



November 6th, 2013

Notice Regarding Children's Toys with Magnets or Magnetic Components

The purpose of this notice is to provide information regarding the danger to human health or safety posed by some toys containing magnets which your company may manufacture, import, advertise, sell or test for the Canadian market. We ask that you review the enclosed information and take the necessary action to ensure that the products you are marketing in Canada do not present a danger to human health or safety.

The Canada Consumer Product Safety Act

The [Canada Consumer Product Safety Act](#) (CCPSA) addresses dangers to human health or safety posed by consumer products in Canada. Any person who markets a consumer product in Canada must comply with all applicable requirements of the CCPSA and its regulations. Health Canada's Consumer Product Safety Program works with industry to help them understand their obligations and their responsibility to market safe products. The Program also takes action to protect the health and safety of Canadians when dangerous products are identified.

The CCPSA prohibits the manufacturing, importing, advertising or selling of consumer products which are a "danger to human health or safety". For the purposes of the CCPSA, a consumer product is a danger to human health or safety when it poses an unreasonable hazard, whether existing or potential, as a result of the product's normal or foreseeable use and which may reasonably be expected to have an adverse effect on an individual's health, including injury or death.

Small Powerful Magnets Can Pose a Danger to Human Health or Safety

Powerful magnets that are very small can be easily swallowed or inhaled. Unlike other small objects that are more likely to pass normally through the digestive system if swallowed, when more than one powerful magnet is swallowed in a short period of time, the magnets can attract one another while moving through the intestines. When this happens, the magnets can twist the intestines and create a blockage or they can slowly tear through the intestinal walls. The results of swallowing small powerful magnets can be very serious and life-threatening. Swallowing incidents have often resulted in considerable damage to the gastrointestinal tissues and required emergency surgical treatment. For survivors, there can be serious lifelong health problems^{1, 2}. Health Canada is aware of two fatalities of children who swallowed small powerful magnets.

¹ Consumer Product Safety Commission. [Safety Standard for Magnet Sets A Proposed Rule by the Consumer Product Safety Commission](#), see Part C.3. Details Concerning Injuries, 2012-09-04, from <https://www.federalregister.gov/articles/2012/09/04/2012-21608/safety-standard-for-magnet-sets#h-16>.

A further concern regarding this unique hazard is that swallowing small magnets may happen with no signs of physical distress or discomfort being shown for many days. The non-specific symptoms that a child eventually develops may include vomiting, diarrhea, and flu-like abdominal pain. Because of the similarity of these symptoms to the stomach flu, parents may not seek medical attention until severe trauma has developed.

Specific characteristics of magnet sets and magnetic children's toys have been identified as dangerous and Health Canada is taking action to remove products with these characteristics from the marketplace.

Recent Health Canada Actions for Magnet Sets

Health Canada recently took action to have dangerous magnet sets removed from the Canadian market. On April 26, 2013, Health Canada issued a notice entitled [*Information for Manufacturers, Importers, Distributors and Retailers of Products Containing Small, Powerful Magnets*](#) to provide information on the characteristics of certain magnetic products that are considered to pose a danger to human health or safety (see Annex A). An [*advisory*](#) was then issued on May 22, 2013, to alert the public to the health and safety concern and to advise of the specific products that are considered to be a danger (see Annex B).

Health Canada is actively pursuing enforcement action on all dangerous magnet sets supplied or advertised in Canada. To date the following recalls have been completed:

- Tradeopia Corp. Magnodots / Magnocubes magnet sets recall: <http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2013/36109r-eng.php>, 2013-10-09;
- Nano Magnetics Ltd. Nanodots magnet sets recall: <http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2013/29263r-eng.php>, 2013-09-03;
- Strong Force Inc. Neocube magnet sets recall: <http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2013/35119r-eng.php>, 2013-08-22;
- NeoMagnetic Gadgets Inc. NeoMagnetic Cube / Square magnet sets recall at: <http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2013/34263r-eng.php>, 2013-06-20; and
- Buckyballs magnet sets recall: <http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2013/29247r-eng.php>, 2013-05-22.

Health Canada Actions for Children's Toys with Magnets

The April 2013 *Notice for Manufacturers, Importers, Distributors and Retailers of Products Containing Small, Powerful Magnets* also indicates that Health Canada is taking action on children's toys that contain small powerful magnets with specific characteristics. Since 2006 there have been several voluntary recalls of children's toys with powerful magnets where the magnetic pieces were either small enough to be swallowed, or small powerful magnets were separating from the toy pieces. While there are no regulatory requirements specific to magnets within the [*Toys Regulations*](#) under the CCPSA, Health Canada has determined that some children's toys containing small powerful magnets are a danger to human health or safety.

