

# FAQs: Mercury

#### What is mercury?

Mercury is a naturally occurring heavy metal that is released into the environment by human activity. According to the U.S. Environmental Protection Agency, coal-burning power plants represent the largest source of human-caused source of mercury emissions to the air. Coalburning power plants emit mercury that then falls from the air and settles and accumulates in streams and oceans. Once deposited, some microorganisms can change mercury into methyl-mercury, a highly toxic form of mercury. Methyl-mercury accumulates in long-lived fish and their consumers, and increases in concentration as it moves up the food chain.

Mercury is also released into the environment through mining and by improper disposal of mercury-containing items such as batteries, fluorescent light bulbs (including compact fluorescent light bulbs) and mercury thermometers. While mercury has proved useful in measuring devices such as thermometers, it is a toxic substance that can harm both humans and wildlife.

There is so much mercury pollution that 39 states are currently warning residents not to eat certain species of fish caught in all or some

#### How can mercury affect human health?

Mercury is a potent neurotoxin that can damage the nervous system including the brain, kidneys and liver. Effects on brain function include tremors, irritability, changes in vision or hearing, and memory problems. Infants, children, and pregnant women are most vulnerable to the negative health effects of mercury.

This neurotoxin is passed to the fetus during pregnancy, and to newborns through breast milk. Harmful effects include blindness, seizures, brain damage, and inability to speak. Children may develop problems affecting their nervous and digestive systems and could suffer kidney damage.

Mercury affects the ability to feel, see, taste and move. It can cause tingling sensations in the fingers and toes, a numb sensation around the mouth and tunnel vision. Long term exposure to mercury can result in symptoms that get progressively worse and lead to personality changes, stupor and coma.

#### Additional Resource(s) on mercury:

Agency for Toxic Substances and Disease Registry (ATSDR)

Mercury in the Environment

#### How can I reduce my exposure to mercury?

#### **Eco Tips for Child Care Providers:**

- Use digital thermometers; do not use mercury thermometers.
- Take used batteries, mercury thermometers, fluorescent light bulbs, and other mercurycontaining products to a hazardous waste facility. Visit <a href="https://www.earth911.org">www.earth911.org</a>; enter your item and zip code and locations will be provided.
- If there is a mercury spill, immediately contact your health department for cleanup instructions and resources.

- Never use a vacuum cleaner or broom to clean. It will spread the mercury. Use cardboard or an eyedropper to gather mercury beads. Always wear gloves.
- Never pour mercury down a drain.

# Additional Resource(s) on reducing exposure to mercury:

National Mercury Reduction Programs Database

Mercury spills, cleanup and disposal

## How can I reduce exposure to mercury in food?

- Limit intake of large, long-lived fish.
   Pregnant women, nursing mothers and children under six years old should not eat more than two servings per week (Adult serving = 6 oz.; child serving = 3 oz.).
- If you eat locally-caught fish, check with your health or environment department regarding fish advisories.

#### **Additional Resources on Mercury:**

<u>Products that Contain Mercury</u> <u>Monterey Bay Aquarium Seafood Watch</u>

### How do I properly dispose of a mercury thermometer?

Once a mercury-free replacement has been purchased, it is important to dispose of the old thermometer safely. Do not throw the old mercury thermometer in the garbage. Garbage is either incinerated or land filled. In either case, the mercury will make its way into the environment through air emissions or water contamination. This mercury will then affect many living things, including humans.

Bring your mercury thermometer to a household hazardous waste collection facility. Many state or local agencies operate these facilities as permanent or seasonal collections. Typically, the service is free.

Visit <u>www.earth911.org</u>. Type in your zip code and the item you want to recycle and this website will list all nearby hazardous waste facilities.