

Washington

Quicksilver Review

August 2002 Volume 1, Issue 2 (Ecology pub# 02-03-040)

Q Where does mercury come from?

A Mercury is a natural element and can be found at low levels almost everywhere. However, human activities such as coal burning and trash disposal have significantly increased mercury levels in the environment. Many common products contain mercury and can pollute the environment when they are incinerated, landfilled, broken, or disposed of down drains.

Mercury can affect local areas or be carried across whole continents by the wind. In lakes, ponds, and the ocean, mercury is absorbed by small organisms that are then eaten by fish. The mercury becomes concentrated in predator and long-lived fish, up to a million times higher than the water the fish lives in.

The Department of Ecology is working with many local communities and the federal government to virtually eliminate man-made releases of mercury to the environment.

Q Health and wildlife effects?

A Mercury affects the human brain, kidneys, and liver. Although mercury can be taken in through the lungs or skin, eating mercury-contaminated fish is of most concern.

Mercury affects fetal and young children's development, preventing the brain and nervous system from developing normally.

Nervous system changes can affect a child's ability to learn. In adults, mercury can lead to nerve problems, harm the heart, and raise blood pressure.



Wildlife, such as loons, otters, and other fish-eating creatures, are also at risk from eating mercury-contaminated fish.

Q What about mercury in fish?

A Eating fish is an important part of a healthy and balanced diet; one or two meals each week is ideal. Fish is an excellent low-fat food and a great source of protein, vitamins, and minerals. But some kinds of fish have too much mercury in them.

More than 40 states and the U.S. Food and Drug Administration have posted fish-consumption advisories due to elevated levels of mercury in fish tissue. Women of child-bearing age and children under six years should not eat any shark, swordfish, tilefish, king mackerel, or tuna steaks and should limit the amount of canned tuna they eat, depending on how much they weigh.

For example, a woman who weighs about 135 pounds should eat no more than one can (6 ounces) of tuna per week.

If you catch fish, check to see if there is a fish advisory for your area by contacting the environmental-health division of your county health department or by going to www.doh.wa.gov/fish. Choose fish that is low in mercury. Salmon, flounder, cod, catfish, trout and pollock tend to be low in mercury, as do clams, shrimp, scallops, and lobsters.

Q Does cooking change the amount of mercury in the fish?

A No. There is no special way to cook fish to remove mercury. But unlike mercury, the amounts of contaminants like PCBs and many pesticides are stored mostly in the fat of fish, and so it is important to prepare fish in ways that reduce the amount of fish fat. Cut off the skin, then broil, grill, or bake it on a rack so the fat drips off the fish. Do not use the drippings for sauces or gravies.

Q When will the fish named in the advisories be safe to eat?

A Because mercury lasts for so long, it will be many years before mercury levels in the fish named in our advisories decrease significantly.



Commonly Asked Questions about mercury

This issue of the *Quicksilver Review* is dedicated to answering commonly asked questions about mercury.

The *Quicksilver Review* is published quarterly, posted on the Internet at www.ecy.wa.gov/programs/eap/pbt/pbtfaq.html.

We will notify subscribers by e-mail when each new edition is published. To sign up for notification, please register at: <http://listserv.wa.gov/archives/mercury-news.html>.

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Mercury in Products: What you can do

Learn which products contain mercury. Do not purchase them if a substitute is available. Never put mercury waste in the trash! Many communities accept mercury at hazardous waste centers. Call your county or 800-RECYCLE for details.

- **Thermometers:** Mercury thermometers can be identified by the silver-colored liquid in the bulb. Alternatives include alcohol (red, blue, or purple bulb), digital, and other non-mercury models.

- **Fluorescent bulbs:** All fluorescent bulbs contain mercury, but they offer the benefit of energy efficiency. Keep fluorescent bulbs out of the trash, avoid breakage, and dispose of them at a household-hazardous-waste site.

- **Button-cell batteries,** such as those used in watches, contain mercury and should be disposed of at a household-hazardous-waste site.

- **Thermostats:** Non-electronic thermostats contain mercury. Alternatives include electronic and digital models.

- **Fillings for your teeth:** Dental amalgam contains about 50 percent mercury. When you are replacing fillings or getting new ones, ask your dentist about mercury-free alternatives.

- **Mercury switches:** Silent light switches and tilt switches, such as those found in automotive trunk and hood lights, clothes irons, bilge pumps, and space heaters, contain mercury. Ask your supplier or manufacturer for products with non-mercury switches.

Other sources of mercury in homes include:

- weight/counter-weight in grandfather clocks
- jewelry with a glass ampoule containing mercury
- old batteries of any type (pre-1990)
- old pesticides, fungicides, and paint

Every drop counts: Spill cleanup

When mercury is spilled, it evaporates and gives off hazardous vapors that are invisible and odorless.

- Take immediate precautions. Do not touch the mercury. Open windows to ventilate the area.

- Large spills should be cleaned up professionally. If more than two tablespoons have been spilled, you are required to report the spill. Call 911 immediately.

- Contain the spill. Move objects away from the spill and prevent the mercury from flowing into drains, cracks, or crevices.

- Never vacuum or sweep up spilled mercury. The suction action will spread mercury by air throughout the house and contaminate your vacuum or broom.



- Clean up the spill. For details on appropriate cleanup procedures, call 911. For more information call the DOH Environmental Health Assessment Office toll-free at 1-877-485-7316 to order DOH Pub 333050 8/02 English.

