa | 32 y M | heroin | 2 | 2 | A | Ingst + Inhal | Unk | 1 | 6-mam (6-monoacetylmorphine) | 18 ng/mL In Blood (unspecified) @ 5 m (pe) | | | | | | |
| | | heroin | 2 | 2 | | | | | morphine | 250 ng/mL In Blood (unspecified) @ 5 m (pe) | | | | | | |
| | | Mitragyna speciosa korthals | 3 | 3 | | | | | mitragynine | 54 ng/mL In Blood (unspecified) @ 5 m (pe) | | | | | | |
| | | sertraline | 4 | 4 | | | | | bupropion | 110 ng/mL In Blood (unspecified) @ 5 m (pe) | | | | | | |
| | | dextromethorphan | 5 | 5 | | | | | | | | | | | | |
| | | chlorpheniramine | 6 | 6 | | | | | | | | | | | | |
| | | bupropion | 7 | 7 | | | | | | | | | | | | |
| | | bupropion | 7 | 7 | | | | | | | hydroxybupropion | 1400 ng/mL In Blood (unspecified) @ 5 m (pe) | | | | |
| | | 2018ai | 32 y M | methylenedioxy methamphetamine (MDMA) | | | | | 1 | 1 | U | Unk | Int-A | 1 | benzoyllecognine | 420 ng/mL In Blood (unspecified) @ Unknown |
| | | | | cocaine | | | | | 2 | 2 | | | | | | |
| cocaine | 2 | | | 2 | ethanol | 137 mcg/dL In Blood (unspecified) @ Unknown | | | | | | | | | | |
| heroin | 1 | 1 | | | | | | | | | | | | | | |
| methamphetamine | 2 | 2 | | | | | | | | | | | | | | |
| 2019ai | 32 y M | heroin | 1 | 1 | | | U | Unk | Int-A | 1 | methamphetamine | 2 | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | | | | | | |
| | | bupropion | 3 | 3 | | | | | | | | | | | | |
| 2020ai | 32 y F | methamphetamine | 1 | 1 | | | U | Unk | Int-U | 2 | methadone | 2 | | | | |
| | | methadone | 2 | 2 | | | | | | | | | | | | |
| 2021p | 33 y M | heroin | 1 | 1 | | | A | Unk | Int-A | 2 | ethanol | 137 mcg/dL In Blood (unspecified) @ Unknown | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | | | | |
| | | morphine | 3 | 3 | | | | | | | | | | | | |
| 2022pha | 33 y M | cocaine | 1 | 1 | A | Oth + Unk | Int-A | 1 | methamphetamine | 5.3 mg/L In Blood (unspecified) @ Autopsy | | | | | | |
| 2023 | 33 y M | caffeine | 1 | 1 | A | Ingst | Int-U | 1 | | | | | | | | |
| 2024ha | 33 y M | amphetamine (hallucinogenic) | 1 | 1 | U | Unk | Unk | 1 | | | THC homolog | 2 | | | | |
| | | THC homolog | 2 | 2 | | | | | | | | | | | | |
| 2025ha | 33 y F | methamphetamine | 1 | 1 | U | Inhal + Unk | Int-A | 2 | | | drug, unknown | 2 | | | | |
| | | drug, unknown | 2 | 2 | | | | | | | | | | | | |
| 2026i | 33 y M | cocaine | 1 | 1 | U | Unk | Int-A | 3 | | | methamphetamine | 5.3 mg/L In Blood (unspecified) @ Autopsy | | | | |
| 2027ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | ethanol | 2 | | |
| | | ethanol | 2 | 2 | | | | | | | | | | | | |
| 2028ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | | | methamphetamine | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | | | | |
| 2029ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | Mitragyna speciosa korthals | 1 | | | | | | |
| | | Mitragyna speciosa korthals | 1 | 1 | | | | | | | | | | | | |
| 2030ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | fentanyl | 2 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | | | | | | | |
| 2031ph | 33 y M | methamphetamine | 1 | 1 | A/C | Oth | Int-A | 2 | methamphetamine | 5.3 mg/L In Blood (unspecified) @ Autopsy | | | | | | |
| 2032a | 33 y M | methamphetamine | 1 | 1 | A | Ingst + Par | Int-A | 1 | | | heroin | 2 | | | | |
| | | heroin | 2 | 2 | | | | | | | | | | | | |
| 2033ph | 33 y M | heroin | 1 | 1 | A | Par | Int-A | 3 | | | alprazolam | 2 | | | | |
| | | alprazolam | 2 | 2 | | | | | | | | | | | | |
| 2034ai | 33 y M | amphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | benzodiazepine | 2 | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | | | | | | |
| 2035pai | 33 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | | | | | |
| 2036ai | 33 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | methamphetamine | 2 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | | | | | | | |
| 2037ai | 33 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | heroin | 1 | | | | | | |
| | | heroin | 1 | 1 | | | | | | | | | | | | |
| | | cocaine | 2 | 2 | | | | | | | | | | | | |
| 2038ai | 33 y M | methamphetamine | 3 | 3 | U | Unk | Int-A | 2 | heroin | 1 | | | | | | |
| | | heroin | 1 | 1 | | | | | | | | | | | | |
| | | heroin | 1 | 1 | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------------------|----------------|------------|------------|---------------|--------|-----|-----------------|---|
| 2039ai | 33 y M | methamphetamine | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| | | clonazepam | 4 | 4 | | | | | | |
| 2040ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2041ai | 33 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 2042ai | 33 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2043ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | hyperthermia | 2 | 2 | | | | | | |
| 2044ai | 33 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | hyperthermia | 2 | 2 | | | | | | |
| 2045ai | 33 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2046i | 34 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2047ai | 34 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| 2048ai | 34 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| [2049ha] | 34 y F | methamphetamine | 1 | 1 | A | Ingst | Int-M | 1 | methamphetamine | 1.001 mg/L In Blood (unspecified) @ Unknown |
| 2050ai | 34 y F | heroin | 1 | 1 | A | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 2051h | 34 y M | methylenedioxy methamphetamine (MDMA) | 1 | 1 | U | Ingst | Int-A | 2 | | |
| 2052p | 34 y F | heroin | 1 | 1 | A | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 2053ai | 34 y M | heroin | 1 | 1 | U | Unk | Int-M | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2054ai | 34 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 2055ai | 34 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2056ha | 35 y M | methamphetamine | 1 | 1 | A/C | Ingst | Int-A | 1 | methamphetamine | 3.8 mg/L In Blood (unspecified) @ 1 h (pe) |
| 2057ai | 35 y F | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2058ai | 35 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 2059ai | 35 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 2060ai | 35 y F | methamphetamine | 1 | 1 | C | Par | Int-A | 3 | | |
| 2061ph | 35 y M | fentanyl analog, carfentanil | 1 | 1 | A | Inhal + Unk | Int-A | 2 | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | fentanyl | 3 | 3 | | | | | | |
| | | synthetic opiate | 4 | 4 | | | | | | |
| 2062h | 35 y F | methamphetamine | 1 | 1 | U | Ingst + Aspir | Unk | 2 | | |
| | | acetaminophen/diphenhydramine | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 2063a | 35 y F | heroin | 1 | 1 | A/C | Ingst + Par | Int-A | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|---------------------|--------|-----|---------------------|--|
| 2064ph | 35 y M | methamphetamine | 2 | 2 | A | Ingst + Unk | Unk | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 128 mg/dL In Blood (unspecified) ⓐ Unknown |
| | | amlodipine | 3 | 3 | | | | | | |
| | | drug, unknown | 4 | 4 | | | | | | |
| 2065ai | 35 y M | amphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| 2066ai | 35 y M | heroin | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | fentanyl analog, methoxyacetylfentanyl | 1 | 1 | | | | | | |
| | | ketamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 2067ai | 35 y F | cocaine | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 2068ai | 35 y F | diphenhydramine | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | donazepam | 3 | 3 | | | | | | |
| 2069ai | 35 y F | donazepam | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 2070ai | 35 y M | cocaine | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2071ai | 35 y M | methamphetamine | 2 | 2 | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2072ai | 35 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2073i | 36 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2074ai | 36 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2075ai | 36 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2076i | 36 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2077ai | 36 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | heroin | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| [2078ha] | 36 y F | ethanol | 3 | 3 | A | Ingst + Vag | Int-U | 1 | | |
| | | cocaine | 1 | 1 | | | | | cocaine | 6046 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | cocaine | 1 | 1 | | | | | benzoylecognine | 6728 ng/mL In Blood (unspecified) ⓐ Unknown |
| 2079pha | 36 y M | benzoylecognine | 1 | 1 | A/C | Ingst | Int-A | 1 | | |
| | | Mitragyna speciosa korthals | 1 | 1 | | | | | mitragynine | 1600 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | sertraline | 2 | 2 | | | | | sertraline | 35 ng/mL In Blood (unspecified) ⓐ Unknown |
| | | sertraline | 2 | 2 | | | | | desmethylsertraline | 89 ng/mL In Blood (unspecified) ⓐ Unknown |
| 2080h | 36 y M | desmethylsertraline | 2 | 2 | U | Par | Int-A | 3 | | |
| | | drug, unknown stimulant or street drug | 1 | 1 | | | | | | |
| 2081p | 36 y F | drug, unknown stimulant or street drug | 1 | 1 | A | Unk | Int-A | 2 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2082ai | 36 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | bupropion | 3 | 3 | | | | | | |
| 2083ai | 36 y M | bupropion | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 2084ai | 36 y M | alprazolam | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 2085ai | 36 y M | cocaine | 3 | 3 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2086ai | 36 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2087ph | 37 y M | methamphetamine | 1 | 1 | A | Ingst + Inhal + Par | Int-A | 3 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------|----------------|------------|------------|---------------------|--------|-----|-----------------|---|
| 2088p | 37 y M | gabapentin | 3 | 3 | | | | | | |
| | | cocaine | 1 | 1 | A | Inhal | Int-A | 2 | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 2089h | 37 y M | phencyclidine | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | marijuana | 2 | 2 | | | | | | |
| | | THC homolog | 3 | 3 | | | | | | |
| 2090pa | 37 y F | THC homolog | 1 | 1 | A | Inhal | Int-A | 1 | | |
| 2091ai | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2092ai | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methadone | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2093i | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2094i | 37 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2095ai | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | methadone | 3 | 3 | | | | | | |
| 2096i | 37 y M | heroin | 1 | 1 | C | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2097ai | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2098i | 37 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2099i | 37 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2100p | 37 y M | cocaine | 1 | 1 | A | Ingst + Inhal + Unk | Int-S | 2 | | |
| | | hydralazine | 2 | 2 | | | | | | |
| | | aripiprazole | 3 | 3 | | | | | | |
| | | trazodone | 4 | 4 | | | | | | |
| | | phenytoin | 5 | 5 | | | | | | |
| | | benztropine | 6 | 6 | | | | | | |
| 2101ha | 37 y F | methamphetamine | 1 | 1 | U | Unk | Unk | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| 2102ph | 37 y M | heroin | 1 | 1 | A | Par | Int-A | 2 | | |
| 2103p | 37 y M | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2104ai | 37 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 2105ai | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | olanzapine | 3 | 3 | | | | | | |
| 2106ai | 37 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2107ai | 37 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 2108ai | 37 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2109 | 38 y M | methamphetamine | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2110pha | 38 y M | methamphetamine | 1 | 1 | U | Unk | Unk | 2 | amphetamine | 22 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | methamphetamine | 1 | 1 | | | | | methamphetamine | 237 ng/mL In Blood (unspecified) ⓐ Autopsy |
| | | morphine | 2 | 2 | | | | | | |
| 2111 | 38 y F | Mitragyna speciosa korthals | 1 | 1 | C | Ingst | Int-A | 3 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 130 mg/dL In Blood (unspecified) ⓐ Unknown |
| 2112ai | 38 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2113ai | 38 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2114ai | 38 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|--|----------------|------------|------------|-----------|--------|-----|---------|----------------------------|
| 2115ai | 38 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2116i | 38 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2117pai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2118ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| 2119i | 38 y F | heroin | 3 | 3 | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 2120ph | 38 y M | gabapentin | 3 | 3 | U | Unk | Unk | 2 | | |
| | | drug, unknown stimulant or street drug | 1 | 1 | | | | | | |
| | | | | | | | | | | |
| 2121ha | 38 y M | methamphetamine | 1 | 1 | A | Ingst | Int-A | 1 | | |
| 2122h | 38 y M | methamphetamine | 1 | 1 | U | Ingst | Int-U | 1 | | |
| 2123ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | codeine | 2 | 2 | | | | | | |
| 2124ai | 38 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | THC homolog | 2 | 2 | | | | | | |
| 2125ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2126ai | 38 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2127ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methadone | 2 | 2 | | | | | | |
| 2128ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2129ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 2130ai | 38 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 2131ai | 38 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | ibuprofen | 3 | 3 | | | | | | |
| 2132h | 39 y M | methamphetamine | 1 | 1 | A | Ingst | Int-M | 2 | | |
| 2133pha | 39 y M | methamphetamine | 1 | 1 | U | Unk | Unk | 2 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | marijuana | 2 | 2 | | | | | | |
| 2134ai | 39 y F | drug, unknown | 3 | 3 | U | Unk | Int-S | 2 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | | | | | | | | | |
| 2135ai | 39 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2136ai | 39 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | bupropion | 2 | 2 | | | | | | |
| | | buspirone | 3 | 3 | | | | | | |
| 2137ai | 39 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2138ai | 39 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2139ai | 39 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2140ai | 39 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2141ai | 39 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2142ph | 39 y M | heroin | 1 | 1 | A/C | Par + Unk | Int-A | 2 | | |
| | | buprenorphine | 2 | 2 | | | | | | |
| 2143p | 39 y M | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2144h | 39 y M | heroin | 1 | 1 | U | Ingst | Int-A | 2 | | |
| | | amphetamine (hallucinogenic) | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ⓐ Time |
|------------------|--------|--|----------------|-------------|------------|-------------|--------|-----|---|---|
| 2145 | 39 y M | methamphetamine glass cleaner (household) | 1 2 | 1 2 | A | Ingst | Int-M | 2 | | |
| 2146ai | 39 y F | cocaine methadone ethanol | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2147ai | 39 y M | heroin methamphetamine hyperthermia | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2148ai | 39 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2149ai | 39 y M | methamphetamine ethanol | 1 2 | 1 2 | U | Unk | Int-A | 1 | | |
| 2150i | 40 y M | heroin methamphetamine | 1 2 | 1 2 | U | Unk | Int-M | 1 | | |
| 2151ai | 40 y M | heroin methamphetamine oxycodone | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2152ai | 40 y M | heroin methamphetamine | 1 2 | 1 2 | U | Unk | Int-A | 1 | | |
| 2153ai | 40 y F | heroin methamphetamine oxycodone | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2154ai | 40 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2155i | 40 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2156ai | 40 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2157ai | 40 y M | Mitragyna speciosa korthals ethanol | 1 2 | 1 2 | U | Unk | Int-A | 1 | | |
| 2158ha | 40 y M | Mitragyna speciosa korthals venlafaxine venlafaxine | 1 2 2 | 1 2 2 | A | Ingst | Int-A | 1 | mitragynine venlafaxine o-desmethyl-venlafaxine | 300 ng/mL In Blood (unspecified) ⓐ Autopsy 216 ng/mL In Blood (unspecified) ⓐ Autopsy 337 ng/mL In Blood (unspecified) ⓐ Autopsy |
| 2159ai | 40 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2160ai | 40 y F | heroin codeine | 1 2 | 1 2 | U | Unk | Int-A | 1 | | |
| 2161ai | 40 y F | methamphetamine | 1 | 1 | C | Unk | Int-A | 1 | | |
| 2162ai | 40 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2163ai | 40 y M | methamphetamine ethanol | 1 2 | 1 2 | U | Ingst + Unk | Int-A | 1 | | |
| 2164ai | 40 y F | methamphetamine fentanyl ibuprofen | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2165ai | 40 y M | methamphetamine bupropion benztropine | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2166ai | 41 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2167 | 41 y M | amphetamine cyclic antidepressant, unknown marijuana | 1 2 3 | 1 2 3 | U | Ingst + Unk | Unt-U | 2 | | |
| 2168ai | 41 y M | heroin methamphetamine codeine | 1 2 3 | 1 2 3 | U | Unk | Int-A | 1 | | |
| 2169i | 41 y M | heroin methamphetamine | 1 2 | 1 2 | U | Unk | Int-A | 1 | | |
| 2170ai | 41 y M | heroin methamphetamine ethanol | 1 2 3 | 1 2 3 | U | Ingst + Unk | Int-A | 1 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------------------|----------------|------------|------------|-------------|--------|-----|-----------------|--|
| 2171ai | 41 y M | | | | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2172h | 41 y F | | | | A/C | Ingst | Int-S | 3 | | |
| | | cocaine | 1 | 1 | | | | | | |
| 2173ph | 41 y M | | | | A/C | Ingst | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2174ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2175ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| 2176ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2177ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 2178ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | codeine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2179ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2180ai | 41 y M | | | | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | morphine | 2 | 2 | | | | | | |
| 2181i | 41 y M | | | | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 2182ai | 41 y M | | | | U | Ingst + Unk | Int-M | 1 | | |
| | | Mitragyna speciosa korthals | 1 | 1 | | | | | | |
| | | antipsychotic (atypical) | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| | | ethanol | 5 | 5 | | | | | | |
| 2183p | 42 y F | | | | A | Inhal | Int-U | 2 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2184pha | 42 y M | | | | A | Unk | Unk | 1 | | |
| | | heroin | 1 | 1 | | | | | morphine (free) | 620 mcg/L In Blood (unspecified) ⓐ Autopsy |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 0.012 mg/L In Blood (unspecified) ⓐ Autopsy |
| 2185ai | 42 y F | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2186ai | 42 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2187ai | 42 y M | | | | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2188ai | 42 y F | | | | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2189pha | 42 y F | | | | U | Oth + Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2190ph | 42 y M | | | | A/C | Par | Int-A | 2 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2191ai | 42 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2192ai | 42 y M | | | | U | Unk | Int-S | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2193ai | 42 y M | | | | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2194ai | 42 y M | | | | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2195ph | 43 y M | | | | A | Par | Int-A | 2 | | |
| | | heroin | 1 | 1 | | | | | | |
| 2196ai | 43 y M | | | | U | Unk | Int-S | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | ketamine | 3 | 3 | | | | | | |
| 2197hai | 43 y M | | | | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | cocaine | 3 | 3 | | | | | | |
| 2198ai | 43 y M | | | | U | Unk | Int-A | 2 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2199ai | 43 y M | | | | U | Unk | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|-------------|--------|-----|-----------------|---|
| 2200ai | 43 y F | | | | U | Unk | Int-A | 2 | | |
| 2201a | 43 y M | methamphetamine | 1 | 1 | A | Ingst | Int-A | 1 | methamphetamine | 17749 ng/mL In Blood (unspecified) @ Unknown |
| 2202ph | 43 y M | methamphetamine | 1 | 1 | U | Unk | Unk | 2 | | |
| 2203ph | 43 y M | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2204ai | 43 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2205ai | 43 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2206ai | 43 y M | methamphetamine | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2207ai | 43 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2208ai | 43 y F | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2209ai | 43 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2210ai | 44 y M | lorazepam | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2211ai | 44 y M | methamphetamine | 1 | 1 | C | Par + Unk | Int-A | 1 | | |
| 2212ai | 44 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2213ai | 44 y M | alprazolam | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2214ai | 44 y M | chlordiazepoxide | 3 | 3 | U | Unk | Int-A | 1 | | |
| 2215ai | 44 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2216ph | 45 y M | methamphetamine | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2217ai | 45 y M | amphetamine | 1 | 1 | U | Unk | Int-A | 1 | ethanol | 143 mg/dL In Whole Blood @ Unknown |
| 2218ai | 45 y M | ethanol | 2 | 2 | U | Unk | Int-A | 2 | | |
| 2219ai | 45 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2220ai | 45 y F | methamphetamine | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2221ai | 45 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2222i | 45 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2223ai | 45 y M | heroin | 1 | 1 | U | Unk | Int-S | 1 | | |
| 2224ai | 45 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2225ai | 45 y M | heroin | 2 | 2 | U | Unk | Int-A | 2 | | |
| 2226ai | 45 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| 2227h | 45 y M | diazepam | 2 | 2 | U | Unk | Int-A | 1 | | |
| 2228p | 45 y M | ethanol | 3 | 3 | U | Unk | Int-A | 1 | | |
| 2229ai | 45 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | isopropanol | 2 | 2 | A/C | Ingst | Int-A | 2 | | |
| | | naproxen | 3 | 3 | U | Unk | Int-A | 1 | | |
| | | methylenedioxy methamphetamine (MDMA) | 1 | 1 | A | Ingst | Int-A | 2 | | |
| | | amphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|-------------------------|--------|-------------------------|----------------|------------|------------|-------------|--------|-----|---------|----------------------------|
| 2230ai | 45 y F | phenylpropanolamine | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2231ai | 45 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | phenylpropanolamine | 2 | 2 | | | | | | |
| | | methadone | 3 | 3 | | | | | | |
| 2232ai | 45 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | isopropanol | 2 | 2 | | | | | | |
| 2233ai | 45 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2234ai | 45 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2235ai | 45 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2236ph | 46 y M | ethanol | 2 | 2 | U | Ingst | Int-M | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2237ai | 46 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2238pha | 46 y M | methamphetamine | 1 | 1 | A/C | Unk | Unk | 2 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | benzodiazepine | 2 | 2 | | | | | | |
| | | narcotic, other/unknown | 3 | 3 | | | | | | |
| | | narcotic, other/unknown | 3 | 3 | | | | | | |
| narcotic, other/unknown | 3 | 3 | | | | | | | | |
| 2239ai | 46 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | chlordiazepoxide | 3 | 3 | | | | | | |
| 2240ai | 46 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2241ai | 46 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2242ai | 46 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | tramadol | 2 | 2 | | | | | | |
| 2243ha | 46 y M | cyclobenzaprine | 3 | 3 | A | Ingst | Int-A | 2 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | drug, unknown | 2 | 2 | | | | | | |
| 2244ai | 46 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2245ai | 46 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 2246ai | 46 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2247ai | 46 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2248ai | 46 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2249ai | 46 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2250ph | 47 y M | methamphetamine | 1 | 1 | A | Ingst | Int-M | 2 | | |
| | | pyrethroids | 2 | 2 | | | | | | |
| 2251ai | 47 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2252ai | 47 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | gabapentin | 3 | 3 | | | | | | |
| 2253hai | 47 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2254ai | 47 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2255ai | 47 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| 2256ai | 47 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------------|----------------|------------|------------|-------------|--------|-----|------------------|---|
| 2257ai | 47 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 2258ai | 47 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2259ai | 47 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2260ai | 47 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2261ai | 47 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2262ai | 47 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2263ai | 48 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2264pha | 48 y F | heroin | 1 | 1 | U | Ingst + Unk | Int-S | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | methamphetamine | 0.31 mg/L In Blood (unspecified) @ 1 h (pe) |
| | | cocaine | 2 | 2 | | | | | benzoyllecognine | 0.22 mg/L In Blood (unspecified) @ 1 h (pe) |
| | | ethanol | 3 | 2 | | | | | ethanol | 44 mg/dL In Serum @ 1 h (pe) |
| 2265ai | 48 y M | cocaine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | | |
| 2266ai | 48 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2267ai | 48 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 2268ai | 48 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2269ai | 48 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2270ai | 48 y F | methamphetamine | 1 | 1 | C | Unk | Int-A | 3 | | |
| 2271ai | 48 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | heroin | 2 | 2 | | | | | | |
| 2272 | 48 y M | methamphetamine | 1 | 1 | C | Unk | Int-A | 2 | | |
| 2273ph | 48 y M | heroin | 1 | 1 | A/C | Unk | Int-A | 2 | | |
| 2274ai | 48 y M | heroin | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | mirtazapine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 2275ai | 48 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | methadone | 3 | 3 | | | | | | |
| 2276ai | 48 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2277ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2278ai | 49 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2279i | 49 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| | | lorazepam | 4 | 4 | | | | | | |
| 2280ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| | | oxycodone | 3 | 3 | | | | | | |
| 2281ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cyclobenzaprine | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 2282ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | acetaminophen | 3 | 3 | | | | | | |
| 2283ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2284ph | 49 y F | heroin | 1 | 1 | A | Par | Int-A | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|-----------------|----------------|------------|------------|-------------|--------|-----|---------|--|
| 2285ai | 49 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| 2286ai | 49 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | diazepam | 3 | 3 | | | | | | |
| 2287ai | 49 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2288ai | 49 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | phencyclidine | 2 | 2 | | | | | | |
| 2289ai | 49 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | amitriptyline | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| | | fluoxetine | 4 | 4 | | | | | | |
| | | gabapentin | 5 | 5 | | | | | | |
| 2290ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2291ai | 49 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2292ai | 50 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2293ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | codeine | 2 | 2 | | | | | | |
| 2294ai | 50 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2295ai | 50 y F | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | codeine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2296i | 50 y F | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2297ai | 50 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2298pha | 50 y F | methamphetamine | 1 | 1 | A/C | Ingst | Int-S | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | clonazepam | 2 | 2 | | | | | | |
| | | amlodipine | 3 | 3 | | | | | | |
| | | cocaine | 4 | 4 | | | | | | |
| 2299ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2300ha | 50 y F | heroin | 1 | 1 | C | Ingst | Unk | 2 | | 6-mam (6-monoacetylmorphine) 210 ng/mL In Blood (unspecified) ③ Autopsy |
| | | oxycodone | 2 | 2 | | | | | | oxycodone (free) 100 ng/mL In Blood (unspecified) ③ Autopsy |
| | | methadone | 3 | 3 | | | | | | methadone 81 ng/mL In Blood (unspecified) ③ Autopsy |
| | | clonazepam | 4 | 4 | | | | | | clonazepam 19 ng/mL In Blood (unspecified) ③ Autopsy |
| | | alprazolam | 5 | 5 | | | | | | alprazolam 5.7 ng/mL In Blood (unspecified) ③ Autopsy |
| | | hydroxyzine | 6 | 6 | | | | | | hydroxyzine 270 ng/mL In Blood (unspecified) ③ Autopsy |
| 2301ai | 50 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2302ai | 50 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 2303ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 2304ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2305ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2306ai | 50 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2307ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2308ai | 50 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | hyperthermia | 2 | 2 | | | | | | |
| 2309ha | 51 y F | cocaine | 1 | 1 | U | Unk | Unk | 3 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ③ Time |
|------------------|--------|-----------------------------|----------------|------------|------------|-------------|--------|-----|---------------------|--|
| | | alprazolam | 2 | 2 | | | | | alpha-oh-alprazolam | 0.04 mg/L In Urine (quantitative only) ③ Unknown |
| | | diazepam | 3 | 3 | | | | | oxazepam | 0.011 mg/L In Urine (quantitative only) ③ Unknown |
| 2310ai | 51 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2311i | 51 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2312ai | 51 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2313ph | 51 y M | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2314ai | 51 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | alprazolam | 3 | 3 | | | | | | |
| 2315ai | 51 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2316ai | 51 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | tramadol | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2317ai | 51 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2318ai | 51 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 2319ai | 51 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | levetiracetam | 3 | 3 | | | | | | |
| 2320ai | 51 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2321i | 52 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2322ai | 52 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2323i | 52 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2324ai | 52 y M | methamphetamine | 1 | 1 | U | Unk | Int-S | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 2325pa | 52 y M | cocaine | 1 | 1 | A | Unk | Unt-U | 1 | cocaine | 0.06 mg/L In Blood (unspecified) ③ Autopsy |
| 2326ai | 52 y F | amphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| | | benzodiazepine | 3 | 3 | | | | | | |
| 2327ai | 52 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2328ai | 52 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | hydromorphone | 3 | 3 | | | | | | |
| 2329ai | 52 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | olanzapine | 2 | 2 | | | | | | |
| 2330ai | 52 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| 2331ai | 52 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2332ai | 52 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fluoxetine | 2 | 2 | | | | | | |
| 2333i | 53 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2334i | 53 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 2335ai | 53 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2336ai | 53 y M | methamphetamine | 1 | 1 | U | Unk | Int-S | 1 | | |
| 2337i | 53 y M | Mitragyna speciosa korthals | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2338pha | 53 y M | | | | A | Par | Int-A | 1 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration ③ Time |
|------------------|--------|--|----------------|------------|------------|-------------|--------|-----|---------------------------------|--|
| | | cocaine | 1 | 1 | | | | | cocaine | 0.05 mg/L In Blood (unspecified) ④ Autopsy |
| 2339ai | 53 y M | fentanyl analog, 4-fluoroisobutyl fentanyl | 2 | 2 | U | Unk | Int-A | 1 | | |
| | | heroin | 1 | 1 | | | | | | |
| | | methadone | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| | | diazepam | 4 | 4 | | | | | | |
| | | alprazolam | 5 | 5 | | | | | | |
| 2340ai | 53 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2341ai | 53 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2342ai | 53 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2343ai | 53 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | lysergic acid diethylamide (LSD) | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2344pha | 54 y F | heroin | 1 | 1 | A | Ingst + Par | Int-U | 1 | morphine | 0.16 mg/L In Blood (unspecified) ④ Autopsy |
| | | heroin | 1 | 1 | | | | | 6-mam (6-monoacetylmorphine) | 8.7 ng/mL In Blood (unspecified) ④ Autopsy |
| | | methadone | 2 | 2 | | | | | methadone | 0.087 mg/L In Blood (unspecified) ④ Autopsy |
| 2345ai | 54 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2346ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2347ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2348ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2349ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 1 | 1 | | | | | | |
| | | narcotic, other/unknown | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2350ai | 54 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2351ai | 54 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| 2352ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | propranolol | 2 | 2 | | | | | | |
| | | paroxetine | 3 | 3 | | | | | | |
| 2353ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2354ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2355ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2356ai | 54 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methadone | 2 | 2 | | | | | | |
| 2357ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2358ai | 54 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2359h | 55 y F | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2360ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2361ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2362ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2363ai | 55 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-S | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | morphine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2364ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2365ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|----------------|------------|------------|---------------|--------|-----|---------|---|
| 2366ai | 55 y M | | | | U | Unk | Int-A | 3 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| 2367ai | 55 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2368ai | 55 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| 2369ai | 55 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2370ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2371ai | 55 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2372ai | 55 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 1 | 1 | | | | | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2373ha | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methylenedioxy methamphetamine (MDMA) | 2 | 2 | | | | | | |
| | | marijuana | 3 | 3 | | | | | | |
| 2374p | 56 y F | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2375ai | 56 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| 2376ai | 56 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2377i | 56 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2378ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2379ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2380ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2381ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2382ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | methylenedioxy methamphetamine (MDMA) | 1 | 1 | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2383h | 56 y M | marijuana | 1 | 1 | A | Ingst + Inhal | Unt-T | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| | | midazolam | 3 | 3 | | | | | | |
| | | haloperidol | 4 | 4 | | | | | | |
| 2384ph | 56 y M | heroin | 1 | 1 | U | Unk | Unk | 1 | | |
| | | ethanol | 2 | 2 | | | | | ethanol | 362 mg/dL In Blood (unspecified) Ⓢ Unknown |
| 2385ai | 56 y M | cocaine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2386ai | 56 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2387ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2388ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2389ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | hyperthermia | 2 | 2 | | | | | | |
| 2390ai | 56 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | trazodone | 2 | 2 | | | | | | |
| 2391ai | 56 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2392ai | 57 y M | cocaine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2393ai | 57 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 2394ai | 57 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--------|----------------------------|----------------|------------|------------|-------------|--------|-----|-----------------|---|-------------|---|-----------------|---|---|---|-----|-------|---|--|--|-----------------|---|---|--------|--------|-----------------|---|---|---|-----|-------|---|--|--|-----------------|--------|-----------|-----------|---|---|--------|--------|-----------|-------|---|---|-----|-------|---|--|--|-----------------|---|-----------------|---------|---|---------|---------|--------|------------------|---|---------|---|-----|-------|---|--|--|-----------------|------------------|---|---------|---|-----|--------|--------|-----------------|---|---|---|-----|-------|---|--|--|---------|-----------------|---|---------------|---------|---|--------|--------|-----------------|-----------------|---|---|-----|-------|-------|---|--|-----------|---------|---|--------|---------------|---------------|---|--------|--------|-----------------|-------|---|---|-----|---------|---|---|--------|--------|---------|-----------|---|---|-----|-------|---|-----------------|---|-------------------------|--------|--------|---------------|---|-------------------------|---|-------------|-------------|---|----------------|---|---------|------------|---|--------|--------|---------|---|---|--------|--------|--------|-----|-------|---|-----|-------|---|--|--|-----------------|-----------------|---|-------------------------|---|---|--------|--------|------------|---|-------------------------|---|-----|-------|---|--|--|-----------------|---|-------------|---|----------------|---|--------|--------|-----------------|------------|---|---|-----|-------|---|--|--|---------------|---|---|---------|---|--------|--------|--------|-----------|--------|---|---|-----|-------|---|--|--|---------------|---|-----|---------|---|---|--------|-----------------|-----------|---|-----------|---|-----|--------|--------|------------|---|---------|---|-----|--------|--------|--------|---|-----------------|---|-----|-----------|---|---|--------|---------|-----------------|---|-------|--------|--------|---|-----|---|-----|-------|---|--|--|-----------------|---|---|---------|---------------|---|-------|---------|--------|---|--------|--------|-----------|-------|---|---|-----|-----------------|---|---|-------|---------------|--------|---|---------|---|-----|--------|--------|-----------|---|-----------------|---|-----|--------|--------|--------|---|---------|---|-----|--------|--------|--------|---|-----------------|---|-----|--------|--------|--------|---|---------|---|-----|-------|--------|--------|---|-----------------|---|-----|-------|--------|-----------|---|-----------------|---|-----|---------|---|---|-------|-----------------|--------|---|--------|--------|----------------------------|-------|---|---|-----|-----------------|---|---|-------|--------|--------|---|--------|--------|-----------------|-------|---|---|-----|-----------------|---|---|--------|--------|--------|---|--------|--------|-----------|---|-----|---|-----|-------|---|--|--|---------|---|---|--------|-----------------|---|--------|--------|--------|--------|---|---|-----|-------|-------|---|--|-----------------|-----------------|---|--------|--------|--------|-----------|---|---|-----|-------|-------|---|--|-----------------|-----------------|---|--------|--------|---------|----------------------------|---|---|
| 2395ai | 57 y M | ethanol | 2 | 2 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | naproxen | 3 | 3 | | | | | | | 2396hai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2397ai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | lorazepam | 2 | 2 | 2398ai | 57 y M | donazepam | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2399hai | 57 y M | dextromethorphan | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2400ai | 57 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | cocaine | 2 | 2 | phencyclidine | 3 | 3 | 2401ai | 57 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | 2402ai | 57 y M | phencyclidine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2403pa | 57 y F | cocaine | 1 | 1 | A | Unk | Int-A | 1 | benzoylecognine | 2400 ng/mL. In Blood (unspecified) ⓐ Unknown | narcotic, other/unknown | 2 | 2 | fentanyl | 15 ng/mL. In Blood (unspecified) ⓐ Unknown | narcotic, other/unknown | 2 | 2 | norfentanyl | 30 ng/mL. In Blood (unspecified) ⓐ Unknown | benzodiazepine | 3 | 3 | alprazolam | 14 ng/mL. In Blood (unspecified) ⓐ Unknown | heroin | 1 | 1 | | | 2404ai | 57 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | trazodone | 2 | 2 | 2405ai | 57 y F | citalopram | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | trazodone | 2 | 2 | 2406ai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-U | 1 | | | phencyclidine | 1 | 1 | codeine | 2 | 2 | 2407ai | 57 y F | lorazepam | 3 | 3 | U | Unk | Int-A | 1 | | | phencyclidine | 1 | 1 | codeine | 2 | 2 | 2408ai | 58 y M | lorazepam | 3 | 3 | U | Unk | Int-A | 1 | | | cocaine | 1 | 1 | 2409ai | 58 y F | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2410i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 2 | 2 | cocaine | 3 | 3 | 2411i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2412i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2413ai | 58 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2414ai | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2415a | 58 y M | methadone | 2 | 2 | A | Unk | Int-S | 2 | | | methamphetamine | 1 | 1 | 2416ai | 58 y M | cleaner (anionic/nonionic) | 2 | 2 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2417ai | 58 y M | methamphetamine | 2 | 2 | U | Unk | Int-A | 2 | | | heroin | 1 | 1 | 2418ai | 58 y M | oxycodone | 2 | 2 | U | Unk | Int-A | 1 | | | ethanol | 3 | 3 | heroin | 1 | 1 | 2419ai | 58 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2420ai | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2421ai | 58 y M | ethanol | 2 | 2 | U |
| 2396hai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2397ai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | | | lorazepam | 2 | 2 | | | | | | | 2398ai | 57 y M | donazepam | 3 | 3 | U | | | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | | | 2 | 2 | 2399hai | | | | | | | 57 y M | dextromethorphan | 3 | 3 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2400ai | 57 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | cocaine | 2 | 2 | phencyclidine | 3 | 3 | 2401ai | 57 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | oxycodone | 2 | | | | | | | 2 | 2402ai | 57 y M | phencyclidine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2403pa | 57 y F | cocaine | 1 | 1 | | | A | Unk | Int-A | | | | | | | 1 | benzoylecognine | 2400 ng/mL. In Blood (unspecified) ⓐ Unknown | narcotic, other/unknown | 2 | 2 | | | fentanyl | 15 ng/mL. In Blood (unspecified) ⓐ Unknown | narcotic, other/unknown | | | | | | | 2 | 2 | norfentanyl | 30 ng/mL. In Blood (unspecified) ⓐ Unknown | benzodiazepine | 3 | | | 3 | alprazolam | 14 ng/mL. In Blood (unspecified) ⓐ Unknown | | | | | | | heroin | 1 | 1 | | | 2404ai | | | 57 y F | heroin | 1 | | | | | | | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | trazodone | 2 | 2 | 2405ai | 57 y F | citalopram | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | trazodone | 2 | 2 | 2406ai | 57 y M | methamphetamine | 1 | | | 1 | U | Unk | | | | | | | Int-U | 1 | | | phencyclidine | 1 | 1 | codeine | 2 | 2 | 2407ai | 57 y F | lorazepam | 3 | 3 | U | Unk | Int-A | 1 | | | phencyclidine | 1 | 1 | codeine | 2 | 2 | 2408ai | 58 y M | lorazepam | 3 | 3 | U | Unk | Int-A | 1 | | | cocaine | 1 | 1 | 2409ai | 58 y F | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2410i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 2 | 2 | cocaine | 3 | 3 | 2411i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2412i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2413ai | 58 y F | heroin | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | methamphetamine | 1 | 1 | 2414ai | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2415a | 58 y M | methadone | 2 | 2 | A | Unk | Int-S | 2 | | | methamphetamine | 1 | 1 | 2416ai | 58 y M | cleaner (anionic/nonionic) | 2 | 2 |
| 2397ai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | lorazepam | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2398ai | 57 y M | donazepam | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2399hai | 57 y M | dextromethorphan | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2400ai | 57 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2401ai | 57 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2402ai | 57 y M | phencyclidine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2403pa | 57 y F | cocaine | 1 | 1 | A | Unk | Int-A | 1 | benzoylecognine | 2400 ng/mL. In Blood (unspecified) ⓐ Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2405ai | 57 y F | citalopram | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2406ai | 57 y M | methamphetamine | 1 | 1 | U | Unk | Int-U | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2407ai | 57 y F | lorazepam | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | phencyclidine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2408ai | 58 y M | lorazepam | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2409ai | 58 y F | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | codeine | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2410i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2411i | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | methamphetamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2420ai | 58 y M | heroin | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2421ai | 58 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---------------------|----------------|------------|------------|-------------|--------|-----|-----------------|--|
| 2422ai | 58 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2423i | 59 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2424ai | 59 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| 2425ai | 59 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2426ai | 59 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | acetaminophen | 2 | 2 | | | | | | |
| 2427ai | 59 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2428 | 59 y M | methamphetamine | 1 | 1 | A | Ingst | Int-A | 2 | | |
| | | body stuffer | 2 | 2 | | | | | | |
| 2429ai | 59 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| 2430ai | 59 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | methamphetamine | 3 | 3 | | | | | | |
| 2431ai | 59 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2432ai | 59 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2433ai | 59 y F | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2434ai | 59 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2435ai | 59 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2436pa | 60 y M | heroin | 1 | 1 | A | Inhal | Int-A | 1 | morphine (free) | 15 mcg/L In Blood (unspecified) ⓐ Autopsy |
| | | fentanyl | 2 | 2 | | | | | fentanyl | 0.018 mg/L In Blood (unspecified) ⓐ Autopsy |
| 2437ai | 60 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methadone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2438ai | 60 y F | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | fentanyl | 2 | 2 | | | | | | |
| 2439ai | 60 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2440ai | 60 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2441ai | 60 y M | THC homolog, 5F-ADB | 1 | 1 | U | Ingst + Unk | Int-A | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2442ai | 60 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2443ai | 60 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | morphine | 3 | 3 | | | | | | |
| 2444ai | 60 y M | heroin | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2445ai | 60 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2446ai | 61 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2447ai | 61 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2448i | 61 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | hydrocodone | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2449ai | 61 y M | | | | C | Unk | Unt-G | 3 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|----------------------|----------------|------------|------------|-------------|--------|-----|---------|----------------------------|
| | | street drug, unknown | 1 | 1 | | | | | | |
| 2450ai | 61 y M | cocaine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2451ai | 61 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2452ai | 61 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | codeine | 2 | 2 | | | | | | |
| | | hydrocodone | 3 | 3 | U | Unk | Int-A | 1 | | |
| 2453ai | 61 y F | methamphetamine | 1 | 1 | | | | | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | lorazepam | 3 | 3 | | | | | | |
| 2454ai | 61 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2455ai | 61 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2456ai | 61 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | ethylene glycol | 2 | 2 | | | | | | |
| | | bupropion | 3 | 3 | | | | | | |
| 2457ai | 62 y M | cocaine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2458i | 62 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2459ai | 62 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2460ai | 62 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2461ai | 62 y F | cocaine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | buprenorphine | 2 | 2 | | | | | | |
| | | diphenhydramine | 3 | 3 | | | | | | |
| 2462ai | 62 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2463ai | 62 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| | | hyperthermia | 3 | 3 | | | | | | |
| 2464ai | 62 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | pseudoephedrine | 2 | 2 | | | | | | |
| | | cyclobenzaprine | 3 | 3 | | | | | | |
| 2465ai | 62 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2466i | 63 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | oxycodone | 2 | 2 | | | | | | |
| | | buprenorphine | 3 | 3 | | | | | | |
| 2467ai | 63 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| 2468ai | 63 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | diazepam | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2469ai | 63 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2470ai | 63 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | cocaine | 2 | 2 | | | | | | |
| 2471ai | 63 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2472ai | 63 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2473ai | 63 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2474ai | 64 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| | | diphenhydramine | 2 | 2 | | | | | | |
| 2475ai | 64 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2476ph | 64 y M | cocaine | 1 | 1 | A | Inhal | Int-A | 2 | | |
| 2477ai | 64 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| | | codeine | 3 | 3 | | | | | | |
| 2478ai | 64 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | |

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Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--------|--------------------------|----------------|------------|------------|-------------|--------|-----|---------|----------------------------|----------|--------|--------------------------|--------|--------|-----------------|-------------|-------|--------|-------|-------|-----------------|--------|--------------------------|-----------------|--------|-----------------|-------------|--------|-----------------|-------------|--------|-----------------|--------|-----------------|-----------------|--------|--------------------------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|-----------------|-------------|-----------------|-----------------|--------|--------------------------|-----------------|-----------------|-------------|-------------|-----------------|--------------------------|--------|---------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|-------------|-----------------|-----------------|-----------|-----------------|-----------------|-------------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|---------|-----------------|-----------------|-----------------|--------|--------------------------|--------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|--------------------------|-----------------|-----------------|-----------------|-----------------|---------|-----------------|-----------------|-----------------|-----------------|--------------------------|-------------|-------------|-----------------|--------------------------|--------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|--------------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|--------------------------|-----------------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------------|--------|---------|-----------------|-----------------|---------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|---------|-----------------|-----------------|-----------|---------|-----------------|-----------------|-----------|---------|-----------------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|--------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|---------|--------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|--------|-----------|--------|--------|-----------------|-----------------|-----------------|----------|-----------------|-----------------|--------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|--------|--------|--------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|---------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|---------|-----------------|--------|--------|-----------------|--------|-----------------|-----------------|--------|-----------------|---------|--------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|--------|-----------------|-----------------|-------|--------|---------|-------------|-----------------|--------|--------|-----------------|--------|-----------------|-----------------|--------|-------------|---------|-----------------|-----------------|-----------------|--------|-----------------|---------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|----------|--------|-----------------|--------|--------|-------------|-----------------|-----------------|-----------------|--------|--------|-----------------|--------|-----------------|-----------------|--------|-----------------|--------|-----------------|------------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| 2479ai | 64 y M | methamphetamine | 2 | 2 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | codeine | 3 | 3 | | | | | | | 2480ai | 64 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2481 | 65 y M | methamphetamine | 1 | 1 | A | Inhal | Int-A | 3 | | | 2482ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | cocaine | 1 | 1 | 2483ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2484i | 65 y M | methamphetamine | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | codeine | 3 | 3 | methamphetamine | 1 | 1 | 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin |
| 2480ai | 64 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2481 | 65 y M | methamphetamine | 1 | 1 | A | Inhal | Int-A | 3 | | | 2482ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | cocaine | 1 | 1 | 2483ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2484i | 65 y M | methamphetamine | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | codeine | 3 | 3 | | | methamphetamine | 1 | 1 | | | | | | | 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | | | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | morphine | | | 2 | 2 | 2489ai | | | | | | | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | | | Int-A | 3 | | | | | | | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | | | 3 | 2495ai | 66 y M | | | | | | | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | methamphetamine | 2 | 2 | | | 2499ai | 67 y M | methamphetamine | | | | | | | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U |
| 2481 | 65 y M | methamphetamine | 1 | 1 | A | Inhal | Int-A | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2482ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | cocaine | 1 | 1 | | | | | | | 2483ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2484i | 65 y M | methamphetamine | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | codeine | 3 | 3 | methamphetamine | 1 | 1 | 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2483ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | heroin | 1 | 1 | | | | | | | 2484i | 65 y M | methamphetamine | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | codeine | 3 | 3 | | | methamphetamine | 1 | 1 | | | | | | | 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | | | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | morphine | | | 2 | 2 | 2489ai | | | | | | | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | | | Int-A | 3 | | | | | | | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | | | 3 | 2495ai | 66 y M | | | | | | | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | methamphetamine | 2 | 2 | | | 2499ai | 67 y M | methamphetamine | | | | | | | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U |
| 2484i | 65 y M | methamphetamine | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | codeine | 3 | 3 | | | | | | | | | methamphetamine | 1 | 1 | | | | | | | 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | | 2489ai | 65 y M | | | | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | | | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | | U | Unk | Int-A | | | 1 | | | | | | ethanol | 2 | 2 | ibuprofen | 3 | | 3 | 2491ai | 66 y M | heroin | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | | | 1 | ethanol | 2 | | | | | | | 2 | 2503i | 68 y M | heroin | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U |
| | | methamphetamine | 1 | 1 | | | | | | | 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | | | methamphetamine | 1 | 1 | | | | | | | 2486ai | 65 y M | ethanol | | | 2 | 2 | U | | | | | | | Unk | Int-A | 3 | | | | | methamphetamine | | | | | | | 1 | 1 | 2487ai | | | 65 y M | methamphetamine | 1 | | | | | | | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | | | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | | | | U | Unk | | | | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | 2489ai | | | | 65 y M | chlorophenhyllpiperazine | | | 3 | 3 | U | | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | ibuprofen | | | 3 | 3 | 2491ai | | | | | | | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | | | 1 | U | Unk | | | | | | | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 2 | | | 2 | ethanol | 3 | | | | | | | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | | | U | Unk | Int-A | 1 | | | | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | | | | U | Unk | Int-A | | | 2 | | | | | | | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | | | oxycodone | 2 | 2 | | | | | | | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | | | Unk | Int-A | 1 | | | | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | | | | 1 | 1 | U | | | Unk | Int-A | 3 | | | | | | | | | 2501ai | | | 67 y M | methamphetamine | 1 | | | | | | | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | | | 67 y F | isopropanol | 3 | | | | | | | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 |
| 2485ai | 65 y M | ethanol | 2 | 2 | U | Ingst + Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | methamphetamine | 1 | 1 | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | | | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | | | 1 | 1 | U | | | | | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | | 1 | 1 | U | | Unk | Int-A | 3 | | | | codeine | | | | | | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | | | 2 | 2 | ethanol | | | 3 | 3 | | | | 2498ai | 67 y M | heroin | 1 | 1 | U | | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | | | U | Unk | Int-A | | | | | | | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | | 69 y M | heroin | | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2486ai | 65 y M | ethanol | 2 | 2 | U | Unk | Int-A | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | ethanol | 2 | 2 | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | | | | | | | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | | | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | | | 2 | 2 | 2490ai | | | | | | | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | | | ethanol | 3 | 3 | | | | | | | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | | | Unk | Int-A | 1 | | | | | | | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | | | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | morphine | | | 2 | 2 | 2502ai | 67 y F | isopropanol | | | | 3 | 3 | U | Unk | Int-A | 2 | | | | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2487ai | 65 y M | methamphetamine | 1 | 1 | U | Ingst + Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | | | | | | | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | ethanol | 2 | 2 | | 2490ai | 65 y M | | | | methamphetamine | 1 | 1 | U | Unk | Int-A | | | 1 | | | ethanol | 2 | 2 | ibuprofen | 3 | | 3 | 2491ai | 66 y M | heroin | 1 | 1 | | U | Unk | Int-A | | | | | | | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | | | ethanol | 3 | 3 | | | | | | | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | | | ethanol | 3 | 3 | | 2498ai | 67 y M | | | | heroin | 1 | 1 | U | Unk | Int-A | | | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | | 2502ai | 67 y F | | | | isopropanol | 3 | 3 | U | Unk | Int-A | | | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | | | 2 | 2503i | 68 y M | heroin | 1 | 1 | | | | | U | Unk | Int-A | | | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2488pi | 65 y F | hyperthermia | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | morphine | 2 | 2 | | | | | | | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | ethanol | 2 | 2 | | | | | | | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | ethanol | 2 | 2 | ibuprofen | | | | 3 | 3 | | | | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | | | ethanol | 3 | 3 | | | | | | | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | | | ethanol | 3 | 3 | | | | | | | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | | | | | | | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | | | methamphetamine | 1 | 1 | ethanol | | | | 2 | 2 | | | | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | morphine | 2 | 2 | | | | | | | 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | | | methamphetamine | 1 | 1 | | | | | | | ethanol | 2 | 2 | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | ethanol | 2 | 2 | | | | | ibuprofen | 3 | | | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | | | codeine | 2 | 2 | | | | | | | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | | | 1 | 1 | U | | | | | | | Unk | Int-A | 2 | | | | | methamphetamine | | | | | | | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | | | 2 | 2 | ethanol | | | | | | | 3 | 3 | 2498ai | | | 67 y M | heroin | 1 | | | | | | | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | | | Int-A | 3 | | | | | | | 2501ai | | | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | | | 1 | morphine | 2 | | | | | | | 2 | 2502ai | 67 y F | | | isopropanol | 3 | 3 | | | | | | | U | Unk | Int-A | | | 2 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | | | 1 | | | | | | | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | |
| 2489ai | 65 y M | chlorophenhyllpiperazine | 3 | 3 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | ethanol | 2 | 2 | | | | | | | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | ethanol | 2 | 2 | | | ibuprofen | 3 | 3 | | | | | | | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | | | U | Unk | Int-A | 1 | | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | | | | | | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | | 1 | 1 | | 2505ai | 68 y M | methamphetamine | | | | | | | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | | | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | | | | 1 | 1 | | | | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | ethanol | 2 | 2 | | | | | | | ibuprofen | 3 | 3 | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | | | codeine | 2 | 2 | | | | | | | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | | | | | | | Unk | Int-A | 2 | | | | | methamphetamine | | | | | | | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | | | oxycodone | 2 | | | 2 | ethanol | | | | 3 | 3 | 2498ai | 67 y M | heroin | 1 | | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | methamphetamine | 1 | | | 1 | 2500ai | 67 y M | | | | | | | methamphetamine | 1 | 1 | U | Unk | Int-A | | | 3 | | | | | | | | | 2501ai | 67 y M | methamphetamine | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | | | | | | | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | | | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2490ai | 65 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | | | ibuprofen | 3 | 3 | | | | | | | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | codeine | 2 | 2 | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | | | U | Unk | Int-A | 1 | | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | | | | | | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | | | Int-A | 1 | | | methamphetamine | | | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | | | | 1 | U | | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | | | 2 | | | ethanol | 2 | | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | | | | | | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | | | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ibuprofen | 3 | 3 | | | | | | | 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | | | codeine | 2 | 2 | | | | | | | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | | | | | | | Unk | Int-A | 2 | | | | | methamphetamine | | | | | | | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | | | oxycodone | 2 | | | 2 | ethanol | | | | | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | methamphetamine | 1 | | | 1 | 2500ai | 67 y M | | | | | | | methamphetamine | 1 | 1 | U | Unk | Int-A | | | 3 | | | | | | | | | 2501ai | 67 y M | methamphetamine | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | | | methamphetamine | | | | 1 | 1 | | | | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | | | 2503i | 68 y M | heroin | 1 | 1 | | | | | | | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2491ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2492ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | codeine | 2 | 2 | | | | | | | 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2493ai | 66 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2494ai | 66 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | ethanol | 3 | 3 | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2496ai | 66 y M | methamphetamine | | | 1 | 1 | U | | | | | | | Unk | Int-A | 2 | | | | | methamphetamine | | | | | | | 1 | 1 | 2497ai | 67 y M | cocaine | 1 | | | 1 | U | Unk | | | | | | | Int-A | 1 | | | | | oxycodone | 2 | | | | | | | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | methamphetamine | 2 | | | | | | | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | | | U | Unk | Int-A | | | | | | | 1 | | | methamphetamine | 1 | 1 | | | 2500ai | 67 y M | methamphetamine | | | | | | | 1 | 1 | U | | | Unk | Int-A | 3 | | | | | | | | | 2501ai | | | 67 y M | methamphetamine | 1 | | | | | | | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | | | 67 y F | isopropanol | 3 | | | | | | | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2495ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2496ai | 66 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | oxycodone | 2 | 2 | ethanol | 3 | 3 | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2497ai | 67 y M | cocaine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | oxycodone | 2 | 2 | | | | | | | | | ethanol | 3 | 3 | | | | | | | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | | | Unk | Int-A | 1 | | | | | | | | | methamphetamine | 1 | 1 | morphine | | | 2 | 2 | 2502ai | | | | | | | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 3 | 3 | | | | | | | 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | methamphetamine | 2 | 2 | | | | | | | 2499ai | 67 y M | methamphetamine | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | | | Unk | Int-A | 3 | | | | | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | | | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | | 3 | 3 | U | | | | | | | Unk | Int-A | 2 | | | methamphetamine | | | 1 | 1 | ethanol | | | | | | | 2 | 2 | 2503i | | | 68 y M | heroin | 1 | | | | | | | 1 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | heroin | 1 | | | | | | | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2498ai | 67 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | | | heroin | 1 | 1 | | U | Unk | | | | | | Int-A | 1 | | | methamphetamine | 2 | 2 | | | 2504ai | 68 y M | heroin | 1 | | 1 | U | Unk | Int-A | 1 | | | | | | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2499ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 1 | 1 | | | morphine | 2 | 2 | | | | | | | 2502ai | 67 y F | isopropanol | 3 | 3 | U | | | Unk | Int-A | 2 | | | | | | | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2500ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2501ai | 67 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | morphine | 2 | 2 | 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | ethanol | 2 | 2 | 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | morphine | 2 | 2 | | | | | | | 2502ai | 67 y F | isopropanol | | | 3 | 3 | U | | | | | | | Unk | Int-A | 2 | | | methamphetamine | | | 1 | 1 | ethanol | | | | | | | 2 | 2 | 2503i | | | 68 y M | heroin | 1 | | | | | | | 1 | U | Unk | | | Int-A | 1 | | | | | | | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | heroin | 1 | | | | | | | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2502ai | 67 y F | isopropanol | 3 | 3 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | | | ethanol | 2 | 2 | 2503i | 68 y M | | heroin | 1 | 1 | U | Unk | Int-A | | | | | | 1 | | | methamphetamine | 2 | 2 | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | 2503i | 68 y M | heroin | 1 | 1 | | | U | Unk | Int-A | 1 | | | | | | methamphetamine | 2 | 2 | | | | 2504ai | 68 y M | heroin | | | 1 | 1 | U | | | | | | | Unk | Int-A | 1 | | | | | heroin | | | | | | | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | | | 2 | 2 | 2506ai | | | | | | | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2503i | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 2 | 2 | | | | | | | 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | heroin | 1 | 1 | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2504ai | 68 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | heroin | 1 | 1 | | | | | | | 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | ethanol | 2 | 2 | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2505ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ethanol | 2 | 2 | | | | | | | 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | methamphetamine | 1 | 1 | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2506ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2507ai | 68 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | methamphetamine | 1 | 1 | | | | | | | 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2508ai | 69 y M | heroin | 1 | 1 | U | Unk | Int-A | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|----------------------------|---|----------------|------------|------------|---------------|--------|-----|-----------------|--|
| | | codeine | 2 | 2 | | | | | | |
| | | ethanol | 3 | 3 | | | | | | |
| 2509ai | 69 y M | cocaine | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2510ai | 69 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2511ai | 69 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2512ai | 70 y F | methamphetamine | 1 | 1 | U | Unk | Int-A | 1 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2513ai | 73 y M | methamphetamine | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2514ai | 9 m M | methamphetamine | 1 | 1 | U | Unk | Unt-U | 1 | | |
| | | heroin | 2 | 2 | | | | | | |
| [2515ph] | 14 m F | cocaine | 1 | 1 | A | Ingst | Unt-G | 1 | benzoylecognine | 1000 ng/mL In Serum @ Unknown |
| 2516 | 30+ y M | methamphetamine | 1 | 1 | A | Unk | Int-A | 1 | | |
| 2517ai | Unknown adult (>=20 yrs) M | THC homolog | 1 | 1 | A | Unk | Oth-C | 1 | | |
| 2518p | Unknown adult (>=20 yrs) M | heroin | 1 | 1 | A | Unk | Int-A | 2 | | |
| 2519i | Unknown age U | THC homolog | 1 | 1 | A | Unk | Int-A | 2 | | |
| See Also case 1, 10, 11, 80, 91, 143, 177, 188, 210, 296, 299, 300, 301, 303, 306, 307, 329, 338, 344, 347, 349, 357, 369, 370, 371, 376, 382, 383, 384, 387, 388, 390, 392, 394, 395, 399, 401, 402, 404, 405, 407, 415, 417, 418, 423, 425, 426, 427, 432, 434, 435, 438, 439, 442, 443, 444, 446, 451, 453, 458, 459, 465, 466, 468, 470, 471, 472, 475, 477, 481, 482, 493, 498, 499, 503, 504, 507, 512, 517, 518, 519, 520, 523, 527, 530, 531, 533, 534, 542, 545, 547, 549, 551, 552, 556, 561, 564, 565, 567, 568, 570, 571, 576, 579, 583, 584, 585, 587, 591, 594, 596, 597, 599, 600, 601, 605, 608, 615, 619, 623, 627, 630, 632, 634, 639, 640, 643, 645, 648, 649, 650, 658, 659, 665, 670, 675, 676, 677, 681, 689, 692, 703, 704, 708, 709, 712, 714, 721, 722, 729, 739, 740, 750, 751, 755, 757, 763, 764, 769, 785, 786, 794, 797, 798, 800, 809, 810, 821, 834, 837, 843, 844, 863, 870, 871, 873, 888, 889, 899, 900, 903, 905, 912, 918, 926, 945, 976, 978, 982, 985, 1008, 1013, 1017, 1042, 1054, 1158, 1197, 1203, 1206, 1207, 1213, 1244, 1285, 1318, 1349, 1352, 1364, 1380, 1403, 1411, 1415, 1417, 1424, 1427, 1438, 1444, 1460, 1485, 1500, 1632, 1644, 1652, 1653, 1664, 1671, 1681, 1720, 1742, 1779, 1784, 1786, 1796, 2520, 2548, 2550, 2565 | | | | | | | | | | |
| Topical Preparations | | | | | | | | | | |
| 2520h | 61 y M | iodine | 1 | 1 | C | Ingst + Inhal | Int-S | 2 | | |
| | | methamphetamine | 2 | 2 | | | | | | |
| See Also case 113, 170, 189 | | | | | | | | | | |
| Unknown Drug | | | | | | | | | | |
| 2521h | 16 y F | drug, unknown | 1 | 1 | A | Ingst | Int-S | 1 | | |
| 2522pa | 17 y F | drug, unknown | 1 | 1 | U | Unk | Unk | 2 | | |
| 2523h | 18 y F | drug, unknown | 1 | 1 | A | Ingst | Int-S | 2 | | |
| 2524p | 19 y M | drug, unknown | 1 | 1 | A | Unk | Unk | 1 | | |
| | | calcium antagonist | 2 | 2 | | | | | | |
| | | angiotensin converting enzyme inhibitor | 3 | 3 | | | | | | |
| | | antipsychotic (atypical) | 4 | 4 | | | | | | |
| | | metformin | 5 | 5 | | | | | | |
| | | antipsychotic (atypical) | 6 | 6 | | | | | | |
| | | topiramate | 7 | 7 | | | | | | |
| | | phenothiazine | 8 | 8 | | | | | | |
| | | trazodone | 9 | 9 | | | | | | |
| | | antacid (proton pump inhibitor) | 10 | 10 | | | | | | |
| | | antihyperlipidemic | 11 | 11 | | | | | | |
| 2525ph | 20 y M | drug, unknown | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 2526ph | 21 y F | drug, unknown | 1 | 1 | U | Unk | Unk | 2 | | |
| 2527 | 22 y M | drug, unknown | 1 | 1 | A | Ingst | Int-A | 3 | | |
| 2528p | 23 y M | drug, unknown | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| | | clonazepam | 2 | 2 | | | | | | |
| 2529ph | 24 y F | drug, unknown | 1 | 1 | U | Unk | Int-U | 2 | | |
| | | alprazolam | 2 | 2 | | | | | | |
| | | ketamine | 3 | 3 | | | | | | |
| 2530pa | 25 y F | drug, unknown | 1 | 1 | A | Unk | Unt-U | 1 | alprazolam | 13 ng/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 1 | 1 | | | | | norfentanyl | 3.1 ng/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 1 | 1 | | | | | amphetamine | 330 ng/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown | 1 | 1 | | | | | fentanyl | 4.7 ng/mL In Blood (unspecified) @ Unknown |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|------------------|--------|---|-----------------------|-----------------------|------------|-------------|--------|-----|----------------------|--|
| 2531pha | 26 y F | drug, unknown | 1 | 1 | U | Unk | Int-A | 2 | hydrocodone (free) | 5.7 ng/mL In Blood (unspecified) @ Unknown |
| | | drug, unknown narcotic, other/unknown | 1 2 | 1 2 | | | | | | |
| 2532ph | 27 y F | drug, unknown clonidine | 1 2 | 1 2 | A | Ingst | Unk | 2 | | |
| 2533pai | 28 y F | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2534 | 31 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2535i | 31 y M | drug, unknown | 1 | 1 | C | Par | Int-A | 3 | | |
| 2536i | 34 y M | drug, unknown | 1 | 1 | C | Par | Int-A | 3 | | |
| 2537ai | 34 y F | drug, unknown | 1 | 1 | C | Unk | Int-A | 2 | | |
| 2538pha | 35 y M | drug, unknown fentanyl | 1 2 | 1 2 | U | Unk | Unk | 3 | fentanyl | 10 ng/mL In Urine (quantitative only) @ Unknown |
| | | fentanyl | 2 | 2 | | | | | norfentanyl | 25 ng/mL In Urine (quantitative only) @ Unknown |
| 2539ai | 35 y F | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2540ha | 35 y F | drug, unknown quetiapine | 2 1 | 1 1 | U | Ingst | Unk | 2 | | |
| 2541ha | 35 y M | drug, unknown | 1 | 1 | A | Unk | Unk | 3 | | |
| 2542ai | 35 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2543ai | 36 y F | drug, unknown | 1 | 1 | U | Unk | Unk | 2 | | |
| 2544ai | 36 y F | drug, unknown | 1 | 1 | U | Unk | Unk | 1 | | |
| 2545h | 37 y M | drug, unknown insulin, lispro insulin, glargine trazodone acetaminophen/hydrocodone | 1 2 3 4 5 | 1 2 3 4 5 | A | Ingst + Par | Int-S | 2 | | |
| 2546ph | 37 y M | drug, unknown | 1 | 1 | A | Ingst | Int-A | 2 | | |
| 2547ai | 37 y F | drug, unknown | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2548ph | 38 y F | drug, unknown methylenedioxy methamphetamine (MDMA) | 1 2 | 1 2 | A | Unk | Int-S | 2 | | |
| 2549p | 39 y M | drug, unknown | 1 | 1 | A | Unk | Int-U | 2 | | |
| 2550ph | 42 y F | drug, unknown heroin | 1 2 | 1 2 | U | Par | Unk | 2 | | |
| 2551ai | 43 y F | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2552ai | 43 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2553ph | 44 y F | drug, unknown ethylene glycol ethanol | 1 2 3 | 1 2 3 | A | Ingst | Oth-M | 2 | ethanol | 0.022 % In Blood (unspecified) @ Unknown |
| 2554h | 45 y M | drug, unknown | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 2555 | 47 y F | drug, unknown acetaminophen | 1 2 | 1 2 | A | Unk | Unk | 2 | acetaminophen (apap) | 78 mcg/mL In Blood (unspecified) @ Unknown |
| 2556ph | 49 y F | drug, unknown | 1 | 1 | U | Ingst | Int-U | 2 | | |
| 2557ph | 50 y F | drug, unknown | 1 | 1 | U | Par | Int-U | 1 | | |
| 2558ai | 50 y M | drug, unknown | 1 | 1 | C | Unk | Int-A | 1 | | |
| 2559ai | 50 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 1 | | |
| 2560 | 51 y M | drug, unknown | 1 | 1 | U | Ingst | Int-S | 2 | | |
| 2561ai | 51 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 2 | | |
| 2562phi | 52 y M | drug, unknown | 1 | 1 | A | Inhal | Int-A | 2 | | |

(continued)

Table 21. Listing of Fatal Nonpharmaceutical and Pharmaceutical Exposures – Continued.

| Annual Report ID | Age | Substances | Substance Rank | Cause Rank | Chronicity | Route | Reason | RCF | Analyte | Blood Concentration @ Time |
|--|----------------------------|------------------------------|----------------|------------|------------|-------------------|--------|-----|----------------------|--|
| 2563ai | 53 y M | drug, unknown | 1 | 1 | C | Unk | Int-A | 3 | | |
| 2564ai | 54 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2565pha | 55 y M | drug, unknown | 1 | 1 | A | Ingst + Unk | Int-S | 2 | | |
| | | ethanol | 2 | 2 | | | | | benzoyllecognine | 1600 ng/mL In Blood (unspecified) @ Unknown |
| | | cocaine | 3 | 3 | | | | | | |
| 2566ha | 55 y M | drug, unknown | 1 | 1 | A | Ingst | Unk | 3 | | |
| | | acetaminophen/hydrocodone | 2 | 2 | | | | | hydrocodone | 30 ng/mL In Blood (unspecified) @ Autopsy |
| 2567ai | 58 y M | drug, unknown | 1 | 1 | C | Unk | Int-A | 3 | | |
| 2568ai | 59 y M | drug, unknown | 1 | 1 | C | Unk | Int-A | 2 | | |
| 2569ai | 60 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2570h | 60 y M | drug, unknown | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | olanzapine | 2 | 2 | | | | | | |
| 2571h | 60 y M | drug, unknown | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 2572h | 60 y F | drug, unknown | 1 | 1 | A | Ingst | Int-S | 2 | | |
| | | gabapentin | 2 | 2 | | | | | | |
| | | lamotrigine | 3 | 3 | | | | | | |
| | | antipsychotic (atypical) | 4 | 4 | | | | | | |
| 2573h | 66 y F | drug, unknown | 1 | 1 | U | Ingst | Unt-G | 3 | | |
| 2574ai | 66 y M | drug, unknown | 1 | 1 | C | Unk | Int-A | 2 | | |
| 2575ai | 69 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| | | ethanol | 2 | 2 | | | | | | |
| 2576 | 73 y M | drug, unknown | 1 | 1 | A/C | Ingst | Int-S | 2 | | |
| 2577ai | 73 y M | drug, unknown | 1 | 1 | U | Unk | Unk | 3 | | |
| 2578ai | 75 y M | drug, unknown | 1 | 1 | U | Unk | Int-A | 3 | | |
| 2579ph | 85 y F | drug, unknown | 1 | 1 | C | Ingst | AR-D | 2 | | |
| | | citalopram | 2 | 2 | | | | | | |
| | | amitriptyline | 3 | 3 | | | | | | |
| | | buspirone | 4 | 4 | | | | | | |
| 2580a | 86 y F | drug, unknown | 1 | 1 | A | Ingst | Unk | 3 | | |
| | | salicylate | 2 | 2 | | | | | salicylate | 47.5 mg/dL In Blood (unspecified) @ Unknown |
| | | acetaminophen | 3 | 3 | | | | | acetaminophen (apap) | 44 mcg/mL In Blood (unspecified) @ Unknown |
| 2581pi | Unknown adult (>=20 yrs) M | drug, unknown | 1 | 1 | A | Unk | Int-A | 2 | | |
| See Also case 6, 142, 169, 181, 354, 355, 413, 423, 508, 555, 629, 641, 748, 858, 901, 920, 1005, 1095, 1140, 1205, 1257, 1267, 1387, 1516, 1517, 1632, 1657, 1659, 1679, 1687, 1731, 1755, 1786, 1875, 1904, 1956, 1998, 2025, 2064, 2088, 2133, 2243, 2428, 2582 | | | | | | | | | | |
| Veterinary Drugs | | | | | | | | | | |
| 2582p | 43 y F | pentobarbital/phenytoin | 1 | 1 | A | Ingst + Par + Unk | Int-S | 2 | | |
| | | morphine | 2 | 2 | | | | | | |
| | | drug, unknown | 3 | 3 | | | | | | |
| | | ethylene glycol (antifreeze) | 4 | 4 | | | | | | |

Listing of 2,582 (1,354 Direct + 1,228 Indirect) fatalities classified as Relative Contribution to Fatality category = 1-Undoubtedly responsible, 2-Probably responsible, or 3-Contributory).

Annual Report ID: Bracketed [case number]=Narrative provided for this case in Appendix C

i=Indirect case; identified through other sources (news feeds, medical examiner data, or other) about which no inquiry to the PC was made, p=prehospital cardiac and/or respiratory arrest, h=hospital records reviewed, a=autopsy report reviewed.

Age Gender: y=years, m=months, d=days, F=female, M=male, F-Pregnant=pregnant, U=unknown

Chronicity: C=chronic exposure, A=acute exposure, A/C=acute on chronic, U=unknown

Route: Aspir=Aspiration (with ingestion), B-S=Bite/sting, Derm=Dermal, Ingst=Ingestion, Inhal=Inhalation/nasal, Oc=Ocular, Ot=Otic, Oth=Other, Par=Parenteral, Rec=Rectal, Unk=Unknown, Vag=Vaginal

Reason: AR-D=Adverse reaction – Drug, AR-F=AR – Food, AR-O=AR – Other, Int-A=Intentional – Abuse, Int-M=Int – Misuse, Int-S=Int – Suspected Suicide, Int-U=Int – Unknown, Oth-C=Other – Contamination/tampering, Oth-M=Oth – Malicious, Oth-W=Oth – Withdrawal, Unk=Unknown reason, Unt-B=Unintentional – Bite/sting, Unt-E=Unt – Environmental, Unt-F=Unt – Food poisoning, Unt-G=Unt – General, Unt-M=Unt – Misuse, Unt-O=Unt – Occupational, Unt-T=Unt – Therapeutic error, Unt-U =Unt – Unknown

RCF (Relative Contribution to Fatality): 1 = Undoubtedly responsible, 2 = Probably responsible, 3 = Contributory. Provided by the RPC for Indirect cases and the AAPCC Fatality Review Team for the direct (non-Indirect) cases.

Appendix E – Table 22(A) & Table 22(B), Demographic profile of SINGLE SUBSTANCE exposure cases by generic category
 Nonpharmaceuticals (Table 22(A))

