

Residency Corner: High-Powered Magnets Safety and Upcoming Day of Action

By Robert W. Hateley, MD

On May 19th, 2021, the organization Trainees For Childhood Injury Prevention (T4CIP) will be promoting a national Day of Action surrounding high-powered magnets safety and the serious harm they pose. These small rare-earth magnets are powerful and easily ingested or inhaled, therefore representing a dangerous and potentially fatal health hazard to children of all ages. The U.S. Consumer Safety Commission banned these types of magnets in 2012, until a federal court decision returned them to store shelves in 2016. The purpose of this promoted Day of Action is to simultaneously generate social media traffic across Facebook, Instagram, and Twitter in order to raise awareness and build a national conversation around this safety issue. According to a study published by the Pediatric Journal of Gastroenterology and Nutrition, since the rare-earth magnet ban was revoked in 2016, there has been a 32% per year on average increase ($P < 0.001$) in total magnet ingestions according to an analysis of U.S. Emergency Department visits.[1] This is significant, both statistically and practically, as it demonstrates that the ban from 2012-2016 was effective, and its lifting triggered a sharp increase in harm to children (Figure).

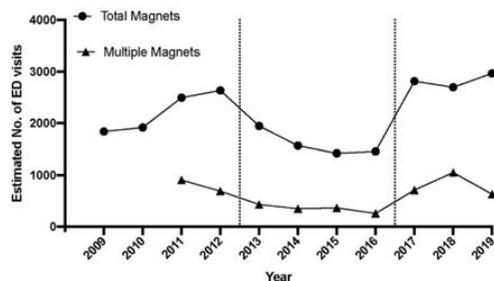


Figure. Number of ED visits for magnet ingestions over time, with vertical lines indicating the period of magnet ban (2012-2016).

Given the overwhelming support of the data uncovered by studies such as this one, it is important to use our voices as physicians and patient advocates to help move the political needle back in the direction toward patient safety. Please join us on May 19, 2021 by sharing the social media materials attached at the end of this article, and by talking to your patients and their families about #MagnetSafety.

References:

[1] Reeves PT, Rudolph B, Nylund CM. Magnet Ingestions in Children Presenting to Emergency Departments in the United States 2009-2019: A Problem in Flux. *J Pediatr Gastroenterol Nutr.* 2020;71(6):699-703.



Robert Hateley is a current second year pediatric resident at Harbor-UCLA Medical Center in Torrance, CA. He received his undergraduate degree in Biology from the University of California, Santa Barbara. He attended medical school at the University of California, Irvine. He plans to apply for PICU fellowships this summer. Some of his advocacy and research interests include state and national health care policy, childhood mental health, ICU delirium, and post-PICU discharge care. In his free time, he enjoys yoga, cycling, and kayaking, as well as spending time with his husband and their three cats.

Social Media Materials [#MagnetSafety]



What can parents do to prevent high-powered magnet injuries?

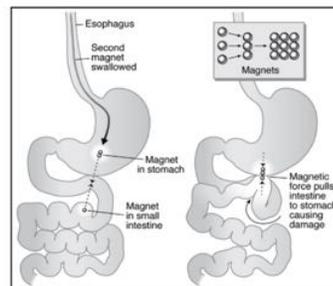
- Keep magnets out of the home
- Educate your children and teens about the risks of swallowing these magnets
- If your toddler or child swallows high-powered magnets, go to the emergency department right away



#MagnetSafety



High-powered magnets will attract to each other across tissue, cutting off blood supply and causing serious tissue damage.



NASPGHAN (2019). Warning! SWALLOWED MAGNETS ARE DANGEROUS. <https://naspghan.org/advocacy/top-issues/foreign-body-ingestions/>

#MagnetSafety



What are high-powered magnets?

- Rare earth metals
- Sold in sets of hundreds
- Desk toys or novelty items
- Small (less than 5mm)
- Shiny
- Powerful: 5-30x stronger than refrigerator magnets



#MagnetSafety



"There's **no safe way** to have high-powered magnets in a home with kids."
Bryan Rudolph, MD, MPH
@Dr_BryanRudolph



#MagnetSafety