



A Cup of Health with CDC

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Gastrointestinal Injuries from Magnet Ingestion in Children – United States, 2003-2006

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

[Matthew Reynolds] Welcome to *A Cup of Health with CDC*, a weekly broadcast of MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Matthew Reynolds. It's a predictable childhood hazard – children swallowing something that was never meant to be eaten. Many caregivers have been taught that if objects are small, smooth, and intact, they usually will pass through a child's digestive system without health consequences. But since 2003, the Consumer Product Safety Commission has identified one death and 19 cases of serious injury caused by swallowing small, powerful magnets – the kind found in many toys and common household items. These magnets present a special hazard because one swallowed magnet can attach itself to another, or to any swallowed metal object, and trap tissues or obstruct the digestive system.

Here to discuss the unique risks faced when children swallow magnets is Dr. Julie Gilchrist of CDC's Division of Unintentional Injury Prevention. It's great to have you here today, Dr. Gilchrist.

[Dr. Gilchrist] Thank you, Matthew.

[Matthew Reynolds] Dr. Gilchrist, why do children swallow non-food objects?

[Dr. Gilchrist] Infants and toddlers commonly mouth objects as a way to explore their world. If what they put in their mouth is small enough, it can easily be swallowed unintentionally. Of course, if they think the object looks like candy, they'll swallow it on purpose! Because of this, many parents and caregivers are careful about the size of objects that small children play with and what may be left within easy reach. They want to avoid the danger of choking. While parents don't think of older children in terms of this kind of risk, the fact is that sometimes older children use their teeth to pry things apart and can swallow an object or a piece of it unintentionally. Or they may swallow something on a dare or as an experiment. Most objects, if small enough and smooth enough, will pass through a child's digestive system without causing any health problems.

[Matthew Reynolds] So why are magnets different?

[Dr. Gilchrist] Magnets pose a unique hazard. An individual magnet may be small enough to pass through the digestive tract, but if a child swallows more than one, or a magnet and another metal object, they can attach to each other across intestinal walls, causing obstructions or perforations, or holes. If tissues, like bowel walls, become trapped between the magnets or objects, the blood supply to the bowel can be

damaged and result in holes in the bowel or even dead sections. Once magnetically attached, these objects aren't likely to come apart without medical help or even surgery. The situation is particularly dangerous because the initial signs and symptoms – vomiting or a painful abdomen, for example – are often thought to be a minor upset stomach or other common illness not likely to need medical intervention. This can then result in delayed diagnosis and a more severe injury.

[Matthew Reynolds] Where are children getting these magnets?

[Dr. Gilchrist] These powerful rare-earth magnets have become less expensive to produce and they're now found in many common household items. They are also found in many children's toys, such as magnetic building sets and magnetic beads or jewelry.

[Matthew Reynolds] You mentioned some of the injuries that can result from swallowing magnets. How serious can these injuries be?

[Dr. Gilchrist] Since 2003, the U.S. Consumer Product Safety Commission has identified one death caused by swallowed magnets, and 19 children, from ages 10 months to 11 years, who needed surgery to repair the injuries caused by swallowed magnets and other metal objects.

[Matthew Reynolds] What should parents do to protect their children?

[Dr. Gilchrist] Parents should make every effort to keep magnets and magnetic toys away from children under six. If an older child has access to magnets, parents should explain the unusual risk that can result from swallowing them. Two different manufacturers, in cooperation with the US Consumer Product Safety Commission, have released voluntary recalls of several magnetic toys. Parents should check the web site, at www.cpsc.gov, to find out if any of their children's toys have been recalled. The recalls include instructions for consumers who have the products.

[Matthew Reynolds] What do health care providers need to know?

[Dr. Gilchrist] Health care providers must understand the potential complications faced by children who swallow magnets. When patients have prolonged symptoms of abdominal pain or vomiting, or when swallowed objects are seen on x-ray, the possibility that magnets have been swallowed must be considered. Remember, magnets and other objects which have trapped tissue between them are not likely to pass through the digestive tract on their own. Surgery is often required to remove them and repair any damage.

[Matthew Reynolds] Well thanks Dr. Gilchrist, for taking the time to talk with us today.

[Dr. Gilchrist] It was my pleasure.

[Matthew Reynolds] Well that's it for this week's show. Don't forget to join us next week. Until then, be well. This is Matthew Reynolds for *A Cup of Health with CDC*.

[Announcer] To access the most accurate and relevant health information that affects you, your family, and your community, please visit www.cdc.gov.