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | Reason | | | | Outcome | | | | | | |
|---|------------------------|---------------|--------------|--------------|--------------|---------------|---------------|-------------|---------------|--------------|------------|------------|---------------------------------|--------------|--------------|--------------|------------|-----------|
| | | ≤5 | 6-12 | 13-19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rxn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| Nonpharmaceuticals | | | | | | | | | | | | | | | | | | |
| Adhesives/Glues | | | | | | | | | | | | | | | | | | |
| | 4,448 | 1,825 | 315 | 285 | 1,577 | 12 | 325 | 57 | 4,221 | 98 | 36 | 28 | 1,231 | 670 | 832 | 162 | 5 | 0 |
| Miscellaneous Adhesives/Glues Cyanoacrylates (Superglues, etc) | 4,396 | 1,825 | 315 | 285 | 1,577 | 12 | 325 | 57 | 4,221 | 98 | 36 | 28 | 1,231 | 670 | 832 | 162 | 5 | 0 |
| Epoxy | 676 | 158 | 27 | 30 | 337 | 4 | 66 | 6 | 603 | 6 | 2 | 17 | 182 | 87 | 141 | 50 | 3 | 0 |
| Non-Toxic Adhesives/Glues (White Glue, Paper Glue, etc) | 949 | 466 | 199 | 55 | 55 | 7 | 10 | 4 | 723 | 62 | 8 | 2 | 35 | 101 | 28 | 2 | 0 | 0 |
| Toluene/Xylene (Adhesives Only) | 234 | 89 | 3 | 11 | 90 | 0 | 23 | 1 | 206 | 10 | 0 | 1 | 52 | 40 | 44 | 13 | 0 | 0 |
| Unknown Types of Adhesive, Glue, Cement or Paste | 4,325 | 1,603 | 360 | 219 | 1,365 | 45 | 342 | 36 | 3,703 | 152 | 32 | 66 | 593 | 625 | 495 | 91 | 12 | 0 |
| Category Total: | 10,632 | 4,141 | 904 | 600 | 3,424 | 68 | 766 | 104 | 9,456 | 328 | 78 | 114 | 2,093 | 1,523 | 1,540 | 318 | 20 | 0 |
| Alcohols | | | | | | | | | | | | | | | | | | |
| Miscellaneous Alcohols | | | | | | | | | | | | | | | | | | |
| Ethanol (Beverages) | 52,432 | 1,875 | 177 | 1,015 | 3,681 | 6 | 429 | 129 | 2,490 | 4,182 | 270 | 182 | 3,438 | 842 | 1,499 | 1,099 | 246 | 79 |
| Ethanol (Non-Beverage, Non-Rubbing) | 2,671 | 1,371 | 93 | 94 | 496 | 2 | 73 | 13 | 1,958 | 141 | 14 | 15 | 231 | 395 | 159 | 27 | 5 | 0 |
| Higher Alcohols (Butanol, Amyl Alcohol, Propanols, etc) | 137 | 35 | 7 | 11 | 38 | 0 | 9 | 0 | 80 | 12 | 6 | 1 | 29 | 12 | 23 | 4 | 0 | 0 |
| Isopropanol (Excluding Rubbing Alcohols and Cleaning Agents) | 4,388 | 1,572 | 154 | 187 | 1,575 | 3 | 235 | 22 | 2,859 | 809 | 28 | 20 | 1,059 | 645 | 720 | 306 | 39 | 0 |
| Methanol (Excluding Automotive Products and Cleaning Agents) | 655 | 77 | 13 | 28 | 347 | 2 | 55 | 4 | 442 | 51 | 11 | 1 | 222 | 123 | 81 | 22 | 18 | 5 |
| Other Types of Alcohol | 153 | 69 | 8 | 8 | 42 | 0 | 4 | 1 | 118 | 6 | 0 | 4 | 30 | 21 | 27 | 3 | 0 | 0 |
| Unknown Types of Alcohol | 3,578 | 133 | 9 | 77 | 355 | 2 | 65 | 22 | 214 | 378 | 18 | 14 | 294 | 55 | 124 | 107 | 29 | 4 |
| Rubbing Alcohols | | | | | | | | | | | | | | | | | | |
| Rubbing Alcohols: Ethanol with Methyl Salicylate | 8 | 6 | 0 | 0 | 2 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 3 | 3 | 2 | 0 | 0 | 0 |
| Rubbing Alcohols: Ethanol without Methyl Salicylate | 350 | 182 | 14 | 16 | 102 | 0 | 5 | 6 | 278 | 45 | 0 | 1 | 64 | 55 | 48 | 19 | 2 | 0 |
| Rubbing Alcohols: Isopropanol with Methyl Salicylate | 191 | 122 | 5 | 4 | 50 | 0 | 1 | 0 | 169 | 11 | 0 | 1 | 41 | 61 | 14 | 3 | 0 | 0 |
| Rubbing Alcohols: Isopropanol without Methyl Salicylate | 6,671 | 3,109 | 162 | 298 | 2,177 | 8 | 243 | 35 | 4,938 | 983 | 54 | 15 | 1,349 | 1,148 | 999 | 310 | 25 | 0 |
| Rubbing Alcohols: Unknown | 147 | 31 | 3 | 6 | 62 | 0 | 2 | 0 | 58 | 41 | 2 | 1 | 48 | 11 | 21 | 15 | 0 | 0 |
| Category Total: | 71,381 | 8,582 | 645 | 1,744 | 8,927 | 23 | 1,121 | 232 | 13,611 | 6,660 | 403 | 255 | 6,808 | 3,371 | 3,717 | 1,915 | 364 | 88 |
| Arts/Crafts/Office Supplies | | | | | | | | | | | | | | | | | | |
| Miscellaneous Arts/Crafts/Office Supplies | | | | | | | | | | | | | | | | | | |
| Artist Paints (Non-Water Color) | 3,834 | 2,792 | 285 | 144 | 389 | 12 | 70 | 10 | 3,605 | 69 | 14 | 10 | 143 | 452 | 144 | 10 | 0 | 0 |
| Artist Paints (Water Color) | 1,618 | 1,298 | 157 | 36 | 61 | 4 | 19 | 1 | 1,535 | 34 | 3 | 3 | 21 | 190 | 22 | 1 | 0 | 0 |
| Chalks | 1,541 | 1,410 | 75 | 19 | 26 | 5 | 6 | 0 | 1,508 | 26 | 5 | 2 | 42 | 180 | 42 | 1 | 0 | 0 |
| Clays | 2,461 | 1,973 | 240 | 62 | 90 | 9 | 20 | 2 | 2,349 | 37 | 3 | 5 | 83 | 249 | 92 | 5 | 0 | 0 |
| Crayons | 1,889 | 1,559 | 205 | 32 | 70 | 13 | 7 | 3 | 1,837 | 46 | 1 | 3 | 47 | 192 | 61 | 2 | 0 | 0 |
| Glazes | 92 | 35 | 21 | 14 | 17 | 0 | 2 | 1 | 80 | 8 | 0 | 2 | 8 | 12 | 9 | 0 | 0 | 0 |
| Office Supplies: Miscellaneous | 108 | 56 | 11 | 5 | 28 | 0 | 5 | 1 | 97 | 9 | 0 | 0 | 5 | 17 | 9 | 2 | 0 | 0 |
| Other Types of Arts/Crafts/ Writing Products | 7,329 | 5,093 | 789 | 293 | 574 | 29 | 160 | 25 | 6,683 | 210 | 35 | 20 | 300 | 933 | 289 | 30 | 1 | 0 |
| Pencils | 1,134 | 457 | 457 | 107 | 53 | 7 | 9 | 2 | 954 | 105 | 19 | 4 | 48 | 105 | 56 | 4 | 0 | 0 |
| Pens or Inks | 8,344 | 5,326 | 1,811 | 722 | 311 | 31 | 118 | 25 | 7,744 | 493 | 32 | 49 | 261 | 1,020 | 242 | 12 | 0 | 0 |
| Typewriter Correction Fluids | 459 | 248 | 81 | 52 | 51 | 2 | 12 | 1 | 400 | 34 | 5 | 2 | 37 | 106 | 32 | 1 | 0 | 0 |
| Unknown Types of Arts/Crafts/ Writing Products | 131 | 86 | 24 | 7 | 7 | 0 | 1 | 0 | 117 | 7 | 0 | 0 | 13 | 22 | 4 | 1 | 0 | 0 |
| Category Total: | 29,277 | 20,333 | 4,156 | 1,493 | 1,677 | 112 | 429 | 71 | 26,909 | 1,078 | 117 | 100 | 1,008 | 3,478 | 1,002 | 69 | 1 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | Reason | | | Outcome | | | | | | | | | |
|--|------------------------|-------|-------|-------|-------|---------|---------------|---------------|-------------|---------|-----|-------|---------|---------------------------------|-------|-------|----------|-------|-------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| Automotive/Aircraft/Boat Products | | | | | | | | | | | | | | | | | | | |
| Automotive Products | | | | | | | | | | | | | | | | | | | |
| 897 | 844 | 197 | 17 | 57 | 494 | 1 | 71 | 7 | 763 | 56 | 15 | 2 | 318 | 153 | 215 | 41 | 12 | 0 | 0 |
| 6,411 | 5,897 | 469 | 125 | 436 | 4,197 | 36 | 552 | 82 | 4,990 | 684 | 143 | 17 | 2,287 | 1,137 | 967 | 420 | 109 | 5 | 5 |
| 157 | 147 | 33 | 10 | 10 | 80 | 3 | 9 | 2 | 132 | 12 | 0 | 3 | 45 | 39 | 24 | 5 | 1 | 0 | 0 |
| 1,884 | 1,757 | 513 | 48 | 106 | 939 | 3 | 138 | 10 | 1,635 | 85 | 27 | 6 | 575 | 298 | 519 | 102 | 4 | 0 | 0 |
| Automotive Products: Glycol and Methanol Mixtures (Transmission Fluids, Power Steering Fluids, etc) | | | | | | | | | | | | | | | | | | | |
| 1,356 | 1,278 | 165 | 48 | 119 | 767 | 5 | 161 | 13 | 1,170 | 75 | 16 | 4 | 368 | 319 | 216 | 36 | 10 | 6 | 6 |
| 200 | 189 | 63 | 13 | 14 | 74 | 6 | 16 | 3 | 172 | 6 | 7 | 4 | 45 | 56 | 31 | 7 | 0 | 0 | 0 |
| Miscellaneous Automotive/Aircraft/Boat Products | | | | | | | | | | | | | | | | | | | |
| 25 | 23 | 13 | 1 | 3 | 6 | 0 | 0 | 0 | 22 | 0 | 0 | 1 | 4 | 4 | 0 | 1 | 0 | 0 | 0 |
| Automotive/Aircraft/Boat Products: Non-Toxic | | | | | | | | | | | | | | | | | | | |
| 1,275 | 1,206 | 420 | 56 | 49 | 580 | 3 | 75 | 23 | 1,151 | 24 | 13 | 14 | 380 | 228 | 335 | 74 | 1 | 0 | 0 |
| 192 | 176 | 42 | 5 | 11 | 87 | 0 | 28 | 3 | 161 | 6 | 5 | 0 | 68 | 39 | 34 | 15 | 1 | 0 | 0 |
| 12,397 | 11,517 | 1,915 | 323 | 805 | 7,224 | 57 | 1,050 | 143 | 10,196 | 948 | 226 | 51 | 4,090 | 2,273 | 2,341 | 701 | 138 | 11 | 11 |
| Batteries | | | | | | | | | | | | | | | | | | | |
| Disc Batteries | | | | | | | | | | | | | | | | | | | |
| 599 | 586 | 350 | 62 | 23 | 121 | 1 | 27 | 2 | 546 | 30 | 6 | 1 | 401 | 299 | 60 | 16 | 2 | 0 | 0 |
| 592 | 351 | 93 | 22 | 33 | 186 | 0 | 14 | 3 | 190 | 68 | 1 | 80 | 287 | 89 | 77 | 90 | 20 | 2 | 2 |
| 18 | 18 | 10 | 2 | 0 | 4 | 0 | 2 | 0 | 18 | 0 | 0 | 0 | 10 | 7 | 1 | 0 | 0 | 0 | 0 |
| 24 | 24 | 5 | 7 | 1 | 9 | 0 | 1 | 1 | 22 | 1 | 0 | 0 | 6 | 3 | 1 | 3 | 0 | 0 | 0 |
| 28 | 28 | 16 | 2 | 1 | 26 | 0 | 2 | 2 | 24 | 1 | 0 | 0 | 22 | 9 | 3 | 1 | 0 | 0 | 0 |
| 108 | 108 | 55 | 6 | 1 | 43 | 2 | 1 | 0 | 106 | 0 | 0 | 1 | 83 | 64 | 6 | 3 | 1 | 0 | 0 |
| 1,837 | 1,798 | 1,107 | 221 | 39 | 387 | 6 | 32 | 6 | 1,712 | 67 | 5 | 0 | 1,374 | 908 | 109 | 25 | 7 | 0 | 0 |
| 677 | 666 | 377 | 61 | 13 | 193 | 3 | 17 | 2 | 644 | 17 | 2 | 0 | 506 | 394 | 34 | 6 | 2 | 0 | 0 |
| Miscellaneous Batteries | | | | | | | | | | | | | | | | | | | |
| 611 | 590 | 52 | 11 | 33 | 405 | 1 | 78 | 10 | 571 | 4 | 5 | 8 | 207 | 58 | 182 | 46 | 0 | 0 | 0 |
| 320 | 310 | 57 | 21 | 48 | 140 | 2 | 39 | 3 | 269 | 21 | 14 | 5 | 86 | 60 | 49 | 20 | 0 | 0 | 0 |
| 5,278 | 5,132 | 3,071 | 526 | 286 | 968 | 20 | 242 | 19 | 4,587 | 447 | 52 | 19 | 1,141 | 1,410 | 472 | 83 | 3 | 0 | 0 |
| 153 | 142 | 71 | 10 | 7 | 40 | 0 | 11 | 3 | 129 | 10 | 0 | 1 | 34 | 50 | 14 | 3 | 0 | 0 | 0 |
| 10,245 | 9,751 | 5,264 | 951 | 485 | 2,501 | 35 | 464 | 51 | 8,818 | 666 | 85 | 115 | 4,157 | 3,351 | 1,008 | 296 | 35 | 2 | 2 |
| Bites and Envenomations | | | | | | | | | | | | | | | | | | | |
| Aquatic | | | | | | | | | | | | | | | | | | | |
| 448 | 440 | 19 | 26 | 54 | 310 | 0 | 27 | 4 | 436 | 1 | 0 | 3 | 226 | 7 | 133 | 71 | 1 | 0 | 0 |
| 219 | 214 | 24 | 58 | 17 | 103 | 1 | 10 | 1 | 211 | 3 | 0 | 0 | 72 | 2 | 60 | 30 | 1 | 0 | 0 |
| 287 | 273 | 112 | 16 | 14 | 118 | 0 | 13 | 0 | 260 | 7 | 3 | 3 | 78 | 29 | 41 | 11 | 2 | 0 | 0 |
| Exotic Snakes | | | | | | | | | | | | | | | | | | | |
| 5 | 5 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 0 |
| 27 | 27 | 3 | 2 | 3 | 16 | 0 | 2 | 1 | 27 | 0 | 0 | 0 | 0 | 0 | 12 | 1 | 0 | 0 | 0 |
| 41 | 40 | 0 | 4 | 1 | 34 | 0 | 1 | 1 | 40 | 0 | 0 | 0 | 31 | 1 | 11 | 14 | 4 | 0 | 0 |
| Insects | | | | | | | | | | | | | | | | | | | |
| 536 | 488 | 131 | 41 | 26 | 224 | 0 | 55 | 11 | 454 | 6 | 17 | 6 | 68 | 22 | 99 | 22 | 0 | 1 | 1 |
| 2,671 | 2,584 | 454 | 250 | 105 | 1,457 | 7 | 282 | 29 | 2,579 | 0 | 3 | 1 | 448 | 30 | 858 | 216 | 10 | 1 | 1 |
| 2,816 | 2,802 | 551 | 380 | 196 | 1,372 | 12 | 255 | 36 | 2,759 | 13 | 6 | 22 | 403 | 67 | 846 | 142 | 3 | 0 | 0 |
| 428 | 423 | 118 | 29 | 30 | 205 | 0 | 36 | 5 | 418 | 1 | 3 | 0 | 57 | 17 | 130 | 17 | 0 | 0 | 0 |
| 147 | 123 | 38 | 9 | 11 | 54 | 1 | 8 | 2 | 123 | 0 | 0 | 0 | 19 | 2 | 25 | 9 | 0 | 0 | 0 |
| 3,945 | 3,945 | 958 | 313 | 206 | 1,937 | 16 | 467 | 48 | 3,768 | 15 | 102 | 38 | 672 | 192 | 737 | 188 | 4 | 0 | 0 |
| 11,313 | 11,300 | 1,378 | 1,279 | 854 | 7,359 | 5 | 352 | 73 | 11,296 | 2 | 1 | 1 | 1,479 | 72 | 6,991 | 597 | 17 | 0 | 0 |
| 657 | 631 | 173 | 59 | 27 | 263 | 7 | 90 | 12 | 630 | 0 | 0 | 1 | 140 | 16 | 94 | 10 | 1 | 0 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Outcome | | | | | |
|---|------------------------|-------|-------|-------|--------|---------------|---------------|-------------|--------|-----|-------|---------|---------------------------------|-------|--------|----------|-------|-------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rxn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| Mammals | | | | | | | | | | | | | | | | | | |
| 744 | 740 | 88 | 82 | 52 | 411 | 3 | 90 | 14 | 730 | 0 | 1 | 1 | 467 | 127 | 98 | 2 | 0 | 0 |
| 766 | 758 | 37 | 88 | 65 | 474 | 4 | 70 | 20 | 755 | 1 | 0 | 0 | 530 | 10 | 338 | 46 | 0 | 0 |
| 2,546 | 2,533 | 364 | 478 | 259 | 1,269 | 7 | 125 | 31 | 2,533 | 0 | 0 | 0 | 1,972 | 27 | 1,196 | 175 | 8 | 0 |
| 27 | 26 | 2 | 2 | 2 | 15 | 1 | 2 | 2 | 26 | 0 | 0 | 0 | 16 | 1 | 9 | 1 | 0 | 0 |
| 11 | 10 | 3 | 1 | 0 | 4 | 0 | 2 | 0 | 9 | 0 | 1 | 0 | 6 | 0 | 4 | 0 | 0 | 0 |
| 774 | 761 | 98 | 72 | 72 | 413 | 7 | 82 | 17 | 746 | 1 | 9 | 1 | 416 | 44 | 173 | 13 | 1 | 1 |
| 131 | 130 | 5 | 10 | 7 | 87 | 4 | 16 | 1 | 128 | 0 | 0 | 0 | 85 | 10 | 32 | 2 | 0 | 0 |
| 773 | 751 | 183 | 101 | 49 | 315 | 8 | 85 | 10 | 713 | 1 | 27 | 3 | 259 | 42 | 170 | 20 | 0 | 0 |
| 10 | 10 | 1 | 0 | 1 | 5 | 1 | 2 | 0 | 10 | 0 | 0 | 0 | 5 | 1 | 1 | 0 | 0 | 0 |
| Miscellaneous Bites and Envenomations | | | | | | | | | | | | | | | | | | |
| 260 | 256 | 31 | 26 | 20 | 144 | 2 | 30 | 3 | 246 | 6 | 0 | 4 | 110 | 15 | 88 | 26 | 0 | 0 |
| 305 | 300 | 82 | 53 | 27 | 111 | 0 | 17 | 10 | 281 | 6 | 2 | 10 | 66 | 28 | 82 | 11 | 1 | 1 |
| 2,096 | 2,044 | 482 | 154 | 97 | 1,086 | 5 | 184 | 36 | 2,016 | 5 | 11 | 6 | 399 | 62 | 418 | 101 | 3 | 0 |
| Miscellaneous Snake Bites and Envenomations | | | | | | | | | | | | | | | | | | |
| 575 | 567 | 44 | 88 | 72 | 336 | 4 | 22 | 1 | 561 | 4 | 0 | 0 | 360 | 25 | 287 | 40 | 2 | 0 |
| 2,443 | 2,423 | 150 | 275 | 249 | 1,689 | 1 | 48 | 11 | 2,417 | 5 | 0 | 0 | 2,230 | 60 | 1,041 | 867 | 60 | 0 |
| Snakes | | | | | | | | | | | | | | | | | | |
| 2,117 | 2,082 | 75 | 156 | 152 | 1,674 | 2 | 21 | 2 | 2,077 | 5 | 0 | 0 | 2,028 | 15 | 574 | 1,295 | 51 | 0 |
| 79 | 78 | 2 | 1 | 5 | 70 | 0 | 0 | 0 | 76 | 0 | 1 | 0 | 70 | 9 | 36 | 19 | 3 | 0 |
| 212 | 211 | 8 | 14 | 24 | 164 | 1 | 0 | 0 | 207 | 3 | 0 | 1 | 202 | 4 | 57 | 117 | 3 | 0 |
| 1,091 | 1,064 | 39 | 64 | 76 | 867 | 0 | 12 | 6 | 1,060 | 2 | 2 | 0 | 1,029 | 19 | 252 | 562 | 107 | 1 |
| 593 | 580 | 25 | 62 | 68 | 412 | 0 | 8 | 5 | 580 | 0 | 0 | 0 | 561 | 5 | 172 | 336 | 19 | 0 |
| Spiders | | | | | | | | | | | | | | | | | | |
| 1,015 | 1,000 | 83 | 59 | 65 | 742 | 2 | 40 | 9 | 997 | 0 | 0 | 2 | 559 | 35 | 313 | 244 | 6 | 0 |
| 734 | 721 | 38 | 49 | 46 | 493 | 0 | 85 | 10 | 715 | 0 | 3 | 3 | 329 | 17 | 138 | 170 | 11 | 0 |
| 72 | 70 | 20 | 6 | 1 | 27 | 0 | 16 | 0 | 70 | 0 | 0 | 0 | 17 | 4 | 11 | 9 | 0 | 0 |
| 2,249 | 2,216 | 287 | 128 | 146 | 1,405 | 5 | 221 | 24 | 2,198 | 5 | 8 | 3 | 563 | 50 | 560 | 163 | 1 | 0 |
| 46 | 45 | 5 | 5 | 2 | 27 | 0 | 5 | 1 | 44 | 0 | 0 | 1 | 17 | 1 | 20 | 6 | 0 | 0 |
| 43,325 | 42,671 | 6,112 | 4,441 | 3,102 | 25,693 | 105 | 2,782 | 436 | 42,201 | 92 | 200 | 111 | 16,012 | 1,068 | 16,108 | 5,555 | 321 | 5 |
| Building and Construction Products | | | | | | | | | | | | | | | | | | |
| Insulation | | | | | | | | | | | | | | | | | | |
| 386 | 337 | 49 | 13 | 6 | 193 | 1 | 71 | 4 | 333 | 0 | 3 | 0 | 47 | 42 | 16 | 6 | 0 | 0 |
| 503 | 476 | 225 | 39 | 25 | 150 | 0 | 29 | 8 | 452 | 8 | 8 | 6 | 77 | 59 | 83 | 13 | 0 | 0 |
| 106 | 102 | 44 | 5 | 2 | 39 | 0 | 11 | 1 | 96 | 4 | 0 | 2 | 20 | 14 | 11 | 3 | 0 | 0 |
| 437 | 418 | 276 | 27 | 12 | 75 | 2 | 24 | 2 | 408 | 6 | 0 | 3 | 39 | 65 | 29 | 6 | 0 | 0 |
| 13 | 13 | 3 | 0 | 1 | 6 | 0 | 3 | 0 | 13 | 0 | 0 | 0 | 3 | 2 | 4 | 0 | 0 | 0 |
| Miscellaneous Building and Construction Products | | | | | | | | | | | | | | | | | | |
| 2,431 | 2,355 | 1,404 | 110 | 45 | 590 | 2 | 177 | 27 | 2,265 | 39 | 15 | 33 | 185 | 472 | 186 | 31 | 0 | 0 |
| 1,343 | 1,287 | 338 | 29 | 48 | 727 | 2 | 132 | 11 | 1,243 | 20 | 3 | 18 | 586 | 173 | 288 | 227 | 9 | 0 |
| 2,203 | 2,032 | 957 | 163 | 75 | 614 | 10 | 150 | 63 | 1,952 | 44 | 11 | 18 | 344 | 374 | 334 | 77 | 3 | 0 |
| 172 | 165 | 34 | 3 | 18 | 93 | 0 | 15 | 2 | 156 | 3 | 3 | 2 | 54 | 24 | 53 | 14 | 2 | 0 |
| 96 | 91 | 24 | 4 | 5 | 42 | 3 | 12 | 1 | 87 | 2 | 0 | 1 | 25 | 15 | 14 | 5 | 0 | 0 |
| 7,690 | 7,276 | 3,354 | 393 | 237 | 2,529 | 20 | 624 | 119 | 7,005 | 126 | 43 | 83 | 1,380 | 1,240 | 1,018 | 382 | 14 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Outcome | | | | | |
|--|------------------------|---------------|--------------|--------------|---------------|---------------|---------------|-------------|---------------|--------------|--------------|------------|---------------------------------|--------------|--------------|--------------|------------|-----------|
| | | Age | | | | | | | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | | | Major | Death | |
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | | | | | None | Minor | Moderate | | | |
| Chemicals | | | | | | | | | | | | | | | | | | |
| Acids | | | | | | | | | | | | | | | | | | |
| 1,794 | 1,483 | 63 | 44 | 208 | 1,004 | 0 | 145 | 19 | 1,394 | 42 | 17 | 17 | 613 | 118 | 543 | 175 | 13 | 1 |
| 682 | 581 | 17 | 4 | 25 | 484 | 1 | 39 | 11 | 566 | 5 | 1 | 6 | 459 | 63 | 236 | 137 | 7 | 2 |
| 4,909 | 4,215 | 815 | 284 | 250 | 2,423 | 11 | 382 | 50 | 3,910 | 175 | 56 | 58 | 1,542 | 555 | 1,164 | 432 | 22 | 0 |
| 170 | 140 | 13 | 1 | 9 | 95 | 0 | 19 | 3 | 124 | 5 | 8 | 2 | 75 | 10 | 34 | 22 | 1 | 1 |
| Miscellaneous Chemicals | | | | | | | | | | | | | | | | | | |
| 1,437 | 1,205 | 430 | 43 | 80 | 532 | 0 | 105 | 15 | 1,077 | 71 | 29 | 8 | 315 | 191 | 252 | 51 | 4 | 0 |
| 3,360 | 2,899 | 414 | 105 | 247 | 1,876 | 4 | 217 | 36 | 2,699 | 94 | 43 | 42 | 1,587 | 244 | 942 | 556 | 59 | 0 |
| 2,548 | 1,694 | 345 | 64 | 117 | 1,002 | 6 | 137 | 23 | 1,563 | 74 | 27 | 19 | 636 | 191 | 555 | 158 | 13 | 1 |
| 7,411 | 7,075 | 2,409 | 1,187 | 557 | 2,449 | 14 | 411 | 48 | 6,589 | 202 | 173 | 85 | 812 | 1,169 | 612 | 62 | 0 | 1 |
| 20 | 16 | 3 | 1 | 3 | 6 | 0 | 3 | 0 | 14 | 0 | 2 | 0 | 6 | 0 | 0 | 3 | 0 | 0 |
| 272 | 185 | 11 | 1 | 9 | 140 | 0 | 19 | 5 | 137 | 17 | 18 | 3 | 116 | 31 | 42 | 13 | 2 | 2 |
| 18 | 12 | 0 | 0 | 1 | 9 | 0 | 1 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 |
| 849 | 702 | 87 | 25 | 31 | 514 | 0 | 41 | 4 | 433 | 190 | 21 | 6 | 406 | 120 | 95 | 82 | 91 | 14 |
| 647 | 585 | 42 | 35 | 65 | 350 | 3 | 68 | 22 | 535 | 21 | 11 | 12 | 228 | 68 | 172 | 36 | 0 | 0 |
| 349 | 301 | 79 | 2 | 13 | 187 | 1 | 15 | 4 | 288 | 8 | 1 | 4 | 129 | 42 | 104 | 30 | 3 | 0 |
| 219 | 185 | 32 | 6 | 6 | 109 | 1 | 28 | 3 | 181 | 3 | 0 | 1 | 78 | 25 | 49 | 16 | 1 | 0 |
| 949 | 867 | 262 | 205 | 72 | 277 | 3 | 44 | 4 | 712 | 125 | 17 | 4 | 209 | 164 | 114 | 31 | 6 | 2 |
| 13,188 | 11,335 | 4,121 | 900 | 706 | 4,538 | 48 | 892 | 130 | 10,133 | 557 | 186 | 387 | 2,843 | 1,798 | 2,127 | 668 | 48 | 8 |
| 2 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 738 | 570 | 224 | 26 | 24 | 227 | 1 | 62 | 6 | 502 | 25 | 7 | 25 | 165 | 115 | 83 | 26 | 8 | 1 |
| 318 | 288 | 31 | 9 | 15 | 168 | 0 | 63 | 2 | 274 | 7 | 3 | 3 | 138 | 34 | 90 | 30 | 3 | 0 |
| 26 | 22 | 10 | 3 | 1 | 6 | 0 | 2 | 0 | 19 | 0 | 0 | 3 | 6 | 9 | 2 | 0 | 0 | 0 |
| 464 | 436 | 114 | 19 | 12 | 235 | 0 | 53 | 3 | 416 | 10 | 0 | 9 | 142 | 35 | 98 | 25 | 5 | 0 |
| 4,652 | 4,377 | 874 | 220 | 220 | 2,339 | 16 | 605 | 103 | 3,398 | 135 | 545 | 160 | 1,513 | 571 | 947 | 300 | 26 | 2 |
| 45,022 | 39,175 | 10,396 | 3,184 | 2,671 | 18,972 | 109 | 3,351 | 492 | 34,977 | 1,766 | 1,166 | 854 | 12,020 | 5,553 | 8,261 | 2,855 | 312 | 35 |
| Cleaning Substances (Household) | | | | | | | | | | | | | | | | | | |
| Automatic Dishwasher Detergents | | | | | | | | | | | | | | | | | | |
| 2,368 | 2,354 | 2,225 | 26 | 6 | 79 | 1 | 13 | 4 | 2,338 | 8 | 6 | 1 | 115 | 538 | 341 | 8 | 0 | 0 |
| 2,273 | 2,236 | 1,865 | 33 | 20 | 254 | 4 | 56 | 4 | 2,179 | 13 | 38 | 2 | 156 | 415 | 283 | 18 | 1 | 0 |
| 6,643 | 6,599 | 6,221 | 45 | 44 | 241 | 4 | 42 | 2 | 6,565 | 27 | 6 | 1 | 450 | 1,492 | 1,087 | 47 | 0 | 0 |
| 392 | 385 | 339 | 12 | 4 | 24 | 1 | 4 | 1 | 381 | 2 | 2 | 0 | 44 | 78 | 56 | 6 | 0 | 0 |
| 1,558 | 1,508 | 1,146 | 26 | 29 | 248 | 0 | 55 | 4 | 1,473 | 11 | 21 | 1 | 160 | 279 | 233 | 41 | 2 | 0 |
| 2,979 | 2,953 | 2,695 | 30 | 23 | 156 | 2 | 44 | 3 | 2,933 | 10 | 10 | 0 | 187 | 730 | 378 | 13 | 0 | 0 |
| 817 | 775 | 587 | 17 | 12 | 124 | 1 | 33 | 1 | 760 | 13 | 1 | 0 | 71 | 154 | 119 | 8 | 0 | 0 |
| 1,263 | 1,248 | 1,034 | 17 | 21 | 138 | 1 | 36 | 1 | 1,228 | 3 | 13 | 3 | 104 | 177 | 134 | 8 | 0 | 0 |
| Bleaches | | | | | | | | | | | | | | | | | | |
| 3,257 | 2,510 | 868 | 105 | 189 | 1,110 | 5 | 189 | 44 | 2,223 | 205 | 49 | 18 | 757 | 414 | 655 | 124 | 6 | 0 |
| 35,425 | 29,707 | 11,004 | 1,166 | 2,222 | 12,763 | 58 | 2,171 | 323 | 26,284 | 2,413 | 525 | 305 | 8,210 | 4,366 | 8,083 | 1,043 | 38 | 2 |
| 237 | 200 | 78 | 11 | 9 | 81 | 0 | 19 | 2 | 165 | 11 | 10 | 14 | 51 | 33 | 53 | 10 | 0 | 0 |
| 1,029 | 830 | 261 | 32 | 60 | 417 | 2 | 45 | 13 | 710 | 92 | 13 | 8 | 298 | 99 | 187 | 45 | 1 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | | | | Reason | | | | Outcome | | | | | | | | | |
|----------------------|------------------------|-------|-----|------|-------|-------|-----|-----|-------|---------|-----|---------------|---------------|-------------|-------|---------|-------|---------|---------------------------------|------|-------|----------|-------|-------|----|
| | | ≤5 | | 6-12 | | 13-19 | | ≥20 | | Unknown | | Unknown Adult | Unknown Child | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death | |
| | | 1,396 | 44 | 43 | 339 | 5 | 57 | 6 | 1,820 | 39 | 19 | | | | | | | | | | | | | | 12 |
| 2,059 | 1,890 | 1,219 | 80 | 78 | 615 | 5 | 156 | 15 | 1,999 | 93 | 45 | 21 | 458 | 387 | 385 | 62 | 3 | 0 | | | | | | | |
| 2,401 | 2,168 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,892 | 1,638 | 692 | 59 | 78 | 648 | 1 | 145 | 15 | 1,512 | 70 | 25 | 25 | 459 | 216 | 393 | 83 | 1 | 0 | | | | | | | |
| 6,773 | 6,275 | 3,475 | 445 | 298 | 1,639 | 19 | 344 | 55 | 5,759 | 309 | 94 | 96 | 761 | 1,151 | 1,068 | 116 | 7 | 1 | | | | | | | |
| 474 | 448 | 227 | 35 | 31 | 124 | 0 | 29 | 2 | 395 | 36 | 6 | 8 | 69 | 98 | 63 | 11 | 1 | 0 | | | | | | | |
| 3,173 | 2,789 | 1,497 | 108 | 109 | 907 | 5 | 148 | 15 | 2,568 | 134 | 41 | 29 | 540 | 650 | 561 | 59 | 2 | 0 | | | | | | | |
| 112 | 73 | 16 | 2 | 2 | 38 | 1 | 12 | 2 | 64 | 4 | 1 | 2 | 25 | 6 | 19 | 11 | 0 | 0 | | | | | | | |
| 2,557 | 2,156 | 306 | 65 | 53 | 1,377 | 0 | 317 | 38 | 1,977 | 109 | 13 | 41 | 698 | 257 | 580 | 246 | 29 | 5 | | | | | | | |
| 32 | 16 | 5 | 0 | 0 | 7 | 0 | 4 | 0 | 16 | 0 | 0 | 0 | 5 | 3 | 5 | 1 | 0 | 0 | | | | | | | |
| 709 | 515 | 96 | 16 | 15 | 305 | 4 | 74 | 5 | 477 | 26 | 7 | 3 | 144 | 71 | 115 | 31 | 5 | 0 | | | | | | | |
| 500 | 368 | 23 | 14 | 14 | 260 | 1 | 51 | 5 | 345 | 9 | 4 | 8 | 155 | 34 | 98 | 70 | 3 | 0 | | | | | | | |
| 25 | 25 | 18 | 0 | 0 | 7 | 0 | 0 | 0 | 24 | 0 | 1 | 0 | 2 | 5 | 3 | 0 | 0 | 0 | | | | | | | |
| 96 | 93 | 78 | 2 | 1 | 8 | 0 | 3 | 1 | 93 | 0 | 0 | 0 | 3 | 23 | 7 | 2 | 0 | 0 | | | | | | | |
| 6 | 6 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | | | | | | | |
| 11 | 11 | 9 | 0 | 1 | 1 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | | | | | | | |
| 10 | 10 | 9 | 0 | 0 | 1 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | | | | | | | |
| 890 | 810 | 591 | 24 | 27 | 140 | 2 | 22 | 4 | 773 | 24 | 4 | 8 | 101 | 153 | 94 | 3 | 1 | 0 | | | | | | | |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 609 | 593 | 487 | 27 | 10 | 53 | 0 | 12 | 4 | 567 | 12 | 6 | 7 | 15 | 86 | 24 | 2 | 0 | 0 | | | | | | | |
| 1,473 | 1,309 | 958 | 46 | 76 | 176 | 5 | 45 | 3 | 1,224 | 69 | 13 | 1 | 112 | 304 | 144 | 13 | 0 | 0 | | | | | | | |
| 145 | 128 | 72 | 10 | 12 | 27 | 0 | 7 | 0 | 111 | 11 | 6 | 0 | 19 | 32 | 12 | 3 | 0 | 0 | | | | | | | |
| 1,191 | 1,081 | 734 | 62 | 52 | 191 | 1 | 35 | 6 | 1,016 | 49 | 11 | 4 | 114 | 249 | 116 | 5 | 1 | 0 | | | | | | | |
| 1,424 | 1,251 | 824 | 63 | 79 | 247 | 1 | 35 | 2 | 1,144 | 88 | 12 | 5 | 143 | 239 | 154 | 17 | 0 | 0 | | | | | | | |
| 6,263 | 5,531 | 3,222 | 357 | 168 | 1,429 | 18 | 306 | 31 | 5,194 | 125 | 160 | 34 | 498 | 660 | 1,000 | 77 | 2 | 0 | | | | | | | |
| 2,290 | 1,966 | 1,035 | 123 | 71 | 582 | 3 | 135 | 17 | 1,863 | 30 | 62 | 3 | 150 | 187 | 272 | 13 | 0 | 0 | | | | | | | |
| 47 | 43 | 20 | 1 | 0 | 20 | 0 | 2 | 0 | 41 | 1 | 0 | 1 | 9 | 8 | 9 | 2 | 0 | 0 | | | | | | | |
| 27 | 23 | 11 | 2 | 0 | 8 | 0 | 2 | 0 | 22 | 0 | 0 | 1 | 2 | 6 | 2 | 2 | 0 | 0 | | | | | | | |
| 475 | 450 | 227 | 67 | 21 | 121 | 3 | 10 | 1 | 420 | 12 | 16 | 1 | 44 | 125 | 61 | 3 | 1 | 0 | | | | | | | |
| 1,560 | 1,489 | 1,192 | 49 | 54 | 132 | 2 | 31 | 29 | 1,430 | 42 | 11 | 2 | 134 | 304 | 131 | 15 | 0 | 0 | | | | | | | |
| 45 | 41 | 25 | 5 | 0 | 11 | 0 | 0 | 0 | 38 | 2 | 1 | 0 | 5 | 8 | 6 | 0 | 0 | 0 | | | | | | | |
| 397 | 387 | 236 | 16 | 18 | 98 | 1 | 16 | 2 | 368 | 12 | 2 | 5 | 77 | 97 | 74 | 10 | 0 | 0 | | | | | | | |
| 2,592 | 2,429 | 1,644 | 114 | 89 | 477 | 1 | 93 | 11 | 2,313 | 78 | 17 | 13 | 355 | 374 | 397 | 43 | 2 | 1 | | | | | | | |
| 224 | 221 | 169 | 14 | 3 | 29 | 0 | 5 | 1 | 214 | 7 | 0 | 0 | 83 | 55 | 80 | 11 | 0 | 0 | | | | | | | |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Outcome | | | | | |
|---|----------------------|------------------------|-------|------|-------|-------|---------------|---------------|-------------|--------|-----|-------|---------|---------------------------------|-------|-------|----------|-------|-------|
| | | | ≤5 | 6-12 | 13-19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| Laundry Detergents: Liquids (Unit Dose) | 11,911 | 11,782 | 9,291 | 739 | 542 | 928 | 36 | 198 | 48 | 11,122 | 555 | 41 | 35 | 4,331 | 2,246 | 4,463 | 642 | 14 | 1 |
| Laundry Detergents: Liquids (Various Containers) | 6,523 | 6,135 | 4,104 | 305 | 274 | 1,221 | 9 | 209 | 13 | 5,763 | 272 | 53 | 26 | 993 | 988 | 1,136 | 105 | 6 | 1 |
| Laundry Detergents: Other or Unknown Types of Household Laundry Detergent and/or Fabric Cleaner | 275 | 246 | 143 | 7 | 18 | 61 | 1 | 14 | 2 | 220 | 16 | 5 | 4 | 60 | 44 | 51 | 6 | 1 | 0 |
| Laundry Detergents: Soaps | 187 | 171 | 105 | 9 | 2 | 48 | 0 | 7 | 0 | 164 | 5 | 0 | 2 | 17 | 48 | 25 | 3 | 0 | 0 |
| Laundry Prewash/Stain Removers: Aerosol or Spray Solvent Based | 121 | 119 | 101 | 4 | 0 | 10 | 0 | 2 | 2 | 118 | 0 | 0 | 1 | 16 | 21 | 25 | 4 | 0 | 0 |
| Laundry Prewash/Stain Removers: Aerosol or Spray Surfactant Based | 242 | 229 | 184 | 5 | 3 | 30 | 0 | 6 | 1 | 224 | 3 | 1 | 0 | 28 | 40 | 39 | 3 | 0 | 0 |
| Laundry Prewash/Stain Removers: Dry Solvent Based | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Laundry Prewash/Stain Removers: Dry Surfactant Based | 56 | 52 | 44 | 1 | 0 | 5 | 0 | 2 | 0 | 51 | 0 | 0 | 1 | 2 | 7 | 6 | 0 | 0 | 0 |
| Laundry Prewash/Stain Removers: Liquid Solvent Based | 158 | 150 | 102 | 2 | 2 | 40 | 0 | 4 | 0 | 145 | 1 | 2 | 2 | 19 | 42 | 22 | 1 | 0 | 0 |
| Laundry Prewash/Stain Removers: Liquid Surfactant Based | 1,443 | 1,377 | 1,169 | 21 | 25 | 136 | 2 | 21 | 3 | 1,335 | 27 | 6 | 6 | 125 | 257 | 246 | 18 | 1 | 0 |
| Laundry Prewash/Stain Removers: Other or Unknown | 1,844 | 1,737 | 1,285 | 52 | 37 | 294 | 4 | 59 | 6 | 1,685 | 26 | 11 | 10 | 181 | 301 | 290 | 18 | 0 | 0 |
| Laundry Prewash/Stain Removers: Other or Unknown Solvent Based | 45 | 41 | 33 | 0 | 2 | 2 | 0 | 3 | 1 | 41 | 0 | 0 | 0 | 8 | 5 | 8 | 1 | 0 | 0 |
| Laundry Prewash/Stain Removers: Other or Unknown Surfactant Based | 44 | 44 | 36 | 0 | 1 | 4 | 0 | 3 | 0 | 44 | 0 | 0 | 0 | 2 | 7 | 6 | 0 | 0 | 0 |
| Miscellaneous Cleaners | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Cleaning Agents: Acids | 1,722 | 1,519 | 710 | 43 | 46 | 606 | 1 | 103 | 10 | 1,425 | 45 | 29 | 14 | 320 | 287 | 308 | 58 | 2 | 0 |
| Miscellaneous Cleaning Agents: Alkalis | 7,612 | 6,649 | 3,699 | 182 | 258 | 2,070 | 25 | 368 | 47 | 6,214 | 273 | 89 | 55 | 1,484 | 1,193 | 1,303 | 296 | 19 | 2 |
| Miscellaneous Cleaning Agents: Anionics or Nonionics | 5,117 | 4,591 | 2,896 | 225 | 163 | 1,070 | 9 | 209 | 19 | 4,316 | 156 | 61 | 45 | 535 | 764 | 610 | 56 | 8 | 1 |
| Miscellaneous Cleaning Agents: Cationics | 2,453 | 2,266 | 1,174 | 115 | 114 | 724 | 3 | 129 | 7 | 2,081 | 125 | 26 | 27 | 458 | 362 | 432 | 83 | 2 | 0 |
| Miscellaneous Cleaning Agents: Ethanol (Excluding Automotive Products) | 543 | 508 | 360 | 27 | 13 | 89 | 1 | 17 | 1 | 481 | 13 | 8 | 6 | 46 | 118 | 64 | 2 | 0 | 0 |
| Miscellaneous Cleaning Agents: Glycols (Excluding Automotive Products) | 371 | 346 | 194 | 31 | 19 | 87 | 0 | 13 | 2 | 323 | 18 | 3 | 1 | 70 | 75 | 57 | 12 | 1 | 0 |
| Miscellaneous Cleaning Agents: Isopropanol (Excluding Automotive Products and Glass) | 1,344 | 1,259 | 642 | 177 | 90 | 264 | 5 | 73 | 8 | 1,131 | 91 | 27 | 5 | 121 | 204 | 152 | 26 | 0 | 0 |
| Miscellaneous Cleaning Agents: Methanol (Excluding Automotive Products) | 24 | 24 | 8 | 0 | 1 | 15 | 0 | 0 | 0 | 22 | 1 | 1 | 0 | 8 | 4 | 8 | 1 | 1 | 0 |
| Miscellaneous Cleaning Agents: Other or Unknown Household Cleaning Agents | 4,691 | 4,215 | 2,328 | 224 | 192 | 1,193 | 8 | 236 | 34 | 3,825 | 208 | 94 | 59 | 797 | 810 | 884 | 134 | 8 | 0 |
| Miscellaneous Cleaning Agents: Phenol (Excluding Disinfectants) | 6 | 6 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 4 | 0 | 3 | 0 | 0 | 0 |
| Miscellaneous Cleaning Substances (Household) | | | | | | | | | | | | | | | | | | | |
| Ammonia Cleaners (All Purpose) | 617 | 453 | 119 | 16 | 22 | 237 | 0 | 55 | 4 | 419 | 18 | 5 | 8 | 118 | 78 | 118 | 39 | 2 | 0 |
| Carpet, Upholstery, Leather, or Vinyl Cleaners | 3,086 | 2,874 | 1,933 | 68 | 64 | 677 | 9 | 110 | 13 | 2,784 | 47 | 19 | 16 | 360 | 533 | 437 | 34 | 1 | 0 |
| Hydrofluoric Acid or Bifluoride | 37 | 35 | 6 | 0 | 2 | 25 | 0 | 2 | 0 | 33 | 1 | 0 | 1 | 29 | 2 | 18 | 9 | 1 | 0 |
| Wheel Cleaners | 203 | 188 | 138 | 16 | 8 | 21 | 2 | 2 | 1 | 181 | 4 | 2 | 1 | 12 | 39 | 17 | 1 | 0 | 0 |
| Starches, Fabric Finishes, or Sizing | | | | | | | | | | | | | | | | | | | |
| Oven Cleaners | | | | | | | | | | | | | | | | | | | |
| Oven Cleaners: Acids | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 0 |
| Oven Cleaners: Alkalis | 1,946 | 1,889 | 295 | 69 | 141 | 1,122 | 12 | 225 | 25 | 1,772 | 20 | 59 | 32 | 653 | 201 | 523 | 227 | 12 | 0 |
| Oven Cleaners: Detergent Types | 8 | 8 | 3 | 1 | 0 | 4 | 0 | 0 | 0 | 7 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 |
| Oven Cleaners: Other or Unknown | 293 | 279 | 48 | 16 | 14 | 147 | 3 | 46 | 5 | 245 | 5 | 25 | 3 | 88 | 42 | 65 | 23 | 1 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Outcome | | | | | | | |
|---|------------------------|----------------|---------------|--------------|--------------|---------------|---------------|--------------|--------------|----------------|--------------|--------------|---------------------------------|---------------|---------------|---------------|--------------|------------|-----------|----------|
| | | Age | | | | | | | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death | | |
| | | ≤5 | 6-12 | 13-19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | | | | | | | | | | | | |
| Rust Removers | | | | | | | | | | | | | | | | | | | | |
| | 391 | 342 | 107 | 8 | 7 | 191 | 0 | 26 | 3 | 333 | 7 | 0 | 2 | 74 | 72 | 96 | 10 | 3 | 0 | |
| Rust Removers: Acids Other Than Hydrofluoric Acid Types | | | | | | | | | | | | | | | | | | | | |
| Rust Removers: Alkalis | 11 | 11 | 2 | 0 | 0 | 8 | 0 | 1 | 0 | 10 | 0 | 0 | 1 | 5 | 1 | 5 | 0 | 0 | 0 | 0 |
| Rust Removers: Anionics or Nonionics | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rust Removers: Hydrofluoric Acid | 205 | 196 | 27 | 1 | 5 | 149 | 0 | 10 | 4 | 183 | 8 | 3 | 1 | 105 | 37 | 63 | 27 | 1 | 2 | 2 |
| Rust Removers: Other or Unknown | 111 | 102 | 23 | 3 | 1 | 61 | 0 | 13 | 1 | 91 | 4 | 2 | 5 | 28 | 22 | 24 | 8 | 0 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents | | | | | | | | | | | | | | | | | | | | |
| Spot Removers/Dry Cleaning Agents: Anionics or Nonionics | 136 | 122 | 90 | 3 | 1 | 24 | 0 | 3 | 1 | 121 | 1 | 0 | 0 | 12 | 18 | 21 | 1 | 1 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents: Anionics or Nonionics | 64 | 55 | 35 | 2 | 0 | 14 | 0 | 4 | 0 | 54 | 1 | 0 | 0 | 10 | 7 | 13 | 2 | 0 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents: Isopropanol | 23 | 22 | 12 | 2 | 1 | 7 | 0 | 0 | 0 | 18 | 0 | 1 | 3 | 3 | 4 | 6 | 1 | 0 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents: Other, Halogenated Hydrocarbon Containing Products | 11 | 10 | 3 | 1 | 0 | 6 | 0 | 0 | 0 | 8 | 0 | 0 | 2 | 2 | 0 | 5 | 0 | 0 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents: Spot Removers/Dry Cleaning Agents: Other Hydrocarbon and/or Non-Halogenated Containing | 616 | 584 | 389 | 20 | 19 | 124 | 3 | 25 | 4 | 565 | 9 | 6 | 4 | 94 | 152 | 106 | 16 | 1 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents: Other or Unknown | 93 | 85 | 59 | 1 | 3 | 18 | 0 | 4 | 0 | 83 | 0 | 0 | 1 | 13 | 19 | 12 | 1 | 0 | 0 | 0 |
| Spot Removers/Dry Cleaning Agents: Perchloroethylene | 8 | 7 | 3 | 0 | 0 | 2 | 0 | 1 | 1 | 7 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 |
| Toilet Bowl Cleaners | | | | | | | | | | | | | | | | | | | | |
| Toilet Bowl Cleaners: Acids | 2,963 | 2,406 | 1,320 | 69 | 74 | 774 | 1 | 137 | 31 | 2,285 | 90 | 18 | 9 | 517 | 594 | 598 | 86 | 12 | 1 | 1 |
| Toilet Bowl Cleaners: Alkalis | 2,913 | 2,681 | 2,203 | 45 | 50 | 299 | 4 | 75 | 5 | 2,593 | 64 | 6 | 16 | 335 | 809 | 378 | 31 | 3 | 1 | 1 |
| Toilet Bowl Cleaners: Other or Unknown | 4,423 | 4,082 | 3,438 | 71 | 49 | 416 | 5 | 87 | 16 | 3,995 | 55 | 7 | 14 | 391 | 995 | 358 | 31 | 2 | 0 | 0 |
| Wall/Floor/Tile Cleaners | | | | | | | | | | | | | | | | | | | | |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Acids | 1,236 | 1,030 | 609 | 30 | 37 | 287 | 4 | 58 | 5 | 977 | 26 | 7 | 16 | 209 | 210 | 215 | 31 | 0 | 0 | 0 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Alkalis | 7,056 | 6,332 | 3,897 | 207 | 233 | 1,634 | 11 | 322 | 28 | 5,980 | 224 | 45 | 65 | 1,195 | 1,153 | 1,474 | 233 | 11 | 0 | 0 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Anionics or Nonionics | 7,637 | 6,803 | 4,092 | 211 | 283 | 1,881 | 13 | 279 | 44 | 6,347 | 307 | 81 | 36 | 1,154 | 1,319 | 988 | 102 | 6 | 1 | 1 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Cationics | 2,253 | 2,022 | 1,299 | 76 | 78 | 475 | 2 | 84 | 8 | 1,893 | 87 | 25 | 13 | 314 | 384 | 411 | 31 | 2 | 0 | 0 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Ethanol | 184 | 175 | 134 | 7 | 5 | 22 | 1 | 6 | 0 | 167 | 4 | 2 | 2 | 17 | 48 | 28 | 4 | 0 | 0 | 0 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Glycols | 739 | 663 | 463 | 14 | 22 | 128 | 1 | 28 | 7 | 631 | 22 | 4 | 5 | 69 | 130 | 82 | 6 | 1 | 0 | 0 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Isopropanol | 387 | 356 | 268 | 8 | 9 | 57 | 0 | 13 | 1 | 338 | 15 | 2 | 0 | 36 | 72 | 48 | 5 | 0 | 0 | 0 |
| Wall/Floor/Tile/All-Purpose Cleaning Agents: Other or Unknown | 1,758 | 1,583 | 1,047 | 68 | 61 | 352 | 2 | 49 | 4 | 1,479 | 57 | 22 | 20 | 247 | 324 | 288 | 24 | 3 | 0 | 0 |
| Category Total: | 184,873 | 166,408 | 99,514 | 6,575 | 7,033 | 43,721 | 334 | 8,144 | 1,087 | 155,396 | 7,110 | 2,069 | 1,260 | 31,678 | 30,041 | 34,242 | 4,751 | 234 | 19 | 0 |
| Cosmetics/Personal Care Products | | | | | | | | | | | | | | | | | | | | |
| Dental Care Products | | | | | | | | | | | | | | | | | | | | |
| False Teeth Cleaning Agents | 2,516 | 2,490 | 241 | 43 | 38 | 1,890 | 7 | 248 | 23 | 2,397 | 53 | 18 | 19 | 158 | 354 | 184 | 6 | 0 | 0 | 0 |
| Other Dental Care Products (Excluding Fluoride Supplements) | 1,577 | 1,523 | 577 | 93 | 78 | 644 | 3 | 111 | 17 | 1,385 | 37 | 6 | 90 | 134 | 217 | 165 | 18 | 1 | 0 | 0 |
| Toothpastes (with Fluoride) | 14,404 | 14,013 | 12,074 | 438 | 299 | 935 | 10 | 235 | 22 | 13,621 | 203 | 26 | 143 | 274 | 2,186 | 698 | 25 | 0 | 0 | 0 |
| Toothpastes (without Fluoride) | 1,834 | 1,760 | 1,536 | 38 | 42 | 101 | 3 | 35 | 5 | 1,720 | 15 | 3 | 21 | 19 | 248 | 73 | 1 | 0 | 0 | 0 |
| Hair Care Products | | | | | | | | | | | | | | | | | | | | |
| Curl Activators | 46 | 43 | 34 | 1 | 3 | 3 | 0 | 2 | 0 | 39 | 2 | 0 | 2 | 5 | 6 | 9 | 1 | 0 | 0 | 0 |
| Hair Coloring Agents (Excluding Peroxides) | 2,234 | 2,151 | 910 | 69 | 133 | 849 | 5 | 171 | 14 | 1,909 | 30 | 4 | 204 | 424 | 318 | 435 | 105 | 4 | 0 | 0 |
| Hair Oils | 569 | 547 | 481 | 12 | 10 | 35 | 0 | 9 | 0 | 533 | 7 | 4 | 1 | 73 | 119 | 53 | 4 | 1 | 0 | 0 |
| Hair Relaxers (with Other Alkalis) | 155 | 152 | 106 | 3 | 3 | 34 | 1 | 2 | 3 | 145 | 0 | 0 | 7 | 76 | 26 | 51 | 17 | 0 | 0 | 0 |
| Hair Relaxers (with Other Non-Alkalis) | 26 | 25 | 16 | 2 | 0 | 6 | 0 | 1 | 0 | 25 | 0 | 0 | 0 | 11 | 5 | 7 | 1 | 0 | 0 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | Reason | | | | | Outcome | | | | | | |
|----------------------|------------------------|----------------|--------------|--------------|---------------|------------|---------------|---------------|----------------|--------------|--------------|--------------|---------------|---------------------------------|---------------|--------------|------------|----------|
| | | ≤5 | 6-12 | 13-19 | ≥20 | Unknown | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major |
