news@JAMA

HOME > EMERGENCY MEDICINE > CHILD INJURIES AND DEATHS FROM BUTTON BATTERIES INCREASING

Child Injuries and Deaths From Button Batteries Increasing

BY BRIDGET M. KUEHN on AUGUST 31, 2012

The proliferation of products powered by small, button-sized batteries is resulting in increasing numbers of children ending up in the emergency department because of injuries caused by exposure to these batteries. This finding was **published** in the August 31 issue of the US Centers for Disease Control and Prevention's (CDC's) *Morbidity and Mortality Weekly Report*.

Batteries and the caustic acids within them have long posed a threat to young children, who may put them in their mouths and swallow them. But, the reports notes, as use of small coin- or button-sized batteries in such products as watches, remote controls, toys, and some children's jewelry has grown, so has the number of battery-related injuries in children.



Button batteries may pose serious threats to young children who may ingest them, according to an analysis that found such injuries are becoming more prevalent. Image: iStockphoto.com/design56

To assess the prevalence of such injuries, the researchers from the US Consumer Product Safety Commission and the CDC analyzed data from the National Electronic Injury Surveillance System between 1997 and 2010. During that period, 40 400 children younger than 13 years—three-quarters of them younger than 4 years—were treated in emergency departments for battery-related injuries. There was a 2.5-fold increase between 1997 and 2010, from 1900 cases to 4800 cases.

Button batteries were implicated in nearly two-thirds of the cases in which battery type was identified. Although in most cases, children were treated and released, the researchers identified 14 cases that resulted in death. Button batteries were implicated in the 12 fatalities in which battery type was reported. These small batteries are of particular concern because they are easy to ingest and may become lodged in the child's esophagus, which can cause serious burns within 2 hours. This can lead to nonspecific symptoms such as vomiting, abdominal pain, fever, respiratory distress, and difficulty swallowing. In fact, in 4 of the fatal cases, children were misdiagnosed and released.

"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 secured safely in the product," the authors said.

٠.