



Mercury Fact Sheet

Where is mercury found?

Mercury is a naturally occurring element that is found as a solid, liquid and gas in our environment. Elemental mercury is a shiny, silver-white metal that is a liquid at room temperature. It will evaporate at elevated temperatures to form mercury vapor, a colorless, odorless gas. Elemental mercury is found in thermometers, thermostats, barometers, switches, fluorescent bulbs, dental amalgams, and other medical and industrial equipment. The most common and significant form of organic mercury is methyl mercury. Methyl mercury builds up in the tissues of fish. Larger and older fish tend to have the highest levels. Mercury also combines with other elements, such as chlorine, sulfur or oxygen, to form inorganic mercury compounds. Inorganic mercury compounds used to be added to latex paints to prevent microbial growth, but this practice was banned in 1990.

How are we exposed to mercury?

Exposure to mercury occurs from absorption, ingestion or inhalation. Exposure to elemental mercury can occur when an item such as a thermometer breaks. If proper clean-up procedures are not followed, mercury that is vaporized can be inhaled, and mercury that is handled without gloves can be absorbed directly through the skin. Exposure to methyl mercury results from eating fish or shellfish that come from mercury contaminated waters. Inorganic mercury salts are typically not a significant risk to the general population today.

What are the health effects of mercury exposure?

Exposure to methyl mercury and mercury vapor results primarily in respiratory and central nervous system damage; exposure to mercury salts affects the kidneys and liver. The severity of symptoms depends upon the mercury concentration, length of exposure, and individual sensitivity. Mercury exposure is more dangerous for developing fetuses and children under the age of four because it may interfere with normal brain development. Acute exposure to elemental mercury may cause chest pain, labored breathing, vomiting, diarrhea, fever, metallic taste in the mouth, and a rash. Chronic exposure may lead to tremors, limb weakness, loss of appetite, excessive shyness, irritability, headache, and memory loss. Acute exposure to organic mercury may cause loss of muscle coordination, tingling in the limbs, blurred vision, malaise, and impaired hearing, taste and smell. Chronic exposure may result in permanent brain damage.

The body is able to rid itself of mercury by excreting it through the urine and feces. Removal can take up to several months following exposure, but because mercury does leave the body, full recovery after short-term exposure is quite likely. When levels in the body are extremely high, chelation therapy is utilized to aid in the removal of the mercury. Blood or urine samples can be taken in a doctor's office to determine the level of mercury in the body.

How can we minimize mercury exposure?

Follow your local fish advisory reports to reduce consumption of fish that have been determined to have significant levels of methyl mercury, and always follow proper clean up procedures for mercury spills.