| 245 | 242 | 154 | 4 | 5 | 62 | 0 | 15 | 2 | 232 | 3 | 0 | 7 | 116 | 36 | 67 | 37 | 1 | 0 |
| 2,075 | 1,958 | 1,588 | 81 | 64 | 178 | 3 | 40 | 4 | 1,884 | 43 | 5 | 23 | 141 | 304 | 163 | 20 | 0 | 0 |
| 1,105 | 1,008 | 611 | 70 | 55 | 225 | 2 | 40 | 5 | 895 | 92 | 5 | 13 | 155 | 148 | 148 | 33 | 2 | 0 |
| 2,491 | 2,367 | 1,772 | 62 | 87 | 339 | 4 | 90 | 13 | 2,262 | 43 | 6 | 53 | 280 | 405 | 268 | 46 | 1 | 0 |
| 104 | 102 | 51 | 1 | 4 | 38 | 1 | 7 | 0 | 96 | 1 | 0 | 5 | 39 | 13 | 36 | 7 | 1 | 0 |
| 5,593 | 5,287 | 3,900 | 280 | 185 | 737 | 17 | 146 | 22 | 4,974 | 210 | 10 | 78 | 450 | 618 | 850 | 51 | 2 | 0 |
| 19,769 | 19,201 | 14,055 | 2,130 | 840 | 1,872 | 27 | 234 | 43 | 16,999 | 1,726 | 374 | 22 | 1,560 | 4,592 | 1,419 | 273 | 29 | 0 |
| 189 | 182 | 140 | 15 | 4 | 21 | 0 | 1 | 1 | 163 | 16 | 1 | 0 | 20 | 36 | 10 | 8 | 1 | 0 |
| 1,315 | 1,285 | 1,012 | 110 | 43 | 89 | 8 | 23 | 0 | 1,213 | 59 | 11 | 1 | 56 | 195 | 54 | 6 | 0 | 0 |
| 616 | 572 | 293 | 113 | 51 | 101 | 3 | 8 | 3 | 450 | 87 | 29 | 2 | 85 | 115 | 87 | 12 | 1 | 0 |
| 1,347 | 1,301 | 1,160 | 29 | 13 | 78 | 5 | 15 | 1 | 1,273 | 11 | 6 | 6 | 120 | 249 | 114 | 9 | 0 | 0 |
| 3,792 | 3,688 | 3,184 | 291 | 30 | 130 | 17 | 30 | 6 | 3,590 | 51 | 9 | 34 | 166 | 642 | 306 | 14 | 1 | 0 |
| 19,931 | 19,065 | 15,287 | 567 | 441 | 2,234 | 41 | 415 | 80 | 18,152 | 247 | 39 | 601 | 752 | 2,528 | 1,064 | 87 | 3 | 0 |
| 12,644 | 12,435 | 10,897 | 360 | 454 | 586 | 23 | 100 | 15 | 12,008 | 285 | 53 | 72 | 475 | 1,664 | 753 | 35 | 1 | 0 |
| 667 | 647 | 217 | 18 | 79 | 269 | 2 | 51 | 11 | 450 | 37 | 7 | 153 | 177 | 72 | 170 | 59 | 3 | 0 |
| 58 | 58 | 36 | 1 | 1 | 15 | 0 | 3 | 2 | 55 | 1 | 0 | 1 | 2 | 12 | 8 | 1 | 0 | 0 |
| 1,301 | 1,236 | 913 | 54 | 42 | 178 | 2 | 40 | 7 | 1,166 | 15 | 3 | 49 | 85 | 168 | 106 | 21 | 1 | 0 |
| 811 | 794 | 668 | 35 | 43 | 29 | 5 | 12 | 2 | 764 | 19 | 2 | 7 | 23 | 123 | 27 | 2 | 0 | 0 |
| 4,221 | 4,104 | 3,536 | 160 | 94 | 231 | 4 | 49 | 30 | 3,813 | 54 | 9 | 226 | 95 | 525 | 299 | 23 | 1 | 0 |
| 7,007 | 6,712 | 5,189 | 384 | 364 | 618 | 19 | 121 | 17 | 6,256 | 332 | 84 | 19 | 651 | 1,326 | 1,127 | 55 | 1 | 0 |
| 6,462 | 5,940 | 4,817 | 254 | 358 | 2,852 | 13 | 573 | 73 | 5,432 | 304 | 43 | 118 | 1,124 | 699 | 1,355 | 223 | 22 | 0 |
| 1,454 | 1,414 | 1,231 | 47 | 35 | 72 | 6 | 21 | 2 | 1,360 | 34 | 7 | 8 | 85 | 220 | 217 | 13 | 1 | 0 |
| 1,480 | 1,441 | 1,097 | 62 | 66 | 160 | 9 | 42 | 5 | 1,372 | 41 | 15 | 10 | 201 | 263 | 250 | 24 | 0 | 0 |
| 13,235 | 12,571 | 8,536 | 787 | 525 | 2,229 | 40 | 392 | 62 | 11,792 | 417 | 121 | 215 | 853 | 1,442 | 1,663 | 111 | 3 | 0 |
| 7,240 | 7,115 | 6,031 | 393 | 135 | 432 | 16 | 94 | 14 | 6,949 | 62 | 24 | 68 | 258 | 849 | 626 | 35 | 2 | 0 |
| 5,464 | 4,886 | 1,199 | 418 | 412 | 2,417 | 6 | 400 | 34 | 3,922 | 878 | 26 | 24 | 866 | 678 | 484 | 214 | 24 | 0 |
| 5,034 | 4,973 | 3,315 | 970 | 113 | 463 | 5 | 93 | 14 | 4,872 | 64 | 1 | 29 | 83 | 738 | 137 | 9 | 1 | 0 |
| 1,699 | 1,634 | 556 | 143 | 101 | 726 | 5 | 100 | 3 | 1,515 | 96 | 1 | 15 | 92 | 238 | 65 | 12 | 1 | 0 |
| 230 | 185 | 42 | 13 | 13 | 87 | 0 | 27 | 3 | 151 | 28 | 0 | 3 | 28 | 24 | 20 | 1 | 0 | 0 |
| 1,079 | 1,070 | 338 | 185 | 141 | 344 | 5 | 48 | 9 | 1,039 | 26 | 1 | 3 | 474 | 110 | 320 | 81 | 2 | 0 |
| 211 | 207 | 153 | 3 | 6 | 40 | 1 | 4 | 0 | 201 | 1 | 0 | 3 | 64 | 51 | 45 | 7 | 1 | 0 |
| 9 | 8 | 5 | 0 | 2 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 |
| 705 | 693 | 473 | 37 | 17 | 133 | 1 | 26 | 6 | 669 | 12 | 4 | 6 | 126 | 137 | 128 | 17 | 1 | 0 |
| 3,124 | 3,012 | 2,048 | 135 | 151 | 573 | 5 | 85 | 15 | 2,869 | 95 | 29 | 11 | 365 | 658 | 421 | 32 | 1 | 0 |
| 5,399 | 5,245 | 4,521 | 214 | 119 | 305 | 9 | 62 | 15 | 5,128 | 84 | 14 | 11 | 341 | 876 | 517 | 20 | 1 | 0 |
| 976 | 951 | 667 | 42 | 48 | 155 | 2 | 30 | 9 | 900 | 30 | 9 | 8 | 102 | 197 | 123 | 9 | 0 | 0 |
| 3,172 | 3,035 | 2,051 | 136 | 174 | 543 | 5 | 118 | 8 | 2,892 | 105 | 27 | 7 | 363 | 449 | 416 | 18 | 1 | 0 |
| 165,616 | 159,328 | 114,718 | 9,303 | 5,921 | 24,059 | 340 | 4,374 | 613 | 149,540 | 5,956 | 1,036 | 2,398 | 12,050 | 24,896 | 15,539 | 1,803 | 116 | 0 |
| 2,166 | 2,102 | 1,400 | 158 | 76 | 371 | 3 | 79 | 15 | 1,978 | 67 | 28 | 21 | 181 | 366 | 328 | 23 | 1 | 0 |
| 9,230 | 9,062 | 7,775 | 250 | 164 | 687 | 16 | 156 | 14 | 8,879 | 110 | 43 | 20 | 663 | 1,769 | 1,214 | 45 | 1 | 0 |
| 2,350 | 2,320 | 2,016 | 87 | 41 | 141 | 5 | 28 | 2 | 2,287 | 20 | 9 | 4 | 176 | 429 | 192 | 5 | 0 | 0 |
| 1,669 | 1,657 | 1,371 | 69 | 34 | 141 | 2 | 34 | 6 | 1,622 | 23 | 3 | 6 | 149 | 313 | 191 | 10 | 0 | 0 |
| 10 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 6,551 | 6,256 | 4,500 | 282 | 172 | 1,074 | 9 | 191 | 28 | 6,004 | 136 | 54 | 50 | 579 | 1,204 | 836 | 65 | 5 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | Reason | | | | Outcome | | | | | | | |
|---|------------------------|---------------|------------|------------|--------------|---------------|---------------|-------------|---------------|------------|------------|------------|---------------------------------|--------------|--------------|------------|-----------|----------|--|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death | |
| 381 | 371 | 295 | 10 | 11 | 43 | 0 | 11 | 1 | 365 | 4 | 0 | 2 | 44 | 83 | 30 | 5 | 0 | 0 | |
| 83 | 79 | 56 | 4 | 3 | 13 | 0 | 2 | 1 | 72 | 6 | 0 | 1 | 15 | 14 | 14 | 0 | 0 | 0 | |
| 22,440 | 21,857 | 17,423 | 860 | 501 | 2,470 | 35 | 501 | 67 | 21,217 | 366 | 137 | 104 | 1,808 | 4,179 | 2,806 | 153 | 7 | 0 | |
| Dyes | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Dyes | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 298 | 294 | 203 | 25 | 9 | 43 | 1 | 11 | 2 | 283 | 4 | 0 | 7 | 24 | 53 | 18 | 2 | 0 | 0 | |
| 706 | 644 | 477 | 96 | 19 | 37 | 10 | 5 | 0 | 597 | 30 | 9 | 8 | 15 | 96 | 40 | 3 | 0 | 0 | |
| 81 | 78 | 61 | 4 | 4 | 4 | 1 | 4 | 0 | 71 | 1 | 3 | 3 | 4 | 20 | 1 | 1 | 0 | 0 | |
| 470 | 412 | 194 | 62 | 66 | 63 | 3 | 19 | 5 | 378 | 16 | 2 | 15 | 48 | 75 | 36 | 10 | 0 | 0 | |
| 56 | 51 | 26 | 8 | 4 | 10 | 0 | 2 | 1 | 45 | 3 | 1 | 2 | 5 | 11 | 6 | 1 | 0 | 0 | |
| 1,612 | 1,480 | 961 | 195 | 102 | 157 | 15 | 42 | 8 | 1,374 | 54 | 15 | 36 | 97 | 255 | 101 | 18 | 0 | 0 | |
| Essential Oils | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Essential Oil | | | | | | | | | | | | | | | | | | | |
| 604 | 543 | 353 | 47 | 13 | 107 | 2 | 18 | 3 | 475 | 37 | 3 | 28 | 57 | 58 | 190 | 11 | 0 | 0 | |
| 655 | 599 | 392 | 24 | 10 | 135 | 1 | 31 | 6 | 559 | 18 | 0 | 21 | 108 | 119 | 137 | 10 | 2 | 0 | |
| 1,504 | 1,352 | 834 | 67 | 34 | 356 | 2 | 52 | 7 | 1,288 | 26 | 11 | 23 | 257 | 314 | 187 | 18 | 4 | 0 | |
| 17,638 | 16,730 | 12,433 | 636 | 353 | 2,647 | 32 | 579 | 50 | 15,984 | 314 | 78 | 320 | 1,158 | 3,211 | 2,539 | 131 | 7 | 0 | |
| 22 | 19 | 1 | 3 | 2 | 11 | 0 | 1 | 1 | 14 | 2 | 0 | 3 | 4 | 4 | 0 | 1 | 0 | 0 | |
| 4,583 | 4,292 | 2,229 | 150 | 183 | 1,389 | 16 | 294 | 31 | 3,936 | 170 | 26 | 123 | 492 | 960 | 396 | 32 | 3 | 0 | |
| 25,006 | 23,535 | 16,242 | 927 | 595 | 4,645 | 53 | 975 | 98 | 22,256 | 567 | 118 | 518 | 2,076 | 4,666 | 3,449 | 203 | 16 | 0 | |
| Fertilizers | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Fertilizers | | | | | | | | | | | | | | | | | | | |
| 1,359 | 1,320 | 697 | 86 | 47 | 405 | 2 | 83 | 0 | 1,271 | 22 | 19 | 6 | 57 | 217 | 48 | 2 | 0 | 0 | |
| 1,380 | 1,261 | 767 | 102 | 33 | 282 | 7 | 63 | 7 | 1,219 | 19 | 13 | 8 | 88 | 246 | 76 | 11 | 0 | 0 | |
| 2,111 | 1,992 | 1,171 | 126 | 42 | 510 | 2 | 119 | 22 | 1,915 | 29 | 26 | 19 | 148 | 368 | 138 | 25 | 0 | 0 | |
| 56 | 48 | 19 | 1 | 0 | 25 | 0 | 3 | 0 | 48 | 0 | 0 | 0 | 7 | 13 | 6 | 3 | 0 | 0 | |
| 137 | 124 | 53 | 17 | 3 | 44 | 1 | 5 | 1 | 116 | 2 | 2 | 4 | 19 | 20 | 7 | 4 | 0 | 0 | |
| 5,043 | 4,745 | 2,707 | 332 | 125 | 1,266 | 12 | 273 | 30 | 4,569 | 72 | 60 | 37 | 319 | 864 | 275 | 45 | 0 | 0 | |
| Fire Extinguishers | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Fire Extinguisher | | | | | | | | | | | | | | | | | | | |
| 2,454 | 2,382 | 200 | 277 | 326 | 1,115 | 22 | 336 | 106 | 2,157 | 65 | 105 | 34 | 705 | 436 | 656 | 134 | 3 | 0 | |
| 2,454 | 2,382 | 200 | 277 | 326 | 1,115 | 22 | 336 | 106 | 2,157 | 65 | 105 | 34 | 705 | 436 | 656 | 134 | 3 | 0 | |
| Foreign Bodies/Toys/Miscellaneous | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Foreign Bodies/Toys/Miscellaneous | | | | | | | | | | | | | | | | | | | |
| 344 | 315 | 258 | 12 | 2 | 30 | 0 | 11 | 2 | 306 | 3 | 6 | 0 | 12 | 51 | 18 | 4 | 0 | 0 | |
| 3,241 | 3,206 | 2,893 | 202 | 31 | 56 | 8 | 14 | 2 | 3,164 | 30 | 7 | 1 | 120 | 353 | 449 | 16 | 0 | 0 | |
| 652 | 509 | 337 | 31 | 22 | 86 | 7 | 22 | 4 | 449 | 24 | 8 | 26 | 45 | 90 | 39 | 4 | 0 | 0 | |
| 278 | 271 | 196 | 15 | 2 | 38 | 0 | 20 | 0 | 270 | 1 | 0 | 0 | 16 | 38 | 18 | 1 | 0 | 0 | |
| 2,392 | 2,328 | 1,859 | 372 | 39 | 35 | 9 | 12 | 2 | 2,269 | 47 | 7 | 2 | 839 | 534 | 275 | 19 | 2 | 0 | |
| 19,623 | 19,479 | 15,703 | 1,407 | 434 | 1,414 | 82 | 386 | 53 | 18,912 | 373 | 146 | 21 | 936 | 2,389 | 167 | 10 | 0 | 0 | |
| 5,736 | 5,042 | 3,858 | 194 | 98 | 632 | 31 | 203 | 26 | 4,851 | 34 | 133 | 15 | 144 | 607 | 152 | 9 | 0 | 0 | |
| 3,886 | 3,785 | 862 | 195 | 194 | 1,617 | 31 | 819 | 67 | 3,558 | 42 | 149 | 25 | 255 | 634 | 158 | 9 | 0 | 0 | |
| 14,598 | 14,568 | 11,102 | 2,799 | 263 | 248 | 41 | 85 | 30 | 14,375 | 169 | 6 | 1 | 551 | 1,529 | 2,551 | 29 | 0 | 0 | |
| 228 | 221 | 160 | 5 | 9 | 32 | 1 | 14 | 0 | 212 | 4 | 2 | 3 | 13 | 42 | 15 | 1 | 0 | 0 | |
| 25,973 | 24,732 | 16,860 | 2,658 | 916 | 2,973 | 116 | 1,054 | 155 | 23,514 | 643 | 309 | 198 | 2,226 | 3,898 | 1,061 | 110 | 3 | 0 | |
| Other Types of Foreign Body, Toy, or Miscellaneous Substance | | | | | | | | | | | | | | | | | | | |
| 510 | 505 | 196 | 124 | 42 | 111 | 0 | 19 | 13 | 437 | 42 | 18 | 6 | 22 | 116 | 13 | 0 | 0 | 0 | |
| 2,059 | 1,854 | 1,349 | 96 | 39 | 284 | 5 | 79 | 2 | 1,779 | 39 | 10 | 21 | 132 | 234 | 114 | 18 | 1 | 0 | |
| 9,853 | 9,743 | 7,602 | 1,610 | 201 | 220 | 35 | 65 | 10 | 9,467 | 195 | 26 | 44 | 651 | 1,538 | 553 | 30 | 0 | 0 | |
| 1,907 | 1,856 | 1,311 | 249 | 70 | 155 | 10 | 52 | 9 | 1,786 | 37 | 18 | 6 | 144 | 293 | 95 | 10 | 0 | 0 | |
| Thermometers | | | | | | | | | | | | | | | | | | | |
| 1,076 | 1,071 | 172 | 124 | 62 | 391 | 26 | 267 | 29 | 1,053 | 6 | 3 | 8 | 88 | 182 | 15 | 3 | 0 | 0 | |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | Reason | | | | | Outcome | | | | | | | |
|--|------------------------|---------------|---------------|--------------|---------------|------------|---------------|---------------|---------------|--------------|------------|------------|---------------|---------------------------------|--------------|--------------|------------|----------|----------|
| | | ≤5 | 6-12 | 13-19 | ≥20 | Unknown | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| 587 | 583 | 165 | 75 | 34 | 155 | 21 | 124 | 9 | 563 | 7 | 13 | 0 | 40 | 121 | 30 | 5 | 0 | 0 | 0 |
| 98 | 98 | 28 | 9 | 8 | 34 | 0 | 19 | 0 | 97 | 1 | 0 | 0 | 12 | 8 | 2 | 0 | 0 | 0 | 0 |
| 93,041 | 90,166 | 64,911 | 10,177 | 2,466 | 8,511 | 423 | 3,265 | 413 | 87,062 | 1,697 | 861 | 377 | 6,246 | 12,657 | 5,725 | 278 | 6 | 0 | 0 |
| Fumes/Gases/Vapors | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Fumes/Gases/Vapors | | | | | | | | | | | | | | | | | | | |
| 480 | 440 | 29 | 28 | 65 | 247 | 4 | 60 | 7 | 393 | 29 | 2 | 13 | 103 | 49 | 125 | 22 | 1 | 1 | 1 |
| 13,353 | 12,055 | 1,608 | 952 | 833 | 6,758 | 108 | 1,607 | 189 | 11,528 | 359 | 29 | 26 | 6,270 | 2,196 | 3,257 | 1,347 | 237 | 42 | 42 |
| 2,303 | 2,168 | 69 | 39 | 126 | 1,578 | 7 | 295 | 54 | 2,068 | 75 | 1 | 17 | 419 | 228 | 659 | 202 | 3 | 0 | 0 |
| 3,354 | 3,176 | 206 | 198 | 207 | 2,074 | 8 | 441 | 42 | 3,028 | 106 | 9 | 29 | 977 | 305 | 1,071 | 352 | 8 | 1 | 1 |
| 2,666 | 2,554 | 101 | 60 | 135 | 1,808 | 7 | 378 | 65 | 2,410 | 107 | 0 | 31 | 510 | 427 | 840 | 255 | 5 | 0 | 0 |
| Chlorine Gas (When Household Acid is Mixed with Hypochlorite) | | | | | | | | | | | | | | | | | | | |
| 846 | 739 | 49 | 28 | 19 | 505 | 4 | 124 | 10 | 726 | 5 | 2 | 3 | 345 | 103 | 206 | 97 | 10 | 2 | 0 |
| 4,645 | 4,354 | 891 | 396 | 259 | 2,018 | 64 | 635 | 91 | 4,312 | 12 | 18 | 4 | 928 | 1,185 | 792 | 125 | 9 | 0 | 0 |
| 1,757 | 1,624 | 199 | 80 | 95 | 921 | 18 | 289 | 22 | 1,495 | 72 | 12 | 37 | 376 | 237 | 362 | 100 | 15 | 2 | 2 |
| 24 | 23 | 5 | 1 | 1 | 7 | 0 | 8 | 1 | 21 | 1 | 1 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 |
| 2,625 | 2,404 | 276 | 233 | 207 | 1,290 | 34 | 294 | 70 | 2,164 | 190 | 17 | 16 | 756 | 353 | 546 | 225 | 9 | 4 | 4 |
| 1,997 | 1,939 | 88 | 60 | 184 | 1,003 | 17 | 510 | 77 | 1,838 | 17 | 51 | 7 | 559 | 168 | 482 | 112 | 8 | 2 | 2 |
| 34,050 | 31,476 | 3,521 | 2,075 | 2,131 | 18,209 | 271 | 4,641 | 628 | 29,983 | 973 | 142 | 183 | 11,243 | 5,255 | 8,340 | 2,838 | 305 | 8 | 2 |
| Heavy Metals | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Heavy Metals | | | | | | | | | | | | | | | | | | | |
| 926 | 860 | 429 | 68 | 44 | 238 | 4 | 74 | 3 | 809 | 8 | 25 | 5 | 71 | 99 | 42 | 8 | 2 | 0 | 0 |
| 753 | 654 | 60 | 20 | 23 | 454 | 4 | 80 | 13 | 393 | 9 | 120 | 11 | 355 | 83 | 55 | 39 | 0 | 0 | 0 |
| 33 | 25 | 1 | 1 | 4 | 18 | 0 | 1 | 0 | 17 | 3 | 3 | 2 | 10 | 1 | 5 | 1 | 0 | 1 | 1 |
| 102 | 58 | 3 | 1 | 2 | 47 | 0 | 1 | 4 | 44 | 0 | 1 | 2 | 30 | 7 | 6 | 4 | 1 | 0 | 0 |
| 632 | 534 | 75 | 45 | 113 | 241 | 2 | 43 | 15 | 465 | 32 | 11 | 16 | 153 | 61 | 136 | 29 | 1 | 0 | 0 |
| 28 | 27 | 8 | 8 | 7 | 3 | 0 | 1 | 0 | 26 | 1 | 0 | 0 | 6 | 4 | 3 | 1 | 1 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2,380 | 2,219 | 1,119 | 180 | 108 | 624 | 18 | 154 | 16 | 2,051 | 34 | 39 | 20 | 1,085 | 625 | 127 | 64 | 9 | 0 | 0 |
| 56 | 41 | 9 | 2 | 2 | 23 | 0 | 5 | 0 | 32 | 3 | 2 | 3 | 10 | 7 | 2 | 8 | 0 | 0 | 0 |
| 297 | 275 | 29 | 15 | 42 | 143 | 0 | 34 | 12 | 215 | 4 | 14 | 26 | 77 | 36 | 17 | 4 | 0 | 0 | 0 |
| 872 | 826 | 60 | 60 | 71 | 415 | 2 | 181 | 37 | 690 | 40 | 27 | 44 | 213 | 140 | 38 | 15 | 6 | 0 | 0 |
| 259 | 234 | 15 | 3 | 12 | 189 | 0 | 15 | 0 | 225 | 2 | 2 | 5 | 108 | 11 | 69 | 34 | 2 | 0 | 0 |
| 2,772 | 1,825 | 725 | 119 | 90 | 727 | 3 | 148 | 13 | 1,477 | 133 | 21 | 177 | 378 | 299 | 200 | 53 | 7 | 2 | 2 |
| 37 | 27 | 0 | 0 | 1 | 23 | 0 | 1 | 2 | 9 | 0 | 12 | 1 | 20 | 3 | 3 | 0 | 0 | 1 | 1 |
| 70 | 60 | 8 | 2 | 6 | 29 | 2 | 13 | 0 | 40 | 1 | 7 | 6 | 27 | 4 | 5 | 2 | 0 | 0 | 0 |
| 9,218 | 7,666 | 2,541 | 524 | 525 | 3,174 | 35 | 752 | 115 | 6,493 | 270 | 284 | 319 | 2,543 | 1,380 | 708 | 262 | 29 | 4 | 4 |
| Hydrocarbons | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Hydrocarbons | | | | | | | | | | | | | | | | | | | |
| 150 | 50 | 5 | 1 | 2 | 36 | 0 | 6 | 0 | 48 | 1 | 0 | 0 | 26 | 8 | 12 | 7 | 1 | 0 | 0 |
| 53 | 46 | 6 | 1 | 2 | 24 | 0 | 12 | 1 | 45 | 0 | 1 | 0 | 11 | 10 | 2 | 0 | 0 | 0 | 0 |
| 971 | 928 | 134 | 18 | 57 | 600 | 0 | 103 | 16 | 865 | 43 | 8 | 4 | 293 | 130 | 246 | 46 | 4 | 0 | 0 |
| 4,427 | 4,217 | 289 | 168 | 308 | 2,858 | 9 | 498 | 87 | 3,309 | 801 | 44 | 34 | 1,714 | 564 | 1,022 | 490 | 44 | 20 | 20 |
| 9,201 | 8,846 | 1,466 | 514 | 693 | 5,064 | 40 | 970 | 99 | 8,127 | 579 | 75 | 21 | 2,013 | 1,182 | 2,521 | 322 | 13 | 0 | 0 |
| 739 | 698 | 305 | 35 | 22 | 266 | 2 | 62 | 6 | 649 | 25 | 17 | 2 | 236 | 120 | 192 | 48 | 7 | 0 | 0 |
| 1,047 | 1,019 | 685 | 34 | 30 | 227 | 2 | 39 | 2 | 986 | 17 | 13 | 2 | 374 | 226 | 224 | 102 | 15 | 0 | 0 |
| 1,835 | 1,713 | 941 | 46 | 102 | 520 | 0 | 96 | 8 | 1,567 | 76 | 46 | 14 | 644 | 345 | 454 | 107 | 14 | 0 | 0 |
| 3,525 | 3,256 | 1,673 | 112 | 140 | 1,091 | 6 | 196 | 38 | 3,101 | 91 | 42 | 7 | 658 | 761 | 592 | 72 | 1 | 0 | 0 |
| 10 | 10 | 5 | 0 | 1 | 4 | 0 | 0 | 0 | 9 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 |
| 1,686 | 1,562 | 396 | 44 | 78 | 852 | 9 | 165 | 18 | 1,440 | 84 | 20 | 9 | 564 | 217 | 438 | 129 | 6 | 0 | 0 |
| 274 | 240 | 32 | 8 | 17 | 164 | 2 | 15 | 2 | 221 | 15 | 2 | 0 | 94 | 36 | 68 | 22 | 1 | 0 | 0 |
| 3,292 | 3,001 | 1,313 | 127 | 133 | 1,187 | 7 | 206 | 28 | 2,819 | 101 | 46 | 30 | 778 | 558 | 611 | 140 | 11 | 0 | 0 |
| 582 | 479 | 69 | 5 | 29 | 335 | 0 | 35 | 6 | 445 | 23 | 6 | 3 | 205 | 58 | 158 | 48 | 1 | 0 | 0 |
| 337 | 294 | 60 | 7 | 18 | 176 | 1 | 31 | 1 | 221 | 63 | 0 | 5 | 97 | 34 | 67 | 22 | 2 | 0 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Outcome | | | | | | |
|---|------------------------|--------------|--------------|--------------|---------------|---------------|---------------|-------------|---------------|--------------|------------|--------------|---------------------------------|--------------|--------------|--------------|------------|-----------|------|
| | | Age | | | | | | | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death | |
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | | | | | | | | | | | None |
| 449 | 396 | 147 | 9 | 24 | 181 | 2 | 25 | 8 | 341 | 50 | 4 | 1 | 156 | 81 | 82 | 42 | 1 | 0 | |
| 28,576 | 26,755 | 7,526 | 1,129 | 1,656 | 13,585 | 80 | 2,459 | 320 | 24,193 | 1,969 | 325 | 132 | 7,865 | 4,330 | 6,692 | 1,597 | 121 | 20 | |
| Industrial Cleaners | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Industrial Cleaners | | | | | | | | | | | | | | | | | | | |
| 1,803 | 1,673 | 208 | 84 | 132 | 1,000 | 6 | 230 | 13 | 1,497 | 140 | 19 | 12 | 543 | 181 | 534 | 149 | 7 | 0 | |
| 1,524 | 1,404 | 344 | 51 | 77 | 778 | 2 | 137 | 15 | 1,265 | 55 | 62 | 14 | 503 | 181 | 435 | 118 | 4 | 0 | |
| 1,442 | 1,231 | 278 | 22 | 61 | 739 | 0 | 119 | 12 | 1,141 | 42 | 28 | 11 | 424 | 158 | 358 | 121 | 4 | 0 | |
| 2,905 | 2,695 | 419 | 47 | 206 | 1,784 | 8 | 200 | 31 | 2,556 | 67 | 54 | 14 | 1,425 | 260 | 989 | 448 | 26 | 2 | |
| 524 | 480 | 185 | 31 | 21 | 204 | 0 | 37 | 2 | 443 | 22 | 7 | 2 | 125 | 74 | 101 | 22 | 1 | 0 | |
| 809 | 756 | 114 | 32 | 89 | 436 | 0 | 70 | 15 | 652 | 66 | 12 | 19 | 304 | 108 | 256 | 42 | 3 | 0 | |
| 9,007 | 8,239 | 1,548 | 267 | 586 | 4,941 | 16 | 793 | 88 | 7,554 | 392 | 182 | 72 | 3,324 | 962 | 2,673 | 900 | 45 | 2 | |
| Infectious and Toxin-Mediated Diseases | | | | | | | | | | | | | | | | | | | |
| Botulinum Toxins | | | | | | | | | | | | | | | | | | | |
| 218 | 205 | 58 | 5 | 6 | 115 | 0 | 21 | 0 | 113 | 18 | 8 | 50 | 84 | 23 | 6 | 22 | 26 | 1 | |
| Ichthyosarcotoxins | | | | | | | | | | | | | | | | | | | |
| 169 | 158 | 0 | 3 | 9 | 125 | 0 | 18 | 3 | 134 | 0 | 0 | 24 | 68 | 3 | 28 | 39 | 6 | 0 | |
| 13 | 13 | 1 | 0 | 0 | 8 | 0 | 4 | 0 | 12 | 0 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | |
| 210 | 195 | 8 | 18 | 129 | 0 | 28 | 4 | 150 | 3 | 1 | 40 | 95 | 5 | 56 | 33 | 3 | 0 | 0 | |
| 79 | 77 | 10 | 3 | 2 | 47 | 0 | 13 | 2 | 65 | 0 | 2 | 10 | 19 | 6 | 19 | 4 | 0 | 0 | |
| 153 | 144 | 9 | 6 | 9 | 98 | 0 | 21 | 1 | 96 | 0 | 2 | 46 | 42 | 3 | 42 | 28 | 0 | 0 | |
| 147 | 147 | 34 | 29 | 8 | 56 | 0 | 19 | 1 | 131 | 7 | 2 | 6 | 21 | 14 | 24 | 4 | 1 | 0 | |
| 437 | 414 | 84 | 35 | 29 | 197 | 3 | 56 | 10 | 360 | 4 | 15 | 27 | 99 | 22 | 53 | 25 | 4 | 0 | |
| 3,579 | 3,488 | 913 | 464 | 212 | 1,472 | 22 | 365 | 40 | 3,146 | 8 | 153 | 179 | 83 | 360 | 112 | 10 | 1 | 0 | |
| 102 | 89 | 28 | 7 | 2 | 33 | 1 | 17 | 1 | 84 | 0 | 3 | 2 | 8 | 1 | 3 | 3 | 0 | 0 | |
| Other Types of Bacterial Food Poisoning (Salmonella, Shigella, Vibrio, Staphylococcus, Streptococcus, etc) | | | | | | | | | | | | | | | | | | | |
| 25 | 22 | 9 | 1 | 0 | 8 | 0 | 3 | 1 | 20 | 0 | 0 | 1 | 4 | 2 | 0 | 0 | 0 | 0 | |
| 318 | 309 | 38 | 18 | 20 | 171 | 3 | 57 | 2 | 300 | 0 | 1 | 8 | 56 | 5 | 29 | 17 | 1 | 0 | |
| Food Poisoning | | | | | | | | | | | | | | | | | | | |
| 10,680 | 10,444 | 1,903 | 734 | 676 | 5,626 | 39 | 1,321 | 145 | 9,588 | 28 | 139 | 650 | 966 | 558 | 1,549 | 349 | 6 | 0 | |
| 171 | 148 | 23 | 10 | 5 | 71 | 2 | 34 | 3 | 135 | 0 | 5 | 1 | 66 | 13 | 8 | 3 | 1 | 0 | |
| 16,301 | 15,853 | 3,118 | 1,323 | 996 | 8,156 | 70 | 1,977 | 213 | 14,334 | 68 | 331 | 1,045 | 1,614 | 1,015 | 1,931 | 537 | 49 | 1 | |
| Information Calls | | | | | | | | | | | | | | | | | | | |
| Food Information Calls | | | | | | | | | | | | | | | | | | | |
| 7,286 | 5,356 | 2,594 | 408 | 210 | 1,602 | 27 | 457 | 58 | 4,399 | 354 | 249 | 316 | 546 | 734 | 655 | 109 | 4 | 0 | |
| 5,060 | 4,964 | 1,130 | 431 | 317 | 2,396 | 23 | 601 | 66 | 4,542 | 9 | 129 | 274 | 194 | 418 | 340 | 75 | 7 | 0 | |
| Spilled Foods | | | | | | | | | | | | | | | | | | | |
| 12,346 | 10,320 | 3,724 | 839 | 527 | 3,998 | 50 | 1,058 | 124 | 8,941 | 363 | 378 | 590 | 740 | 1,152 | 995 | 184 | 11 | 0 | |
| Lacrimators | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Lacrimators | | | | | | | | | | | | | | | | | | | |
| 3,054 | 3,014 | 577 | 652 | 604 | 852 | 23 | 263 | 43 | 2,409 | 127 | 326 | 37 | 646 | 118 | 1,456 | 161 | 2 | 0 | |
| 237 | 231 | 26 | 38 | 58 | 79 | 1 | 15 | 14 | 156 | 11 | 60 | 2 | 63 | 12 | 92 | 18 | 0 | 0 | |
| 44 | 41 | 3 | 5 | 7 | 9 | 0 | 17 | 0 | 37 | 2 | 2 | 0 | 8 | 1 | 14 | 3 | 0 | 0 | |
| 92 | 56 | 4 | 3 | 3 | 34 | 0 | 12 | 0 | 53 | 0 | 0 | 3 | 15 | 4 | 8 | 3 | 0 | 0 | |
| 196 | 186 | 25 | 53 | 21 | 67 | 2 | 16 | 2 | 151 | 8 | 21 | 3 | 94 | 40 | 90 | 11 | 1 | 0 | |
| 3,623 | 3,528 | 635 | 751 | 693 | 1,041 | 26 | 323 | 59 | 2,806 | 148 | 409 | 45 | 826 | 175 | 1,660 | 196 | 3 | 0 | |
| Matches/Fireworks/Explosives | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Matches/Fireworks/Explosives | | | | | | | | | | | | | | | | | | | |
| 163 | 150 | 87 | 17 | 8 | 28 | 0 | 9 | 1 | 134 | 11 | 1 | 2 | 52 | 40 | 21 | 1 | 0 | 0 | |
| 746 | 736 | 627 | 42 | 18 | 37 | 3 | 5 | 4 | 714 | 15 | 6 | 1 | 75 | 213 | 57 | 11 | 0 | 0 | |
| 421 | 417 | 361 | 7 | 11 | 25 | 0 | 10 | 3 | 401 | 7 | 7 | 1 | 12 | 78 | 6 | 1 | 0 | 0 | |
| 81 | 78 | 56 | 10 | 5 | 7 | 0 | 0 | 0 | 71 | 5 | 1 | 1 | 10 | 19 | 11 | 3 | 0 | 0 | |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | | Outcome | | | | |
|---|------------------------|--------|-------|-------|--------|---------------|---------------|-------------|--------|-----|-------|---------|---------------------------------|---------|-------|----------|-------|-------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1,419 | 1,389 | 1,139 | 76 | 42 | 97 | 3 | 24 | 8 | 1,328 | 38 | 15 | 5 | 150 | 353 | 96 | 16 | 0 | 0 |
| Miscellaneous Foods | | | | | | | | | | | | | | | | | | |
| 2,172 | 2,103 | 487 | 279 | 377 | 718 | 12 | 207 | 23 | 1,580 | 168 | 61 | 278 | 270 | 95 | 880 | 88 | 2 | 0 |
| 451 | 395 | 142 | 57 | 27 | 134 | 0 | 29 | 6 | 309 | 25 | 10 | 51 | 72 | 48 | 74 | 10 | 2 | 0 |
| 10,061 | 9,425 | 4,184 | 768 | 501 | 2,871 | 48 | 852 | 201 | 7,578 | 214 | 281 | 1,306 | 711 | 1,013 | 765 | 161 | 5 | 1 |
| 1,400 | 1,307 | 245 | 102 | 59 | 660 | 9 | 209 | 23 | 561 | 22 | 55 | 660 | 234 | 72 | 229 | 103 | 6 | 0 |
| 14,084 | 13,230 | 5,058 | 1,206 | 964 | 4,383 | 69 | 1,297 | 253 | 10,028 | 429 | 407 | 2,295 | 1,287 | 1,228 | 1,948 | 362 | 15 | 1 |
| Mushrooms | | | | | | | | | | | | | | | | | | |
| Miscellaneous Mushrooms | | | | | | | | | | | | | | | | | | |
| 76 | 69 | 8 | 1 | 6 | 48 | 0 | 6 | 0 | 38 | 22 | 0 | 6 | 39 | 15 | 18 | 4 | 4 | 0 |
| 18 | 17 | 0 | 0 | 12 | 5 | 0 | 0 | 0 | 10 | 6 | 0 | 1 | 14 | 8 | 3 | 2 | 1 | 0 |
| 34 | 33 | 7 | 3 | 3 | 15 | 2 | 3 | 0 | 22 | 10 | 0 | 1 | 20 | 9 | 9 | 9 | 1 | 1 |
| 20 | 20 | 0 | 0 | 1 | 18 | 0 | 1 | 0 | 12 | 4 | 0 | 4 | 10 | 5 | 6 | 1 | 0 | 0 |
| 16 | 14 | 1 | 0 | 0 | 10 | 0 | 2 | 1 | 12 | 0 | 0 | 2 | 8 | 1 | 7 | 1 | 0 | 0 |
| 9 | 9 | 6 | 0 | 1 | 2 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 4 | 5 | 2 | 0 | 0 | 0 |
| 454 | 304 | 15 | 3 | 90 | 175 | 0 | 12 | 9 | 38 | 258 | 3 | 5 | 250 | 16 | 69 | 136 | 9 | 0 |
| 281 | 269 | 80 | 22 | 19 | 134 | 0 | 14 | 0 | 197 | 48 | 1 | 21 | 138 | 48 | 116 | 37 | 0 | 0 |
| 165 | 137 | 65 | 9 | 4 | 46 | 1 | 10 | 2 | 116 | 3 | 0 | 16 | 36 | 42 | 24 | 7 | 0 | 0 |
| 107 | 90 | 35 | 7 | 5 | 39 | 0 | 4 | 0 | 69 | 8 | 1 | 11 | 22 | 19 | 17 | 9 | 1 | 1 |
| 5,138 | 4,970 | 3,131 | 485 | 186 | 1,005 | 21 | 120 | 22 | 4,227 | 554 | 10 | 154 | 1,554 | 1,946 | 646 | 234 | 27 | 3 |
| 6,318 | 5,932 | 3,348 | 530 | 327 | 1,497 | 24 | 172 | 34 | 4,749 | 914 | 15 | 221 | 2,095 | 2,114 | 917 | 440 | 43 | 5 |
| Category Total: | | | | | | | | | | | | | | | | | | |
| Other/Unknown Nondrug Substances | | | | | | | | | | | | | | | | | | |
| Miscellaneous Other/Unknown Nondrug Substances | | | | | | | | | | | | | | | | | | |
| 24,837 | 23,232 | 10,662 | 2,177 | 930 | 6,959 | 145 | 1,943 | 416 | 20,741 | 793 | 677 | 783 | 3,321 | 3,951 | 3,658 | 607 | 35 | 2 |
| 6,745 | 6,445 | 1,122 | 268 | 264 | 3,785 | 30 | 778 | 198 | 4,587 | 199 | 1,010 | 202 | 1,736 | 441 | 631 | 264 | 72 | 6 |
| 31,582 | 29,677 | 11,784 | 2,445 | 1,194 | 10,744 | 175 | 2,721 | 614 | 25,328 | 992 | 1,687 | 985 | 5,057 | 4,392 | 4,289 | 871 | 107 | 8 |
| Category Total: | | | | | | | | | | | | | | | | | | |
| Paints and Stripping Agents | | | | | | | | | | | | | | | | | | |
| Miscellaneous Paints and Stripping Agents | | | | | | | | | | | | | | | | | | |
| 540 | 497 | 187 | 16 | 13 | 190 | 3 | 70 | 18 | 476 | 6 | 4 | 9 | 109 | 51 | 82 | 36 | 2 | 0 |
| 4,640 | 4,377 | 2,885 | 205 | 134 | 851 | 12 | 266 | 24 | 4,238 | 50 | 17 | 57 | 435 | 652 | 342 | 53 | 1 | 0 |
| 824 | 780 | 182 | 27 | 36 | 414 | 1 | 109 | 11 | 742 | 17 | 3 | 16 | 160 | 102 | 152 | 44 | 4 | 0 |
| Paints | | | | | | | | | | | | | | | | | | |
| 23 | 22 | 3 | 0 | 0 | 16 | 0 | 3 | 0 | 21 | 0 | 0 | 1 | 8 | 2 | 4 | 1 | 1 | 0 |
| 39 | 39 | 6 | 0 | 0 | 28 | 0 | 5 | 0 | 38 | 1 | 0 | 0 | 12 | 6 | 10 | 2 | 0 | 0 |
| 1,967 | 1,874 | 498 | 207 | 108 | 871 | 4 | 168 | 18 | 1,762 | 50 | 14 | 45 | 399 | 219 | 399 | 80 | 4 | 0 |
| 2,847 | 2,767 | 1,987 | 98 | 74 | 484 | 6 | 109 | 9 | 2,669 | 32 | 14 | 38 | 209 | 386 | 195 | 26 | 4 | 0 |
| 708 | 663 | 257 | 24 | 24 | 275 | 1 | 73 | 9 | 638 | 5 | 3 | 16 | 84 | 121 | 110 | 21 | 0 | 0 |
| Stripping Agents | | | | | | | | | | | | | | | | | | |
| 370 | 349 | 40 | 9 | 28 | 235 | 0 | 33 | 4 | 331 | 6 | 1 | 8 | 142 | 22 | 127 | 49 | 2 | 1 |
| 373 | 348 | 71 | 6 | 6 | 226 | 0 | 37 | 2 | 334 | 6 | 1 | 6 | 133 | 25 | 106 | 50 | 2 | 0 |
| 73 | 67 | 6 | 1 | 5 | 47 | 0 | 7 | 1 | 62 | 3 | 0 | 2 | 28 | 2 | 27 | 4 | 2 | 0 |
| 12,404 | 11,783 | 6,122 | 593 | 428 | 3,637 | 27 | 880 | 96 | 11,311 | 176 | 57 | 198 | 1,648 | 1,588 | 1,554 | 366 | 22 | 1 |
| Category Total: | | | | | | | | | | | | | | | | | | |
| Pesticides | | | | | | | | | | | | | | | | | | |
| Fumigants | | | | | | | | | | | | | | | | | | |
| 84 | 75 | 1 | 3 | 1 | 67 | 0 | 2 | 1 | 70 | 3 | 1 | 1 | 47 | 14 | 25 | 11 | 1 | 0 |
| 19 | 18 | 3 | 1 | 0 | 11 | 0 | 3 | 0 | 18 | 0 | 0 | 0 | 8 | 3 | 5 | 3 | 0 | 0 |
| 43 | 41 | 6 | 4 | 1 | 21 | 0 | 8 | 1 | 40 | 0 | 0 | 1 | 19 | 9 | 10 | 3 | 0 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Outcome | | | | | |
|----------------------|------------------------|-------|------|-------|--------|---------------|---------------|-------------|--------|-----|-------|---------|---------------------------------|-------|-------|----------|-------|-------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| | | | | | | | | | | | | | | | | | | |
| 345 | 300 | 35 | 31 | 10 | 184 | 3 | 27 | 10 | 286 | 1 | 8 | 3 | 48 | 33 | 53 | 4 | 0 | 1 |
| 89 | 85 | 9 | 5 | 3 | 55 | 1 | 11 | 1 | 74 | 4 | 2 | 5 | 31 | 3 | 20 | 8 | 0 | 0 |
| 67 | 55 | 13 | 0 | 3 | 19 | 0 | 6 | 14 | 52 | 2 | 1 | 0 | 12 | 8 | 16 | 2 | 0 | 1 |
| 95 | 92 | 13 | 0 | 3 | 62 | 0 | 14 | 0 | 88 | 2 | 1 | 0 | 16 | 9 | 17 | 2 | 2 | 1 |
| 550 | 446 | 117 | 17 | 8 | 236 | 0 | 57 | 11 | 406 | 17 | 9 | 13 | 74 | 82 | 82 | 18 | 3 | 0 |
| 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 25 | 20 | 11 | 1 | 1 | 7 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 |
| 45 | 32 | 5 | 0 | 0 | 21 | 0 | 6 | 0 | 30 | 0 | 2 | 0 | 5 | 5 | 10 | 0 | 0 | 0 |
| 142 | 132 | 17 | 7 | 0 | 88 | 0 | 19 | 1 | 125 | 2 | 1 | 2 | 29 | 21 | 18 | 8 | 1 | 0 |
| 9 | 7 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 4 | 1 | 3 | 2 | 0 | 0 |
| 1,706 | 1,493 | 349 | 56 | 21 | 868 | 9 | 170 | 20 | 1,408 | 20 | 14 | 48 | 270 | 276 | 338 | 47 | 2 | 0 |
| 406 | 374 | 93 | 15 | 7 | 214 | 1 | 40 | 4 | 347 | 12 | 3 | 12 | 66 | 105 | 80 | 13 | 1 | 0 |
| 3,160 | 2,860 | 530 | 137 | 56 | 1,774 | 14 | 321 | 28 | 2,662 | 45 | 52 | 92 | 527 | 541 | 577 | 85 | 2 | 4 |
| 1,144 | 1,144 | 217 | 49 | 38 | 687 | 1 | 131 | 21 | 1,089 | 17 | 10 | 24 | 242 | 189 | 238 | 42 | 1 | 2 |
| 139 | 120 | 1 | 1 | 11 | 97 | 0 | 9 | 1 | 105 | 10 | 4 | 1 | 75 | 17 | 20 | 17 | 2 | 3 |
| 164 | 113 | 20 | 4 | 2 | 74 | 0 | 12 | 1 | 110 | 2 | 1 | 0 | 23 | 20 | 33 | 2 | 0 | 0 |
| 481 | 387 | 94 | 28 | 13 | 198 | 2 | 45 | 7 | 357 | 5 | 9 | 14 | 76 | 48 | 60 | 12 | 2 | 1 |
| 50 | 43 | 9 | 4 | 2 | 23 | 1 | 3 | 1 | 38 | 2 | 1 | 2 | 10 | 8 | 10 | 0 | 0 | 0 |
| 1,152 | 1,074 | 342 | 57 | 25 | 522 | 3 | 109 | 16 | 994 | 41 | 11 | 25 | 208 | 214 | 164 | 41 | 6 | 1 |
| 303 | 292 | 66 | 8 | 7 | 168 | 0 | 32 | 11 | 276 | 4 | 5 | 5 | 45 | 33 | 43 | 15 | 1 | 0 |
| 128 | 119 | 39 | 4 | 2 | 56 | 0 | 18 | 0 | 111 | 5 | 0 | 0 | 26 | 20 | 12 | 4 | 2 | 0 |
| 250 | 246 | 40 | 11 | 15 | 143 | 0 | 32 | 5 | 229 | 11 | 1 | 5 | 56 | 32 | 70 | 15 | 0 | 0 |
| 148 | 88 | 30 | 4 | 2 | 43 | 0 | 8 | 1 | 84 | 0 | 0 | 3 | 18 | 11 | 9 | 0 | 0 | 0 |
| 27 | 22 | 6 | 0 | 0 | 11 | 0 | 3 | 2 | 20 | 0 | 1 | 0 | 1 | 3 | 1 | 1 | 0 | 0 |
| 57 | 50 | 19 | 3 | 4 | 20 | 0 | 3 | 1 | 38 | 4 | 2 | 6 | 9 | 6 | 8 | 4 | 1 | 0 |
| 2,004 | 1,844 | 576 | 75 | 48 | 899 | 6 | 208 | 32 | 1,685 | 84 | 20 | 42 | 473 | 420 | 348 | 86 | 24 | 3 |
| 63 | 59 | 14 | 5 | 3 | 33 | 0 | 3 | 1 | 55 | 1 | 1 | 2 | 8 | 9 | 12 | 1 | 0 | 0 |
| 510 | 489 | 103 | 24 | 24 | 269 | 1 | 67 | 1 | 468 | 12 | 3 | 6 | 99 | 66 | 123 | 25 | 0 | 0 |
| 9,898 | 9,227 | 4,860 | 346 | 183 | 2,953 | 40 | 698 | 147 | 8,823 | 131 | 58 | 191 | 878 | 1,736 | 968 | 124 | 6 | 1 |
| 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5,632 | 5,312 | 1,535 | 353 | 218 | 2,577 | 19 | 540 | 70 | 4,838 | 183 | 34 | 239 | 1,212 | 652 | 1,388 | 277 | 11 | 1 |
| 21,660 | 20,382 | 4,892 | 900 | 714 | 11,227 | 60 | 2,273 | 316 | 18,545 | 661 | 215 | 868 | 3,628 | 2,806 | 5,386 | 787 | 24 | 1 |
| 39 | 37 | 6 | 4 | 4 | 17 | 0 | 3 | 3 | 35 | 0 | 0 | 2 | 5 | 12 | 5 | 1 | 0 | 0 |
| 4,314 | 3,966 | 953 | 187 | 146 | 2,034 | 30 | 534 | 82 | 3,479 | 141 | 155 | 137 | 1,116 | 456 | 755 | 208 | 12 | 2 |
| 4 | 4 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 32 | 32 | 18 | 2 | 0 | 6 | 1 | 5 | 0 | 30 | 0 | 2 | 0 | 3 | 4 | 0 | 1 | 0 | 0 |
| 8,643 | 8,536 | 7,635 | 182 | 61 | 507 | 12 | 118 | 21 | 8,455 | 38 | 28 | 12 | 498 | 1,499 | 204 | 15 | 2 | 0 |
| 405 | 392 | 106 | 19 | 8 | 192 | 0 | 62 | 5 | 362 | 10 | 8 | 12 | 62 | 50 | 96 | 9 | 0 | 0 |
| 4,181 | 4,114 | 2,118 | 483 | 193 | 1,033 | 12 | 242 | 33 | 3,736 | 91 | 53 | 218 | 397 | 564 | 1,125 | 79 | 1 | 0 |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | Reason | | | | Outcome | | | | | | |
|--|------------------------|--------------|-----------|-----------|------------|---------------|---------------|-------------|--------------|-----------|-----------|-----------|---------------------------------|------------|------------|-----------|----------|----------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| 1,559 | 1,476 | 993 | 50 | 46 | 302 | 4 | 73 | 8 | 1,419 | 29 | 10 | 12 | 158 | 275 | 149 | 17 | 2 | 0 |
| 3,383 | 3,188 | 2,312 | 96 | 72 | 567 | 7 | 121 | 13 | 3,086 | 53 | 15 | 25 | 356 | 732 | 413 | 37 | 2 | 0 |
| Radiation | | | | | | | | | | | | | | | | | | |
| Ionizing Radiation | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| 60 | 60 | 3 | 2 | 1 | 34 | 1 | 16 | 3 | 46 | 0 | 2 | 9 | 26 | 11 | 3 | 3 | 0 | 0 |
| 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 59 | 56 | 7 | 6 | 0 | 26 | 2 | 14 | 1 | 54 | 0 | 0 | 1 | 11 | 5 | 5 | 0 | 0 | 1 |
| 102 | 85 | 10 | 1 | 2 | 53 | 0 | 15 | 4 | 64 | 3 | 3 | 11 | 33 | 20 | 7 | 9 | 0 | 0 |
| 22 | 20 | 0 | 1 | 0 | 13 | 0 | 5 | 1 | 6 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Radiation | | | | | | | | | | | | | | | | | | |
| Nonpharmaceutical Radiation: | | | | | | | | | | | | | | | | | | |
| Type Unknown | | | | | | | | | | | | | | | | | | |
| 9 | 8 | 0 | 1 | 0 | 5 | 0 | 2 | 0 | 7 | 1 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 |
| Non-Ionizing Radiation | | | | | | | | | | | | | | | | | | |
| Extremely Low-frequency Radiation | | | | | | | | | | | | | | | | | | |
| 2 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 17 | 17 | 0 | 0 | 1 | 10 | 1 | 5 | 0 | 16 | 1 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 0 |
| 28 | 28 | 1 | 0 | 0 | 18 | 0 | 6 | 3 | 20 | 1 | 4 | 2 | 17 | 5 | 5 | 1 | 0 | 0 |
| Non-ionizing Radiation: Type Unknown | | | | | | | | | | | | | | | | | | |
| 7 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| 17 | 17 | 0 | 1 | 1 | 6 | 0 | 3 | 6 | 16 | 0 | 1 | 0 | 13 | 2 | 5 | 2 | 0 | 0 |
| 5 | 5 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| 337 | 311 | 21 | 14 | 5 | 181 | 4 | 68 | 18 | 244 | 6 | 14 | 36 | 114 | 47 | 29 | 16 | 0 | 1 |
| Sporting Equipment | | | | | | | | | | | | | | | | | | |
| Miscellaneous Sporting Equipment | | | | | | | | | | | | | | | | | | |
| 47 | 45 | 31 | 5 | 2 | 6 | 0 | 1 | 0 | 41 | 3 | 1 | 0 | 3 | 10 | 5 | 1 | 0 | 0 |
| 13 | 13 | 10 | 0 | 1 | 1 | 0 | 1 | 0 | 13 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| 5 | 5 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 |
| Golf Balls (Including Liquid Center of Golf Balls) | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | 26 | 11 | 0 | 0 | 14 | 0 | 1 | 1 | 25 | 1 | 0 | 0 | 15 | 5 | 7 | 4 | 0 | 0 |
| 202 | 197 | 97 | 22 | 16 | 48 | 0 | 11 | 3 | 172 | 18 | 6 | 1 | 58 | 50 | 23 | 3 | 1 | 0 |
| Hunting Products, Miscellaneous | | | | | | | | | | | | | | | | | | |
| 7 | 7 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 |
| Other Types of Sporting Equipment | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 302 | 295 | 158 | 28 | 19 | 72 | 0 | 14 | 4 | 265 | 22 | 7 | 1 | 78 | 77 | 36 | 8 | 1 | 0 |
| Swimming Pool/Aquarium | | | | | | | | | | | | | | | | | | |
| Miscellaneous Swimming Pool/Aquarium | | | | | | | | | | | | | | | | | | |
| 684 | 631 | 180 | 44 | 28 | 296 | 2 | 76 | 5 | 603 | 8 | 1 | 17 | 120 | 87 | 165 | 30 | 0 | 0 |
| 1,310 | 1,235 | 967 | 56 | 45 | 1,199 | 2 | 22 | 4 | 1,199 | 23 | 7 | 4 | 72 | 238 | 61 | 11 | 1 | 0 |
| 45 | 42 | 10 | 5 | 0 | 20 | 0 | 7 | 0 | 36 | 3 | 0 | 3 | 5 | 9 | 15 | 0 | 0 | 0 |
| Bromine Shock Treatments | | | | | | | | | | | | | | | | | | |
| 2,631 | 2,515 | 470 | 324 | 208 | 1,271 | 14 | 197 | 31 | 2,407 | 60 | 6 | 35 | 740 | 180 | 897 | 238 | 12 | 0 |
| 1,499 | 1,406 | 371 | 163 | 84 | 664 | 7 | 99 | 18 | 1,343 | 21 | 4 | 33 | 319 | 177 | 475 | 99 | 0 | 0 |
| Other Types of Swimming Pool or Aquarium Product | | | | | | | | | | | | | | | | | | |
| 149 | 126 | 41 | 22 | 29 | 23 | 1 | 9 | 1 | 123 | 2 | 1 | 0 | 15 | 29 | 13 | 5 | 0 | 0 |
| 6,318 | 5,955 | 2,039 | 614 | 394 | 2,413 | 26 | 410 | 59 | 5,711 | 117 | 19 | 92 | 1,271 | 720 | 1,626 | 383 | 13 | 0 |
| Swimming Pool and Aquarium Test Kits | | | | | | | | | | | | | | | | | | |
| Tobacco/Nicotine/eCigarette Products | | | | | | | | | | | | | | | | | | |
| eCigarettes: Nicotine Containing | | | | | | | | | | | | | | | | | | |
| 599 | 570 | 330 | 12 | 98 | 108 | 2 | 15 | 5 | 446 | 84 | 4 | 29 | 181 | 148 | 98 | 40 | 1 | 0 |
| eCigarettes: Nicotine Device Flavor Unknown | | | | | | | | | | | | | | | | | | |
| 259 | 255 | 168 | 16 | 23 | 41 | 0 | 5 | 2 | 221 | 25 | 1 | 7 | 62 | 92 | 43 | 5 | 0 | 0 |
| eCigarettes: Nicotine Device With Added Flavors | | | | | | | | | | | | | | | | | | |
| 670 | 640 | 403 | 15 | 68 | 123 | 1 | 25 | 5 | 545 | 56 | 8 | 27 | 188 | 184 | 104 | 26 | 1 | 0 |
| eCigarettes: Nicotine Device Without Added Flavors | | | | | | | | | | | | | | | | | | |
| 959 | 920 | 587 | 18 | 81 | 200 | 4 | 23 | 7 | 812 | 68 | 9 | 30 | 324 | 303 | 177 | 17 | 0 | 0 |
| eCigarettes: Nicotine Liquid Flavor Unknown | | | | | | | | | | | | | | | | | | |

