

# What common danger do Rock Star Elmo, TV remote pose to kids? Button batteries

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From rock star Elmo to remote control cars and even board games, batteries are required to operate almost any toy. While some call for standard batteries like AA, C or D sizes, some use button or disc batteries, which can cause extreme harm if swallowed by children.

These tiny batteries are common in toys, but they're also present in a multitude of household devices like remote controls, calculators, handheld games, books and even musical greeting cards.

"To a child, these small batteries may look like candy," said Dr. Ivan Daniel, pediatrician, Aldine Health Center, part of the Harris County Hospital District and assistant professor, Pediatrics, University of Texas Health Science Center at Houston. "If swallowed, they can trigger a storm of major medical complications, sometimes ending in death if not treated and removed in time."

According to the National Poison Data System, studies show that up to 2.7 percent of all button batteries result in serious medical problems, with most problems caused by batteries 20 mm or more in diameter. In children, the majority of ingestions happen in those younger than six, with the highest rate between one to two years old.

The injuries are produced by electrical discharge, destruction of the tissues from battery pressure or leakage of the battery contents. While some swallowed batteries may pass through the system and are eliminated in a few days, others can get stuck in the child's esophagus.

Dire consequences may include: esophageal burns; fistulas (abnormal connections between the digestive tract and airways or blood vessels); perforations of the esophagus, stomach or gut; spillage of the battery content in the chest or abdomen; and poisoning with heavy metals, such as mercury.

Although some of the ingestions are observed, frequently they may go unnoticed. Dr. Ivan says a child who was previously in good health and all of a sudden has pain swallowing, refuses to drink, drools, coughs, vomits or has chest pain, nausea, diarrhea, stomach pain or fever could raise the question of possible ingestion of a foreign body.

If parents suspect their child swallowed a button battery:

- Call the National Battery Ingestion Hotline at 202-625-3333 or Poison Control Center at 1-800-222-1222
- Provide information about the battery type and size, if available
- Avoid inducing vomiting since this may bring the battery back from the stomach into the esophagus. Do not give the child any food or drinks.
- Take the child to an emergency room, since in most cases X-rays are needed to identify the position of the battery in the body.
- If fever, abdominal pain, vomiting or blood in the stool develop after the ER visit, report symptoms immediately.
- If directed by a physician after an ER exam, check the bowel movements until the battery has passed.

"Prevention through education is a better alternative than treatment," says Dr. Ivan.

Caregivers should:

- Properly dispose the used batteries.
- Secure the battery compartment so that a tool is required to open them.
- Improve the integrity of the seal area of button batteries.
- Avoid using devices that use batteries greater than 15 mm in diameter.
- Avoid letting children play or manipulate devices containing disc batteries, which can easily be removed/dislocated.