



MERCURY

ENVIRONMENTAL HEALTH – CONTAMINANTS FACT SHEETS

WHAT DO WE KNOW ABOUT MERCURY?

Mercury is a heavy metal found naturally in the environment. It can be released by forest fires, volcanoes, and as rock wears down.

Human activities, such as burning coal, release additional mercury into the environment. Most of the mercury in the NWT is carried long distances from other parts of the world by air currents in the atmosphere. Some mercury comes from local sources, such as gold mines.

More than one form of mercury exists. One of these forms, called inorganic mercury, can be changed naturally by

microorganisms into another form, called methylmercury. Methylmercury can then be absorbed by plants and animals.

Mercury levels become higher in animals as we move up the food chain. This process is called biomagnification. Aquatic food chains are usually longer than land food chains. This is why fish, ringed seal and beluga whale tend to have higher levels of mercury than land animals. Many land animals eat plants and are low on the food chain and so they do not accumulate high levels of mercury.

HOW DOES MERCURY AFFECT HUMAN HEALTH?

At high levels, methylmercury can cause problems with the brain which may include changes in personality, changes in vision and hearing, loss of memory, loss of normal muscle function, intellectual impairment, tremors and death. Mercury can also damage the liver and kidney. Children and the developing fetus are the most sensitive to mercury.

Methylmercury is the form of mercury that we are most concerned about when consuming traditional foods. Details on other forms of mercury and their health effects can be found on the Health Canada website.

Note that very high levels of mercury exposure are required in order to produce these health effects.

For most people, it takes 50 days for half of the mercury in your blood to be eliminated by your body. Small amounts of mercury are usually consumed every day, and so there will be some elimination and some absorption every day. The balance between elimination and absorption determines how much mercury is in a person's body.

ARE TRADITIONAL FOODS SAFE TO EAT?

Yes! 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 low levels of mercury exposure. Check the GNWT Health and Social Services website for current consumption advice.

By following consumption advice, you can safely enjoy all traditional foods.

Higher levels of mercury may be found in larger and older animals, and animals that are higher up in the food chain (predators). To reduce exposure to mercury, eat a variety of foods and include animals that are younger, smaller and non-predatory.

To see NWT fish consumption notices, please visit www.hss.gov.nt.ca.