Lead & Cadmium in Children's Jewelry

Caution when purchasing children's jewelry or gifting antique jewelry. Some jewelry may contain lead and cadmium. These items may present a hazard if mouthed, chewed, or swallowed by children.

How dangerous are lead and cadmium?

Both lead and cadmium are soft metals. Ingesting lead or cadmium can cause serious health problems, even death. Babies, children under six years, and pregnant women are at the highest risk of harm.

Lead

Lead occurs naturally and has been used in many products. Concentrations of lead in the body that were once considered safe are now dealt with as a medical emergency. There is no safe level of lead. Often, there are no outward signs from coming in contact with lead. However, it can cause damage to the brain, kidneys, and nervous system. In children, lead can also slow development or cause learning, behavior, and hearing problems.

Ingesting large amounts of lead may cause acute lead poisoning with the following symptoms:

- abdominal pain
- vomiting
- muscle weakness
- constipation
- death

Health care providers can do a blood test to measure exposure to lead.

Cadmium

Cadmium is a naturally occurring metal found in the earth's crust and is used in many products such as metal plating, "NiCad" (NiCd) batteries, stabilizers in plastics, and phosphate fertilizers. If ingested, large amounts of cadmium may cause acute cadmium poisoning with the following symptoms:

- nausea
- abdominal pain
- vomiting
- diarrhea
- muscle ache
- in rare circumstances, death

Breathing high levels of cadmium can severely damage the lungs and can cause death. Cadmium can accumulate in the kidneys following exposure to low levels in air, food, water, and particularly in tobacco smoke and cause kidney disease and fragile bones.

Detailed information about the health effects of <u>lead</u> and <u>cadmium</u> can be found on MDH's <u>Toxic Free Kids Act website</u>.



How do I know if my child's jewelry or accessory contains lead or cadmium?

There is no way to know if a product contains high levels of lead or cadmium by looking at it. That is why parents should keep jewelry with small parts away from young children, and never allow them to put jewelry in their mouths.

Based on studies by Minnesota Pollution Control Agency (MPCA) and others, jewelry labeled as made in the U.S. is least likely to contain unsafe levels of lead and cadmium.

Consumers should avoid shopping in-store or on-line for jewelry when no information is provided as to where the jewelry was made. Consumers should also be cautious about inexpensive jewelry.

DEPARTMENT OF HEALTH

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How are children exposed to lead or cadmium in jewelry?

- Frequent hand-to-mouth contact after handling jewelry
- Putting jewelry in their mouth
- Biting or sucking on jewelry
- Swallowing jewelry

If your child swallows a piece of jewelry, you should contact your health care provider or take your child for urgent medical care.

Other factors that can increase a child's exposure to lead or cadmium from children's jewelry include:

- the amount of lead or cadmium in the item,
- how worn or damaged the item is, and
- how often and for how long the child puts the item in their mouth.

Simply wearing jewelry containing lead or cadmium is unlikely to be harmful because almost no lead or cadmium enters the body through direct skin contact.

How else are children exposed to lead or cadmium?

Lead

Children most commonly come in contact with lead through dust from chipping or peeling paint, soil, and dust brought home from a parent's job or hobby. Visit MDH's <u>infographic</u> and <u>Lead Poisoning Prevention: Common</u> <u>Sources</u> to learn about how to reduce contact with lead.

Cadmium

You may be exposed to cadmium through cigarette smoke, foods that contain high levels of cadmium such as cereal products, kidney meats, liver, potatoes, and shellfish.

WARNING: If your child swallows a piece of jewelry, you should contact your health care provider or take your child for urgent medical care. This can be a serious situation: sadly, a four-year-old Minneapolis boy died in 2006 after swallowing a heart-shaped charm made with lead that came with a pair of shoes.

Do not allow children to put jewelry in their mouth.

How can I protect my children from lead and cadmium in children's jewelry products?

- Do not allow your child to mouth, bite, or swallow children's jewelry
- Wash hands often, such as after touching children's jewelry
- Avoid shopping in-store or on-line for jewelry when no information is provided of where the jewelry was made

• Be cautious about inexpensive jewelry

How do I safely dispose of jewelry items that may contain lead or cadmium?

Call your area <u>household hazardous waste collection</u> <u>program</u> for disposal advice, but they may not accept jewelry if it hasn't been tested. If you have doubts or concerns about jewelry items that have not been tested, they should be disposed of in household trash. The jewelry items should not be donated to charity or otherwise reused. Store the jewelry items away from children until you have the opportunity to dispose of them.