Consumer Federation of America

Office of the Secretary
Consumer Product Safety Commission
Room 502
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Bethesda, Maryland 20814
Via: www.regulations.gov

November 15, 2012

Comments of Consumer Federation of America to the U.S. Consumer Product Safety Commission on
"Safety Standard for Magnet Sets, Notice of Proposed Rulemaking,"
Docket No. CPSC–2012-0050

I. Introduction

Consumer Federation of America (CFA) submits the following comments to the U.S. Consumer Product Safety Commission ("CPSC" or "Commission") in the above-referenced matter. [1]

CFA agrees with the CPSC's preliminary determination that there is an unreasonable risk of injury associated with children ingesting high powered magnets that are part of magnet sets. Data from the CPSC as well as from pediatric gastroenterologists across the country has documented the serious medical consequences that occur as a result of a child ingesting such high powered magnets. The unique properties of these magnets cause serious life threatening injuries when a child ingests two or more magnets. These injuries are vastly different from and more serious than those that occur from the ingestion of other small parts.

In the Notice of Proposed Rulemaking, the Commission proposes safety standards for magnet sets. The safety standard proposed would prohibit current magnet sets. The proposed rule would require magnets that fit into the small parts cylinder to have a flux density of 50 or less or they would be prohibited. Our comments support this proposed standard and respond to numerous questions raised in the federal register notice.

II. Background

The hazards of powerful rare earth magnets first emerged in the mid 2000's when toy building and construction sets containing these powerful magnets entered the marketplace. The magnets were so strong that they broke out of and detached from the plastic that contained the magnets. Injuries occurred when children swallowed more than one of these powerful magnets that had separated from the plastic toys and a number of incidents involved children swallowing the toy

[1] Safety Standard for Magnet Sets, Notice of Proposed Rulemaking. Federal Register, Vol. 77, No.171, (September 4, 2012).

part that contained the magnet. Due to this defect and to the resulting serious injuries, the CPSC conducted numerous recalls of these toys in 2007 and 2008.[2]
These incidents clarified the seriousness of the injuries that occur when these magnets attract each other inside a child's body. These magnets attract across tissue within the stomach, bowel and small and large intestines causing holes, blockages, and killing tissue caught between the magnets. Such injuries are difficult to diagnose and can be fatal if not treated immediately.

As a result of this alarming trend, CPSC and consumer advocates worked with ASTM and representatives of the toy industry and testing lab community to develop a voluntary toy standard upon which CPSC's proposed rule is based.

III. Discussion & Recommendations

A. The Risk of Serious Injury caused by Magnets in Magnet Sets

CPSC's proposed rule accurately describes the serious injuries caused by ingestion of magnets from magnet sets, which can be very grave and potentially life threatening.

When more than one magnet from a magnet set is ingested, the magnetic force of the magnets pulls the magnets together. The magnets trap tissue between them such as tissue from the intestinal wall, esophageal tissue, and other digestive tissue. This tissue, when essentially caught between the magnetic force of numerous magnets, is damaged. Such damage could entail a tear or perforation, death of the tissue, or could create a fistula. This damage results in a serious injury or death. The longer the damage is not identified and remedied, the more serious and acute the injury.

The most common intervention for high-powered magnet ingestion is surgical repair of a perforation and/or fistula. In cases where bowel resection is required, the health implications are long-term and serious.

According to a recent survey by the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition, "in the past 10 years, there have been at least 480 cases of high powered magnet ingestions, with 204 of those cases occurring in the past 12 months."[3] The survey also found that: of the reported cases, 80 percent required endoscopic or surgical intervention; 51 percent of magnet ingestions occurred in children 1 to 6 years of age; of children requiring medical intervention, in almost all cases, those children also required sedation and

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[2] CPSC Recalls of Magnet toys http://www.cpsc.gov/CPSCPUB/PREREL/prhtml07/07179.html; http://www.cpsc.gov/CPSCPUB/PREREL/prhtml08/08149.html; http://www.cpsc.gov/CPSCPUB/PREREL/prhtml07/07271.html; http://www.cpsc.gov/CPSCPUB/PREREL/prhtml08/08223.html; http://www.cpsc.gov/CPSCPUB/PREREL/prhtml07/07085.html; and http://www.cpsc.gov/CPSCPUB/PREREL/prhtml07/07272.html.

[3] http://www.naspghan.org/user-assets/Documents/pdf/Advocacy/Magnets/NASPGHAN%20Media%20Advisory%20on%20Magnet%20Ingestions.pdf

single or multiple x-rays; of cases requiring surgery, 16 percent resulted in removal of part of the bowel; and 62 percent of interventions were for repairs of perforations or fistulas.