The specific magnetic toys that pose a danger to human health or safety are those that contain one or more loose small powerful magnets or one or more loose small powerful magnetic components.

² North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. *NASPGHAN, Warning Labels Ineffective at Preventing High-Powered Magnet Ingestions*, 2012-10-23, from <http://www.naspgan.org/user-assets/Documents/pdf/Advocacy/December%202012/Final%20NOLA%20Press%20Release.pdf>.

- Where "small" is defined as a magnet or magnetic component that can be entirely enclosed in the small parts cylinder as illustrated in Schedule 1 of the *Toys Regulations* under the CCPSA.
- Where "powerful" is defined as a magnet with a magnetic flux index of 50 kG²mm² or more, when assessed according to the method described in sections 8.24.1 to 8.24.3 of ASTM F963-11, *Standard Consumer Safety Specification for Toy Safety*, or an equivalent method for the determination of magnetic flux index.

Further, for magnetic toys where one or more small powerful magnets are embedded in a toy component and the component is large and cannot be entirely enclosed in the small parts cylinder, it is critical that the magnet(s) does not separate from the component with reasonably foreseeable use.

In determining whether a particular consumer product is a danger to human health or safety, one of the considerations which Health Canada will take into account, where there are no specific regulatory requirements for the product, is whether it meets the relevant requirements of an internationally recognized safety standard. There are three such standards in place with specific requirements for magnetic toys:

- Section 4.38 of ASTM F963-11 Standard Consumer Safety Specification for Toy Safety;
- Clause 4.30 of ISO 8124-1:2012 Safety of toys – Part 1: Safety aspects related to mechanical and physical properties; and
- Clause 4.23 of EN 71-1:2011 Safety of toys, Part 1: Mechanical and physical properties.

Please note that while some products with small, powerful magnets are outside the scope of some of the international standards noted above (e.g. children's arts, crafts and hobby kits) or have been specifically excluded from some of these standards (e.g. children's science kits), Health Canada generally considers these children's products to be toys and will assess them as such in terms of whether they pose a danger to human health or safety. Health Canada considers a product to be a toy if it meets the definition of "toy" set out in the *Toys Regulations*, that is, if it is a product that is intended for use by a child in learning or play.

The above-noted standards also exclude toys with magnets or magnetic components where the magnet is required for the function of an electric or electronic component of the toy such as a motor, relay or speaker. Where a toy has this type of magnetic property which is not part of the intended play mode for the toy, Health Canada will take this fact into consideration in assessing the toy's overall safety. Please also note that compliance with an internationally recognized safety standard is only one factor in Health Canada's assessment of whether a product poses a danger to human health or safety. Ultimately it is the responsibility of manufacturers, importers and retailers to ensure that the products they market in Canada are safe for consumers.

You are requested to verify that the toys with magnets or magnetic components that you are marketing in Canada are safe and do not present a danger to human health or safety as outlined in this notice.

If you have any questions or concerns, please contact the Consumer Product Safety Program by email at CCPSA-LCSPC@hc-sc.gc.ca or by telephone at 1-866-662-0666.

Attachments:

-Annex A – Information for Manufacturers, Importers, Distributors and Retailers of Products Containing Small, Powerful Magnets

-Annex B – Health Canada is Taking Action to have Small, Powerful Magnet Sets removed from the Marketplace



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Consumer Product Safety

Information for Manufacturers, Importers, Distributors and Retailers of Products Containing Small, Powerful Magnets

The purpose of this notice is to inform you that Health Canada has determined that some products containing small¹, powerful² magnets are a danger to children and is now taking steps to remove these products from the marketplace. These products include some novelty magnet sets, as well as toys that do not meet international safety standards regarding the use of small, powerful magnets. The manufacturing, import, sale or advertising of these products is a violation of the general prohibition under the *Canada Consumer Product Safety Act (CCPSA)*.

Health Canada is particularly concerned about novelty magnet sets containing more than one small, powerful magnet, regardless of the intended age of the user, where the set is intended for use as a toy or manipulative for general entertainment, such as puzzle working, sculpture building, mental stimulation or stress relief. The magnet sets of concern generally consist of hundreds of small (various sizes, but commonly 5 mm in diameter) powerful rare earth element magnetic pieces in spherical, cube and/or cuboid shapes.

Health Canada is equally concerned about some children's toys that contain small, powerful magnets or magnetic components. Similar actions to remove dangerous magnet sets and toys with small, powerful magnets from the market have been undertaken in the United States, Europe, Australia and New Zealand. Health Canada's position is that toys on the Canadian marketplace should conform to at least one of the latest versions of internationally respected safety standards (for example, ASTM F963, EN 71-1, ISO 8124-1) with respect to magnets or magnetic components. This position is in line with the direction which has been provided to industry regarding magnets and magnetic components in toys (see page 15 of Health Canada's *Industry Guide to Health Canada's Safety Requirements for Children's Toys and Related Products, 2012*).

