

Water Reclamation Department

The City of Solon Water Reclamation Department has been mandated by the Ohio Environmental Protection Agency to reduce the amount of mercury discharged to the environment. A plan to reduce and eliminate mercury has been developed by the Solon Water Reclamation Department and approved by the Ohio EPA. Part of this plan includes mercury reduction and elimination within our residential community. With your assistance, we can reduce the potential risks of mercury in our homes and the environment. Thank you in advance for your assistance. If you have any questions regarding mercury, please call us.

James S. Stanek,

Director, Solon Water Reclamation Department

The information in this brochure will help protect you, your family, and our environment from the many hidden dangers of mercury. We will answer the following questions:

What is mercury and where can it be found?

What are the health effects of mercury exposure?

How do we reduce or eliminate mercury exposure and dispose of household mercury items?

What should I do if mercury is spilled in my home?

What are the effects of mercury in the environment and how can we help prevent mercury pollution?

What is mercury and where is it found?

Mercury (Hg) is an element that occurs naturally in the earth's surface. It is a dense silver-gray liquid at room temperature. When exposed to the atmosphere, mercury will slowly vaporize and emit a colorless, odorless and highly toxic fume. Though mercury has many beneficial uses, it is being phased out of many retail products because of its toxicity. The following is a list of some common household products that contain mercury:



Thermometers

Fluorescent and mercury vapor lamps

Thermostats



Appliances (freezers, microwaves, clothes irons)

Switches (tilt, space heaters, sump pumps)



Barometers, manometers, blood pressure and vacuum gauges)

Bulk containers of mercury (glass jars or cans)



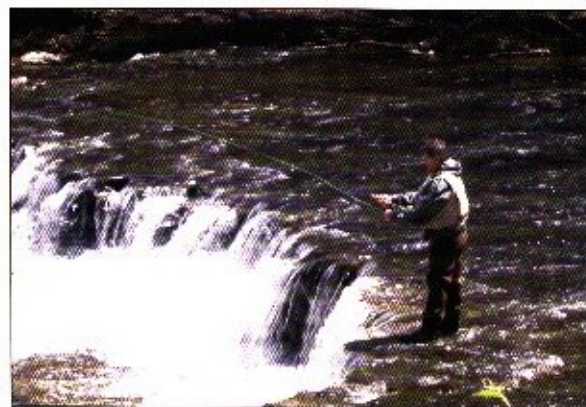
Old paint manufactured before 1992 and old batteries before 1980

Antiseptics (Mercurochrome)

What are the health effects of mercury exposure?

Mercury exposure can occur by inhalation, ingestion, and physical contact. Symptoms can range from headaches to death, depending on the route of exposure, concentration, length of exposure, and the individual. Women who are pregnant and children under six are at greatest risk of developing serious health problems. Documented incidents of exposure have provided valuable information about the insidious nature of mercury. Small mercury spills, like a broken thermometer, can pose a significant health risk if not properly cleaned up.

Exposure to larger quantities of mercury has required hospitalization and can lead to permanent physical damage or death. Mercury exposure by ingestion is usually caused by eating contaminated fish. The Ohio Department of Health advises that all persons should limit consumption of sport fish caught from all water bodies in Ohio to one meal per week, unless there is a more restrictive advisory.



For more information, visit Ohio Department of Health and the following U.S. EPA web sites:

www.odh.state.oh.us

www.epa.gov/bnsdocs/hg/thermfaq.html

How do we reduce or eliminate mercury exposure and dispose of household mercury items?

Start by purchasing household products that are mercury-free and replace existing products containing mercury with alternatives. (Example: Replace mercury-filled thermometers with electronic type. Replace Mercurochrome with Neosporin.) Identify and properly dispose of existing household items that contain mercury to reduce or eliminate the risk of mercury exposure. Never dispose of mercury or items containing mercury in the trash or down a drain. Place items in a plastic bag or plastic container for proper disposal. The Cuyahoga County Solid Waste District manages a Household Mercury Collection Program. As part of this program the Solon Service Department, located at 6600 Cochran Road, will accept your mercury items from 9:00 AM to 4:00 PM, Monday through Friday. A sign-in sheet must be completed at the time of drop-off.



For more information on Household Mercury Collection, visit the Cuyahoga County web site:

www.cuyahogaswd.org

What should I do if mercury is spilled in my home?

The safest and best way to clean up a mercury spill is to hire a licensed professional contractor. If a spill occurs, follow these safety recommendations prior to clean up:

- Contain the spill with rags or other disposable items.
- Keep children, pets, and others out of the spill area to prevent spreading.
- Open windows and doors and use a fan to ventilate the spill area.
- Turn off heating and air conditioning systems or close vents.
- Close windows and doors outside the spill area to prevent contamination.

NEVER perform the following actions when a mercury spill has occurred:

- NEVER use an ordinary vacuum or a shop vacuum to clean up mercury. These types of vacuums will increase mercury vapors and increase exposure.
- NEVER use a broom or small brush to clean up mercury spills. This will break up the mercury into smaller beads and increase vaporization.
- NEVER pour mercury down the drain or dispose in the regular trash.
- NEVER allow people or pets to leave the general area of contamination. Leaving the area may spread the mercury to other areas.
- NEVER wash contaminated clothing in your washing machine. Clothing must be disposed of with other contaminated items.

Report all mercury spills, large or small, to the Ohio EPA Spill Hotline, 800-282-9378, and Poison Control Center, 800-222-1222. For more information on mercury spill safety and clean up, visit the following web site:

www.epa.state.oh.us/opp/mercury_pbt/mercury.pdf

What are the effects of mercury in the environment and how can we help prevent mercury pollution?

Mercury enters the environment in many different ways, including:

- Burning fossil fuels for energy production, releases mercury to the atmosphere.
- Disposal of mercury products in domestic waste, which is incinerated or buried at a landfill.
- Mercury waste from commercial and industrial processes discharged to a wastewater treatment facility.



When mercury reaches our lakes and rivers it is converted to methyl-mercury by bacteria. Methyl-mercury is extremely toxic and has the ability to bio-accumulate and reach dangerous concentrations in fish tissue. Many animals, like eagles, turtles, and otters, are dependent on a large fish diet and are therefore very susceptible to methyl-mercury poisoning.

We can all help to reduce the amount of mercury that is released to the environment by remembering the following suggestions:

- Know where mercury is found.
- Avoid buying products that contain mercury.
- Properly dispose of mercury-containing products.

By following these suggestions, we can all help to reduce the amount of mercury reaching the environment. For more information on fish consumption advisories, visit this web site:

www.epa.state.oh.us/dsw/fishadvisory/