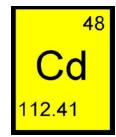


# <u>Cadmium</u>



### What is cadmium?

Cadmium is a bluish-white metal commercially mined in Germany and Asia. It occurs widely at low levels in the environment, and may be recycled from used nickel-cadmium batteries.

Cadmium appears on the Proposition 65 list of chemicals known to cause cancer and reproductive harm.

#### How is cadmium used?

Rechargeable nickel-cadmium batteries power many products, from cameras and cell phones to electric cars.
Cadmium-based pigments produce paints in bright red, yellow and orange shades. Cadmium also has many industrial uses, among them metal plating, solar cells, and tissue imaging.

## How are most people exposed to cadmium?

People who work with cadmium – generally in manufacturing – have the most chance of exposure to the metal. also may be exposed.

Fast Facts About Cadmium	
Cancer	1987: Placed on the original Proposition 65 list by a state panel of scientific experts. Cadmium and cadmium compounds can cause lung cancer in humans and may cause prostate and kidney cancer.
Reproductive / Developmental Effects	1997: A state panel of scientific experts found that cadmium affects birth weight and can build up in male reproductive tissues.
Other known health effects identified by OEHHA scientists	Studies of workers show evidence that cadmium:  O Causes proteinuria, a sign of chronic kidney disease.  O Affects lung capacity  O Damages the sense of smell

What is Proposition 65? OEHHA has provided some helpful information that explains how chemicals and substances end up on the list and how listing affects consumers and companies.

- Follow this link for a "plain language" overview of Proposition 65
- Follow this link to read "Frequently Asked Questions" about Proposition 65.

most chance of exposure to the metal. Those who paint with pigments that contain cadmium also may be exposed.

Smoking represents the most common way in which the general public may be exposed to cadmium, because tobacco plants very easily absorb the metal. In fact, studies have shown that cadmium generally builds to higher levels in the body tissues of smokers.

There is a growing awareness of the potential for cadmium exposures from products such as jewelry and glassware. For example, a 2010 Associated Press investigation detected high amounts of cadmium in jewelry imported from China. Young children who put cadmium-



containing jewelry in their mouths also may be significantly exposed to cadmium. The federal government also has begun investigating the cadmium content of drinking glasses. Cadmium also may be present in decorative paints used to make some glassware, pottery, and similar crafts.

Small amounts of cadmium are sometimes detected in water and in food. Cadmium is present in foods such as liver, kidneys, and shellfish, and occasionally in plant crops grown using soil or water that contains high amounts of cadmium. U.S. soils contain very little natural cadmium, but cadmium may build up in the soil due to the application of contaminated water, fertilizer, or sludge.

### What are the health effects of cadmium exposure?

Exposure to very low levels of cadmium does not present a significant health risk.

Multiple studies in humans suggest that prolonged cadmium exposure may also cause lung, prostate, and kidney cancer. One study of workers showed that exposure to high levels of cadmium raised the risk of cancer, and harmed liver and kidney function. Significant exposure to cadmium during pregnancy may affect the development of the fetus or result in low birth weight. In men, cadmium exposure may affect sperm maturation, and build up in the tissue of the male reproductive system.

Other research found workers who breathed large amounts of cadmium dust suffered lung damage. Some workers lost their sense of smell from breathing lower levels of cadmium dust.

### What does it mean that cadmium is on California's Proposition 65 list?

Cadmium is on the Proposition 65 list because it is known to cause cancer, developmental and reproductive harm.

This means that businesses must provide a warning if they manufacture or sell products that cause exposures to significant amounts of cadmium. The most common places for such warnings to appear are product labels and retail store shelves. Businesses whose operations could expose the public to significant amounts of cadmium must also provide warnings. Many businesses subject to this requirement provide the warning periodically in newspaper advertisements. Finally, significant amounts of cadmium cannot be discharged into drinking water sources.

Businesses that do not provide the required warning or that discharge the chemical into sources of drinking water may face civil lawsuits brought by state or local prosecutors or members of the public.