Battery ingestion a growing risk for kids

NEW YORK – The rate of severe poisonings from battery ingestion among U.S. children has risen in the past 25 years, along with the growing use of lithium “button” batteries in a wide range of consumer products, new research shows.

The number of children who die or suffer serious injuries each year remains quite small, but such severe cases are accounting for a growing proportion of all button-battery poisonings, researchers report in the journal Pediatrics.

The findings underscore the importance of keeping the small, disc-shaped batteries out of children’s reach, say the investigators, led by Dr. Toby Litovitz of the National Capital Poison Center in Washington, D.C.

Between 1985 and 2009, U.S. poison-control centers received 59,535 reports of button-battery ingestion. The yearly incidence rates fluctuated, with no pattern of an increase over time.

However, the rate of severe poisonings clearly rose, Litovitz and his colleagues found.

From 1985 through 1987, just 0.06 percent of button-battery ingestions were fatal or had “major” complications — mainly damage to the esophagus that often required surgery and led to prolonged problems with breathing and eating.
That figure increased nearly seven-fold by the three-year period from 2007 to 2009, when 0.44 percent of all button-battery swallowings proved fatal or severe.

Children younger than 4 were the most frequent victims, and in nearly all cases of severe complications, a particular type of button battery — the 20-millimeter lithium cell — was to blame.

Button batteries are used in a wide variety of products, including cameras, remote controls, watches, hearing aids, toys and even musical greeting cards. Compared with other types of button batteries, 20-mm lithium cells are larger (about the size of a nickel) and more apt to become lodged in the esophagus if swallowed.

Once stuck in the esophagus (the tube through which food passes), the lithium battery creates an electrical current that burns the tissue surrounding it. In contrast, batteries that make it through the esophagus usually move harmlessly through the digestive tract until they are passed.

The current study found that in the majority of fatal or severe injuries, no one had seen the child swallow the battery. And because the symptoms of poisoning are non-specific — such as fever, vomiting, poor appetite and lethargy — doctors often initially misdiagnosed the problem.

To further investigate the circumstances surrounding severe cases of battery poisoning, Litovitz and his colleagues combed through reports to the National Battery Ingestion Hotline and cases published in the medical literature. They identified 13 fatal and 73 serious battery poisonings that occurred between 1977 and 2009.

Of the 13 fatalities, nine occurred between 2004 and 2009, the researchers found. And of all fatal or severe poisonings from 2000 onward, 92 percent of the batteries identified were 20-mm lithium cells.

The fact that these poisonings can be difficult to diagnose underscores the importance of prevention, according to Litovitz and his colleagues.

They warn parents to keep not only loose batteries out of children’s reach, but also the household products that contain the batteries. In about 62 percent of cases where a young child swallowed a button battery, the child fished the battery out of a household item.

For an additional barrier, the researchers advise parents to place strong tape over the battery compartment of all household products.

They urge extra caution with any 20-mm lithium cell batteries, which can be recognized by their imprint codes — usually CR2032, CR2025 or CR2016.

The researchers also call on manufacturers of the variety of products that use button batteries to redesign the battery compartments — both so that a young child cannot open them, and so they do not spontaneously open if the product is dropped.

“The popular belief that only toys need to be safe for children is ill-construed,” the researchers write.
Name - required

Email - required, never published

Website

Comment

Post

Recent Press Releases

- Popular
- Latest
- Comments
- Topics

- Woman attacked, dog killed in Skokie park
  With 11 comments since 2010-05-11 16:17:05
- National tea party plans May 29 rally in Arizona
  With 11 comments since 2010-05-21 18:55:24
- Jobless claims down again
  With 9 comments since 2010-05-06 10:10:25
- Metra Executive Director Phil Pagano accused of giving himself unauthorized $56,000 bonus
  With 7 comments since 2010-04-28 21:48:35
- Statement by Thaksin Shinawatra on Thai Political Crisis
  With 6 comments since 2010-05-20 06:18:19
- In a Rare Interview, Minister Louis Farrakhan Discusses the Nation's First Black President, Inner-City Crime, Blacks and HIV/AIDS, Post-Racial America and Interracial Relationships on TV One on One with Cathy Hughes
  With 5 comments since 2010-04-27 13:26:12
- IL: ShoreBank scrambles for needed cash
  With 4 comments since 2010-05-17 08:27:29
IBEW, Local 134 Sues Communications Contractor for Employee Misclassification Violations
With 3 comments since 2010-04-27 18:35:16

Lisa Wilson-Foley, Candidate for Lieutenant Governor, Hosts 15 Kenyan Entrepreneurs
With 3 comments since 2010-04-30 06:26:44