Action for industry

Health Canada has determined that some products pose a *danger to human health or safety*. Industry should immediately stop the manufacturing, import, sale or advertising of these products, any of which is a violation of the general prohibition set out in paragraphs 7(a) and 8(a) of the CCPSA.

Key considerations that are used to determine whether these paragraphs apply to the supply or advertising of a product are as follows:

- the product is a consumer product within the meaning of the CCPSA
- the hazard posed by the product is unreasonable
- the hazard is posed in, or as a result of, the product's normal or foreseeable use
- the hazard may reasonably be expected to have an acute or chronic adverse effect on health, including an injury or death

What is Health Canada doing?

Since 2006, Health Canada has issued several advisories to warn Canadians of the dangers associated with ingesting magnets. Despite these warnings and some manufacturers efforts to

keep these products out of the hands of children, which have included package warnings, instructions on safe use and guidance to retailers on safe selling practises, these magnets are accessed and used by children, and incidents continue to occur.

Health Canada is now taking action to identify dangerous products and have them removed from the marketplace. Manufacturers, importers, distributors and retailers are being asked to cease their activities related to these products immediately.

Description of the danger

Magnets that are very small can be easily swallowed or inhaled. Unlike other small objects that would be more likely to pass normally through the digestive system if swallowed, when more than one powerful magnet is swallowed, the magnets can attract one another while travelling through the digestive system. The magnets can then pinch together and create a blockage and slowly tear through the intestinal walls, causing perforations.

The result of swallowing powerful magnets can be very serious and even fatal. Swallowing incidents have resulted in considerable damage to the gastrointestinal tissues and required emergency surgical treatment. There can also be serious long-term health consequences.

A further concern regarding this unique hazard is that swallowing small magnets may happen with no signs of physical distress or discomfort being shown for many days. The non-specific symptoms that eventually develop may include vomiting, diarrhea and flu-like abdominal pain. Because of the similarity of these symptoms to the stomach flu, parents may not seek medical attention until severe trauma has developed. Additionally, medical practitioners may not recognize ingested foreign bodies as magnets and may not initially treat patients with the urgency warranted.

Children and teens have unintentionally swallowed the magnets when they played with them in foreseeable ways, such as: using the magnets to mimic a tongue, lip or nose piercing; attaching them to braces; mistaking the magnets for candy; or simply in general exploratory play.

Other Information

If you require additional information regarding this notice, please contact the Consumer Product Safety Directorate by [email](#) or by telephone at 1-866-662-0666.

- 1 Where "small" is defined as a magnet or magnetic component that can be entirely enclosed in the small parts cylinder as illustrated in Schedule 1 of the *Toys Regulations* under the CCPSA.
- 2 Where "powerful" is defined as a magnet with a magnetic flux index of 50 kG²mm² or more (when tested according to the method described in sections 8.24.1 to 8.24.3 of ASTM F963-11, *Standard Consumer Safety Specification for Toy Safety*).

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Healthy Canadians

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Health Canada is Taking Action to have Small, Powerful Magnet Sets Removed from the Marketplace

Report a Concern

Starting date:	May 22, 2013
Posting date:	May 22, 2013
Type of communication:	Advisory
Subcategory:	Children's Products, Household Items, Toys
Source of recall:	Health Canada
Issue:	Product Safety
Audience:	General Public
Identification number:	RA-31619

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- [Report health or safety concerns](#)
- [What Health Canada is doing](#)

Issue

Health Canada is warning Canadians that a number of [novelty magnet sets marketed to adults that were sold in Canada are a danger to human health or safety](#). These sets contain small, powerful magnets that can be easily swallowed or inhaled by children of all ages resulting in serious adverse effects on their health. Health Canada is now taking action to identify and have these dangerous products removed from the marketplace.

When more than one powerful magnet is swallowed in a short period of time, the magnets can attract one another while moving through the intestines. This can cause the intestines to twist, creating blockages or tearing of the intestinal walls. The results of swallowing small, powerful magnets can be very serious and life-threatening. Swallowing incidents have often resulted in considerable damage to the gastrointestinal tissues and required emergency surgical treatment. For survivors, there can be serious lifelong health problems.

