

Button-cell battery dangers: Dr. Toby Litovitz

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Toby Litovitz, M.D. is a Washington, D.C. physician who has made it her mission to advocate for battery safety. How did she get interested in that? "Happstance," she says.

In 1980, Dr. Litovitz was a junior faculty member at Georgetown University's Medical Center, when she took on the task of running the regional poison control center for the Washington, DC area. About a year later, she was presented with her first case of a child who had swallowed a button-cell battery. The medical literature at that time listed two fatalities. Seeking more data, she started a registry for battery ingestion incidents.

Since then, Dr. Litovitz has been collecting and analyzing incident-report data through the [National Battery Ingestion Hotline](#). Her analyses have revealed that incidents related to button-cell batteries resulting in severe injuries and fatalities have increased sevenfold since 1985. Most of the serious incidents were reported in children under four who got to the batteries in products such as remote controls, games, toys, and calculators.

In the past five years, Dr. Litovitz has seen a "very dramatic shift" in the severity of button battery ingestions. By far the most dangerous type is a 20 mm lithium battery. While small batteries may pass through the digestive system leaving a child unharmed, those larger-diameter lithium batteries are more likely to get stuck in the esophagus. And the lithium button battery has a greater voltage, creating more current, and faster.

Here's what can happen. A young child is playing with a remote, gets a 20 mm lithium battery loose, and swallows it. No one sees the child swallow the battery. The child may then have non-specific symptoms that run the gamut from not eating, vomiting, drooling, hoarseness, cough, fever, or respiratory symptoms. The battery burns holes [insert link to our blog with holes burned in ham], requiring surgical repairs to the esophagus and trachea. Dr. Litovitz told me about heart-wrenching cases of children bleeding to death days after batteries they had swallowed were finally discovered and removed. The batteries can also cause nerve damage and paralyze the vocal cords. Some children will need feeding tubes and breathing tubes for the rest of their lives.

Dr. Litovitz wants parents and caregivers to know that these batteries are out there and can be anywhere and everywhere in your home: digital thermometers, calculators, watches, telephones, cameras, garage door openers, key fobs, glucose meters, dog collars that work with invisible fences, shoes that light up, toothbrushes, musical greeting cards and "flameless" candles. Dr. Litovitz said that remote controls lead the list of products children get into with the most dangerous size—20 mm lithium—batteries.

Parental diligence, while certainly crucial, is not the only answer. Dr. Litovitz believes that industry must make changes to the way products are designed: all products that contain these [button-cell batteries](#) (not just those made for children) should have their battery compartments secured shut with screws. "A battery-operated item may seem secure, but kids will play with it until it becomes loose," notes Dr. Litovitz.

If you have the slightest suspicion that a child in your care may have swallowed a button-cell battery, get him or her to the ER immediately for an X-ray.

While young children are most likely to swallow batteries, because they like putting things in their mouths, older kids and even adults are not immune. Dr. Litovitz told me that adults have swallowed batteries they've put in their mouth to check the charge or to hold it while they are doing something else with their hands. She advises against putting batteries in the mouth for any reason.

Read more: [CPSC issues new warning on button batteries](#)

[Safety alert: button batteries](#)

[Deadly batteries that are cute as a button](#)

—Desiree Ferenczi