(continued)

Table 22A. Demographic profile of SINGLE SUBSTANCE nonpharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | Reason | | | | Outcome | | | | | | |
|--|------------------------|----------------|---------------|---------------|----------------|---------------|---------------|--------------|----------------|---------------|---------------|---------------|---------------------------------|----------------|----------------|---------------|--------------|------------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rtn | Treated in Health Care Facility | None | Minor | Moderate | Major | Death |
| eCigarettes: Nicotine Liquid With Added Flavors | 504 | 328 | 10 | 67 | 77 | 0 | 18 | 4 | 422 | 47 | 8 | 24 | 144 | 181 | 112 | 10 | 0 | 0 |
| eCigarettes: Nicotine Liquid Without Added Flavors | 126 | 76 | 6 | 8 | 34 | 0 | 1 | 1 | 116 | 6 | 3 | 0 | 34 | 41 | 22 | 3 | 1 | 0 |
| Miscellaneous Tobacco Products | | | | | | | | | | | | | | | | | | |
| Chewing Tobacco | 1,509 | 1,369 | 27 | 25 | 71 | 4 | 8 | 5 | 1,471 | 27 | 6 | 5 | 301 | 447 | 411 | 29 | 1 | 0 |
| Cigarettes | 5,656 | 5,091 | 37 | 59 | 228 | 7 | 61 | 8 | 5,356 | 82 | 12 | 34 | 692 | 1,682 | 826 | 48 | 1 | 0 |
| Cigars | 179 | 109 | 6 | 16 | 40 | 0 | 7 | 1 | 140 | 12 | 1 | 24 | 24 | 50 | 33 | 5 | 0 | 0 |
| Dissolvable Tobacco | 11 | 8 | 1 | 0 | 2 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 2 | 2 | 1 | 1 | 0 | 0 |
| Filter Tips Only (i.e. Butts) | 79 | 70 | 0 | 4 | 7 | 0 | 3 | 0 | 76 | 1 | 0 | 0 | 12 | 28 | 14 | 1 | 0 | 0 |
| Other Types of Tobacco Product | 143 | 83 | 2 | 9 | 41 | 0 | 8 | 0 | 117 | 17 | 1 | 8 | 31 | 24 | 32 | 5 | 0 | 0 |
| Snuff | 331 | 274 | 6 | 7 | 30 | 1 | 6 | 2 | 307 | 12 | 0 | 6 | 67 | 84 | 87 | 12 | 0 | 0 |
| Unknown Types of Tobacco Product | 2,376 | 1,370 | 68 | 206 | 485 | 6 | 93 | 14 | 1,880 | 221 | 16 | 104 | 632 | 621 | 415 | 83 | 5 | 0 |
| Category Total: | 13,483 | 10,266 | 224 | 667 | 1,484 | 25 | 273 | 54 | 11,920 | 658 | 69 | 298 | 2,694 | 3,887 | 2,375 | 285 | 10 | 0 |
| Waterproofers/Sealants | | | | | | | | | | | | | | | | | | |
| Miscellaneous Waterproofers/Sealants | 186 | 73 | 7 | 11 | 71 | 1 | 11 | 2 | 160 | 4 | 3 | 9 | 48 | 34 | 35 | 17 | 2 | 0 |
| Waterproofers/sealants: aerosols | 111 | 50 | 5 | 5 | 36 | 0 | 14 | 0 | 102 | 1 | 3 | 3 | 37 | 24 | 23 | 6 | 0 | 0 |
| Waterproofers/sealants: liquids | 4 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waterproofers/sealants: solids | 36 | 16 | 0 | 0 | 14 | 0 | 3 | 0 | 30 | 2 | 0 | 1 | 6 | 8 | 7 | 1 | 0 | 0 |
| Category Total: | 337 | 141 | 12 | 16 | 122 | 1 | 29 | 2 | 295 | 7 | 7 | 13 | 91 | 66 | 65 | 24 | 2 | 0 |
| Weapons of Mass Destruction | | | | | | | | | | | | | | | | | | |
| Miscellaneous Weapons of Mass Destruction | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Anthrax | 5 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nerve Gases | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Other Biological Weapons | 7 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 |
| Other Chemical Weapons | 240 | 31 | 21 | 12 | 124 | 3 | 26 | 4 | 142 | 22 | 48 | 2 | 105 | 38 | 45 | 23 | 5 | 0 |
| Other Suspicious Powders | 2,742 | 476 | 145 | 171 | 1,178 | 10 | 383 | 85 | 1,356 | 221 | 457 | 87 | 1,057 | 292 | 384 | 269 | 77 | 7 |
| Suspicious Substances (Non-Powder) or Package | 52 | 1 | 4 | 2 | 27 | 0 | 10 | 0 | 20 | 5 | 18 | 0 | 25 | 10 | 11 | 2 | 0 | 0 |
| Category Total: | 3,050 | 508 | 172 | 185 | 1,336 | 13 | 422 | 90 | 1,528 | 249 | 525 | 89 | 1,194 | 341 | 441 | 294 | 82 | 7 |
| Nonpharmaceuticals Total: | 1,061,831 | 499,971 | 64,854 | 43,248 | 275,044 | 3,106 | 55,581 | 8,168 | 876,046 | 39,551 | 12,749 | 16,629 | 164,247 | 150,096 | 151,674 | 31,996 | 2,613 | 293 |

Pharmaceuticals (Table 22(B))

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceutical exposure cases by generic category.

