

## **Lead and Cadmium in Toy Jewelry**

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This page describes actions that relate to lead and cadmium in children's products. The page also provides links to information from the U.S. Consumer Product Safety Commission (CPSC) that can help you protect your children against the hazard, including a list of products recalled.

### **Background**

Lead is a highly toxic metal that was used for many years in products found in and around our homes. Lead may cause a range of health effects from behavioral problems and learning disabilities to seizures and death. Children six years old and under are most at risk because their bodies are growing quickly.

When a child puts an object containing lead in his or her mouth, the child can suffer from lead poisoning. For example, in 2003 a child became lead-poisoned from ingesting toy jewelry from a vending machine. On July 8, 2004, the threat of lead poisoning from toy jewelry led the CPSC to conduct a voluntary recall of 150 million pieces of metal toy jewelry sold widely in vending machines. Unfortunately, another incident occurred in 2006, when a child died from ingesting a toy charm containing lead. This incident prompted the voluntary recall of 300,000 charm bracelets. The charm and metal bracelets were given as free gifts with the purchase of shoes from one manufacturer.

Toy jewelry containing unsafe levels of lead has continued to be sold even after CPSC issued guidance to prevent the sale of these products. In addition to toy jewelry products containing lead, other products containing lead have been recalled, such as crayons, chalk and clothing. For a list of recalls, including recalls for products containing lead, visit CPSC's [Toy Hazards Recall Listing](#).

Cadmium is also a dangerous metal. On August 3, 2010, EPA received a petition under section 21 of the Toxic Substances Control Act regarding cadmium in consumer products, especially toy metal jewelry. Petitioners contend that children are particularly at risk for oral exposure to cadmium because they put objects in their mouths. Chronic oral exposure of humans to cadmium may lead to kidney disease. Animal studies provide evidence that cadmium exposure results in developmental effects. EPA has classified cadmium as a Group B1, probable human carcinogen.

The petition requested that EPA require submission of health and safety studies related to cadmium and cadmium compounds in consumer products and to regulate their use in toy metal jewelry. The petition also asked that CPSC take certain actions, including the establishment of standards restricting cadmium in children's products, especially metal jewelry. EPA has granted the petition. EPA will propose a rule under the Toxic Substances Control Act to require the submission of health and safety studies. It is EPA's understanding that CPSC is currently developing exposure limits for cadmium. EPA plans to work with CPSC and will initiate a TSCA section 6 rulemaking if CPSC's effort does not result in action or EPA concludes that some form of joint action is appropriate.

CPSC has created a docket for the petition. CPSC published a [notice in the Federal Register \(PDF\)](#) (2 pp, 142K) on August 19, 2010, (75 FR 51246) inviting comments on the petition. Comments must be received by CPSC by October 18, 2010.

## EPA Actions

On **August 30, 2010**, EPA notified the [Empire State Consumer Project, Sierra Club, and other petitioners \(PDF\)](#) (2 pp, 542K) that the Agency is granting the petition relating to cadmium and cadmium compounds, and will propose a rule to require reporting by producers, importers and processors of cadmium and cadmium compounds that are reasonably likely to be incorporated into consumer products of lists and/or copies of ongoing and completed unpublished health and safety studies relevant to the determination of whether a potential hazard exists and whether a product may be a banned hazardous substance as outlined in CPSC guidelines. In addition, though it is EPA's understanding that CPSC is currently developing exposure limits for cadmium in certain children's products, if CPSC does not act, EPA will initiate a rulemaking under TSCA section 6. [Read more about EPA's announcement.](#)

On **January 29, 2008**, EPA issued a final rule under section 8(d) of the Toxic Substances Control Act (TSCA) adding lead and lead compounds to the TSCA health and safety data reporting requirements. This rule required certain manufacturers (i.e., under the rule, manufacturers of consumer products intended for use by children who also manufacture lead or lead compounds) to submit to EPA by April 28, 2008, any unpublished health and safety studies that relate to the lead content of consumer products that are intended for use by children or that assess children's exposure to lead from such products, excluding children's metal jewelry. The import of children's products that contain lead or lead compounds constitutes the manufacture of lead or lead compounds under TSCA, and EPA believes importers of such products are the entities most likely to have the type of health and safety studies EPA is seeking.

EPA will review the submitted health and safety data and will consult with the Consumer Product Safety Commission (CPSC), where appropriate, to address any concerns identified by the data with respect to lead-containing products. Already, CPSC is working to address recently discovered risks from children's metal jewelry containing lead. EPA's rule is directed at children's products other than metal toy jewelry, for which less lead exposure information is available.

[CPSC has evaluated](#) whether commercially available lead test kits reliably and accurately detect the presence or absence of lead in consumer products, such as toy jewelry and children's vinyl toys. Based on this evaluation, CPSC does not recommend that these test kits be used for consumer products. CPSC's analysis was specific to consumer products and was not conducted on lead-based paint used in housing. Research on the use of these kits for testing lead in paint used in housing has been conducted by the National Institute of Standards and Technology. NIST found that the test kits currently available do reliably detect the absence of lead-based paint. EPA believes that these kits are effective at ruling out whether lead-based paint is present. However, the kits may be overly sensitive and will indicate the presence of lead-based paint even at levels below the Federal standards. EPA is currently developing improved test kits.

On **August 2, 2007**, CPSC issued a press release announcing the [Fisher-Price recall of 967,000 toys due to lead poisoning hazard.](#)

On **April 30, 2007**, [EPA sent a letter to CPSC \(PDF\)](#) (2 pp, 77K) describing its continuing concerns about the presence of lead in children's products. EPA also sent [letters to 120 companies \(PDF\)](#) (3 pp, 125K), alerting them to requirements under TSCA section 8(e):

"[a]ny person who manufactures, processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment shall immediately inform the Administrator of such information unless such person has actual knowledge that the Administrator has been adequately informed of such information." [15 U.S.C. § 2607\(e\)](#)

Recipients of the letter were either a party to a settlement with the State of California regarding lead in toy jewelry or were participants in a recall of children's products containing lead.

In response to the Sierra Club's petition, CPSC published an [advance notice of proposed rulemaking \(PDF\)](#) (3 pp, 59K) to ban children's jewelry containing more than 0.06 percent lead.

On **April 21, 2006**, the Sierra Club submitted a petition to EPA and CPSC to take certain actions regarding lead in children's products. EPA denied two of Sierra Club's requests in July 2006, and Sierra Club filed a lawsuit challenging that denial in September 2006. On **April 13, 2007**, EPA and the Sierra Club reached a [final settlement \(PDF\)](#) (7 pp, 412K).

Under the settlement, EPA agreed to take certain actions that would complement other actions by EPA and its federal and state partners to protect children from lead exposure. These actions are designed to contribute to the federal goal of eliminating childhood lead poisoning by 2010.

Under the settlement, EPA agreed to:

- Initiate a rulemaking to obtain existing health and safety studies on lead in children's products.

- Notify a number of companies of their obligation to inform EPA if they obtain information that products they manufacture or import present a lead-poisoning risk to children.

- Inform CPSC of concerns regarding corporate quality-control measures.

## More Information

To find out more about your child's potential exposure to lead from toy jewelry, please visit CDC's [Lead in Toy Jewelry Questions & Answers](#).