CPSC has estimated that 1,700 ingestions of magnets from magnet sets were treated in emergency rooms in hospitals across the country from 2009 through 2011.

Thus, numerous serious injuries, many of which required surgical intervention, have been caused by these magnets. We support the CPSC's assessment of the seriousness of these injuries and agree that this data provides evidential support for the promulgation of a proposed rule that effectively addresses this serious hazard.

B. Individual Magnets

We urge the CPSC to include individual magnets that are sold to be used in conjunction with a magnet set as part of the scope of the proposed rule. Individual magnets bought separately would pose the same hazards as those bought as part of magnet sets. Thus, the same standard should apply to these magnets.

C. Flux Density

a. Flux Density of 50

We agree with the CPSC's recommendation in the proposed standard that magnets sold as part of magnet sets and magnets intended to be used as part of magnet sets that are smaller than the choke test tube should have a flux density of 50 or less, or they will be prohibited. The CPSC should study whether magnets of a flux density of less than 50 could also potentially cause harm. While the flux density of 50, put forth in this proposed standard, was based upon the ASTM toy standard and an analyses of magnet containing toys on the market, we also suggest that the CPSC study other products containing magnets including magnets used as refrigerator magnets, push pins, and jewelry to evaluate whether a flux density of 50 is the appropriate level.

b. Flux Density for Aggregated Magnets

We further urge the CPSC to study whether magnets with a flux density of 50, when aggregated, continue to have a flux density of 50 or whether the aggregation of these magnets increases the flux density and could pose more serious harm.

D. Regulatory Alternatives

a. Statutory Authority

While we believe that the CPSC has authority under both the Consumer Product Safety Act and Federal Hazardous Substances Act to address the Hazards posed by magnets in magnet sets, specifically, we urge the CPSC to promulgate a mandatory standard for these magnet sets under sections 7 and 9 of the Consumer Product Safety Act rather than a ban under section 8. Promulgating a rule under section 7 and 9 provides an effective framework for manufacturers

who may want to enter this product market. While a ban under section 8 may have the same immediate effect as a standard promulgated under section 7 and 9, the future impact of a standard would be profound in clearly identifying a standard that such product must meet in order to be legally sold in the United States.

b. Warnings are not an Effective Solution

We agree with the CPSC staff that warning labels have never been effective in protecting children from the hazards posed by ingesting magnets from magnet sets. First, warnings are a less effective injury prevention method than changing the product to reduce the hazard. Second, this hazard is hidden, the potential harm is not immediately obvious and warning labels are less effective when the harm is not clearly known. Third, warnings have been included on products and those warnings have not curbed injuries and have been entirely ineffective. Since a new label was required in March 2010 on a specific product, reported injuries continued to increase steadily and significantly. Fourth, warning labels do not prevent exposure to this product but rather seek to convey information that would alter a consumers' potentially risky interaction with the product. The more effective way to eliminate or reduce ingestion hazards is to prevent exposure to this foreseeably hazardous product. Finally, since the data shows that children six and younger make up the bulk of the incidents, a warning label would not be effective for that population.

c. Child Proof Containers are not an Effective Solution

We further urge the CPSC not to rely upon child proof containers but rather upon an effective standard to curb the hazards caused by ingestions of these magnets from magnet sets. Given the nature of the use of these magnet sets, it is likely that magnet sets would not remain in their containers. They would be left out of their containers on a table, dresser, or desk in the geometric shape that the consumer created with the magnets. Given the intended use of the product, the benefit of such a child proof container would be limited if effective at all.

E. Costs

The CPSC's cost analysis considers the extensive costs of the injuries to children caused by these magnets in magnet sets. Importantly, however, these products continue to pose hazards across the life of the product and ingestion of magnets does not diminish the economic value of the magnet set. This is in contrast to other products such as balloons. Balloons are most dangerous to children when they are ingested after the balloon pops after use – once the balloon pops it is effectively trash and no longer has economic value. Throwing it away immediately after it pops is not only the most effective way to prevent an injury but is also the expected outcome. Balloons unlike these magnets have no economic value in its dangerous state.

Magnets, on the other hand, are still as valuable in their dangerous loose state as when purchased. This inuring cost of continued injury must be considered in the cost analysis.

IV. Conclusion

CFA strongly supports the adoption of the Commission's standard as included in the Notice of Proposed Rulemaking for magnet sets. This standard, will effectively limit exposure to the hazards caused by magnet sets currently on the market. Reducing the magnetic force of magnets that can be swallowed is the most robust and successful way to reduce the threat of injury and death to children caused by these magnet sets.

Respectfully submitted,

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