| Analgesics | No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | | Outcome | | | |
|--|----------------------|------------------------|--------|-------|-------|--------|---------------|---------------|-------------|--------|--------|-------|---------|---------------------------------|--------|-------|----------|---------|-------|--|--|
| | | | Age | | | | | | | Unint | Int | Other | Adv Rxn | Care | None | Minor | Moderate | Major | Death | | |
| | | | ≤5 | 6–12 | 13–19 | ≤20 | Unknown Child | Unknown Adult | Unknown Age | | | | | | | | | | | | |
| Acetaminophen Alone | | | 6,542 | 1,210 | 6,849 | 12,423 | 12 | 665 | 171 | 13,069 | 14,060 | 9 | 373 | 17,489 | 7,822 | 4,640 | 2,609 | 786 | 82 | | |
| Acetaminophen Alone, Adult | 43,318 | 27,872 | 16,257 | 1,206 | 256 | 385 | 22 | 24 | 6 | 17,561 | 457 | 4 | 98 | 2,638 | 3,746 | 336 | 93 | 21 | 1 | | |
| Acetaminophen Alone, Pediatric | 20,280 | 4,266 | 1,230 | 179 | 904 | 1,802 | 7 | 114 | 30 | 2,057 | 2,029 | 6 | 54 | 2,661 | 1,071 | 688 | 425 | 148 | 27 | | |
| Acetaminophen Alone, Unknown if Adult or Pediatric | 7,297 | | | | | | | | | | | | | | | | | | | | |
| Acetaminophen Combinations | | | | | | | | | | | | | | | | | | | | | |
| Acetaminophen in Combination with Other Drugs, Adult Formulations | 5,685 | 3,203 | 727 | 113 | 1,224 | 1,066 | 3 | 53 | 17 | 1,164 | 1,928 | 5 | 66 | 2,185 | 780 | 855 | 487 | 49 | 1 | | |
| Acetaminophen in Combination with Other Drugs, Pediatric Formulations | 188 | 167 | 149 | 13 | 1 | 4 | 0 | 0 | 0 | 159 | 4 | 0 | 4 | 17 | 27 | 8 | 0 | 0 | 0 | | |
| Acetaminophen with Codeine | 3,170 | 1,448 | 197 | 42 | 210 | 922 | 2 | 66 | 9 | 599 | 722 | 1 | 114 | 858 | 372 | 302 | 167 | 25 | 2 | | |
| Acetaminophen with Diphenhydramine | 6,762 | 3,943 | 595 | 95 | 767 | 2,383 | 0 | 77 | 26 | 1,113 | 2,739 | 1 | 48 | 2,922 | 830 | 964 | 861 | 136 | 7 | | |
| Acetaminophen with Hydrocodone | 13,116 | 5,605 | 801 | 148 | 680 | 3,698 | 2 | 227 | 49 | 2,484 | 2,735 | 15 | 258 | 3,373 | 1,381 | 1,182 | 653 | 166 | 10 | | |
| Acetaminophen with Other Narcotics or Narcotic Analogs | 234 | 102 | 15 | 1 | 13 | 65 | 1 | 6 | 1 | 33 | 61 | 0 | 2 | 72 | 25 | 20 | 14 | 9 | 0 | | |
| Acetaminophen with Oxycodone | 6,557 | 2,892 | 409 | 64 | 261 | 2,014 | 2 | 118 | 24 | 1,205 | 1,464 | 14 | 134 | 1,871 | 665 | 644 | 463 | 138 | 12 | | |
| Acetaminophen with Propoxyphene | 36 | 17 | 0 | 0 | 5 | 12 | 0 | 0 | 0 | 5 | 12 | 0 | 0 | 12 | 5 | 1 | 5 | 2 | 0 | | |
| Acetylsalicylic Acid Alone | | | | | | | | | | | | | | | | | | | | | |
| Acetylsalicylic Acid Alone, Adult Formulations | 8,567 | 4,399 | 1,645 | 214 | 816 | 1,648 | 4 | 51 | 21 | 2,263 | 1,980 | 1 | 76 | 2,623 | 1,125 | 653 | 752 | 99 | 15 | | |
| Acetylsalicylic Acid Alone, Pediatric Formulations | 2,178 | 982 | 510 | 61 | 128 | 273 | 0 | 7 | 3 | 630 | 320 | 1 | 18 | 470 | 251 | 81 | 130 | 16 | 0 | | |
| Acetylsalicylic Acid Alone, Unknown if Adult or Pediatric Formulations | 6,635 | 3,201 | 951 | 138 | 589 | 1,458 | 3 | 48 | 14 | 1,437 | 1,572 | 1 | 65 | 2,076 | 699 | 550 | 675 | 89 | 11 | | |
| Acetylsalicylic Acid Combinations | | | | | | | | | | | | | | | | | | | | | |
| Acetylsalicylic Acid in Combination with Other Drugs, Adult Formulations | 1,029 | 679 | 210 | 19 | 57 | 379 | 0 | 13 | 1 | 376 | 245 | 2 | 36 | 386 | 139 | 114 | 135 | 19 | 2 | | |
| Acetylsalicylic Acid with Carisoprodol | 6 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | | |
| Acetylsalicylic Acid with Codeine | 33 | 17 | 3 | 2 | 2 | 10 | 0 | 0 | 0 | 7 | 10 | 0 | 0 | 12 | 2 | 3 | 4 | 1 | 0 | | |
| Acetylsalicylic Acid with Other Narcotics or Narcotic Analogs | 5 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | | |
| Acetylsalicylic Acid with Oxycodone | 6 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | | |
| Acetylsalicylic Acid with Propoxyphene | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | |
| Miscellaneous Analgesics | | | | | | | | | | | | | | | | | | | | | |
| Non-Aspirin Salicylates (Excluding Topicals and/or Gastrointestinal Drugs) | 296 | 224 | 116 | 7 | 21 | 72 | 0 | 8 | 0 | 194 | 22 | 0 | 7 | 52 | 40 | 33 | 8 | 1 | 0 | | |
| Other Analgesics | 814 | 561 | 213 | 17 | 51 | 262 | 0 | 16 | 2 | 369 | 178 | 0 | 12 | 217 | 121 | 107 | 66 | 1 | 0 | | |
| Phenacetin | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Phenazopyridine | 1,234 | 1,016 | 717 | 28 | 23 | 212 | 0 | 34 | 2 | 906 | 46 | 1 | 60 | 232 | 305 | 66 | 32 | 8 | 1 | | |
| Salicylamide | 7 | 5 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | | |
| Unknown Analgesics | 173 | 74 | 13 | 4 | 24 | 27 | 1 | 2 | 3 | 21 | 45 | 1 | 4 | 56 | 12 | 13 | 12 | 3 | 0 | | |
| Nonsteroidal Antiinflammatory Drugs | | | | | | | | | | | | | | | | | | | | | |
| Colchicine | 386 | 256 | 65 | 7 | 9 | 161 | 2 | 11 | 1 | 195 | 35 | 0 | 23 | 128 | 57 | 57 | 28 | 3 | 2 | | |
| Cyclooxygenase-2 Inhibitors | 819 | 408 | 135 | 18 | 19 | 206 | 0 | 26 | 4 | 351 | 45 | 1 | 11 | 76 | 94 | 19 | 6 | 0 | 0 | | |
| Ibuprofen | 80,850 | 60,893 | 39,253 | 3,260 | 8,369 | 8,926 | 54 | 816 | 215 | 47,649 | 12,490 | 51 | 512 | 14,733 | 13,946 | 4,469 | 1,108 | 74 | 1 | | |
| Ibuprofen with Diphenhydramine | 2,507 | 1,543 | 316 | 26 | 283 | 862 | 1 | 40 | 15 | 732 | 778 | 3 | 23 | 854 | 326 | 325 | 229 | 19 | 0 | | |
| Ibuprofen with Hydrocodone | 59 | 33 | 5 | 0 | 5 | 22 | 0 | 1 | 0 | 12 | 18 | 0 | 3 | 15 | 7 | 7 | 3 | 0 | 0 | | |
| Indomethacin | 396 | 203 | 50 | 10 | 24 | 105 | 0 | 13 | 1 | 132 | 57 | 0 | 13 | 67 | 41 | 34 | 7 | 0 | 0 | | |
| Ketoprofen | 40 | 17 | 11 | 1 | 1 | 5 | 0 | 0 | 0 | 13 | 4 | 0 | 0 | 10 | 7 | 0 | 0 | 0 | 0 | | |
| Naproxen | 12,728 | 7,184 | 2,302 | 246 | 1,701 | 2,607 | 5 | 266 | 57 | 4,181 | 2,770 | 3 | 191 | 3,009 | 2,028 | 983 | 255 | 11 | 0 | | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. -- Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | Reason | | | Treated in Health Care Facility | | | Outcome | | | | | | |
|--|----------------------|------------------------|---------------|--------------|---------------|---------------|------------|--------------|------------|----------------|---------------------------------|------------|--------------|---------------|---------------|---------------|---------------|--------------|------------|------------|
| | | | ≤5 | 6-12 | 13-19 | ≤20 | Unknown | Child | Adult | Age | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death |
| Other Types of Nonsteroidal Antiinflammatory Drug | 7,462 | 3,965 | 1,290 | 162 | 297 | 1,965 | 1 | 228 | 22 | 3,210 | 597 | 2 | 143 | 929 | 961 | 318 | 69 | 0 | 0 | 0 |
| Unknown Types of Nonsteroidal Antiinflammatory Drug | 12 | 5 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 1 |
| Opioids | | | | | | | | | | | | | | | | | | | | |
| Alfentanil | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Buprenorphine | 4,219 | 2,440 | 1,104 | 56 | 68 | 1,072 | 3 | 113 | 24 | 1,476 | 688 | 70 | 144 | 1,883 | 367 | 707 | 496 | 90 | 4 | 4 |
| Butorphanol | 61 | 38 | 7 | 1 | 0 | 27 | 0 | 3 | 0 | 26 | 7 | 1 | 4 | 21 | 9 | 8 | 3 | 0 | 0 | 0 |
| Codine | 1,403 | 884 | 306 | 104 | 67 | 369 | 0 | 29 | 9 | 695 | 137 | 2 | 36 | 257 | 251 | 117 | 26 | 3 | 0 | 0 |
| Dihydrocodeine | 3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fentanyl | 2,094 | 978 | 54 | 5 | 47 | 752 | 0 | 93 | 27 | 309 | 576 | 23 | 39 | 729 | 125 | 134 | 245 | 146 | 77 | 7 |
| Hydrocodone Alone or in Combination (Excluding Combination Products with Acetaminophen, Acetylsalicylic Acid or Ibuprofen) | 1,308 | 544 | 122 | 30 | 32 | 317 | 0 | 36 | 7 | 340 | 163 | 3 | 26 | 230 | 133 | 95 | 36 | 8 | 3 | 3 |
| Hydromorphone | 957 | 406 | 42 | 16 | 10 | 309 | 0 | 26 | 3 | 199 | 161 | 2 | 25 | 254 | 85 | 75 | 68 | 17 | 1 | 1 |
| Levorphanol | 8 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 |
| Meperidine | 1 | 26 | 4 | 2 | 3 | 15 | 1 | 1 | 0 | 13 | 9 | 1 | 3 | 18 | 7 | 9 | 0 | 0 | 0 | 0 |
| Methadone | 2,184 | 962 | 137 | 17 | 37 | 713 | 1 | 49 | 8 | 372 | 434 | 32 | 64 | 785 | 137 | 147 | 284 | 142 | 9 | 9 |
| Morphine | 2,394 | 1,106 | 145 | 17 | 53 | 816 | 1 | 66 | 8 | 644 | 381 | 5 | 51 | 679 | 243 | 201 | 177 | 62 | 5 | 5 |
| Nalbuphine | 12 | 10 | 1 | 0 | 0 | 9 | 0 | 0 | 0 | 2 | 1 | 1 | 6 | 8 | 0 | 2 | 3 | 1 | 0 | 0 |
| Other or Unknown Narcotics | 2,185 | 1,084 | 45 | 7 | 48 | 919 | 3 | 49 | 13 | 123 | 701 | 160 | 26 | 948 | 50 | 155 | 389 | 255 | 13 | 13 |
| Oxycodone Alone or in Combination (Excluding Combination Products with Acetaminophen or Acetylsalicylic Acid) | 6,783 | 2,894 | 421 | 113 | 219 | 1,949 | 1 | 158 | 33 | 1,385 | 1,290 | 39 | 118 | 1,790 | 611 | 561 | 472 | 188 | 11 | 11 |
| Oxymorphone | 164 | 78 | 9 | 0 | 7 | 61 | 0 | 0 | 1 | 22 | 50 | 0 | 4 | 63 | 13 | 16 | 25 | 4 | 0 | 0 |
| Pentazocine | 13 | 6 | 3 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 1 | 0 | 1 | 3 | 4 | 0 | 1 | 0 | 0 | 0 |
| Propoxyphene | 19 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 |
| Remifentanyl | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sufentanil | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tapentadol | 230 | 129 | 9 | 3 | 0 | 105 | 0 | 11 | 1 | 73 | 40 | 2 | 11 | 78 | 24 | 29 | 20 | 3 | 1 | 1 |
| Tramadol | 9,565 | 4,209 | 738 | 115 | 428 | 2,762 | 4 | 134 | 28 | 1,865 | 2,068 | 19 | 189 | 2,856 | 1,054 | 937 | 710 | 128 | 1 | 1 |
| Other Acetaminophen and Acetylsalicylic Acid Combinations | | | | | | | | | | | | | | | | | | | | |
| Acetaminophen and Acetylsalicylic Acid with Other Ingredients | 6,755 | 4,309 | 1,482 | 144 | 1,163 | 1,393 | 1 | 90 | 36 | 2,122 | 2,018 | 4 | 140 | 2,310 | 1,007 | 924 | 509 | 15 | 1 | 1 |
| Acetaminophen and Acetylsalicylic Acid without Other Ingredients | 211 | 122 | 35 | 2 | 18 | 65 | 0 | 2 | 0 | 51 | 66 | 0 | 1 | 79 | 19 | 28 | 22 | 2 | 0 | 0 |
| Serotonin 5-HT_{1B/1D} Receptor Agonists | | | | | | | | | | | | | | | | | | | | |
| Serotonin 5-HT _{1B/1D} Receptor Agonists: Other or Unknown | 348 | 180 | 73 | 15 | 16 | 69 | 0 | 6 | 1 | 130 | 28 | 0 | 21 | 61 | 57 | 24 | 7 | 0 | 0 | 0 |
| Serotonin 5-HT _{1B/1D} Receptor Agonists: Sumatriptan | 983 | 507 | 144 | 40 | 67 | 230 | 0 | 22 | 4 | 350 | 92 | 0 | 63 | 238 | 141 | 78 | 44 | 1 | 0 | 0 |
| Category Total: Anesthetics | 274,852 | 174,269 | 79,617 | 7,978 | 25,871 | 55,948 | 137 | 3,820 | 898 | 112,345 | 56,342 | 486 | 3,323 | 73,347 | 41,227 | 21,721 | 12,839 | 2,890 | 301 | 301 |
| Inhalation Anesthetics | | | | | | | | | | | | | | | | | | | | |
| Nitrous Oxide | 202 | 160 | 18 | 18 | 13 | 98 | 1 | 9 | 3 | 53 | 84 | 1 | 22 | 103 | 19 | 23 | 40 | 6 | 1 | 1 |
| Other Types of Inhalation Anesthetic | 65 | 52 | 0 | 0 | 5 | 47 | 0 | 0 | 0 | 44 | 4 | 1 | 3 | 31 | 7 | 20 | 9 | 0 | 2 | 2 |
| Local and/or Topical Anesthetics | | | | | | | | | | | | | | | | | | | | |
| Dibucaine | 24 | 22 | 17 | 1 | 0 | 4 | 0 | 0 | 0 | 21 | 0 | 0 | 1 | 6 | 11 | 0 | 2 | 0 | 0 | 0 |
| Lidocaine | 2,040 | 1,797 | 636 | 112 | 110 | 795 | 1 | 133 | 10 | 1,440 | 96 | 3 | 243 | 406 | 346 | 256 | 76 | 24 | 3 | 3 |
| Other or Unknown Local and/or Topical Anesthetic | 3,206 | 2,999 | 1,702 | 123 | 120 | 872 | 4 | 159 | 19 | 2,610 | 128 | 17 | 227 | 434 | 753 | 360 | 86 | 23 | 0 | 0 |
| Miscellaneous Anesthetics | | | | | | | | | | | | | | | | | | | | |
| Ketamine and Analogs | 265 | 118 | 2 | 7 | 8 | 90 | 0 | 8 | 3 | 40 | 50 | 6 | 18 | 96 | 11 | 24 | 36 | 6 | 2 | 2 |
| Other Types of Anesthetic | 29 | 24 | 10 | 1 | 5 | 8 | 0 | 0 | 0 | 15 | 3 | 0 | 6 | 8 | 4 | 4 | 0 | 0 | 0 | 0 |
| Unknown Types of Anesthetic | 9 | 5 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 3 | 2 | 0 | 1 | 0 | 0 | 0 |
| Category Total: | 5,840 | 5,177 | 2,388 | 262 | 261 | 1,916 | 6 | 309 | 35 | 4,226 | 365 | 28 | 522 | 1,087 | 1,153 | 687 | 250 | 59 | 8 | 8 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. -- Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | Outcome | | |
|---|------------------------|-------|-------|-------|--------|-------|-------|---------|--------|--------|-------|---------|---------------------------------|-------|-------|----------|-------|-------|
| | | ≤5 | 6-12 | 13-19 | ≤20 | Child | Adult | Unknown | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death |
| Anticholinergic Drugs | | | | | | | | | | | | | | | | | | |
| Miscellaneous Anticholinergic Drugs | | | | | | | | | | | | | | | | | | |
| 6,029 | 3,613 | 235 | 66 | 95 | 2,797 | 3 | 379 | 38 | 3,139 | 294 | 15 | 141 | 590 | 491 | 204 | 184 | 14 | 2 |
| 6,029 | 3,613 | 235 | 66 | 95 | 2,797 | 3 | 379 | 38 | 3,139 | 294 | 15 | 141 | 590 | 491 | 204 | 184 | 14 | 2 |
| Anticoagulants | | | | | | | | | | | | | | | | | | |
| Miscellaneous Anticoagulants | | | | | | | | | | | | | | | | | | |
| 6 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 1 | 0 |
| 249 | 210 | 25 | 5 | 2 | 157 | 0 | 17 | 4 | 171 | 17 | 2 | 18 | 81 | 50 | 13 | 7 | 4 | 0 |
| 3,005 | 1,031 | 16 | 18 | 16 | 706 | 1 | 65 | 15 | 962 | 49 | 1 | 165 | 165 | 218 | 25 | 17 | 1 | 0 |
| 4,660 | 2,504 | 423 | 30 | 18 | 1,847 | 1 | 170 | 15 | 2,268 | 133 | 2 | 91 | 477 | 527 | 70 | 57 | 18 | 0 |
| 23 | 16 | 8 | 1 | 0 | 5 | 0 | 2 | 0 | 11 | 1 | 1 | 1 | 7 | 2 | 1 | 0 | 3 | 0 |
| 2,342 | 1,136 | 175 | 12 | 24 | 867 | 2 | 51 | 5 | 928 | 159 | 1 | 33 | 350 | 192 | 49 | 98 | 22 | 0 |
| 10,285 | 4,902 | 846 | 66 | 60 | 3,587 | 4 | 305 | 34 | 4,345 | 359 | 6 | 160 | 1,083 | 991 | 158 | 179 | 49 | 0 |
| Anticonvulsants | | | | | | | | | | | | | | | | | | |
| Anticonvulsants: Carbamazepine and Analogs | | | | | | | | | | | | | | | | | | |
| 3,185 | 1,566 | 178 | 31 | 84 | 1,237 | 1 | 26 | 9 | 569 | 777 | 1 | 158 | 1,182 | 303 | 421 | 382 | 75 | 1 |
| 4,471 | 1,956 | 381 | 268 | 505 | 745 | 3 | 44 | 10 | 1,020 | 882 | 1 | 41 | 1,111 | 425 | 511 | 256 | 34 | 1 |
| Anticonvulsants: Gamma Aminobutyric Acid and Analogs | | | | | | | | | | | | | | | | | | |
| 22,763 | 7,662 | 1,143 | 147 | 545 | 5,463 | 4 | 316 | 44 | 3,146 | 4,132 | 49 | 228 | 4,704 | 2,027 | 1,714 | 851 | 144 | 3 |
| 3,216 | 1,204 | 230 | 28 | 65 | 822 | 0 | 47 | 12 | 603 | 509 | 8 | 58 | 686 | 270 | 280 | 160 | 26 | 0 |
| Anticonvulsants: Hydantoin | | | | | | | | | | | | | | | | | | |
| 17 | 13 | 1 | 0 | 1 | 10 | 0 | 1 | 0 | 7 | 1 | 0 | 5 | 12 | 1 | 3 | 4 | 2 | 0 |
| 1,897 | 1,218 | 47 | 8 | 18 | 1,109 | 1 | 29 | 6 | 430 | 239 | 2 | 458 | 1,010 | 148 | 349 | 379 | 49 | 3 |
| Miscellaneous Anticonvulsants | | | | | | | | | | | | | | | | | | |
| 58 | 26 | 11 | 5 | 2 | 5 | 0 | 2 | 1 | 26 | 0 | 0 | 0 | 7 | 6 | 4 | 1 | 0 | 0 |
| 10,346 | 3,876 | 520 | 172 | 756 | 2,239 | 2 | 166 | 21 | 2,301 | 1,401 | 4 | 131 | 1,997 | 639 | 876 | 574 | 78 | 1 |
| 5,250 | 2,649 | 889 | 273 | 251 | 1,145 | 3 | 79 | 9 | 2,090 | 486 | 3 | 60 | 789 | 701 | 357 | 98 | 7 | 0 |
| 1,126 | 421 | 78 | 36 | 45 | 242 | 1 | 17 | 2 | 325 | 71 | 0 | 18 | 163 | 83 | 75 | 42 | 7 | 0 |
| Other Types of Anticonvulsant (Excluding Barbiturates) | | | | | | | | | | | | | | | | | | |
| 372 | 124 | 9 | 2 | 4 | 104 | 0 | 5 | 0 | 78 | 32 | 1 | 13 | 65 | 32 | 27 | 10 | 4 | 0 |
| 181 | 125 | 59 | 39 | 17 | 8 | 1 | 1 | 0 | 113 | 11 | 0 | 1 | 25 | 39 | 13 | 0 | 0 | 0 |
| 4,845 | 1,783 | 436 | 168 | 413 | 716 | 0 | 38 | 12 | 965 | 725 | 2 | 68 | 1,007 | 529 | 397 | 196 | 9 | 0 |
| 8 | 4 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Antidepressants | | | | | | | | | | | | | | | | | | |
| Lithium Salts | | | | | | | | | | | | | | | | | | |
| 7,699 | 2,996 | 279 | 163 | 371 | 2,094 | 0 | 75 | 14 | 1,160 | 1,271 | 6 | 406 | 2,079 | 634 | 650 | 564 | 87 | 0 |
| 701 | 313 | 86 | 27 | 43 | 147 | 0 | 10 | 0 | 255 | 50 | 0 | 8 | 81 | 71 | 38 | 8 | 1 | 0 |
| 66,135 | 25,936 | 4,348 | 1,367 | 3,121 | 16,087 | 16 | 857 | 140 | 13,090 | 10,589 | 77 | 1,653 | 14,920 | 5,908 | 5,715 | 3,525 | 523 | 9 |
| Lithium Salts | | | | | | | | | | | | | | | | | | |
| 7,055 | 3,865 | 93 | 40 | 480 | 3,130 | 3 | 102 | 17 | 858 | 1,354 | 9 | 1,405 | 3,360 | 564 | 913 | 1,419 | 180 | 3 |
| Miscellaneous Antidepressants | | | | | | | | | | | | | | | | | | |
| 77 | 19 | 2 | 1 | 6 | 9 | 0 | 0 | 1 | 2 | 14 | 2 | 0 | 11 | 3 | 4 | 2 | 0 | 0 |
| 14,824 | 6,903 | 754 | 198 | 1,228 | 4,434 | 3 | 243 | 43 | 3,706 | 2,998 | 9 | 133 | 4,569 | 1,399 | 1,082 | 1,644 | 455 | 9 |
| 427 | 189 | 24 | 5 | 40 | 113 | 0 | 5 | 2 | 61 | 114 | 2 | 10 | 140 | 41 | 51 | 28 | 9 | 0 |
| 21,859 | 8,115 | 572 | 233 | 1,722 | 5,342 | 0 | 185 | 61 | 1,851 | 6,077 | 8 | 113 | 6,509 | 1,705 | 2,658 | 1,696 | 116 | 3 |
| Monoamine Oxidase Inhibitors (MAOI) | | | | | | | | | | | | | | | | | | |
| 74 | 28 | 6 | 0 | 0 | 18 | 0 | 4 | 0 | 24 | 2 | 0 | 1 | 9 | 7 | 2 | 1 | 1 | 0 |
| Other Types of Monoamine Oxidase Inhibitor (MAOI) | | | | | | | | | | | | | | | | | | |
| 46 | 18 | 2 | 0 | 0 | 14 | 0 | 1 | 1 | 7 | 7 | 0 | 2 | 13 | 2 | 3 | 3 | 2 | 0 |
| 47 | 20 | 1 | 2 | 0 | 14 | 0 | 3 | 0 | 12 | 4 | 0 | 4 | 12 | 3 | 0 | 3 | 0 | 0 |
| 49 | 25 | 3 | 0 | 0 | 20 | 0 | 2 | 0 | 14 | 4 | 0 | 5 | 14 | 7 | 6 | 1 | 2 | 1 |
| Selective Serotonin Reuptake Inhibitors (SSRI) | | | | | | | | | | | | | | | | | | |
| 8,169 | 3,331 | 720 | 171 | 896 | 1,442 | 3 | 76 | 23 | 1,559 | 1,679 | 4 | 66 | 1,983 | 942 | 674 | 464 | 60 | 1 |
| 9,819 | 4,454 | 691 | 299 | 1,723 | 1,576 | 2 | 129 | 34 | 1,820 | 2,470 | 5 | 129 | 2,776 | 1,230 | 927 | 632 | 24 | 0 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. -- Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | Outcome | | | | |
|---|----------------------|------------------------|---------------|--------------|---------------|---------------|-----------|--------------|------------|---------------|---------------|------------|--------------|---------------------------------|---------------|---------------|---------------|--------------|-----------|-------|-------|
| | | | ≤5 | 6-12 | 13-19 | ≤20 | Child | Adult | Unknown | Unknow | Unknow | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death |
| | | | | | | | | | | | | | | | | | | | | | |
| Fluoxetine | 13,932 | 5,938 | 775 | 527 | 2,710 | 1,740 | 9 | 131 | 46 | 2,105 | 3,683 | 8 | 99 | 3,872 | 1,951 | 1,293 | 536 | 34 | 3 | | |
| Fluvoxamine | 476 | 156 | 15 | 6 | 42 | 82 | 0 | 7 | 4 | 88 | 54 | 2 | 12 | 64 | 29 | 27 | 16 | 3 | 0 | | |
| Other Types of Selective Serotonin Reuptake Inhibitor (SSRI) | 4,379 | 1,854 | 450 | 111 | 508 | 710 | 0 | 64 | 11 | 885 | 889 | 7 | 62 | 1,096 | 551 | 388 | 217 | 23 | 0 | | |
| Paroxetine | 3,369 | 1,362 | 301 | 37 | 242 | 729 | 0 | 40 | 13 | 686 | 616 | 8 | 41 | 736 | 334 | 281 | 145 | 5 | 0 | | |
| Sertraline | 20,294 | 10,108 | 2,216 | 591 | 3,604 | 3,401 | 14 | 223 | 59 | 4,472 | 5,253 | 22 | 294 | 6,148 | 2,586 | 2,460 | 1,306 | 53 | 1 | | |
| Serotonin Norepinephrine Reuptake Inhibitors (SNRI) | | | | | | | | | | | | | | | | | | | | | |
| Duloxetine | 5,802 | 2,063 | 482 | 73 | 298 | 1,127 | 1 | 70 | 12 | 1,137 | 799 | 13 | 101 | 1,073 | 514 | 439 | 268 | 15 | 0 | | |
| Nefazodone | 28 | 15 | 1 | 0 | 0 | 12 | 0 | 2 | 0 | 12 | 3 | 0 | 0 | 3 | 2 | 4 | 0 | 1 | 0 | | |
| Other Types of Serotonin Norepinephrine Reuptake Inhibitor (SNRI) | 579 | 248 | 69 | 11 | 58 | 99 | 0 | 11 | 0 | 153 | 80 | 1 | 12 | 121 | 65 | 42 | 23 | 1 | 0 | | |
| Venlafaxine | 6,846 | 2,687 | 542 | 72 | 476 | 1,492 | 1 | 91 | 13 | 1,394 | 1,159 | 17 | 92 | 1,613 | 677 | 514 | 443 | 56 | 4 | | |
| Tetracyclic Antidepressants | | | | | | | | | | | | | | | | | | | | | |
| Maprotiline | 3 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 1 | 1 | 1 | 0 | 0 | | |
| Mirtazapine | 4,960 | 1,518 | 226 | 64 | 240 | 942 | 0 | 37 | 9 | 529 | 933 | 3 | 39 | 1,103 | 368 | 458 | 246 | 21 | 0 | | |
| Tricyclic Antidepressants (TCA) | | | | | | | | | | | | | | | | | | | | | |
| Amiripryline | 5,492 | 2,397 | 293 | 99 | 476 | 1,460 | 0 | 56 | 13 | 788 | 1,466 | 3 | 63 | 1,855 | 336 | 521 | 726 | 272 | 14 | | |
| Amoxapine | 12 | 4 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | | |
| Clomipramine | 240 | 103 | 11 | 4 | 11 | 70 | 0 | 7 | 0 | 71 | 27 | 0 | 3 | 46 | 17 | 17 | 13 | 4 | 1 | | |
| Desipramine | 61 | 34 | 6 | 1 | 2 | 23 | 0 | 2 | 0 | 18 | 12 | 0 | 3 | 21 | 6 | 7 | 5 | 3 | 0 | | |
| Doxepin | 1,675 | 671 | 48 | 20 | 76 | 501 | 0 | 21 | 5 | 188 | 449 | 0 | 26 | 522 | 104 | 156 | 190 | 66 | 6 | | |
| Imipramine | 212 | 95 | 22 | 11 | 9 | 51 | 0 | 1 | 1 | 56 | 32 | 0 | 6 | 54 | 23 | 14 | 22 | 4 | 0 | | |
| Loxapine | 87 | 23 | 0 | 0 | 2 | 20 | 0 | 1 | 0 | 2 | 18 | 0 | 3 | 19 | 2 | 8 | 10 | 0 | 0 | | |
| Nortriptyline | 1,115 | 474 | 56 | 21 | 78 | 305 | 0 | 14 | 0 | 208 | 225 | 1 | 27 | 302 | 86 | 89 | 99 | 31 | 2 | | |
| Other Types of Tricyclic Antidepressant (TCA) | 347 | 150 | 8 | 6 | 18 | 111 | 0 | 6 | 1 | 19 | 92 | 12 | 6 | 134 | 15 | 23 | 55 | 26 | 2 | | |
| Protriptyline | 8 | 5 | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 0 | 0 | | |
| Tricyclic Antidepressants (TCA) Formulated with a Benzodiazepine | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Tricyclic Antidepressants (TCA) Formulated with a Phenothiazine | 24 | 13 | 5 | 0 | 2 | 6 | 0 | 0 | 0 | 7 | 6 | 0 | 0 | 11 | 5 | 1 | 3 | 1 | 0 | | |
| Tricyclic Antidepressants (TCA): Type Unknown to Consumer | 22 | 3 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | | |
| Category Total: | 132,412 | 56,891 | 8,394 | 2,605 | 14,948 | 29,004 | 36 | 1,535 | 369 | 22,734 | 30,530 | 136 | 2,759 | 38,201 | 13,575 | 13,065 | 10,222 | 1,468 | 50 | | |
| Antihistamines | | | | | | | | | | | | | | | | | | | | | |
| Histamine H2 Antagonists | | | | | | | | | | | | | | | | | | | | | |
| Cimetidine and Other Histamine-2 Blockers | 8,609 | 6,030 | 4,326 | 263 | 207 | 1,044 | 2 | 167 | 21 | 5,672 | 268 | 1 | 78 | 477 | 1,255 | 213 | 15 | 2 | 0 | | |
| Less Sedating Antihistamines | | | | | | | | | | | | | | | | | | | | | |
| Cetirizine | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | |
| Miscellaneous Antihistamines | | | | | | | | | | | | | | | | | | | | | |
| Other Antihistamines Alone (Excluding Cough and Cold Preparations) | 55,857 | 37,784 | 21,086 | 4,846 | 3,575 | 7,439 | 23 | 678 | 137 | 31,483 | 5,731 | 22 | 412 | 7,592 | 8,478 | 2,835 | 1,168 | 83 | 2 | | |
| Sedating Antihistamines | | | | | | | | | | | | | | | | | | | | | |
| Diphenhydramine Alone (Over the Counter) | 25,881 | 18,485 | 9,757 | 1,131 | 2,399 | 4,836 | 7 | 288 | 67 | 12,434 | 5,656 | 17 | 258 | 7,447 | 3,866 | 2,693 | 2,329 | 263 | 5 | | |
| Diphenhydramine Alone (Prescription) | 1,772 | 1,127 | 452 | 57 | 190 | 397 | 1 | 25 | 5 | 617 | 474 | 1 | 22 | 575 | 232 | 163 | 224 | 18 | 2 | | |
| Diphenhydramine Alone (Unknown if Over the Counter or Prescription) | 16,920 | 11,271 | 4,894 | 756 | 1,848 | 3,508 | 11 | 195 | 59 | 6,514 | 4,484 | 13 | 157 | 5,385 | 2,197 | 1,971 | 1,911 | 239 | 15 | | |
| Other Sedating Antihistamines | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Category Total: | 109,042 | 74,698 | 40,516 | 7,053 | 8,219 | 17,224 | 44 | 1,353 | 289 | 56,721 | 16,613 | 54 | 927 | 21,476 | 16,029 | 7,875 | 5,647 | 605 | 24 | | |
| Antimicrobials | | | | | | | | | | | | | | | | | | | | | |
| Anthelmintics | | | | | | | | | | | | | | | | | | | | | |
| Diethylcarbamazine | 14 | 13 | 9 | 1 | 0 | 1 | 0 | 2 | 0 | 13 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | | |
| Levamisole | 35 | 25 | 1 | 1 | 2 | 20 | 1 | 0 | 0 | 15 | 8 | 0 | 1 | 18 | 5 | 3 | 6 | 3 | 0 | | |
| Other Types of Anthelmintic | 1,725 | 1,604 | 854 | 147 | 37 | 486 | 5 | 69 | 6 | 1,432 | 77 | 5 | 76 | 197 | 351 | 121 | 26 | 0 | 0 | | |
| Piperazine | 139 | 130 | 89 | 7 | 4 | 25 | 0 | 2 | 3 | 119 | 9 | 1 | 0 | 15 | 39 | 12 | 2 | 1 | 0 | | |
| Unknown Types of Anthelmintic | 14 | 12 | 7 | 0 | 2 | 2 | 0 | 1 | 0 | 11 | 1 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. — Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Unknown | | | Reason | | | | Treated in Health Care Facility | | | | Outcome | | |
|---|------------------------|--------|-------|-------|--------|-------|-------|---------|---------|-------|-------|---------|---------------|-------|-------|---------------------------------|-------|-------|--|---------|--|--|
| | | ≤5 | 6–12 | 13–19 | ≤20 | Child | Adult | Unknown | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death | | | | |
| Antibiotics | | | | | | | | | | | | | | | | | | | | | | |
| 28,891 | 22,696 | 10,221 | 2,064 | 1,458 | 7,615 | 43 | 1,168 | 127 | 19,261 | 1,308 | 18 | 2,045 | 2,984 | 3,720 | 1,557 | 312 | 29 | 1 | | | | |
| Systemic Antibiotic Preparations (Oral, Intravenous, Intramuscular) | | | | | | | | | | | | | | | | | | | | | | |
| 4,770 | 4,531 | 3,107 | 185 | 99 | 893 | 13 | 208 | 26 | 4,341 | 51 | 5 | 127 | 146 | 651 | 174 | 17 | 1 | 0 | | | | |
| Topical Antibiotic Preparations (Dermal, Otic, Ophthalmic, Nasal) | | | | | | | | | | | | | | | | | | | | | | |
| 268 | 173 | 80 | 8 | 12 | 51 | 2 | 18 | 2 | 133 | 11 | 3 | 25 | 28 | 25 | 13 | 2 | 0 | 0 | | | | |
| Unknown Types of Antibiotic Preparation | | | | | | | | | | | | | | | | | | | | | | |
| 1,156 | 903 | 380 | 54 | 38 | 360 | 1 | 61 | 9 | 769 | 29 | 0 | 102 | 141 | 145 | 88 | 18 | 1 | 0 | | | | |
| Systemic Antifungal Preparations (Oral, Intravenous, Intramuscular) | | | | | | | | | | | | | | | | | | | | | | |
| 6,499 | 6,149 | 3,930 | 169 | 97 | 1,581 | 12 | 339 | 21 | 5,910 | 42 | 13 | 173 | 395 | 897 | 411 | 52 | 4 | 0 | | | | |
| Topical Antifungal Preparations (Dermal, Otic, Ophthalmic, Nasal) | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 10 | 1 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 1 | 0 | 0 | 4 | 1 | 3 | 0 | 0 | 0 | | | | |
| Unknown Types of Antifungal Preparation | | | | | | | | | | | | | | | | | | | | | | |
| Antiparasitics | | | | | | | | | | | | | | | | | | | | | | |
| 826 | 454 | 113 | 38 | 51 | 229 | 0 | 19 | 4 | 359 | 56 | 0 | 36 | 185 | 117 | 58 | 32 | 12 | 3 | | | | |
| Antimalarials | | | | | | | | | | | | | | | | | | | | | | |
| 1,232 | 699 | 181 | 21 | 54 | 375 | 0 | 62 | 6 | 541 | 74 | 2 | 80 | 128 | 98 | 74 | 18 | 0 | 0 | | | | |
| Metronidazole | | | | | | | | | | | | | | | | | | | | | | |
| 39 | 33 | 12 | 3 | 0 | 14 | 0 | 4 | 0 | 28 | 1 | 0 | 4 | 10 | 4 | 3 | 0 | 0 | 0 | | | | |
| Other Types of Antiparasitic | | | | | | | | | | | | | | | | | | | | | | |
| Antituberculars | | | | | | | | | | | | | | | | | | | | | | |
| 123 | 89 | 16 | 8 | 18 | 43 | 0 | 3 | 1 | 50 | 22 | 0 | 13 | 57 | 18 | 9 | 11 | 17 | 0 | | | | |
| Isoniazid | | | | | | | | | | | | | | | | | | | | | | |
| 29 | 6 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | | | | |
| Other Types of Antitubercular | | | | | | | | | | | | | | | | | | | | | | |
| 95 | 61 | 5 | 5 | 6 | 39 | 0 | 6 | 0 | 48 | 10 | 0 | 3 | 24 | 12 | 6 | 5 | 0 | 0 | | | | |
| Antivirals | | | | | | | | | | | | | | | | | | | | | | |
| 302 | 110 | 24 | 18 | 12 | 53 | 0 | 3 | 0 | 80 | 20 | 0 | 8 | 42 | 19 | 15 | 20 | 2 | 1 | | | | |
| Amantadine | | | | | | | | | | | | | | | | | | | | | | |
| 785 | 412 | 68 | 8 | 32 | 272 | 0 | 30 | 2 | 295 | 107 | 0 | 7 | 145 | 87 | 47 | 19 | 2 | 0 | | | | |
| Antiretrovirals | | | | | | | | | | | | | | | | | | | | | | |
| 1,461 | 1,333 | 430 | 366 | 122 | 345 | 8 | 57 | 5 | 1,154 | 17 | 1 | 159 | 129 | 202 | 94 | 26 | 3 | 0 | | | | |
| Other Anti-Influenza Agents | | | | | | | | | | | | | | | | | | | | | | |
| 1,605 | 1,163 | 349 | 20 | 50 | 646 | 3 | 81 | 14 | 988 | 96 | 0 | 76 | 208 | 213 | 69 | 37 | 4 | 0 | | | | |
| Systemic Antiviral Preparations (Oral, Intravenous, Intramuscular) | | | | | | | | | | | | | | | | | | | | | | |
| 157 | 154 | 77 | 10 | 3 | 52 | 1 | 11 | 0 | 150 | 1 | 0 | 3 | 5 | 22 | 14 | 0 | 0 | 0 | | | | |
| Topical Antiviral Preparations (Dermal, Otic, Ophthalmic, Nasal) | | | | | | | | | | | | | | | | | | | | | | |
| 312 | 204 | 68 | 3 | 13 | 108 | 0 | 12 | 0 | 171 | 14 | 1 | 18 | 31 | 38 | 12 | 2 | 1 | 0 | | | | |
| Unknown Types of Antiviral Preparations | | | | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Antimicrobials | | | | | | | | | | | | | | | | | | | | | | |
| 226 | 214 | 118 | 6 | 6 | 69 | 0 | 13 | 2 | 197 | 3 | 0 | 14 | 21 | 43 | 25 | 2 | 0 | 0 | | | | |
| Other Types of Antimicrobial | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 5 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | | | | |
| Unknown Types of Antimicrobial | | | | | | | | | | | | | | | | | | | | | | |
| 50,720 | 41,183 | 20,145 | 3,142 | 2,116 | 13,294 | 89 | 2,169 | 228 | 36,084 | 1,958 | 49 | 2,971 | 4,920 | 6,711 | 2,810 | 610 | 80 | 5 | | | | |
| Category Total: | | | | | | | | | | | | | | | | | | | | | | |
| Antineoplastics | | | | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Antineoplastics | | | | | | | | | | | | | | | | | | | | | | |
| 2,167 | 1,670 | 270 | 46 | 41 | 1,144 | 4 | 148 | 17 | 1,505 | 47 | 6 | 104 | 602 | 354 | 167 | 90 | 14 | 4 | | | | |
| Antineoplastic Drugs | | | | | | | | | | | | | | | | | | | | | | |
| 2,167 | 1,670 | 270 | 46 | 41 | 1,144 | 4 | 148 | 17 | 1,505 | 47 | 6 | 104 | 602 | 354 | 167 | 90 | 14 | 4 | | | | |
| Category Total: | | | | | | | | | | | | | | | | | | | | | | |
| Asthma Therapies | | | | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Asthma Therapies | | | | | | | | | | | | | | | | | | | | | | |
| 4,291 | 3,857 | 1,984 | 651 | 323 | 747 | 5 | 130 | 17 | 3,143 | 495 | 9 | 189 | 517 | 721 | 480 | 212 | 5 | 1 | | | | |
| Albuterol | | | | | | | | | | | | | | | | | | | | | | |
| 132 | 88 | 3 | 3 | 3 | 75 | 0 | 3 | 1 | 61 | 6 | 0 | 19 | 46 | 18 | 10 | 22 | 8 | 1 | | | | |
| Aminophylline or Theophylline | | | | | | | | | | | | | | | | | | | | | | |
| 6,109 | 4,258 | 2,842 | 682 | 187 | 474 | 3 | 63 | 7 | 4,020 | 207 | 0 | 25 | 488 | 974 | 91 | 3 | 0 | 0 | | | | |
| Leukotriene Antagonist or Inhibitor | | | | | | | | | | | | | | | | | | | | | | |
| 3,805 | 3,762 | 1,596 | 878 | 179 | 957 | 5 | 133 | 14 | 3,653 | 79 | 2 | 18 | 938 | 240 | 1,577 | 266 | 3 | 0 | | | | |
| Non-Selective Beta Agonists | | | | | | | | | | | | | | | | | | | | | | |
| 301 | 203 | 62 | 18 | 12 | 100 | 0 | 11 | 0 | 162 | 22 | 0 | 14 | 55 | 51 | 18 | 12 | 3 | 1 | | | | |
| Other Asthma Therapeutic Agents | | | | | | | | | | | | | | | | | | | | | | |
| 981 | 834 | 131 | 91 | 33 | 500 | 0 | 74 | 5 | 719 | 69 | 2 | 39 | 99 | 133 | 73 | 48 | 1 | 0 | | | | |
| Terbutaline and Other Beta-2 Agonists | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | | | | |
| Unknown Asthma Therapeutic Agents | | | | | | | | | | | | | | | | | | | | | | |
| 15,626 | 13,005 | 6,618 | 2,325 | 737 | 2,854 | 13 | 414 | 44 | 11,759 | 880 | 13 | 304 | 2,145 | 2,137 | 2,250 | 564 | 20 | 3 | | | | |
| Category Total: | | | | | | | | | | | | | | | | | | | | | | |
| Cardiovascular Drugs | | | | | | | | | | | | | | | | | | | | | | |
| Angiotensin Converting Enzyme Inhibitor | | | | | | | | | | | | | | | | | | | | | | |
| 1,932 | 1,063 | 407 | 77 | 43 | 496 | 0 | 40 | 0 | 955 | 99 | 0 | 9 | 337 | 358 | 54 | 37 | 1 | 0 | | | | |
| Angiotensin Converting Enzyme Inhibitor in Combination with Diuretic | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | | | | |
| Angiotensin Converting Enzyme Inhibitor in Combination with Other Drugs (Excluding Calcium Antagonists) | | | | | | | | | | | | | | | | | | | | | | |
| 14,407 | 5,766 | 2,297 | 319 | 218 | 2,691 | 4 | 211 | 26 | 4,896 | 762 | 3 | 86 | 1,997 | 2,117 | 228 | 167 | 7 | 0 | | | | |
| Angiotensin Converting Enzyme Inhibitor, Alone | | | | | | | | | | | | | | | | | | | | | | |
| Angiotensin Receptor Blocker | | | | | | | | | | | | | | | | | | | | | | |
| 1,777 | 966 | 208 | 30 | 33 | 647 | 0 | 46 | 2 | 901 | 55 | 1 | 9 | 176 | 259 | 53 | 18 | 1 | 1 | | | | |
| Angiotensin Receptor Blocker in Combination with Diuretic | | | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | | Outcome | | | |
|----------------------|------------------------|--|-------|-------|--------|-------|---------------|-------------|--------|-------|-------|---------|---------------------------------|--------|-------|----------|---------|-------|--|--|
| | | ≤5 | 6–12 | 13–19 | ≤20 | Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death | | |
| 209 | 80 | 22 | 0 | 1 | 50 | 0 | 6 | 1 | 69 | 5 | 0 | 6 | 19 | 15 | 5 | 6 | 0 | 0 | | |
| | | Angiotensin Receptor Blocker in Combination with Other Drugs (Excluding Calcium Antagonists) | | | | | | | | | | | | | | | | | | |
| 8,175 | 3,502 | 841 | 111 | 102 | 2,235 | 2 | 192 | 19 | 3,183 | 233 | 9 | 68 | 779 | 1,092 | 177 | 81 | 3 | 0 | | |
| | | Angiotensin Receptor Blocker, Alone | | | | | | | | | | | | | | | | | | |
| 50 | 25 | 5 | 1 | 0 | 18 | 0 | 1 | 0 | 24 | 0 | 0 | 1 | 0 | 3 | 2 | 0 | 0 | 0 | | |
| | | Antihyperlipidemic Combinations (Excluding Calcium Antagonists) | | | | | | | | | | | | | | | | | | |
| 12,210 | 4,127 | 1,582 | 121 | 147 | 1,988 | 6 | 264 | 19 | 3,835 | 213 | 4 | 71 | 494 | 748 | 123 | 20 | 0 | 1 | | |
| | | Antihyperlipidemic, Alone | | | | | | | | | | | | | | | | | | |
| 5,105 | 2,762 | 776 | 1,160 | 553 | 248 | 4 | 18 | 3 | 2,251 | 430 | 6 | 49 | 1,508 | 848 | 427 | 472 | 32 | 1 | | |
| 11 | 7 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | | |
| 5 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | Antihypertensive in Combination with Other Drugs (Excluding Diuretics) | | | | | | | | | | | | | | | | | | |
| | | Beta Blockers | | | | | | | | | | | | | | | | | | |
| 267 | 127 | 36 | 10 | 6 | 70 | 0 | 5 | 0 | 114 | 10 | 0 | 1 | 50 | 48 | 7 | 7 | 2 | 0 | | |
| 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | |
| | | Beta Blocker in Combination with Diuretic | | | | | | | | | | | | | | | | | | |
| | | Beta Blocker in Combination with Other Drugs (Excluding Calcium Antagonists) | | | | | | | | | | | | | | | | | | |
| 26,397 | 10,398 | 2,591 | 361 | 494 | 6,512 | 4 | 395 | 41 | 8,338 | 1,766 | 5 | 225 | 4,354 | 3,674 | 594 | 1,025 | 134 | 23 | | |
| | | Calcium Antagonist | | | | | | | | | | | | | | | | | | |
| 292 | 167 | 43 | 5 | 9 | 104 | 0 | 5 | 1 | 152 | 14 | 0 | 0 | 66 | 66 | 6 | 15 | 1 | 0 | | |
| | | Calcium Antagonist in Combination with Diuretic | | | | | | | | | | | | | | | | | | |
| | | Calcium Antagonist in Combination with Other Drugs | | | | | | | | | | | | | | | | | | |
| 198 | 103 | 25 | 1 | 3 | 72 | 0 | 2 | 0 | 96 | 6 | 0 | 1 | 40 | 32 | 6 | 6 | 0 | 0 | | |
| | | Calcium Antagonist in Combination with Angiotensin Receptor Blocker | | | | | | | | | | | | | | | | | | |
| 15 | 8 | 3 | 0 | 0 | 5 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 5 | 1 | 1 | 1 | 0 | 0 | | |
| | | Calcium Antagonist in Combination with Antihyperlipidemic | | | | | | | | | | | | | | | | | | |
| 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | Calcium Antagonist in Combination with Diuretic | | | | | | | | | | | | | | | | | | |
| 70 | 44 | 19 | 0 | 1 | 21 | 0 | 3 | 0 | 42 | 1 | 0 | 0 | 18 | 20 | 2 | 2 | 0 | 0 | | |
| | | Calcium Antagonist in Combination with Other Drugs | | | | | | | | | | | | | | | | | | |
| 13,840 | 5,495 | 1,242 | 180 | 177 | 3,669 | 1 | 205 | 21 | 4,695 | 646 | 0 | 123 | 2,718 | 2,026 | 376 | 484 | 80 | 41 | | |
| | | Miscellaneous Cardiovascular Drugs | | | | | | | | | | | | | | | | | | |
| 5,570 | 1,587 | 274 | 30 | 187 | 1,002 | 3 | 80 | 11 | 978 | 527 | 2 | 72 | 708 | 373 | 274 | 163 | 8 | 0 | | |
| 2,088 | 1,094 | 102 | 13 | 17 | 903 | 1 | 48 | 10 | 988 | 38 | 1 | 61 | 492 | 385 | 78 | 101 | 25 | 6 | | |
| | | Alpha Blockers | | | | | | | | | | | | | | | | | | |
| 1,689 | 1,143 | 57 | 5 | 7 | 1,059 | 0 | 14 | 1 | 438 | 49 | 1 | 595 | 931 | 137 | 119 | 445 | 114 | 23 | | |
| | | Cardiac Glycosides | | | | | | | | | | | | | | | | | | |
| 10,684 | 5,439 | 1,616 | 1,306 | 1,031 | 1,402 | 5 | 57 | 22 | 3,410 | 1,847 | 17 | 102 | 3,853 | 982 | 1,135 | 1,758 | 200 | 0 | | |
| | | Clonidine | | | | | | | | | | | | | | | | | | |
| 1,510 | 552 | 133 | 8 | 28 | 363 | 0 | 17 | 3 | 447 | 90 | 0 | 12 | 239 | 166 | 71 | 52 | 3 | 0 | | |
| | | Hydralazine | | | | | | | | | | | | | | | | | | |
| 959 | 241 | 44 | 5 | 5 | 178 | 0 | 9 | 0 | 215 | 20 | 0 | 5 | 67 | 63 | 24 | 11 | 1 | 0 | | |
| | | Long-Acting Nitrates | | | | | | | | | | | | | | | | | | |
| 808 | 514 | 276 | 20 | 10 | 183 | 1 | 23 | 1 | 418 | 80 | 1 | 9 | 233 | 211 | 30 | 23 | 3 | 0 | | |
| | | Nitroglycerin | | | | | | | | | | | | | | | | | | |
| 11 | 9 | 3 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 1 | 1 | 2 | 1 | 0 | | |
| | | Nitroprusside | | | | | | | | | | | | | | | | | | |
| 501 | 213 | 60 | 4 | 6 | 138 | 0 | 5 | 0 | 190 | 13 | 1 | 7 | 71 | 66 | 17 | 11 | 2 | 1 | | |
| | | Other Types of Cardiovascular Drug | | | | | | | | | | | | | | | | | | |
| 1,135 | 771 | 292 | 36 | 22 | 365 | 0 | 51 | 5 | 587 | 85 | 3 | 88 | 278 | 197 | 93 | 49 | 6 | 0 | | |
| | | Other Types of Vasodilator | | | | | | | | | | | | | | | | | | |
| 60 | 23 | 4 | 0 | 1 | 11 | 2 | 5 | 0 | 14 | 8 | 0 | 0 | 11 | 4 | 1 | 3 | 0 | 0 | | |
| | | Unknown Types of Cardiovascular Drug | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 2 | 0 | 2 | 3 | 0 | 0 | 0 | 4 | 1 | 0 | 2 | 2 | 2 | 3 | 0 | 0 | 0 | | |
| | | Unknown Types of Vasodilator | | | | | | | | | | | | | | | | | | |
| 301 | 259 | 79 | 42 | 7 | 118 | 1 | 10 | 2 | 240 | 5 | 0 | 13 | 80 | 22 | 98 | 35 | 2 | 2 | | |
| | | Vasopressors | | | | | | | | | | | | | | | | | | |
| 110,305 | 46,499 | 13,045 | 3,845 | 3,110 | 24,564 | 34 | 1,713 | 188 | 37,502 | 7,003 | 54 | 1,624 | 19,537 | 13,920 | 4,005 | 4,994 | 626 | 99 | | |
| | | Category Total: | | | | | | | | | | | | | | | | | | |
| | | Cold and Cough Preparations | | | | | | | | | | | | | | | | | | |
| | | Acetaminophen and Acetylsalicylic Acid with Decongestant and/or Antihistamine | | | | | | | | | | | | | | | | | | |
| 14 | 10 | 4 | 0 | 3 | 2 | 0 | 1 | 0 | 6 | 4 | 0 | 0 | 6 | 3 | 1 | 2 | 0 | 0 | | |
| | | Acetaminophen and Acetylsalicylic Acid with Antihistamine without Opioids | | | | | | | | | | | | | | | | | | |
| 18 | 14 | 7 | 4 | 1 | 1 | 0 | 1 | 0 | 11 | 2 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | | |
| | | Acetaminophen and Acetylsalicylic Acid with Decongestant and Antihistamine without Opioids | | | | | | | | | | | | | | | | | | |
| 7 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | | |
| | | Acetaminophen and Acetylsalicylic Acid with Decongestant without Opioids | | | | | | | | | | | | | | | | | | |
| 20 | 11 | 3 | 1 | 2 | 5 | 0 | 0 | 0 | 5 | 4 | 0 | 2 | 5 | 1 | 3 | 2 | 0 | 0 | | |
| | | Acetaminophen, Acetylsalicylic Acid, and Dextromethorphan with Antihistamine | | | | | | | | | | | | | | | | | | |
| 15 | 8 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 7 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | | |
| | | Acetaminophen, Acetylsalicylic Acid, and Dextromethorphan with Decongestant | | | | | | | | | | | | | | | | | | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. — Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | Outcome | | |
|----------------------|------------------------|---|------|-------|-----|-------|-------|---------|--------|-----|-------|---------|---------------------------------|-------|----------|---------|-------|---|
| | | ≤5 | 6–12 | 13–19 | 20 | Child | Adult | Unknown | Unint | Int | Other | Adv Rxn | None | Minor | Moderate | Major | Death | |
| 14 | 11 | 9 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen, Acetylsalicylic Acid, and Dextromethorphan with Decongestant and Antihistamine | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen, Acetylsalicylic Acid, and Opioid with Decongestant | | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen, Acetylsalicylic Acid, and Opioid with Decongestant and Antihistamine | | | | | | | | | | | | | | | | |
| 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Obsolete: Acetaminophen and Acetylsalicylic Acid with Decongestant and/or Antihistamine Combinations without Phenylpropanolamine or Opioids | | | | | | | | | | | | | | | | |
| 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Obsolete: Acetaminophen, Acetylsalicylic Acid, and Dextromethorphan Combinations with Decongestant and/or Antihistamine without Phenylpropanolamine | | | | | | | | | | | | | | | | |
| | | Acetaminophen with Decongestant and/or Antihistamine | | | | | | | | | | | | | | | | |
| 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen and Codeine with Antihistamine | | | | | | | | | | | | | | | | |
| 5 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen and Codeine with Decongestant | | | | | | | | | | | | | | | | |
| 16 | 10 | 3 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen and Codeine with Decongestant and Antihistamine | | | | | | | | | | | | | | | | |
| 4,944 | 2,382 | 881 | 166 | 487 | 781 | 3 | 51 | 13 | 1,272 | 999 | 3 | 73 | 1,137 | 548 | 421 | 218 | 20 | 1 |
| | | Acetaminophen and Dextromethorphan with Antihistamine | | | | | | | | | | | | | | | | |
| 4,314 | 2,354 | 1,170 | 198 | 319 | 604 | 2 | 54 | 7 | 1,758 | 449 | 1 | 138 | 591 | 539 | 234 | 79 | 4 | 0 |
| | | Acetaminophen and Dextromethorphan with Decongestant | | | | | | | | | | | | | | | | |
| 3,014 | 1,701 | 873 | 148 | 240 | 398 | 2 | 32 | 8 | 1,195 | 433 | 0 | 62 | 572 | 388 | 246 | 76 | 5 | 0 |
| | | Acetaminophen and Dextromethorphan with Decongestant and Antihistamine | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen and Other Opioid with Antihistamine | | | | | | | | | | | | | | | | |
| 8 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetaminophen and Other Opioid with Decongestant and Antihistamine | | | | | | | | | | | | | | | | |
| 621 | 406 | 72 | 20 | 107 | 201 | 0 | 6 | 0 | 113 | 283 | 0 | 6 | 296 | 57 | 105 | 111 | 13 | 0 |
| | | Acetaminophen with Antihistamine without Opioids | | | | | | | | | | | | | | | | |
| 1,087 | 658 | 376 | 58 | 68 | 138 | 1 | 14 | 3 | 492 | 141 | 2 | 20 | 213 | 169 | 64 | 37 | 6 | 0 |
| | | Acetaminophen with Decongestant and Antihistamine without Opioids | | | | | | | | | | | | | | | | |
| 990 | 579 | 307 | 45 | 72 | 138 | 0 | 17 | 0 | 459 | 78 | 1 | 38 | 117 | 118 | 43 | 23 | 0 | 0 |
| | | Acetaminophen with Decongestant without Opioids | | | | | | | | | | | | | | | | |
| 2 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Obsolete: Acetaminophen and Codeine Combinations with Decongestant and/or Antihistamine without Phenylpropanolamine | | | | | | | | | | | | | | | | |
| 18 | 13 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 12 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| | | Obsolete: Acetaminophen and Dextromethorphan Combinations with Decongestant and/or Antihistamine without Phenylpropanolamine | | | | | | | | | | | | | | | | |
| 9 | 6 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 |
| | | Acetaminophen with Decongestant and/or Antihistamine Combinations without Phenylpropanolamine or Opioids | | | | | | | | | | | | | | | | |
| | | Acetylsalicylic Acid with Decongestant and/or Antihistamine | | | | | | | | | | | | | | | | |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| | | Acetylsalicylic Acid and Codeine with Antihistamine | | | | | | | | | | | | | | | | |
| 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Acetylsalicylic Acid and Dextromethorphan with Antihistamine | | | | | | | | | | | | | | | | |
| 4 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | | Acetylsalicylic Acid and Dextromethorphan with Decongestant | | | | | | | | | | | | | | | | |
| 20 | 16 | 11 | 3 | 0 | 2 | 0 | 0 | 0 | 15 | 0 | 0 | 1 | 2 | 4 | 2 | 0 | 0 | 0 |
| | | Acetylsalicylic Acid and Dextromethorphan with Decongestant and Antihistamine | | | | | | | | | | | | | | | | |
| 18 | 14 | 5 | 1 | 3 | 5 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 8 | 2 | 2 | 4 | 0 | 0 |
| | | Acetylsalicylic Acid with Antihistamine without Opioids | | | | | | | | | | | | | | | | |
| 114 | 75 | 53 | 10 | 2 | 7 | 0 | 2 | 1 | 67 | 3 | 1 | 4 | 8 | 20 | 1 | 1 | 0 | 0 |
| | | Acetylsalicylic Acid with Decongestant and Antihistamine without Opioids | | | | | | | | | | | | | | | | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. -- Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | Treated in Health Care Facility | | | Outcome | | | |
|---|----------------------|------------------------|-------|------|-------|-------|-------|-------|---------|--------|-------|-------|---------------------------------|---------------|-------|---------|----------|-------|-------|
| | | | ≤5 | 6-12 | 13-19 | 20 | Child | Adult | Unknown | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death |
| Acetylsalicylic Acid with Decongestant without Opioids | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Antihistamine and/or Decongestant | | | | | | | | | | | | | | | | | | | |
| Antihistamine and Decongestant with Codeine | 72 | 50 | 24 | 4 | 1 | 18 | 0 | 3 | 0 | 38 | 8 | 0 | 4 | 15 | 16 | 4 | 1 | 0 | 0 |
| Antihistamine and Decongestant with Dextromethorphan | 2,785 | 2,341 | 1,693 | 357 | 117 | 151 | 1 | 18 | 4 | 2,173 | 126 | 2 | 33 | 368 | 566 | 221 | 58 | 2 | 0 |
| Antihistamine and Decongestant with Other Opioid | 14 | 10 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 2 | 2 | 2 | 0 | 0 | 0 |
| Antihistamine and Decongestant without Opioid | 3,888 | 3,140 | 2,046 | 390 | 183 | 466 | 2 | 44 | 9 | 2,863 | 192 | 3 | 75 | 495 | 763 | 250 | 83 | 7 | 0 |
| Antihistamine with Codeine | 483 | 359 | 89 | 27 | 49 | 176 | 0 | 16 | 2 | 261 | 88 | 0 | 6 | 125 | 79 | 65 | 18 | 2 | 0 |
