Tiny Batteries a Rising Risk for Children

CDC: Swallowed 'Button' Batteries Can Cause Harm, Even Death

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WebMD Health News

Aug. 30, 2012 -- Children and batteries are a dangerous and increasingly common combination, according to a new CDC report. In 1998, while battery-related injuries sent 1,900 children to the emergency room, 4,800 cases were reported in 2010.

Overall, more than 40,000 children were admitted to ERs nationwide between 1997 and 2010. Almost three quarters of them were 4 years old or younger. One in 10 children required hospitalization; 14 of them died.

The CDC singled out button batteries as the most potentially harmful type of battery for young children. These are the round battery-sized batteries often used to power watches, hearing aids, and other small devices. They are easy to swallow and can get stuck in the esophagus, leading to serious injury or death.

Twelve of the 14 deaths were attributed to button batteries; the remaining two deaths also likely involved them.

“This information is consistent with recent reports showing an increase in severe or fatal outcomes with button battery ingestions from 1985 to 2009,” write the authors of the report.

The data, primarily from the National Electronic Injury Surveillance System, were collected and analyzed by the federal Consumer Product Safety Commission (CPSC). That agency, the report states, “is urging the electronics industry and battery manufacturers to develop warnings and industry standards to prevent serious injuries and deaths from button batteries.”

Potentially Fatal Complications

Swallowed batteries may pass through the intestines and safely out of the body. However, they often get lodged in the esophagus. When that happens, a buildup of the chemical hydroxide may occur, causing dangerous burns within a couple of hours. Batteries stuck in the throat may also leak alkaline electrolyte, a corrosive chemical.

Even if the battery does not leak, it can cause harm. Direct pressure can cut off blood flow to the area where the battery is stuck, leading to tissue death.

The symptoms of battery ingestion include vomiting, abdominal pain, fever, and diarrhea, as well as difficulty breathing and swallowing. Such symptoms, which can be attributed to numerous causes, make it difficult to diagnose battery ingestion quickly. This is especially true, the report’s authors point out, when a child swallows a battery when no one is around to see them do it.

“Another complicating factor arises when incidents are not witnessed or the diagnosis or treatment of battery ingestion is delayed, as it was in at least nine of the 14 fatal cases,” the report states. “It is also important to recognize that children might
be reluctant or unable to say that they ingested a battery or gave one to a sibling.”

Safety Measures

Battery safety standards for children’s toys are dictated by law. All batteries must be inaccessible in toys designed for children under age 3, while toys for kids under 12 must make inaccessible batteries under a certain size.

At least three of the deaths noted in the report were caused by batteries from devices not meant for children, including a remote car alarm, a garage door opener, and a radio remote control. A new law being considered by Congress may require child-proofing for button battery enclosures on all consumer products.

“Parents and caregivers should be aware of the potential hazards associated with battery exposure (particularly ingestion of button batteries) and ensure that products containing them are either kept away from children or that the batteries are securely in the product,” the report’s authors conclude.

If a child swallows a battery, the CPSC advises that you immediately contact your local poison control center, your family doctor, or the 24-hour National Battery Ingestion Hotline at 202-625-3333.

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