

## Magnetic toys

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Toys containing small magnets (3–8 mm) carry the risk of ingestion or aspiration. If more than one is swallowed, these magnets may connect together from within different segments of the bowel, causing intestinal perforations or obstructions and requiring surgical removal. In 2006, multiple magnet ingestion resulted in the death of a 20-month-old boy in the United States. Since then, hundreds of reports of magnets coming loose from toys were made to the United States Consumer Product Safety Commission and to manufacturers, and approximately 30 more intestinal injuries were identified in the U.S. This led to the North American recall of more than 12 million magnetic toy sets, including Magnetix™ and Polly Pocket™ toys. As well, a number of lawsuits and claims were filed against Magnetix™. Health Canada posted advisories about these toys in June and November 2006.

Although injury and death from these toys have been documented in the U.S., it is unknown whether Canadian health care providers have seen cases of multiple magnet ingestions and whether they are aware of the potential complications. The purpose of this study was to document Canadian data, using a one-time CPSP survey. The goal of the survey was to describe Canadian health care providers' awareness of the risks of multiple magnet ingestion and to describe the number, nature and severity of ingestions reported by participants.

In August 2007, a one-time survey was sent to 2,437 CPSP participants. There were 983 (40%) respondents and among these, 597 (61%) were aware of the complications of multiple magnet ingestion. Of the participants who were aware of the complications, 49% identified the media as one of their information sources. Clinical experience and Health Canada advisories were identified as information sources, by 26% and 25%, respectively. There were 20 (2%) respondents who had seen multiple magnet ingestions in the preceding year. The majority (88%) of ingestions were seen in children three years and younger. There was wide variability in the products involved and only one multiple magnet ingestion was identified as being caused by a toy that had been recalled. Complications seen varied from none (n=6) to bowel perforation (n=1) and obstruction (n=1). Management varied from observation only (n=5) to endoscopy (n=8), laparotomy (n=4) and admission to the ICU (n=2).

These data document that multiple magnet ingestions are being seen in the Canadian paediatric population, and that these ingestions result in significant morbidity and often require invasive management. With only 61% of respondents being aware of the complications of these ingestions, more effort must be put into educating paediatricians about this hazard.

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