| Antihistamine with Dextromethorphan | 3,701 | 2,901 | 644 | 214 | 763 | 1,234 | 3 | 31 | 12 | 1,114 | 1,708 | 4 | 44 | 1,864 | 429 | 654 | 833 | 49 | 0 |
| Antihistamine with Other Opioid | 131 | 102 | 18 | 7 | 5 | 59 | 1 | 11 | 1 | 83 | 14 | 0 | 5 | 39 | 23 | 14 | 11 | 0 | 0 |
| Antihistamine without Opioid | 1,550 | 907 | 455 | 62 | 106 | 257 | 1 | 23 | 3 | 629 | 252 | 1 | 19 | 396 | 269 | 132 | 87 | 10 | 0 |
| Decongestant with Codeine | 38 | 26 | 6 | 2 | 1 | 15 | 0 | 2 | 0 | 19 | 5 | 0 | 2 | 5 | 6 | 2 | 0 | 0 | 0 |
| Decongestant with Dextromethorphan | 1,581 | 1,235 | 819 | 195 | 86 | 124 | 0 | 9 | 2 | 1,072 | 125 | 1 | 33 | 183 | 285 | 74 | 52 | 2 | 0 |
| Decongestant with Other Opioid | 10 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Decongestant without Opioid | 3,972 | 2,659 | 1,322 | 199 | 247 | 790 | 2 | 91 | 8 | 2,326 | 215 | 1 | 110 | 442 | 620 | 165 | 100 | 1 | 0 |
| Obsolete: Antihistamine and/or Decongestant with Dextromethorphan without Phenylpropanolamine | 110 | 88 | 7 | 2 | 18 | 59 | 0 | 1 | 1 | 12 | 75 | 0 | 0 | 75 | 9 | 26 | 38 | 2 | 0 |
| Obsolete: Antihistamine and/or Decongestant without Phenylpropanolamine and Opioid | 12 | 11 | 10 | 0 | 0 | 1 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 2 | 2 | 3 | 0 | 0 | 0 |
| Miscellaneous Cold and Cough Preparations | | | | | | | | | | | | | | | | | | | |
| Acetaminophen in Combination with Dextromethorphan (Without Decongestants or Antihistamines) | 158 | 104 | 64 | 5 | 14 | 20 | 0 | 1 | 0 | 78 | 23 | 0 | 2 | 37 | 28 | 7 | 4 | 1 | 0 |
| Cough and Cold Preparations (Not Otherwise Classified) | 3,654 | 2,596 | 1,874 | 149 | 156 | 367 | 4 | 36 | 10 | 2,124 | 382 | 0 | 70 | 518 | 482 | 218 | 121 | 15 | 0 |
| Dextromethorphan Preparations (Not Otherwise Classified) | 11,057 | 8,195 | 2,922 | 980 | 1,118 | 2,993 | 2 | 154 | 26 | 5,172 | 2,724 | 21 | 211 | 3,291 | 1,331 | 1,362 | 1,258 | 62 | 2 |
| Dextromethorphan With Expectorants | 733 | 574 | 313 | 82 | 44 | 127 | 0 | 7 | 1 | 452 | 99 | 0 | 19 | 148 | 106 | 57 | 49 | 0 | 0 |
| Expectorants Without Dextromethorphan | 2,125 | 1,354 | 551 | 72 | 97 | 555 | 2 | 70 | 7 | 1,145 | 157 | 1 | 43 | 202 | 206 | 65 | 30 | 1 | 0 |
| Non-Narcotic Antitussives Excluding Dextromethorphan | 2,130 | 1,435 | 513 | 90 | 187 | 572 | 0 | 64 | 9 | 1,103 | 236 | 0 | 83 | 594 | 453 | 217 | 52 | 12 | 0 |
| Obsolete: Acetylsalicylic Acid in Combination with Dextromethorphan | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Obsolete: Expectorants or Antitussives (Without Narcotics or Narcotic Analogs) | 10 | 8 | 4 | 1 | 2 | 1 | 0 | 0 | 0 | 6 | 1 | 0 | 1 | 2 | 2 | 0 | 2 | 0 | 0 |
| Obsolete: Unknown Types of Cough and Cold Preparation | 80 | 35 | 6 | 7 | 7 | 15 | 0 | 0 | 0 | 14 | 19 | 1 | 1 | 22 | 10 | 8 | 3 | 0 | 0 |
| Non-Acetylsalicylic Acid Salicylates with Decongestant and/or Antihistamine | | | | | | | | | | | | | | | | | | | |
| Non-Acetylsalicylic Acid Salicylates and Dextromethorphan with Antihistamine | 5 | 5 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 3 | 1 | 1 | 1 | 1 | 0 |
| Non-Acetylsalicylic Acid Salicylates and Dextromethorphan with Decongestant | 8 | 8 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 |
| Non-Acetylsalicylic Acid Salicylates and Dextromethorphan with Decongestant and Antihistamine | 4 | 4 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Non-Acetylsalicylic Acid Salicylates and Opioid with Decongestant | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Acetylsalicylic Acid Salicylates and Opioid with Decongestant and Antihistamine | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Non-Acetylsalicylic Acid Salicylates with Antihistamine without Opioid | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Acetylsalicylic Acid Salicylates with Decongestant and Antihistamine without Opioid | 5 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | | Outcome | | | |
|--|------------------------|---------------|--------------|--------------|---------------|-----------|------------|---------------|--------------|-----------|--------------|---------------|---------------------------------|--------------|--------------|------------|----------|----------|----------|-------|
| | | Age | | | | | | | Unint | Int | Other | Adv Rxn | None | Minor | Moderate | Major | Death | | | |
| | | ≤5 | 6–12 | 13–19 | 20 | Unknown | Adult | Age | | | | | | | | | | Unint | Int | Other |
| 5 | 4 | 2 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | |
| 38 | 22 | 5 | 4 | 3 | 10 | 0 | 0 | 11 | 9 | 0 | 1 | 15 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | |
| 4 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 9 | 6 | 3 | 1 | 0 | 2 | 0 | 0 | 4 | 2 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 14 | 10 | 5 | 1 | 1 | 1 | 0 | 0 | 9 | 1 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 19 | 13 | 8 | 0 | 2 | 3 | 0 | 0 | 11 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 11 | 8 | 5 | 2 | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 174 | 130 | 90 | 22 | 6 | 12 | 0 | 0 | 124 | 6 | 0 | 0 | 21 | 29 | 8 | 4 | 0 | 0 | 0 | 0 | |
| 215 | 150 | 106 | 24 | 6 | 11 | 1 | 1 | 130 | 14 | 0 | 4 | 27 | 28 | 10 | 5 | 1 | 0 | 0 | 0 | |
| 206 | 179 | 87 | 1 | 3 | 75 | 0 | 11 | 177 | 1 | 1 | 0 | 6 | 51 | 2 | 1 | 0 | 0 | 0 | 0 | |
| 54,314 | 36,977 | 17,516 | 3,562 | 4,538 | 10,429 | 29 | 773 | 26,660 | 8,903 | 44 | 1,119 | 11,888 | 7,675 | 4,709 | 3,375 | 216 | 3 | 3 | 3 | |
| Diagnostic Agents | | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Diagnostic Agents | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 386 | 330 | 52 | 16 | 11 | 190 | 1 | 53 | 7 | 232 | 5 | 1 | 123 | 47 | 54 | 20 | 3 | 0 | 0 | 0 | |
| 9 | 7 | 1 | 0 | 0 | 4 | 0 | 2 | 0 | 5 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 396 | 338 | 53 | 16 | 11 | 195 | 1 | 55 | 7 | 238 | 5 | 1 | 93 | 125 | 47 | 57 | 20 | 3 | 0 | 0 | |
| Dietary Supplements/Herbals/Homeopathic | | | | | | | | | | | | | | | | | | | | |
| Amino Acids | | | | | | | | | | | | | | | | | | | | |
| 150 | 104 | 65 | 7 | 10 | 21 | 0 | 1 | 0 | 84 | 9 | 1 | 10 | 22 | 21 | 10 | 3 | 0 | 0 | 0 | |
| 792 | 532 | 278 | 22 | 39 | 167 | 0 | 21 | 5 | 384 | 60 | 0 | 88 | 113 | 80 | 69 | 15 | 0 | 0 | 0 | |
| Botanical Products | | | | | | | | | | | | | | | | | | | | |
| 11 | 10 | 5 | 0 | 1 | 4 | 0 | 0 | 0 | 8 | 1 | 0 | 1 | 5 | 2 | 0 | 2 | 0 | 0 | 0 | |
| 156 | 101 | 71 | 13 | 1 | 14 | 0 | 2 | 0 | 86 | 4 | 0 | 8 | 7 | 24 | 7 | 0 | 0 | 0 | 0 | |
| 91 | 58 | 32 | 1 | 1 | 22 | 0 | 2 | 0 | 45 | 9 | 0 | 4 | 9 | 11 | 6 | 2 | 0 | 0 | 0 | |
| 86 | 55 | 21 | 1 | 11 | 18 | 0 | 4 | 0 | 27 | 16 | 0 | 21 | 15 | 4 | 5 | 1 | 0 | 0 | 0 | |
| 112 | 70 | 6 | 1 | 7 | 45 | 0 | 11 | 0 | 19 | 27 | 0 | 23 | 41 | 7 | 16 | 10 | 1 | 0 | 0 | |
| 18 | 11 | 4 | 1 | 0 | 6 | 0 | 0 | 7 | 2 | 0 | 2 | 6 | 1 | 1 | 4 | 0 | 0 | 0 | 0 | |
| 51 | 44 | 14 | 3 | 1 | 25 | 0 | 1 | 21 | 8 | 1 | 13 | 23 | 8 | 6 | 10 | 1 | 0 | 0 | 0 | |
| 51 | 32 | 12 | 2 | 5 | 13 | 0 | 0 | 17 | 11 | 0 | 4 | 16 | 7 | 9 | 5 | 0 | 0 | 0 | 0 | |
| 1,783 | 1,444 | 953 | 68 | 58 | 322 | 2 | 38 | 3 | 1,133 | 114 | 5 | 188 | 296 | 294 | 147 | 84 | 7 | 0 | 0 | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | Treated in Health Facility | | | | Outcome | | |
|---|----------------------|------------------------|---------------|--------------|--------------|--------------|-----------|------------|------------|---------------|--------------|-----------|----------------------------|--------------|--------------|--------------|------------|-----------|----------|
| | | | ≤5 | 6–12 | 13–19 | ≤20 | Child | Unknown | Adult | Age | Unint | Int | Other | Adv Rxn | Care | None | Minor | Moderate | Major |
| Other Single Ingredient Botanicals | 3,897 | 3,047 | 1,747 | 157 | 104 | 849 | 8 | 160 | 22 | 2,482 | 204 | 7 | 339 | 394 | 495 | 343 | 76 | 4 | 0 |
| St. John's Wort | 180 | 105 | 65 | 4 | 14 | 21 | 0 | 1 | 0 | 77 | 20 | 0 | 8 | 26 | 21 | 7 | 1 | 0 | 0 |
| Valerian | 242 | 113 | 41 | 3 | 7 | 52 | 0 | 8 | 2 | 64 | 20 | 1 | 24 | 38 | 20 | 21 | 7 | 0 | 0 |
| Yohimbe | 123 | 96 | 10 | 2 | 2 | 76 | 0 | 4 | 2 | 26 | 16 | 1 | 53 | 63 | 9 | 24 | 32 | 3 | 0 |
| Cultural Medicines | | | | | | | | | | | | | | | | | | | |
| Asian Medicines | 90 | 78 | 30 | 5 | 1 | 37 | 1 | 4 | 0 | 54 | 6 | 0 | 18 | 33 | 6 | 9 | 7 | 2 | 0 |
| Ayurvedic Medicines | 21 | 14 | 6 | 0 | 0 | 7 | 0 | 1 | 0 | 7 | 1 | 1 | 5 | 7 | 2 | 2 | 0 | 1 | 0 |
| Hispanic Medicines | 11 | 10 | 8 | 0 | 0 | 1 | 0 | 1 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Cultural Medicines | 116 | 97 | 45 | 2 | 10 | 34 | 1 | 5 | 0 | 63 | 21 | 1 | 11 | 39 | 8 | 8 | 15 | 0 | 1 |
| Energy Products | | | | | | | | | | | | | | | | | | | |
| Energy Drinks: Caffeine Containing (From Any Source Including Guarana, Kola Nut, Tea, Yerba Mate, Cocoa, etc) | 1,154 | 942 | 571 | 55 | 114 | 179 | 0 | 21 | 2 | 691 | 130 | 5 | 112 | 186 | 163 | 140 | 92 | 2 | 0 |
| Energy Drinks: Caffeine Only (Without Guarana, Kola Nut, Tea, Yerba Mate, Cocoa, etc) | 873 | 622 | 373 | 47 | 57 | 121 | 0 | 20 | 4 | 457 | 107 | 3 | 52 | 108 | 122 | 91 | 31 | 4 | 0 |
| Energy Drinks: Ethanol and Caffeine Containing (From Any Source Including Guarana, Kola Nut, Tea, Yerba Mate, Cocoa, etc) | 118 | 28 | 6 | 0 | 8 | 12 | 0 | 1 | 1 | 9 | 13 | 1 | 3 | 11 | 4 | 6 | 5 | 0 | 0 |
| Energy Drinks: Ethanol and Caffeine Only (Without Guarana, Kola Nut, Tea, Yerba Mate, Cocoa, etc) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy Drinks: Ethanol Containing Without Caffeine (From Any Source) | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy Drinks: No Caffeine (From Any Source) | 28 | 22 | 11 | 7 | 1 | 3 | 0 | 0 | 0 | 14 | 4 | 0 | 4 | 4 | 3 | 5 | 0 | 0 | 0 |
| Energy Drinks: Unknown | 423 | 291 | 134 | 31 | 29 | 82 | 0 | 14 | 1 | 187 | 45 | 4 | 55 | 55 | 42 | 48 | 19 | 0 | 0 |
| Energy Products: Other | 319 | 257 | 133 | 11 | 24 | 79 | 1 | 6 | 3 | 171 | 38 | 2 | 44 | 89 | 60 | 42 | 29 | 0 | 0 |
| Hormonal Products | | | | | | | | | | | | | | | | | | | |
| Androgen or Androgen Precursor Dietary Supplements | 142 | 105 | 73 | 1 | 5 | 24 | 0 | 2 | 0 | 88 | 7 | 0 | 10 | 17 | 23 | 9 | 5 | 0 | 0 |
| Glandular Dietary Supplements | 38 | 27 | 19 | 2 | 0 | 4 | 0 | 2 | 0 | 24 | 2 | 0 | 1 | 7 | 4 | 1 | 0 | 0 | 0 |
| Melatonin | 35,027 | 30,324 | 24,238 | 3,004 | 1,581 | 1,268 | 36 | 155 | 42 | 27,772 | 2,276 | 20 | 179 | 3,890 | 6,092 | 2,544 | 88 | 5 | 0 |
| Miscellaneous Dietary Supplements/Herbals/ Homeopathic | 72 | 54 | 23 | 1 | 5 | 21 | 0 | 3 | 1 | 37 | 10 | 0 | 7 | 10 | 9 | 5 | 4 | 0 | 0 |
| Homeopathic Agents | 7,883 | 7,361 | 6,455 | 309 | 71 | 435 | 9 | 70 | 12 | 7,113 | 82 | 5 | 152 | 518 | 1,327 | 200 | 27 | 1 | 0 |
| Unknown Dietary Supplements or Homeopathic Agents | 1,968 | 1,550 | 928 | 101 | 64 | 393 | 2 | 52 | 10 | 1,187 | 100 | 2 | 248 | 288 | 281 | 169 | 63 | 6 | 5 |
| Other Dietary Supplements | | | | | | | | | | | | | | | | | | | |
| Blue-Green Algae | 537 | 507 | 95 | 71 | 51 | 201 | 8 | 55 | 26 | 463 | 0 | 29 | 13 | 88 | 137 | 98 | 11 | 0 | 0 |
| Fatty Acid Supplements | 324 | 204 | 163 | 12 | 3 | 24 | 0 | 2 | 0 | 190 | 6 | 0 | 8 | 14 | 38 | 7 | 1 | 1 | 0 |
| Glucosamine (with or without Chondroitin) | 531 | 385 | 285 | 12 | 9 | 68 | 0 | 10 | 1 | 368 | 10 | 0 | 5 | 26 | 62 | 10 | 0 | 0 | 0 |
| Other Single Ingredient Non-Botanical Dietary Supplements | 1,537 | 784 | 536 | 47 | 18 | 150 | 4 | 21 | 8 | 685 | 32 | 5 | 58 | 87 | 152 | 39 | 7 | 2 | 0 |
| Category Total: | 58,957 | 49,485 | 37,456 | 4,003 | 2,312 | 4,798 | 72 | 699 | 145 | 44,070 | 3,412 | 94 | 1,759 | 6,557 | 9,550 | 4,106 | 656 | 41 | 6 |
| Diuretics | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Diuretics | | | | | | | | | | | | | | | | | | | |
| Furosemide | 3,233 | 935 | 351 | 29 | 22 | 496 | 0 | 32 | 5 | 849 | 53 | 1 | 27 | 257 | 210 | 109 | 36 | 3 | 1 |
| Other Types of Diuretic | 2,859 | 1,108 | 391 | 57 | 74 | 527 | 1 | 50 | 8 | 926 | 120 | 1 | 55 | 288 | 280 | 106 | 32 | 4 | 0 |
| Thiazide | 4,137 | 1,445 | 559 | 92 | 61 | 658 | 1 | 69 | 5 | 1,268 | 146 | 3 | 24 | 344 | 358 | 84 | 24 | 0 | 0 |
| Unknown Types of Diuretic | 197 | 53 | 18 | 2 | 4 | 27 | 0 | 2 | 0 | 46 | 7 | 0 | 13 | 13 | 6 | 2 | 0 | 0 | 0 |
| Category Total: | 10,426 | 3,541 | 1,319 | 180 | 161 | 1,708 | 2 | 153 | 18 | 3,089 | 326 | 5 | 106 | 902 | 861 | 305 | 94 | 7 | 1 |
| Electrolytes and Minerals | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Electrolytes and Minerals | | | | | | | | | | | | | | | | | | | |
| Calcium and Calcium Salts | 11,349 | 9,877 | 8,744 | 495 | 121 | 438 | 10 | 54 | 15 | 9,617 | 201 | 8 | 47 | 320 | 1,572 | 173 | 20 | 2 | 0 |
| Chromium, Trivalent | 156 | 132 | 43 | 8 | 5 | 62 | 0 | 14 | 2 | 127 | 2 | 0 | 3 | 36 | 17 | 15 | 6 | 0 | 0 |
| Colloidal Silver | 151 | 125 | 48 | 13 | 5 | 51 | 1 | 7 | 0 | 75 | 21 | 0 | 26 | 38 | 15 | 12 | 11 | 1 | 0 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. — Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | | Reason | | | | Treated in Health Facility | | | Outcome | | | |
|--|----------------------|------------------------|---------------|--------------|--------------|--------------|-----------|--------------|-----------|---------------|--------------|------------|----------------------------|--------------|--------------|--------------|------------|-----------|----------|
| | | | ≤5 | 6-12 | 13-19 | ≥20 | Child | Adult | Unknown | Unknown | Unint | Int | Other | Adv Rxn | Care | None | Minor | Moderate | Major |
| Fluoride (Excluding Vitamins, Hydrofluoric Acid & Mouthwashes) | 1,362 | 1,303 | 1,013 | 135 | 35 | 97 | 3 | 18 | 2 | 1,204 | 28 | 4 | 62 | 72 | 209 | 87 | 10 | 1 | 1 |
| Germanium and Germanium Salts | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iron and Iron Salts (Excluding Vitamins with Iron) | 6,210 | 4,549 | 2,173 | 156 | 540 | 1,472 | 2 | 184 | 22 | 3,555 | 627 | 7 | 335 | 1,266 | 987 | 587 | 141 | 10 | 1 |
| Magnesium and Magnesium Salts | 2,436 | 1,952 | 890 | 115 | 99 | 719 | 5 | 107 | 17 | 1,603 | 170 | 17 | 154 | 261 | 296 | 210 | 43 | 0 | 0 |
| Multi-Mineral and Multi-Herbal Dietary Supplement | 590 | 459 | 254 | 23 | 55 | 116 | 0 | 10 | 1 | 318 | 99 | 1 | 40 | 172 | 118 | 65 | 51 | 1 | 0 |
| Multi-Mineral Dietary Supplements | 148 | 114 | 52 | 6 | 7 | 39 | 0 | 9 | 1 | 84 | 14 | 0 | 16 | 20 | 14 | 20 | 0 | 1 | 0 |
| Other Types of Electrolyte or Mineral | 62 | 49 | 17 | 2 | 1 | 24 | 0 | 5 | 0 | 45 | 2 | 0 | 2 | 6 | 3 | 11 | 2 | 1 | 0 |
| Potassium and Potassium Salts | 1,641 | 613 | 184 | 21 | 14 | 338 | 0 | 47 | 9 | 476 | 87 | 8 | 38 | 148 | 124 | 43 | 27 | 5 | 1 |
| Selenium and Selenium Salts | 85 | 56 | 16 | 4 | 4 | 27 | 0 | 5 | 0 | 40 | 5 | 1 | 6 | 13 | 9 | 4 | 2 | 0 | 0 |
| Sodium and Sodium Salts | 4,525 | 3,751 | 2,156 | 406 | 177 | 796 | 9 | 184 | 23 | 3,209 | 382 | 46 | 90 | 603 | 692 | 510 | 50 | 2 | 0 |
| Unknown Types of Electrolyte or Mineral | 17 | 12 | 5 | 2 | 0 | 4 | 0 | 1 | 0 | 11 | 0 | 0 | 0 | 6 | 1 | 4 | 0 | 0 | 0 |
| Zinc and Zinc Salts | 1,250 | 1,060 | 487 | 44 | 47 | 406 | 4 | 67 | 5 | 831 | 71 | 1 | 154 | 103 | 129 | 157 | 15 | 0 | 0 |
| Category Total: | 29,983 | 24,052 | 16,082 | 1,430 | 1,110 | 4,589 | 34 | 712 | 95 | 21,195 | 1,709 | 93 | 973 | 3,064 | 4,186 | 1,898 | 378 | 25 | 3 |
| Eye/Ear/Nose/Throat Preparations | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Eye/Ear/Nose/Throat Preparations | | | | | | | | | | | | | | | | | | | |
| Topical Steroids For Eye/Nose/Throat | 2,005 | 1,711 | 780 | 297 | 56 | 478 | 4 | 85 | 11 | 1,592 | 56 | 2 | 56 | 59 | 260 | 114 | 6 | 1 | 0 |
| Nasal Preparations | 1,700 | 1,595 | 576 | 72 | 115 | 689 | 2 | 134 | 7 | 1,385 | 78 | 6 | 122 | 191 | 334 | 140 | 39 | 4 | 0 |
| Other Nasal Decongestants or Sympathomimetics (Excluding Tetrahydrozoline) | 588 | 564 | 324 | 15 | 14 | 169 | 4 | 36 | 2 | 522 | 10 | 6 | 25 | 22 | 79 | 54 | 2 | 0 | 0 |
| Other Types of Nasal Preparation | 32 | 30 | 18 | 1 | 0 | 10 | 0 | 1 | 0 | 26 | 0 | 3 | 0 | 6 | 10 | 2 | 1 | 0 | 0 |
| Tetrahydrozoline, Nasal Preparations | 7 | 5 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| Ophthalmic Preparations | | | | | | | | | | | | | | | | | | | |
| Contact Lens Products | 2,049 | 1,954 | 986 | 65 | 94 | 688 | 1 | 110 | 10 | 1,896 | 26 | 15 | 13 | 328 | 162 | 355 | 63 | 4 | 0 |
| Glaucoma Medications | 377 | 337 | 68 | 2 | 9 | 218 | 0 | 38 | 2 | 304 | 6 | 1 | 26 | 45 | 59 | 36 | 13 | 0 | 0 |
| Other Ophthalmic Sympathomimetics | 688 | 651 | 410 | 18 | 30 | 140 | 1 | 43 | 9 | 573 | 24 | 33 | 18 | 166 | 238 | 35 | 14 | 0 | 0 |
| Other Types of Ophthalmic Preparation | 1,931 | 1,840 | 960 | 66 | 43 | 581 | 4 | 172 | 14 | 1,738 | 24 | 13 | 57 | 90 | 262 | 80 | 16 | 2 | 0 |
| Tetrahydrozoline, Ophthalmic Preparations | 853 | 812 | 436 | 20 | 47 | 261 | 1 | 37 | 10 | 662 | 49 | 81 | 14 | 213 | 259 | 56 | 22 | 2 | 0 |
| Unknown Types of Ophthalmic Preparation | 55 | 49 | 15 | 3 | 4 | 20 | 1 | 4 | 2 | 23 | 7 | 12 | 6 | 16 | 5 | 8 | 4 | 0 | 0 |
| Otic Preparations | | | | | | | | | | | | | | | | | | | |
| Combination Products | 820 | 815 | 346 | 63 | 28 | 323 | 5 | 45 | 5 | 803 | 3 | 0 | 8 | 63 | 132 | 186 | 14 | 0 | 0 |
| Other Types of Otic Preparation | 2,439 | 2,416 | 706 | 99 | 66 | 1,307 | 5 | 219 | 14 | 2,370 | 9 | 2 | 30 | 340 | 218 | 743 | 60 | 0 | 0 |
| Unknown Types of Otic Preparation | 33 | 31 | 5 | 3 | 3 | 14 | 1 | 5 | 0 | 31 | 0 | 0 | 0 | 5 | 2 | 14 | 0 | 0 | 0 |
| Throat Preparations | | | | | | | | | | | | | | | | | | | |
| Other Types of Throat Preparation | 432 | 413 | 96 | 41 | 41 | 188 | 0 | 41 | 6 | 378 | 21 | 0 | 12 | 30 | 62 | 33 | 3 | 0 | 0 |
| Throat Lozenges with Local Anesthetics | 184 | 168 | 78 | 6 | 14 | 52 | 2 | 16 | 0 | 146 | 9 | 0 | 13 | 13 | 34 | 5 | 4 | 0 | 0 |
| Throat Lozenges without Local Anesthetics | 723 | 676 | 536 | 52 | 14 | 57 | 2 | 13 | 2 | 628 | 20 | 0 | 28 | 22 | 116 | 31 | 1 | 0 | 0 |
| Unknown Types of Throat Preparation | 6 | 5 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Category Total: | 14,922 | 14,072 | 6,345 | 823 | 578 | 5,199 | 33 | 1,000 | 94 | 13,084 | 344 | 174 | 429 | 1,611 | 2,233 | 1,894 | 262 | 13 | 0 |
| Gastrointestinal Preparations | | | | | | | | | | | | | | | | | | | |
| Antacids | | | | | | | | | | | | | | | | | | | |
| Antacids: Other Types | 3,353 | 3,071 | 2,679 | 145 | 30 | 179 | 2 | 33 | 3 | 2,964 | 66 | 3 | 33 | 77 | 421 | 47 | 5 | 1 | 0 |
| Antacids: Proton Pump Inhibitors | 9,337 | 4,136 | 2,034 | 141 | 215 | 1,482 | 3 | 236 | 25 | 3,698 | 300 | 3 | 124 | 453 | 763 | 123 | 22 | 0 | 0 |
| Antacids: Salicylate-Containing | 2,583 | 2,267 | 1,772 | 231 | 31 | 199 | 2 | 28 | 4 | 2,129 | 84 | 0 | 49 | 229 | 504 | 68 | 12 | 0 | 1 |
| Antidiarrheals | | | | | | | | | | | | | | | | | | | |
| Antidiarrheals: Diphenoxylate and Atropine Containing | 218 | 100 | 35 | 3 | 6 | 48 | 0 | 8 | 0 | 64 | 27 | 0 | 6 | 67 | 28 | 15 | 16 | 5 | 0 |
| Antidiarrheals: Loperamide | 1,476 | 1,043 | 435 | 35 | 26 | 506 | 1 | 35 | 5 | 634 | 327 | 13 | 51 | 480 | 289 | 115 | 100 | 73 | 7 |
| Antidiarrheals: Non-Narcotic Containing (Excluding Salicyl Containing) | 34 | 26 | 17 | 0 | 1 | 5 | 0 | 3 | 0 | 25 | 1 | 0 | 0 | 3 | 7 | 2 | 1 | 0 | 0 |
| Antidiarrheals: Other Narcotic Containing | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Antidiarrheals: Paregoric Containing | 6 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. — Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | | Reason | | | | Treated in Health Facility | | | Outcome | | |
|---|------------------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|---------------|--------------|--------------|--------------|--------------|----------------------------|--------------|--------------|------------|-----------|-----------|
| | | ≤5 | 6–12 | 13–19 | ≤20 | Child | Unknown | Adult | Unknown | Unint | Int | Other | Adv Rxn | Care | None | Minor | Moderate | Major | Death |
| | | | | | | | | | | | | | | | | | | | |
| Antispasmodics | | | | | | | | | | | | | | | | | | | |
| 2,736 | 1,194 | 407 | 96 | 157 | 480 | 2 | 45 | 7 | 879 | 237 | 1 | 63 | 491 | 349 | 182 | 102 | 8 | 0 | 0 |
| 269 | 132 | 20 | 1 | 1 | 97 | 0 | 13 | 0 | 124 | 2 | 0 | 6 | 24 | 34 | 8 | 3 | 0 | 0 | 0 |
| Miscellaneous Gastrointestinal Preparations | | | | | | | | | | | | | | | | | | | |
| 14,603 | 12,517 | 8,511 | 755 | 431 | 2,343 | 19 | 415 | 43 | 11,365 | 597 | 66 | 458 | 1,154 | 1,648 | 1,176 | 149 | 6 | 0 | 0 |
| 9,259 | 7,647 | 5,798 | 327 | 138 | 1,123 | 18 | 204 | 39 | 6,940 | 188 | 11 | 488 | 500 | 1,232 | 436 | 76 | 2 | 0 | 0 |
| 38 | 21 | 17 | 1 | 2 | 1 | 0 | 0 | 0 | 19 | 1 | 0 | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 0 |
| Serotonin 5-HT₃ Receptor Antagonists | | | | | | | | | | | | | | | | | | | |
| 3,210 | 1,786 | 1,120 | 150 | 132 | 340 | 1 | 37 | 6 | 1,555 | 162 | 1 | 58 | 509 | 596 | 136 | 50 | 2 | 0 | 0 |
| Serotonin 5-HT₃ Receptor Antagonists: Other or Unknown | | | | | | | | | | | | | | | | | | | |
| 13 | 8 | 1 | 1 | 1 | 5 | 0 | 0 | 0 | 6 | 1 | 0 | 1 | 3 | 3 | 1 | 0 | 0 | 0 | 0 |
| 47,137 | 22,846 | 1,886 | 1,171 | 6,812 | 48 | 1,057 | 132 | 30,406 | 1,993 | 98 | 1,338 | 3,996 | 5,878 | 2,310 | 536 | 97 | 8 | 8 | 8 |
| Hormones and Hormone Antagonists | | | | | | | | | | | | | | | | | | | |
| Hypoglycemic, Combination | | | | | | | | | | | | | | | | | | | |
| 473 | 259 | 49 | 2 | 9 | 180 | 0 | 19 | 0 | 231 | 20 | 0 | 7 | 55 | 73 | 9 | 12 | 3 | 1 | 0 |
| Hypoglycemic, Biguanide Combinations (Excluding Sulfonylurea) | | | | | | | | | | | | | | | | | | | |
| 30 | 17 | 5 | 1 | 1 | 8 | 0 | 2 | 0 | 15 | 1 | 0 | 0 | 4 | 5 | 1 | 1 | 0 | 0 | 0 |
| Hypoglycemic, Other or Unknown Oral | | | | | | | | | | | | | | | | | | | |
| Hypoglycemic Combination | | | | | | | | | | | | | | | | | | | |
| 104 | 65 | 25 | 4 | 7 | 25 | 0 | 3 | 1 | 49 | 13 | 0 | 2 | 47 | 22 | 4 | 16 | 0 | 0 | 0 |
| Hypoglycemic, Sulfonylurea Combinations | | | | | | | | | | | | | | | | | | | |
| 545 | 470 | 16 | 6 | 0 | 390 | 0 | 50 | 8 | 416 | 23 | 0 | 30 | 111 | 107 | 55 | 22 | 2 | 0 | 0 |
| Hypoglycemic, Glucagon-Like Peptide-1 (GLP-1) Receptor Agonists | | | | | | | | | | | | | | | | | | | |
| 73 | 29 | 4 | 2 | 0 | 21 | 1 | 1 | 0 | 26 | 2 | 0 | 0 | 11 | 11 | 0 | 3 | 0 | 0 | 0 |
| 6,880 | 5,736 | 171 | 96 | 163 | 4,930 | 3 | 337 | 36 | 4,841 | 740 | 16 | 100 | 2,708 | 2,296 | 359 | 989 | 63 | 2 | 2 |
| 40 | 19 | 9 | 1 | 1 | 6 | 0 | 2 | 0 | 17 | 2 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 0 | 0 |
| Insulin | | | | | | | | | | | | | | | | | | | |
| 9,230 | 3,804 | 906 | 112 | 344 | 2,228 | 2 | 201 | 11 | 2,966 | 712 | 3 | 93 | 1,227 | 838 | 329 | 254 | 49 | 16 | 0 |
| 1,006 | 352 | 108 | 15 | 9 | 199 | 0 | 20 | 1 | 319 | 20 | 0 | 12 | 87 | 127 | 14 | 4 | 0 | 0 | 0 |
| Oral Hypoglycemics: Dipeptidyl Peptidase-4 (DPP-4) Inhibitors | | | | | | | | | | | | | | | | | | | |
| 77 | 39 | 13 | 0 | 2 | 21 | 0 | 3 | 0 | 34 | 1 | 0 | 3 | 23 | 19 | 2 | 7 | 0 | 0 | 0 |
| Oral Hypoglycemics: Meglitinides | | | | | | | | | | | | | | | | | | | |
| 587 | 272 | 104 | 7 | 6 | 143 | 0 | 12 | 0 | 244 | 11 | 0 | 17 | 75 | 91 | 11 | 10 | 3 | 0 | 0 |
| Oral Hypoglycemics: Sodium Glucose Co-Transporter 2 Inhibitor (SGLT2) Inhibitors | | | | | | | | | | | | | | | | | | | |
| 3,752 | 1,512 | 613 | 64 | 45 | 755 | 1 | 28 | 6 | 1,199 | 189 | 2 | 89 | 1,148 | 494 | 74 | 435 | 47 | 1 | 0 |
| 341 | 106 | 35 | 3 | 6 | 59 | 0 | 3 | 0 | 92 | 8 | 0 | 4 | 33 | 40 | 5 | 3 | 0 | 0 | 0 |
| Miscellaneous Hormones and Hormone Antagonists | | | | | | | | | | | | | | | | | | | |
| Androgens | | | | | | | | | | | | | | | | | | | |
| 432 | 342 | 76 | 17 | 22 | 189 | 0 | 32 | 6 | 256 | 40 | 0 | 45 | 90 | 52 | 41 | 24 | 1 | 0 | 0 |
| 10,942 | 8,762 | 3,646 | 633 | 350 | 3,517 | 11 | 551 | 54 | 8,106 | 186 | 11 | 445 | 645 | 1,228 | 332 | 58 | 3 | 0 | 0 |
| 1,300 | 847 | 423 | 30 | 62 | 270 | 3 | 55 | 4 | 756 | 58 | 3 | 29 | 75 | 147 | 33 | 7 | 0 | 0 | 0 |
| 3,339 | 2,618 | 1,643 | 88 | 376 | 413 | 4 | 82 | 12 | 2,170 | 397 | 1 | 43 | 237 | 374 | 148 | 12 | 0 | 0 | 0 |
| 630 | 470 | 130 | 31 | 23 | 258 | 2 | 23 | 3 | 431 | 30 | 0 | 8 | 71 | 92 | 26 | 4 | 0 | 0 | 0 |
| 871 | 636 | 203 | 62 | 46 | 279 | 0 | 41 | 5 | 576 | 32 | 2 | 25 | 151 | 167 | 40 | 21 | 0 | 0 | 0 |
| 1,190 | 941 | 537 | 38 | 41 | 274 | 2 | 44 | 5 | 836 | 43 | 1 | 56 | 87 | 181 | 36 | 8 | 0 | 0 | 0 |
| 273 | 147 | 48 | 9 | 11 | 69 | 0 | 8 | 2 | 142 | 4 | 0 | 0 | 28 | 35 | 10 | 0 | 1 | 0 | 0 |
| 13,161 | 8,582 | 4,296 | 388 | 289 | 3,188 | 8 | 392 | 21 | 8,136 | 346 | 6 | 75 | 1,243 | 1,518 | 172 | 54 | 6 | 0 | 0 |
| 13 | 8 | 4 | 0 | 1 | 2 | 0 | 1 | 0 | 6 | 0 | 0 | 2 | 5 | 2 | 0 | 1 | 1 | 0 | 0 |
| 55,289 | 36,033 | 13,064 | 1,609 | 1,814 | 17,424 | 37 | 1,910 | 175 | 31,864 | 2,878 | 45 | 1,085 | 8,166 | 7,923 | 1,701 | 1,945 | 179 | 20 | 20 |
| Miscellaneous Drugs | | | | | | | | | | | | | | | | | | | |
| Alzheimer Drugs | | | | | | | | | | | | | | | | | | | |
| 1,717 | 583 | 83 | 6 | 7 | 469 | 0 | 17 | 1 | 511 | 32 | 0 | 29 | 208 | 106 | 109 | 54 | 5 | 0 | 0 |
| Miscellaneous Alzheimer Drugs | | | | | | | | | | | | | | | | | | | |
| 285 | 177 | 44 | 4 | 10 | 103 | 0 | 11 | 5 | 146 | 11 | 0 | 14 | 60 | 32 | 29 | 8 | 2 | 0 | 0 |
| Antidotes | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Antidote Drugs | | | | | | | | | | | | | | | | | | | |
| 949 | 282 | 124 | 11 | 7 | 132 | 0 | 8 | 0 | 258 | 18 | 0 | 5 | 42 | 79 | 14 | 1 | 0 | 0 | 0 |
| 341 | 309 | 8 | 0 | 2 | 276 | 0 | 20 | 3 | 288 | 1 | 1 | 19 | 59 | 50 | 19 | 7 | 0 | 0 | 0 |
| Other Miscellaneous Drugs | | | | | | | | | | | | | | | | | | | |
| 252 | 76 | 6 | 1 | 0 | 56 | 0 | 11 | 2 | 33 | 21 | 1 | 20 | 30 | 6 | 16 | 10 | 2 | 0 | 0 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | Reason | | | | | Treated in Health Facility | | | | Outcome | | |
|---|------------------------|---------------|--------------|--------------|--------------|---------------|------------|--------------|---------------|---------------|------------|----------------------------|---------------|---------------|---------------|--------------|--------------|-----------|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown | Child | Adult | Age | Unit | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major |
| 39 | 27 | 9 | 1 | 2 | 14 | 0 | 1 | 0 | 16 | 4 | 0 | 7 | 18 | 5 | 5 | 5 | 0 | 0 |
| Hematopoietics | 25 | 3 | 2 | 0 | 19 | 0 | 1 | 0 | 23 | 0 | 0 | 2 | 8 | 5 | 0 | 1 | 0 | 0 |
| Monoclonal Antibodies (Including Fragments) | 116 | 11 | 0 | 4 | 92 | 0 | 8 | 1 | 88 | 2 | 0 | 26 | 37 | 13 | 18 | 10 | 1 | 0 |
| Neuromuscular Blocking Agents (Succinylcholine, Curare, etc) | 15 | 2 | 0 | 0 | 13 | 0 | 0 | 0 | 10 | 0 | 0 | 5 | 14 | 5 | 1 | 1 | 1 | 1 |
| Nicotine Pharmaceuticals | 1,646 | 979 | 157 | 47 | 391 | 0 | 65 | 7 | 1,428 | 112 | 7 | 94 | 306 | 482 | 243 | 43 | 2 | 0 |
| Other Types of Miscellaneous Prescription or Over the Counter Drug | 8,219 | 3,420 | 479 | 518 | 3,237 | 11 | 495 | 59 | 7,193 | 510 | 19 | 444 | 1,722 | 1,639 | 878 | 305 | 28 | 4 |
| Parkinson Drugs | | | | | | | | | | | | | | | | | | |
| Decarboxylase Inhibitor, Alone | 10 | 3 | 0 | 0 | 5 | 0 | 1 | 1 | 7 | 1 | 0 | 2 | 4 | 2 | 3 | 0 | 0 | 0 |
| Levodopa (Alone or with Decarboxylase Inhibitor) | 814 | 161 | 6 | 9 | 582 | 0 | 53 | 3 | 710 | 63 | 4 | 26 | 232 | 175 | 108 | 69 | 2 | 1 |
| Levodopa and Carbidopa with Other Drugs | 42 | 12 | 0 | 0 | 30 | 0 | 0 | 0 | 38 | 2 | 0 | 1 | 8 | 11 | 6 | 1 | 0 | 0 |
| Other Parkinson Drugs (Including Combinations) | 525 | 203 | 22 | 24 | 254 | 1 | 19 | 2 | 413 | 81 | 5 | 22 | 242 | 96 | 160 | 42 | 3 | 0 |
| Category Total: | 12,866 | 5,068 | 689 | 630 | 5,673 | 12 | 710 | 84 | 11,162 | 858 | 37 | 716 | 2,990 | 2,706 | 1,609 | 557 | 46 | 6 |
| Miscellaneous Muscle Relaxants | | | | | | | | | | | | | | | | | | |
| Baclofen | 5,341 | 2,316 | 262 | 197 | 1,730 | 1 | 46 | 21 | 692 | 1,378 | 24 | 121 | 1,865 | 274 | 494 | 683 | 341 | 2 |
| Carisoprodol (Formulated Alone) | 1,795 | 737 | 61 | 36 | 612 | 0 | 19 | 5 | 153 | 545 | 1 | 12 | 613 | 72 | 238 | 217 | 38 | 3 |
| Cyclobenzaprine | 9,956 | 4,080 | 905 | 445 | 2,368 | 3 | 105 | 22 | 1,977 | 1,963 | 2 | 61 | 2,547 | 893 | 1,032 | 708 | 104 | 1 |
| Metaxalone | 377 | 165 | 27 | 18 | 111 | 0 | 5 | 1 | 91 | 65 | 0 | 5 | 89 | 37 | 40 | 19 | 4 | 0 |
| Methocarbamol | 2,324 | 879 | 132 | 123 | 569 | 0 | 26 | 4 | 385 | 464 | 0 | 15 | 561 | 229 | 248 | 102 | 15 | 0 |
| Other Types of Muscle Relaxant | 573 | 225 | 32 | 25 | 146 | 0 | 18 | 1 | 108 | 98 | 0 | 15 | 120 | 44 | 62 | 27 | 4 | 0 |
| Tizanidine | 4,754 | 1,951 | 287 | 40 | 1,431 | 0 | 79 | 10 | 890 | 914 | 10 | 109 | 1,331 | 276 | 430 | 600 | 76 | 0 |
| Unknown Types of Muscle Relaxant | 263 | 57 | 9 | 9 | 33 | 0 | 3 | 2 | 10 | 46 | 0 | 1 | 43 | 11 | 14 | 10 | 2 | 0 |
| Category Total: | 25,383 | 10,410 | 1,715 | 957 | 7,000 | 4 | 301 | 66 | 4,306 | 5,473 | 37 | 339 | 7,169 | 1,836 | 2,558 | 2,366 | 584 | 6 |
| Narcotic Antagonists | | | | | | | | | | | | | | | | | | |
| Miscellaneous Narcotic Antagonists | 1,127 | 436 | 34 | 7 | 330 | 0 | 40 | 7 | 206 | 96 | 20 | 104 | 220 | 54 | 83 | 77 | 6 | 0 |
| Miscellaneous Narcotic Antagonist | 1,127 | 436 | 34 | 7 | 330 | 0 | 40 | 7 | 206 | 96 | 20 | 104 | 220 | 54 | 83 | 77 | 6 | 0 |
| Category Total: | | | | | | | | | | | | | | | | | | |
| Miscellaneous Radiopharmaceutical | | | | | | | | | | | | | | | | | | |
| Specific Pharmaceutical Radionuclides | 36 | 32 | 5 | 1 | 3 | 0 | 3 | 0 | 21 | 1 | 0 | 9 | 7 | 3 | 5 | 1 | 0 | 0 |
| Category Total: | 36 | 32 | 5 | 1 | 3 | 0 | 3 | 0 | 21 | 1 | 0 | 9 | 7 | 3 | 5 | 1 | 0 | 0 |
| Sedative/Hypnotics/Antipsychotics | | | | | | | | | | | | | | | | | | |
| Barbiturates | | | | | | | | | | | | | | | | | | |
| Long Acting Barbiturates | 1,363 | 821 | 186 | 44 | 520 | 0 | 28 | 5 | 593 | 174 | 0 | 35 | 308 | 184 | 114 | 77 | 34 | 1 |
| Short or Intermediate Acting Barbiturates | 161 | 81 | 3 | 4 | 60 | 0 | 12 | 1 | 54 | 23 | 0 | 2 | 42 | 14 | 21 | 8 | 6 | 2 |
| Unknown Types of Barbiturate | 37 | 6 | 0 | 1 | 4 | 0 | 0 | 1 | 1 | 4 | 0 | 1 | 5 | 0 | 0 | 1 | 1 | 0 |
| Miscellaneous Sedative/Hypnotics/ Antipsychotics | | | | | | | | | | | | | | | | | | |
| Atypical Antipsychotics | 45,252 | 17,471 | 1,638 | 896 | 3,202 | 11,124 | 8 | 476 | 5,520 | 10,950 | 48 | 689 | 13,409 | 3,078 | 4,898 | 4,408 | 677 | 9 |
| Benzodiazepines | 63,570 | 22,995 | 3,365 | 3,155 | 14,872 | 13 | 738 | 247 | 6,668 | 15,285 | 307 | 353 | 17,346 | 4,518 | 8,091 | 3,430 | 469 | 19 |
| Bupropione | 6,717 | 2,028 | 272 | 68 | 396 | 1,203 | 70 | 18 | 741 | 1,197 | 4 | 74 | 1,325 | 628 | 525 | 185 | 18 | 1 |
| Chloral Hydrate | 10 | 4 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 1 | 3 | 1 | 0 | 1 | 1 | 0 |
| Ethchlorvynol | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Meprobamate | 15 | 8 | 2 | 1 | 0 | 5 | 0 | 0 | 3 | 4 | 0 | 0 | 7 | 1 | 2 | 2 | 1 | 0 |
| Methaqualone | 6 | 3 | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 1 | 1 | 1 | 0 | 0 |
| Other Types of Sedative/Hypnotic/Anti-Anxiety or Anti-Psychotic Drug | 12,769 | 5,132 | 524 | 185 | 405 | 3,800 | 2 | 182 | 1,720 | 3,108 | 45 | 113 | 3,712 | 802 | 1,785 | 904 | 137 | 3 |
| Phenothiazines | 4,092 | 1,585 | 170 | 165 | 1,123 | 1 | 59 | 8 | 622 | 759 | 3 | 176 | 1,138 | 251 | 340 | 471 | 22 | 2 |
| Sleep Aids, Over the Counter Only (Excluding Diphenhydramine) | 1,940 | 1,286 | 520 | 20 | 183 | 532 | 1 | 24 | 625 | 635 | 0 | 16 | 732 | 328 | 206 | 268 | 24 | 0 |
| Unknown Types of Sedative/Hypnotic/ Anti-Anxiety or Anti-Psychotic Drug | 227 | 74 | 4 | 1 | 11 | 48 | 0 | 5 | 7 | 58 | 5 | 0 | 59 | 11 | 12 | 16 | 2 | 0 |
| Category Total: | 136,163 | 51,495 | 6,686 | 1,874 | 7,567 | 33,296 | 26 | 1,594 | 16,556 | 32,201 | 412 | 1,461 | 38,090 | 9,817 | 15,995 | 9,773 | 1,392 | 37 |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | Reason | | | | Treated in Health Facility | | | Outcome | | | | | | |
|---|------------------------|--------------|------------|------------|------------|----------|------------|-----------|--------------|----------|----------------------------|------------|------------|------------|------------|------------|----------|----------|-------|---|
| | | ≤5 | 6–12 | 13–19 | ≥20 | Unknown | Child | Adult | Age | Unint | Int | Other | Adv Rxn | Care | None | Minor | Moderate | Major | Death | |
| | | | | | | | | | | | | | | | | | | | | |
| Serums, Toxoids, Vaccines | | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Serums, Toxoids, Vaccines | 1,801 | 1,619 | 124 | 132 | 859 | 7 | 168 | 18 | 1,273 | 4 | 0 | 333 | 553 | 147 | 287 | 109 | 5 | 1 | | |
| Category Total: | 1,801 | 1,619 | 124 | 132 | 859 | 7 | 168 | 18 | 1,273 | 4 | 0 | 333 | 553 | 147 | 287 | 109 | 5 | 1 | | |
| Stimulants and Street Drugs | | | | | | | | | | | | | | | | | | | | |
| Cannabinoids and Analogs | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| eCigarettes: Marijuana Device Without Added Flavors | 117 | 93 | 1 | 28 | 33 | 0 | 3 | 2 | 44 | 36 | 6 | 4 | 53 | 7 | 28 | 12 | 4 | 0 | 0 | 0 |
| eCigarettes: Marijuana Device With Added Flavors | 6 | 5 | 3 | 1 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| eCigarettes: Marijuana Device Without Added Flavors | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| eCigarettes: Marijuana Liquid Flavor Unknown | 19 | 14 | 4 | 6 | 3 | 0 | 0 | 0 | 6 | 6 | 0 | 2 | 9 | 0 | 3 | 6 | 1 | 0 | 0 | 0 |
| eCigarettes: Marijuana Liquid With Added Flavors | 9 | 7 | 4 | 2 | 1 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| eCigarettes: Marijuana Liquid Without Added Flavors | 5 | 5 | 0 | 2 | 3 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Marijuana: Concentrated Extract (Including Oils and Tinctures) | 1,082 | 863 | 36 | 213 | 397 | 1 | 36 | 13 | 329 | 359 | 14 | 143 | 549 | 84 | 245 | 199 | 11 | 0 | 0 | 0 |
| Marijuana: Dried Plant | 6,040 | 2,335 | 133 | 649 | 844 | 11 | 132 | 34 | 912 | 1,071 | 69 | 214 | 1,631 | 178 | 704 | 533 | 42 | 2 | 0 | 0 |
| Marijuana: Edible Preparation | 1,974 | 1,716 | 217 | 373 | 489 | 7 | 38 | 20 | 912 | 561 | 81 | 125 | 1,196 | 143 | 589 | 325 | 18 | 0 | 0 | 0 |
| Marijuana: Oral Capsule or Pill Preparation | 44 | 32 | 7 | 4 | 18 | 0 | 0 | 0 | 9 | 11 | 0 | 12 | 18 | 4 | 6 | 7 | 3 | 0 | 0 | 0 |
| Marijuana: Other or Unknown Preparation | 997 | 285 | 79 | 76 | 100 | 2 | 13 | 9 | 95 | 146 | 6 | 23 | 224 | 21 | 93 | 77 | 6 | 0 | 0 | 0 |
| Marijuana: Pharmaceutical Preparation | 118 | 80 | 27 | 3 | 46 | 0 | 1 | 0 | 47 | 16 | 0 | 14 | 54 | 16 | 26 | 12 | 2 | 0 | 0 | 0 |
| Marijuana: Topical Preparation | 24 | 19 | 5 | 3 | 6 | 1 | 3 | 0 | 13 | 2 | 0 | 3 | 5 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| Marijuana: Undried Plant | 167 | 44 | 8 | 14 | 17 | 0 | 2 | 3 | 16 | 23 | 1 | 4 | 26 | 3 | 12 | 6 | 2 | 0 | 0 | 0 |
| Synthetic Cannabinoids, Analogs and Precursors | 1,993 | 1,350 | 21 | 293 | 951 | 4 | 39 | 33 | 91 | 1,088 | 114 | 20 | 1,255 | 68 | 344 | 486 | 234 | 9 | 0 | 0 |
| Diet Aids | | | | | | | | | | | | | | | | | | | | |
| Diet Aids: Phenylpropanolamine and Caffeine Combinations | 9 | 5 | 2 | 2 | 1 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 3 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| Diet Aids: Phenylpropanolamine Only | 6 | 4 | 1 | 1 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Other Types of Diet Aid, Over the Counter Only | 114 | 91 | 41 | 6 | 11 | 32 | 0 | 1 | 55 | 15 | 0 | 20 | 47 | 20 | 14 | 13 | 2 | 0 | 0 | 0 |
| Other Types of Diet Aid, Prescription Only | 21 | 15 | 9 | 0 | 6 | 0 | 0 | 0 | 11 | 2 | 0 | 2 | 8 | 5 | 1 | 3 | 0 | 0 | 0 | 0 |
| Unknown Types of Diet Aid | 42 | 28 | 9 | 5 | 14 | 0 | 0 | 0 | 14 | 5 | 0 | 8 | 13 | 1 | 6 | 4 | 0 | 0 | 0 | 0 |
| Miscellaneous Stimulants and Street Drugs | | | | | | | | | | | | | | | | | | | | |
| Amphetamines and Related Compounds | 16,486 | 10,027 | 3,509 | 1,821 | 2,606 | 7 | 156 | 61 | 6,890 | 2,671 | 47 | 239 | 5,147 | 2,440 | 1,722 | 1,689 | 125 | 2 | 0 | 0 |
| Amphetamine | 167 | 139 | 9 | 8 | 109 | 2 | 9 | 0 | 53 | 83 | 0 | 1 | 83 | 10 | 30 | 36 | 5 | 0 | 0 | 0 |
| Amphetamine or Butyl Nitrites (Street Drugs) | 3,740 | 2,849 | 1,113 | 428 | 1,046 | 6 | 140 | 14 | 1,693 | 666 | 16 | 441 | 798 | 407 | 485 | 325 | 21 | 2 | 0 | 0 |
| Caffeine | 5,778 | 1,358 | 76 | 14 | 74 | 1,056 | 1 | 96 | 1,500 | 1,107 | 27 | 7 | 1,168 | 191 | 216 | 398 | 114 | 28 | 0 | 0 |
| Cocaine | 137 | 104 | 57 | 2 | 35 | 0 | 5 | 0 | 78 | 19 | 0 | 7 | 32 | 24 | 16 | 10 | 0 | 0 | 0 | 0 |
| Ephedrine | 617 | 392 | 11 | 2 | 343 | 0 | 18 | 6 | 73 | 247 | 41 | 7 | 339 | 13 | 65 | 147 | 85 | 0 | 0 | 0 |
| gamma-Hydroxybutyric Acid Including Analogs or Precursors | 1,818 | 810 | 26 | 158 | 564 | 1 | 40 | 16 | 58 | 702 | 28 | 9 | 686 | 47 | 171 | 308 | 62 | 8 | 0 | 0 |
| Hallucinogenic Amphetamines | 7,653 | 4,265 | 24 | 3 | 88 | 4,004 | 3 | 109 | 182 | 3,930 | 70 | 27 | 3,891 | 416 | 699 | 1,346 | 896 | 54 | 2 | 0 |
| Heroin | 1,146 | 746 | 39 | 3 | 42 | 615 | 1 | 31 | 102 | 488 | 53 | 85 | 611 | 46 | 199 | 235 | 49 | 2 | 0 | 0 |
| Kratom | 795 | 470 | 9 | 0 | 280 | 156 | 0 | 17 | 32 | 423 | 8 | 2 | 413 | 17 | 104 | 229 | 21 | 0 | 0 | 0 |
| Lysergic acid diethylamide (LSD) | 32 | 26 | 6 | 1 | 16 | 0 | 2 | 0 | 12 | 12 | 0 | 1 | 18 | 5 | 5 | 8 | 0 | 0 | 0 | 0 |
| Mescaline/Peyote | 8,390 | 3,971 | 257 | 48 | 185 | 3,134 | 2 | 269 | 598 | 3,138 | 92 | 42 | 3,279 | 355 | 736 | 1,360 | 306 | 183 | 0 | 0 |
| Methamphetamines | 8,988 | 5,994 | 1,319 | 2,413 | 1,380 | 795 | 3 | 65 | 4,802 | 1,032 | 8 | 113 | 1,935 | 1,467 | 882 | 642 | 26 | 0 | 0 | 0 |
| Methylphenidate | 20 | 13 | 0 | 5 | 7 | 1 | 0 | 0 | 1 | 10 | 0 | 0 | 13 | 3 | 1 | 8 | 0 | 0 | 0 | 0 |
| Other Hallucinogens | 495 | 291 | 99 | 3 | 27 | 146 | 0 | 14 | 180 | 70 | 2 | 36 | 133 | 46 | 49 | 46 | 4 | 0 | 0 | 0 |
| Other Stimulants (Excluding Amphetamines) | 138 | 86 | 5 | 12 | 58 | 0 | 2 | 1 | 13 | 63 | 3 | 1 | 73 | 10 | 8 | 32 | 10 | 1 | 0 | 0 |
| Other Street Drugs | 56 | 40 | 4 | 0 | 16 | 18 | 0 | 2 | 8 | 30 | 1 | 1 | 30 | 0 | 9 | 18 | 2 | 0 | 0 | 0 |
| Other Synthetic Street Drugs | 449 | 189 | 12 | 0 | 14 | 152 | 0 | 10 | 37 | 133 | 6 | 1 | 165 | 15 | 36 | 71 | 22 | 0 | 0 | 0 |
| Phenylcyclohexylpiperidine (PCP) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Phenylpropanolamine Containing Look Alike Drugs | 290 | 180 | 13 | 5 | 16 | 131 | 0 | 10 | 22 | 141 | 9 | 1 | 154 | 13 | 21 | 77 | 25 | 2 | 0 | 0 |
| Synthetic Cathinones, Analogs and Precursors | 101 | 57 | 0 | 3 | 34 | 0 | 19 | 1 | 22 | 31 | 3 | 0 | 55 | 5 | 6 | 29 | 5 | 3 | 0 | 0 |
| Synthetic Opioids, Analogs and Precursors (Excluding Pharmaceutical Preparations) | | | | | | | | | | | | | | | | | | | | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| | No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | Treated in Health Care Facility | | | Outcome | | | |
|--|----------------------|------------------------|---------------|--------------|--------------|---------------|---------------|---------------|-------------|---------------|---------------|------------|---------------------------------|---------------|--------------|--------------|--------------|--------------|------------|
| | | | ≤5 | 6–12 | 13–19 | ≤20 | Unknown Child | Unknown Adult | Unknown Age | Unint | Int | Other | Adv Rxn | Care Facility | None | Minor | Moderate | Major | Death |
| | | | | | | | | | | | | | | | | | | | |
| Synthetic Tryptamines, Analogs and Precursors | 60 | 38 | 1 | 0 | 8 | 28 | 0 | 1 | 0 | 2 | 35 | 1 | 0 | 0 | 2 | 25 | 0 | 0 | |
| Unknown Hallucinogens | 6 | 4 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | |
| Unknown Stimulants or Street Drugs | 300 | 196 | 7 | 3 | 52 | 115 | 2 | 16 | 1 | 28 | 140 | 7 | 3 | 168 | 17 | 27 | 69 | 25 | |
| Category Total: | 70,452 | 39,238 | 8,116 | 4,894 | 6,322 | 18,136 | 55 | 1,299 | 416 | 17,607 | 18,525 | 713 | 1,619 | 24,327 | 6,104 | 7,569 | 8,797 | 2,128 | 300 |
| Topical Preparations | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Topical Preparations | | | | | | | | | | | | | | | | | | | |
| Acne Preparations | 1,844 | 1,764 | 936 | 109 | 220 | 399 | 3 | 90 | 7 | 1,639 | 31 | 6 | 80 | 111 | 273 | 197 | 16 | 0 | |
| Boric Acid or Borates (As Antiseptics, Excluding Insecticides) | 266 | 260 | 40 | 12 | 9 | 173 | 0 | 23 | 3 | 243 | 3 | 0 | 10 | 28 | 42 | 21 | 5 | 0 | |
| Calamine (Including All Caladyl Type Products) | 1,797 | 1,744 | 1,144 | 53 | 23 | 461 | 5 | 55 | 3 | 1,716 | 15 | 2 | 8 | 119 | 243 | 149 | 9 | 1 | |
| Camphor | 9,418 | 9,233 | 7,510 | 212 | 151 | 1,089 | 16 | 233 | 22 | 9,001 | 137 | 15 | 66 | 1,103 | 2,348 | 1,063 | 76 | 10 | |
| Camphor and Methyl Salicylate Combinations | 1,386 | 1,362 | 1,039 | 37 | 27 | 223 | 3 | 28 | 5 | 1,319 | 12 | 6 | 22 | 149 | 347 | 186 | 10 | 0 | |
| Diaper Care and Rash Products | 21,088 | 20,710 | 19,536 | 242 | 127 | 629 | 46 | 112 | 18 | 20,617 | 37 | 9 | 42 | 457 | 2,645 | 588 | 22 | 1 | |
| Hexachlorophene Containing Antiseptics | 23 | 23 | 10 | 0 | 3 | 9 | 0 | 1 | 0 | 21 | 0 | 1 | 1 | 2 | 1 | 4 | 1 | 0 | |
| Hydrogen Peroxide 3% | 6,087 | 5,747 | 1,872 | 286 | 292 | 2,892 | 3 | 377 | 25 | 5,480 | 184 | 35 | 30 | 550 | 570 | 1,023 | 61 | 1 | |
| Iodine or Iodine Containing Antiseptics | 941 | 853 | 177 | 39 | 65 | 490 | 1 | 69 | 12 | 707 | 71 | 15 | 51 | 192 | 145 | 157 | 19 | 0 | |
| Mercury Containing Antiseptics | 32 | 31 | 11 | 0 | 0 | 13 | 0 | 7 | 0 | 26 | 3 | 1 | 0 | 11 | 8 | 3 | 0 | 1 | |
| Methyl Salicylate | 5,215 | 5,107 | 3,527 | 234 | 140 | 975 | 6 | 204 | 21 | 4,883 | 73 | 17 | 129 | 516 | 995 | 724 | 32 | 3 | |
| Minoxidil, Topical | 186 | 178 | 65 | 5 | 2 | 86 | 0 | 19 | 1 | 145 | 7 | 1 | 24 | 45 | 37 | 22 | 14 | 1 | |
| Other Types of Rubefacient or Uniment (Excluding Camphor and Methyl Salicylate) | 3,207 | 3,147 | 2,190 | 76 | 63 | 674 | 4 | 125 | 15 | 2,892 | 34 | 8 | 209 | 205 | 510 | 480 | 26 | 1 | |
| Other Types of Topical Antiseptic | 2,010 | 1,943 | 900 | 91 | 70 | 744 | 6 | 121 | 11 | 1,811 | 69 | 13 | 48 | 274 | 328 | 240 | 26 | 2 | |
| Podophyllin | 55 | 54 | 16 | 3 | 2 | 32 | 0 | 1 | 0 | 43 | 5 | 0 | 6 | 15 | 7 | 8 | 5 | 0 | |
| Silver Nitrate | 97 | 77 | 22 | 0 | 16 | 30 | 1 | 7 | 1 | 68 | 3 | 0 | 6 | 17 | 14 | 12 | 6 | 0 | |
| Topical Steroids (Including Otic, Ophthalmic, and Dermal Preparations) | 8,463 | 8,238 | 4,390 | 619 | 204 | 2,479 | 17 | 483 | 46 | 8,098 | 37 | 8 | 83 | 191 | 1,122 | 300 | 13 | 1 | |
| Topical Steroids in Combination with Antibiotics (Including Otic, Ophthalmic, and Dermal Preparations) | 1,019 | 990 | 534 | 54 | 23 | 306 | 3 | 64 | 6 | 956 | 9 | 3 | 21 | 50 | 144 | 116 | 5 | 0 | |
| Wart Preparations and Other Keratolytics | 1,068 | 1,051 | 603 | 82 | 26 | 284 | 2 | 50 | 4 | 994 | 16 | 3 | 38 | 166 | 174 | 176 | 33 | 0 | |
| Category Total: | 64,202 | 62,512 | 44,322 | 2,154 | 1,463 | 11,988 | 116 | 2,069 | 200 | 60,659 | 746 | 143 | 874 | 4,201 | 9,953 | 5,469 | 379 | 23 | 0 |
| Unknown Drug | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Unknown Drug | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Unknown Drugs | 25,134 | 16,842 | 3,976 | 647 | 2,211 | 8,833 | 42 | 784 | 349 | 5,880 | 6,837 | 861 | 606 | 12,829 | 2,842 | 2,787 | 3,876 | 1,520 | |
| Category Total: | 25,134 | 16,842 | 3,976 | 647 | 2,211 | 8,833 | 42 | 784 | 349 | 5,880 | 6,837 | 861 | 606 | 12,829 | 2,842 | 2,787 | 3,876 | 1,520 | 160 |
| Veterinary Drugs | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Veterinary Drugs | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Veterinary Drugs without Human Equivalent | 5,090 | 4,621 | 1,105 | 82 | 114 | 2,801 | 1 | 487 | 31 | 4,519 | 46 | 6 | 41 | 412 | 954 | 414 | 59 | 3 | |
| Category Total: | 5,090 | 4,621 | 1,105 | 82 | 114 | 2,801 | 1 | 487 | 31 | 4,519 | 46 | 6 | 41 | 412 | 954 | 414 | 59 | 3 | 2 |
| Vitamins | | | | | | | | | | | | | | | | | | | |
| Miscellaneous Vitamins | | | | | | | | | | | | | | | | | | | |
| Other Types of Vitamin | 712 | 510 | 381 | 38 | 15 | 64 | 2 | 9 | 1 | 460 | 28 | 0 | 21 | 57 | 102 | 20 | 8 | 0 | |
| Unknown Types of Vitamin | 729 | 506 | 385 | 46 | 19 | 36 | 2 | 14 | 4 | 459 | 33 | 3 | 10 | 54 | 118 | 28 | 3 | 0 | |
| Multiple Vitamin Liquids: Adult Formulations | | | | | | | | | | | | | | | | | | | |
| Multiple Vitamin Liquids: Adult Formulations with Fluoride (No Iron) | 21 | 21 | 15 | 3 | 0 | 2 | 0 | 1 | 0 | 20 | 1 | 0 | 0 | 2 | 5 | 3 | 0 | 0 | |
| Multiple Vitamin Liquids: Adult Formulations with Iron (No Fluoride) | 222 | 179 | 106 | 13 | 5 | 49 | 0 | 6 | 0 | 153 | 7 | 1 | 18 | 18 | 29 | 12 | 3 | 0 | |
| Multiple Vitamin Liquids: Adult Formulations with Iron and Fluoride | 18 | 8 | 3 | 0 | 0 | 4 | 0 | 1 | 0 | 7 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | |
| Multiple Vitamin Liquids: Adult Formulations without Iron or Fluoride | 522 | 392 | 268 | 46 | 12 | 58 | 1 | 7 | 0 | 357 | 24 | 1 | 9 | 32 | 53 | 14 | 6 | 0 | |
| Multiple Vitamin Liquids: Pediatric Formulations | | | | | | | | | | | | | | | | | | | |
| Multiple Vitamin Liquids: Pediatric Formulations with Fluoride (No Iron) | 84 | 82 | 80 | 1 | 0 | 1 | 0 | 0 | 0 | 81 | 1 | 0 | 0 | 2 | 10 | 3 | 0 | 0 | |
| Multiple Vitamin Liquids: Pediatric Formulations without Iron (No Fluoride) | 478 | 452 | 430 | 16 | 0 | 4 | 1 | 1 | 0 | 448 | 1 | 0 | 3 | 29 | 91 | 11 | 1 | 0 | |

