



# CADMIUM

## ENVIRONMENTAL HEALTH – CONTAMINANTS FACT SHEETS

### WHAT DO WE KNOW ABOUT CADMIUM?

Cadmium is a heavy metal found naturally in the environment and can be released as rock wears down and by volcanoes.

Cadmium is also released into the environment through human activities, such as mining and burning fuel and garbage. It can be carried long distances by air currents

in the atmosphere. Cadmium is found in tobacco smoke, batteries, some dental fillings, electronic devices, mirrors, and televisions.

Some plants, such as lichens, will absorb cadmium that is found in the environment. Land animals that eat these plants will then take up the cadmium, which is stored mainly in the kidney and liver.

### HOW DOES CADMIUM AFFECT HUMAN HEALTH?

When cadmium enters the body, it is not released for many years. Most of the cadmium will be stored in the kidneys. The kidneys are very important organs as they help keep bones and blood healthy. High levels of cadmium can cause problems with kidney functions and may lead to issues such as kidney stones or soft bones that break easily. When inhaled, cadmium can cause problems with the lungs and make it difficult to breathe.

Cadmium is also a known human carcinogen. Most of the evidence suggests an elevated risk of lung cancer in a

work-related exposure; however, links between cadmium exposure and other cancers (such as kidney, breast, and prostate cancers) have also been made.

In the Northwest Territories, smokers have the highest blood cadmium levels. During the 2007-2008 Inuit Health Survey, it was found that 70% of people smoke and that blood cadmium levels were much lower in non-smokers. Cadmium exposure from tobacco smoke is much higher than exposure from eating traditional foods. To lower your exposure to cadmium, stop smoking and avoid second hand smoke.

### DO TRADITIONAL FOODS CONTAIN CADMIUM?

Traditional foods are safe to eat. They are also some of the healthiest foods available. The benefits of consuming traditional foods are much greater than the risks of cadmium exposure.

The Chief Public Health Officer recommends that only a small amount of liver and kidney from moose in the southern Mackenzie Mountains (in the Dehcho) be

consumed. Moose in this region have much higher cadmium levels in their organs. Check the GNWT Health and Social Services website for details on current consumption notices (<http://www.hss.gov.nt.ca>). **By following consumption notices, you can safely enjoy all traditional foods.**