

## More kids injured by tiny magnets after sales ban was lifted

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(HealthDay)—Small, powerful magnets in toys like Buckyballs building



sets and jewelry kits are causing an alarming number of serious pediatric injuries in the United States, new research warns.

Analyzing national data, researchers found an 80% rise in these injuries to children from 2016 to 2019, following the repeal of a sales ban on the magnets by a <u>federal court</u>.

When these small rare earth magnets are swallowed, the potential for serious gastrointestinal injury is high, noted study lead author Dr. Michael Flaherty.

Cases are popping up all over the United States, according to a recent report from *NBC News*. In Indiana, a 4-year-old boy was rushed to surgery after swallowing 27 magnetized balls; one 2-year-old girl in Illinois needed her appendix removed in December after swallowing five of the balls; and in 2018, a Wisconsin 4-year-old needed part of his colon, intestine and appendix removed after swallowing 13 magnetic balls, the network reported.

More recently, 6-year-old Cameron Moreau, of New Jersey, landed in the hospital with eight perforations to his colon after swallowing magnets from a toy he got for his birthday. Two of the holes were so close together surgeons had to remove a portion of the colon, *NBC News* said.

The magnets are made of neodymium, said Flaherty, a pediatric critical care physician at MassGeneral Hospital for Children in Boston.

The magnets come in circular, rectangular, cylindrical or cubed form, and range from BB-pellet size to roughly 0.10 to 0.25 inches (3 to 6 mm).

They're also "five to 10 times more powerful than traditional ferrite magnets," said Flaherty, "and were initially intended for commercial



applications."

But over time they've come to be included in a wide variety of "entertainment products," Flaherty noted. "Many products now carry warnings to keep away from children, but the small size of the magnets and their inclusion in sets composed of many small magnets make them easily accessible to young children, even if purchased by an adult."

The harm can be considerable when a child ingests two of these magnets, or a magnet with another metal object, Flaherty explained. "This can lead to bowel walls becoming attached and kinked, leading to catastrophic bowel injury and/or death," he said.

In 2012, the U.S. Consumer Product Safety Commission (CPSC) took steps to limit their sale with voluntary recalls and safety standards. That effort culminated with a prohibition in 2014. But in 2016 a federal court determined that the commission had overstepped its bounds, and the ban was overturned.

For this study, Flaherty and his colleagues reviewed almost 37,000 emergency department visits that took place between 2009 and 2019 by kids under 18 years of age who had swallowed an object. Data was compiled from the U.S. National Electronic Injury Surveillance System.

Just over 1,400 of the visits involved magnet ingestion or inhalation, with about 850 occurring in children younger than 6 years of age. (All magnet ingestions were included; rare earth magnets could not be separated out.)

The investigators found that between 2012 and 2016—when protection efforts were underway—pediatric emergency department visits stemming from magnet ingestions dropped significantly (from 3.58 per 100,000 persons to 2.83 per 100,000). But from 2016 to 2019—after the



protections were thrown out of court—magnet ingestions jumped to 5.16 per 100,000, an increase of more than 80%.

"Products with [small rare earth magnets] really should not be in any home with children under 14," Flaherty said. "The significant reduction in ER visits associated with the CPSC's initial ban indicate that further federal action is necessary, and that industry standards should be revisited."

His advice: "As the holiday season approaches, product-related hazards such as these magnets become even more of an important issue. Parents should always read labels carefully before buying any toys or sets for their children or home, to ensure they are age appropriate. And consult the CPSC website to check on recent toy recalls."

Parents must be vigilant, another expert agreed.

"The problem is that a small child is a natural detective, always discovering and looking at things," said Anthony Green, chief advocacy and network officer for Safe Kids Worldwide in Washington, D.C.

"And the tools of investigation for a child are their fingers and their mouth," Green said. "It can be <u>button batteries</u>, liquid laundry packets, medications that look like candy, or rare earth magnets. And that issue has been aggravated by COVID-19, where everyone's at home and parents are trying to juggle both caregiving and work."

In the absence of a ban, Safe Kids is trying to promote awareness of the issue, he said. Meanwhile, Green added, "what a parent can and should do is really survey their house, and identify where <u>children</u> go in the house, to look for dangers that could expose a child to these magnets and serious injury."



The study was published in the Nov. 24 issue of the *Journal of the American Medical Association*.

**More information:** There's more on magnet safety at the <u>U.S.</u> <u>Consumer Product Safety Commission</u>.

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