The American Legion says Definitive Agent Orange Action is "Long Overdue"
With 3 comments since 2010-05-06 08:34:40

Henin wins 1st match in 3 years at French Open (AP)
Tuesday, May 25, 2010 12:45 - 0 Comments

North Korea threatens action against South, severs ties
Tuesday, May 25, 2010 12:35 - 0 Comments

BP prepares for 'top kill'
Tuesday, May 25, 2010 12:35 - 0 Comments

AP names 9 winners of annual Gramling Awards
Tuesday, May 25, 2010 12:23 - 0 Comments

Rebab possible soon for New Trier hit-run victim
Tuesday, May 25, 2010 12:14 - 0 Comments

U2 cancels summer tour, Chicago show
Tuesday, May 25, 2010 12:13 - 0 Comments

When your foul smell is all in your head
Tuesday, May 25, 2010 12:01 - 0 Comments

15 best age-erasing superfoods
Tuesday, May 25, 2010 11:51 - 0 Comments

Top sunscreens? Consumer Reports ranks best
Tuesday, May 25, 2010 11:51 - 0 Comments

Reportlinker Adds The Top 10 Pharmaceutical Companies in Latin America: Growth Performance, Strategies and SWOT Analysis
Tuesday, May 25, 2010 11:51 - 0 Comments

Hispanic from az took the words out of my mouth. People need to stop being so se...
Said Get illegals out of AZ on 2010-05-25 12:42:49

I tend to agree with tom7001. This was Rubio's race to loose. He seems to be doi...
Said Clearbrook on 2010-05-25 12:26:36

With the disclosures of Rubio's tax forms, its obvious Rubio sold out his positi...
Said tom7001 on 2010-05-25 09:52:07

here is a video of the awards ceremony, winner announcement and speech from the ...
Said peter on 2010-05-24 20:17:04

Public service???? Increasing class size is not a service to the public!...
Said AADO on 2010-05-24 16:18:45

Thank you for your truthful comments regarding the status of our country and the...
Said TEA Bagger from OK on 2010-05-24 08:08:51

hello,i'd like to know more about programm,wich is big opportunity for me. I'd li...
Said kamshat turekulova on 2010-05-24 06:57:22

As years has passed us by, and each Vet falls another and than another, the DVA ...
Said Steve Marion on 2010-05-24 05:27:09

It is interesting how little is still understood about those patriots who have s...
Said DesertCactus on 2010-05-24 03:50:53

As-Salaam-Alaikum, It is crystal clear to those of us who are firmly connecte...
Said Jihad Rasheed Shabazz on 2010-05-24 01:16:22

california oil medical public transportation Entertainment olympics management FBI energy 2009 gnom
Consumer confidence rises in May (AP)
Tuesday, May 25, 2010 10:06 - 0 Comments

Home prices drop 0.5 pct. from February to March (AP)
Tuesday, May 25, 2010 8:48 - 0 Comments

Stocks plummet on economic worries (AP)
Tuesday, May 25, 2010 8:48 - 0 Comments

Medtronic 4Q net income surges, revenue rises (AP)
Tuesday, May 25, 2010 7:30 - 0 Comments

BP had a key role in the Exxon Valdez disaster (AP)
Tuesday, May 25, 2010 5:31 - 0 Comments
‘Sick’ outlook

More In Entertainment

- ‘Law & Order’: How can we miss you if you never go away?
  Tuesday, May 25, 2010 11:39 - 0 Comments
- Jesse James: the baby brought us closer
  Tuesday, May 25, 2010 11:39 - 0 Comments
- ‘SATC’ movie too racy for one city
  Tuesday, May 25, 2010 10:30 - 0 Comments
- Autopsy today on Slipknot bassist
  Tuesday, May 25, 2010 2:24 - 0 Comments
- Slipknot bassist found dead in Iowa hotel room
  Monday, May 24, 2010 17:55 - 0 Comments

Florida’s Crist pulls ahead in latest Senate poll

More In Politics

- 63% Favor Repeal of National Health Care Plan
  Tuesday, May 25, 2010 8:48 - 0 Comments
- Kentucky GOP urges Rand Paul to avoid national spotlight
  Tuesday, May 25, 2010 8:48 - 0 Comments
- ‘Don’t ask, don’t tell’ repeal vote expected soon (AP)
  Tuesday, May 25, 2010 8:47 - 0 Comments
- W.H. takes heat over spill response (Politico)
  Tuesday, May 25, 2010 8:35 - 0 Comments
- IL: Quinn analyzing McCormick Place reform legislation
  Tuesday, May 25, 2010 8:23 - 0 Comments