Consumer Federation of America

Office of the Secretary
Consumer Product Safety Commission
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Oral Comments of Rachel Weintraub, Legislative Director and General Counsel, Consumer Federation of America to the U.S. Consumer Product Safety Commission, "Safety Standard for Magnets Notice of Proposed Rulemaking" Docket No. CPSC–2021-0037

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] Ten years ago, CFA similarly submitted comments to the CPSC on rulemaking for magnets, then "magnet sets." The past ten years have illustrated the important beneficial impact of a mandatory standard for magnets and the inadequacy of the voluntary standard to effectively address the known hazard.

CFA supports the CPSC's notice of proposed rulemaking seeking to develop a safety standard to address "the unreasonable risk of injury and death associated with ingestion of loose or separable high-powered magnets."[2] Incident 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 magnets. The safety standard proposed would apply to "consumer products that are designed, marketed, or intended to be used for entertainment, jewelry, mental stimulation, stress relief, or a combination of these purposes, and that contain one or more loose or separable magnets."[3] The proposed rule would require loose or separable magnets "to be either too large to swallow, or weak enough to

[1] Safety Standard for Magnets. Notice of Proposed Rulemaking, Federal Register, Vol. 87, No. 6, (January 10, 2021). https://www.govinfo.gov/content/pkg/FR-2022-01-10/pdf/2021-27826.pdf
[2] Ibid at 1260.
[3] Ibid at 1260.

reduce the risk of internal interaction injuries when swallowed."[4] The proposed rule would require that subject magnets that fit entirely within the small parts cylinder must have a flux index of less than 50 kG^2 mm^2. Our comments support this proposed standard and respond to 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 part that contained the magnet or the magnet itself. Due to this defect and to the resulting serious injuries, the CPSC conducted numerous recalls of these toys in 2007 and 2008.[5]

The numerous 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.

Since many magnet incidents were caused by magnets that were not toys, in 2012, the CPSC began a rulemaking to address the magnet ingestion hazards not covered by the toy standard. The rule was issued in 2014 and went into effect in 2015. The rule focused on the size and strength of magnets in magnet sets. The rule was struck down by the U.S. Court of Appeals for the Tenth Circuit in 2016. The CPSC's incident data, before, during, and after this period clearly document how effective the mandatory standard was in reducing incidents associated with these magnets.

Significantly, between 2010 and 2021, the CPSC recalled 18 magnet products. The CPSC documented that the "vast majority" of those recalls involved "products intended for amusement," including primarily "magnet sets and desk toys, rather than children's toys or other non-amusement products."[6]

III. Discussion & Recommendations

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[4] Ibid at 1260.
[5] 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.
[6] Safety Standards for Magnets, NPR at 1290.

A. The Risk of Serious Injury caused by Magnets

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 one or more than one magnet is ingested, the magnetic force of the magnet can "interact internally through body tissue with an unrelated magnet or a ferromagnetic object resulting in an internal injury."[7] The CPSC data, therefore, indicate that even one magnet poses the same risk as numerous magnets. Thus a single magnet or magnets can 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, 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.

CPSC has estimated that 23,700 ingestions of magnets were treated in emergency rooms in hospitals across the country from 2010 through 2020. Of great importance, the CPSC identified "significantly fewer ED-treated magnet ingestions in 2015 than in any of the following years."[8] "Likewise, there were significantly fewer ED-treated magnet ingestions in 2016 than in any of the following years. . . Overall, 2014 through 2016 had the lowest number of estimated ED-treated magnet ingestions."[9] Clearly, these incidence significantly correlate to the issuance of CPSC's mandatory standard for magnet sets in 2014 and the revocation of the rule in 2016.

