

# CADMIUM | WHAT YOU NEED TO KNOW

## 1 Possible sources of exposure

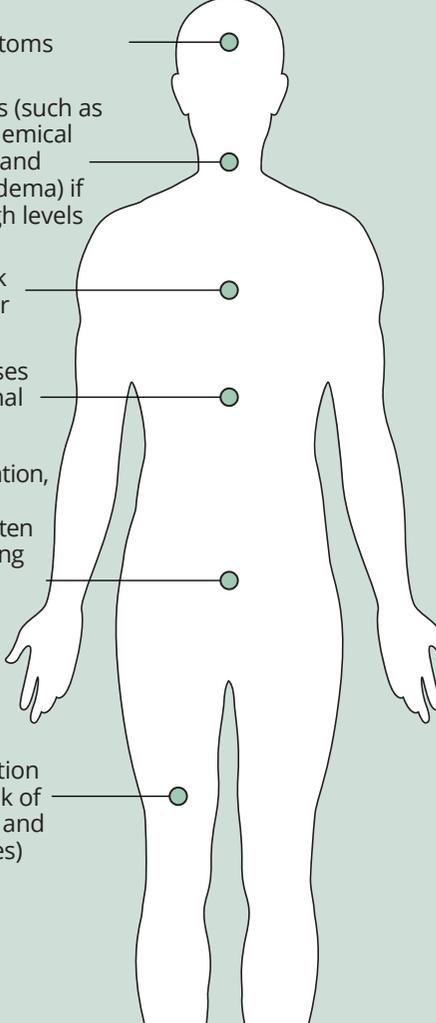
-  Food:
  -  Leafy green vegetables
  -  Liver or kidney
  -  Chocolate
  -  Seafood
  -  Cereals and cereal products
  -  Potatoes
-  Contaminated drinking water
-  Occupational exposure (manufacturing and construction and waste sectors)
-  Tobacco smoke
-  Contaminated air from industrial facilities
-  Occupational exposure

## 2 How can cadmium enter your body?

Via ingestion 

Via inhalation 

## 3 How might cadmium affect your health?



-  Flu-like symptoms
-  Lung diseases (such as bronchitis, chemical pneumonitis and pulmonary edema) if inhaled in high levels
-  Increased risk of lung cancer
-  Kidney diseases (including renal failure)
-  Stomach irritation, vomiting, and diarrhea, if eaten food or drinking water contain high levels of cadmium (acute exposure)
-  Bone demineralisation (increased risk of osteoporosis and bone fractures)

## 4 How can you reduce your exposure to cadmium?

-   **Do not** smoke tobacco products. Cadmium accumulates in tobacco leaves. Stay away from areas where people smoke. If you smoke, avoid exposing others to second-hand smoke, especially children
-   **Maintain** a balanced diet, with only moderate amounts of shellfish and offal such as liver and kidney
-   **Keep** nickel-cadmium batteries out of reach of young children. Dispose of batteries properly
-   **Get** your water and garden soil tested for cadmium if your drinking water comes from a private well or if you live near a source of cadmium
-   If you work with cadmium, **use** all safety precautions, **keep** the work surfaces clean and **wash** your hands frequently

## Where cadmium can be possibly found

Cadmium might be found in foodstuff including cereal and cereal products, vegetables and wild mushrooms, nuts, and offal such as liver and kidney and meat in general, chocolate, and shellfish. Cadmium can be found in tobacco plants and also in contaminated water.



Common industrial uses for cadmium today are in batteries, alloys, coatings (electroplating), solar (photovoltaic) panels, plastic stabilizers, metal plating, infrared detectors, nuclear reactors and pigments for glass, ceramic, plastic and artist colours.

The EU has taken action to reduce people's exposure to cadmium.

As example, the European law sets limits for the levels of cadmium in certain **foodstuff products**. New levels aimed at protecting the most vulnerable groups especially children have been set in a range of **infant products and cocoa-based products**, since 2015 and 2019 respectively. For chocolate, since 1 January 2019, three maximum levels have been established depending on the content of the chocolate varieties. The strictest maximum levels apply to the chocolate varieties mostly eaten by children.

For further information on cadmium, please visit the **'HBM4EU Factsheet'** section.