Health Canada is particularly concerned about novelty magnet sets containing more than one small, powerful magnet, regardless of the intended age of the user, where the set is intended for use as a toy or manipulative for general entertainment, such as puzzle working, sculpture building, mental stimulation or stress relief. These sets generally consist of a number of small (various sizes, but commonly 5 mm in diameter) powerful, rare earth element magnetic pieces in spherical, cube and/or cuboid shapes. Rare earth element magnets are many times more powerful than traditional magnets and pose unique dangers.

Health Canada has identified the following novelty sets that may have been distributed in Canada:

- BuckyBalls Magnetic Building Spheres
- BuckyBalls BuckyBars Magnetic Building Rods
- BuckyBalls BuckyBigs XL Magnetic Building Spheres
- BuckyBalls BuckyCubes Magnetic Building Cubes
- BuckyBalls Chromatics Magnetic Building Spheres
- BuckyBalls Sidekick Magnetic Building Spheres
- Nanodots Spheres
- Nanodots Colors
- Mega Nanodots sets
- Magnicube Magnet Balls
- Magnicube Magnet Cubes
- Neoballs (polymer, electroplate)
- Neocube Alpha
- Neocube G
- Neocube Omega
- Neo Mini
- CubeTastic Value Pack
- NeoMagnetic Cube 5mm Triple Nickel
- NeoMagnetic Cube 6mm Triple Nickel
- NeoMagnetic Cube 5mm Gold

- NeoMagnetic Cube 5mm Glazed Spheres Various Colours
- NeoMagnetic Square 5mm

- SuperMagnetMan Super neo magnet sphere sets (SP0190)
- SuperMagnetMan Super small neo magnet sphere sets (SP0326)
- SuperMagnetMan Super neo magnet sphere sets (SP0510)

- Zen Magnets
- Zen Magnets Mini
- Zen Mandala Set

In addition to concerns with novelty magnet sets marketed to adults, since 2006 there have been several recalls of children's toys with powerful magnets where the magnetic pieces were either small enough to be swallowed, or tiny magnets were separating from the toy and being swallowed by children. Consumers should check the [Healthy Canadians Recalls and Safety Alerts database](#) for dangerous toys and take action to remove toys of concern. Even if not recalled, remove and safely discard any toys with powerful magnets where the magnets are loose or the magnetic toy pieces are small enough to be swallowed.

What you should do

- Consumers should immediately stop using any novelty magnet sets and contact their municipality for instructions on how to dispose of or recycle the products.
- Keep novelty magnet sets out of the reach of children.
- Do not allow children to play with small toys or other small items that contain powerful magnets.
- Check your children's toys for wear and tear. Throw away any toys with magnets that have come loose.
- Teach children of all ages that magnets and items containing magnets should never be placed in their mouth or nose.
- Seek immediate medical attention for any child who has swallowed (or is suspected of having swallowed) one or more magnets. You should also [report any injuries or safety concerns](#).
- Read and follow the age recommendations, warnings, safety messages and assembly instructions for products.

Report health or safety concerns

Health Canada would like to remind Canadians to report any health or safety incidents related to the use of a consumer product or cosmetic. [An incident report form](#) is now available on the Department's website.

E-mail: CPSR-RSPC@hc-sc.gc.ca

Mail: Incident Report - Consumer Product Safety Directorate

Health Canada

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What Health Canada is doing

Health Canada has determined that some products containing small, powerful magnets are a danger to Canadian children and teens, and their presence in the marketplace may be a violation of the Canada Consumer Product Safety Act's (CCPSA) general prohibition against the supply of consumer products that pose a danger to human health or safety. These magnets are found in some novelty magnet sets that appeal to children, and in some children's toys.

Health Canada is now taking action to have these dangerous products removed from the marketplace. Today, Health Canada published a recall related to a number of novelty magnet sets marketed to adults that contain small, powerful magnets which can be easily swallowed or inhaled by children. Information about the specific recalled products can be found on the [Healthy Canadians Recall and Safety Alerts database](#). Consumers should immediately stop using these recalled magnet sets and contact their municipality for instructions on how to dispose of or recycle the recalled products.

Health Canada is also reminding the public to keep any products with small, loose powerful magnets out of the hands of children of all ages. Retailers are also reminded of the dangers these products may pose to their customers.

Images

Select thumbnail to enlarge



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For more information

For more information on the danger of swallowing magnets, see [Magnets - health risks](#).

Consumers and health professionals wanting more information about this advisory can contact the nearest Health Canada Product Safety Office by phone at 1-866-662-0666 (toll-free) or email at cps-spc@hc-sc.gc.ca (please indicate the province or territory from which you are corresponding).

To alert parents and caregivers of the serious hazards associated with small powerful magnets, Health Canada has issued a number of consumer advisories:

- [August 2012 Health Canada Advisory](#)
- [September 2008 Health Canada Advisory](#)

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