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. Flux Index of 50 kG^2 mm^2

We agree with the CPSC's recommendation in the proposed standard that magnets that are smaller than the choke test tube should have a flux index of 50 kG^2 mm^2 or less, or they will be prohibited. The CPSC should further study whether magnets of a flux index of less than 50 could also potentially cause harm. While the flux index of 50 kG^2 mm^2, put forth in this proposed standard, was based upon the ASTM toy standard, we are concerned about data that the CPSC identified that may indicate that magnets of a flux index of less than 50 kG^2 mm^2 may have been involved in serious incidents. We suggest that the CPSC continue to study this issue after the rule is finalized.

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[7] Safety Standard for Magnets, NPR at 1288.
[8] Ibid at 1266.
[9] Ibid. at 1266.

C. Inadequacy of Voluntary Standard

I have participated in the ASTM Subcommittee F15.77 on Magnets. While consumer group representatives, CPSC staff, pediatricians, and gastroenterologists with expertise in treating children who have ingested magnets strongly and repeatedly urged that the standard include performance requirements, that recommendation was overruled by the majority of the subcommittee members. The voluntary standard, which was published in March of 2021, ASTM-F3458-21 Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a flux Index of greater than 50 $kG^2 mm^2$) does not effectively address the hazards posed by the ingestion of magnets and necessitates the promulgation of an effective rule, such as the rule CPSC has proposed.

We agree with the CPSC analysis that the scope, labeling and packaging provisions of ASTM F3486-21 are not adequate. The CPSC states that the scope is not broad enough to include products other than magnet sets intended for consumers 14 and older. Thus, products that are not magnet sets, but which are known to have caused incidents are not covered by the rule. Further, that the standard does not include performance requirements, limits its effectiveness. That the standard relies on information to "encourage consumers to keep magnets away from children" is inadequate since incident data indicate that children and teens use magnet products intended for older users. Significantly, the CPSC staff concludes that "safety messaging (e.g., warnings and instructions) and packaging requirements, without performance requirements for the magnets themselves, are not likely to adequately address the hazards."[10]

D. Regulatory Alternatives

a. Statutory Authority

We support that the CPSC has authority under both the Consumer Product Safety Act and Federal Hazardous Substances Act to address the hazards posed by magnets, specifically, we support the CPSC's proposal to promulgate a mandatory standard for these magnet under sections 7 and 9 of the Consumer Product Safety Act. We believe that the CPSC has effectively made the necessary findings included in the proposed rule. We believe that the rule is reasonable and necessary to eliminate or reduce an unreasonable risk of injury associated with magnets.

b. Safety Messaging, Labeling, and Packaging Requirements are not an Adequate nor Effective Solution

In the proposed rule, CPSC staff considers whether safety messaging, labeling, and packaging requirements could be an alternative to performance requirements. CPSC staff rejects this concept and we strongly agree. As addressed above, the CPSC and CFA consider the ASTM F3458-21 standard that excludes a performance requirement and relies upon safety information and packaging provisions to be entirely inadequate in addressing the known harm caused my magnets. As the CPSC stated in the original notice of proposed rulemaking on magnet sets and reiterates in this proposed rulemaking on magnets, warning labels have never been effective in protecting children from the hazards posed by ingesting magnets. First, warnings are a less

[10] Ibid at 1285.

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. When 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 children and teens interact with products for children aged 14 and up, warnings indicating children should not use these products would not be effective for that population.

We further support that the CPSC proposed rule is not relying upon child proof containers but rather upon an effective standard to curb the hazards caused by ingestions of these magnets. Given the nature of the use of these magnets, it is likely that magnets 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. 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 magnets. 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.

F. Effective Date

CFA support the effective date of 30 days and believe that the 30 days is reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with the product. Further, given the clear incident data that documents the known hazards, we do not believe that the time should be lengthened because it would delay the critically important safety benefits of the rule.

IV. Conclusion

CFA strongly supports the adoption of the Commission's standard as included in the notice of proposed rulemaking for magnets. This standard will effectively limit exposure to the hazards caused by magnets currently on the market. Limiting the size to prevent swallowing and limiting the magnetic force to reduce serious injury are the most robust ways to reduce the threat of injury and death to children caused by these magnets.