(continued)

Table 22B. Demographic profile of SINGLE SUBSTANCE pharmaceuticals exposure cases by generic category. – Continued.

| No. of Case Mentions | No. of Single Exposure | Age | | | | | | | Reason | | | | Treated in Health Care Facility | | | Outcome | | |
|----------------------|------------------------|---------|---------|---------|---------|---------------|---------------|-------------|---------|--------|--------|---------|---------------------------------|---------|----------|---------|-------|--|
| | | ≤5 | 6–12 | 13–19 | ≤20 | Unknown Child | Unknown Adult | Unknown Age | Unit | Int | Other | Adv Rxn | None | Minor | Moderate | Major | Death | |
| | | | | | | | | | | | | | | | | | | |
| 36 | 32 | 30 | 1 | 0 | 1 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 3 | 5 | 1 | 0 | 0 | |
| 899 | 832 | 695 | 114 | 9 | 9 | 2 | 0 | 801 | 26 | 0 | 4 | 37 | 128 | 16 | 2 | 0 | 0 | |
| 87 | 78 | 67 | 5 | 0 | 6 | 0 | 0 | 75 | 2 | 0 | 1 | 3 | 14 | 1 | 0 | 0 | 0 | |
| 4,827 | 3,848 | 2,947 | 119 | 121 | 575 | 1 | 77 | 3,611 | 157 | 2 | 74 | 366 | 805 | 156 | 13 | 0 | 0 | |
| 25 | 18 | 9 | 2 | 2 | 5 | 0 | 0 | 16 | 2 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | |
| 102 | 84 | 68 | 4 | 3 | 9 | 0 | 0 | 81 | 2 | 0 | 0 | 11 | 23 | 2 | 0 | 0 | 0 | |
| 8,030 | 6,535 | 4,829 | 778 | 244 | 580 | 10 | 79 | 6,083 | 344 | 3 | 88 | 419 | 1,295 | 196 | 17 | 1 | 0 | |
| 203 | 187 | 163 | 20 | 3 | 1 | 0 | 0 | 179 | 5 | 0 | 3 | 8 | 27 | 5 | 0 | 0 | 0 | |
| 3,999 | 3,747 | 3,316 | 330 | 34 | 56 | 3 | 6 | 3,659 | 76 | 0 | 11 | 310 | 744 | 228 | 16 | 0 | 0 | |
| 18 | 18 | 16 | 1 | 1 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 6 | 6 | 1 | 0 | 0 | 0 | |
| 21 | 19 | 14 | 5 | 0 | 0 | 0 | 0 | 18 | 1 | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | |
| 17,511 | 16,815 | 13,371 | 2,869 | 326 | 189 | 24 | 25 | 16,117 | 661 | 1 | 19 | 703 | 2,792 | 385 | 6 | 1 | 0 | |
| 12 | 12 | 7 | 2 | 0 | 3 | 0 | 0 | 12 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | |
| 806 | 581 | 420 | 18 | 21 | 98 | 0 | 23 | 540 | 34 | 0 | 7 | 62 | 105 | 19 | 3 | 0 | 0 | |
| 9 | 6 | 4 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 535 | 484 | 357 | 71 | 14 | 33 | 0 | 8 | 441 | 37 | 1 | 5 | 26 | 75 | 4 | 0 | 0 | 0 | |
| 12 | 12 | 10 | 2 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | |
| 82 | 77 | 70 | 4 | 1 | 2 | 0 | 0 | 75 | 2 | 0 | 0 | 9 | 17 | 3 | 0 | 0 | 0 | |
| 4 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | |
| 1,072 | 1,024 | 828 | 169 | 16 | 4 | 4 | 2 | 965 | 57 | 0 | 1 | 28 | 199 | 30 | 0 | 0 | 0 | |
| 5,411 | 3,616 | 2,895 | 210 | 83 | 354 | 5 | 60 | 3,408 | 125 | 1 | 79 | 264 | 632 | 61 | 6 | 0 | 0 | |
| 442 | 348 | 196 | 19 | 15 | 90 | 0 | 27 | 310 | 18 | 0 | 17 | 44 | 65 | 19 | 4 | 0 | 0 | |
| 1,002 | 792 | 248 | 20 | 20 | 397 | 1 | 42 | 405 | 150 | 1 | 232 | 227 | 71 | 255 | 61 | 1 | 0 | |
| 350 | 211 | 142 | 18 | 2 | 43 | 0 | 4 | 190 | 9 | 0 | 12 | 17 | 33 | 8 | 2 | 0 | 0 | |
| 1,516 | 1,001 | 728 | 95 | 27 | 124 | 0 | 24 | 910 | 55 | 2 | 32 | 63 | 153 | 44 | 7 | 0 | 0 | |
| 8,004 | 5,610 | 3,767 | 349 | 209 | 1,104 | 8 | 164 | 5,362 | 155 | 2 | 85 | 515 | 964 | 156 | 30 | 2 | 0 | |
| 724 | 489 | 348 | 38 | 15 | 67 | 0 | 19 | 449 | 22 | 0 | 17 | 28 | 78 | 15 | 1 | 0 | 0 | |
| 58,525 | 48,630 | 37,215 | 5,427 | 1,278 | 3,970 | 65 | 601 | 45,760 | 2,037 | 18 | 750 | 3,350 | 8,655 | 1,697 | 189 | 5 | 0 | |
| 1,462,902 | 894,994 | 399,856 | 58,530 | 90,969 | 312,479 | 970 | 27,417 | 642,005 | 211,374 | 3,725 | 28,242 | 308,365 | 183,920 | 114,110 | 72,553 | 12,641 | 1,058 | |
| 2,524,733 | 1,844,966 | 899,827 | 123,384 | 134,217 | 587,523 | 4,076 | 82,998 | 1,518,051 | 250,925 | 16,474 | 44,871 | 472,612 | 334,016 | 265,784 | 104,549 | 15,254 | 1,351 | |