

## Mercury Spills

### Safely handle them if they happen.

Elemental mercury (quicksilver) is a toxin that can be found in a variety of items, such as thermometers, thermostats, blood pressure cuffs, fluorescent bulbs, and even some toys or jewelry. When it is spilled, it evaporates and gives off invisible, odorless vapors. Breathing mercury vapors can make you sick. Even though you might not feel sick, mercury can impact the way your brain and nervous system function.

Walk through your home, work or school and look at items that might contain mercury. If you find something that contains mercury, pack it carefully or talk with your school administrator or supervisor about safe handling and disposal. If you spill mercury or break a product that contains mercury, follow the tips in this brochure.

### Take immediate precautions to contain the spill.

Do not touch the mercury. Keep people and pets out of the area. Isolate the spill area and prevent the mercury from flowing into drains, cracks or crevices. Turn off heating, ventilating or air conditioning systems that circulate the air internally through the house or building.

### Never vacuum or sweep up the spilled mercury.

The most dangerous exposure to elemental mercury is by breathing its fumes. Vacuuming or sweeping up a mercury spill will spread the mercury throughout the house or building and contaminate your vacuum or broom.

**Get help for large spills.** Large mercury spills should be cleaned up professionally. Call 911 if more than about two tablespoons has been spilled. Describe what happened and ask to be connected with the Wayne County Department of Environment (24-hour hotline 1-888-223-2363). The Poison Control Center (1-800-222-1222) is available to answer your questions about human health and large or small mercury spills.

**Clean up small spills.** Remove all jewelry from your hands since mercury adheres to gold and silver. Put on rubber gloves. Keep your hands away from your face. Find a plastic bag for sealing any item that mercury has touched.

Carefully pick up pieces of broken glass and place them in the plastic bag. Using the sticky side of duct tape or masking tape (two-inches or wider), pick up any remaining glass and mercury droplets.

- **On a hard surface:** Push the beads of mercury together with a card, stiff paper or squeegee to form larger droplets. Then use two cards, stiff papers or an eyedropper to pick up the droplets of mercury.
- **On carpet:** Cut out the contaminated section. Place it in the plastic bag.
- **In a drain:** Remove the sink trap and pour the contents into a plastic bag. Use a flashlight to look all around in the area of the spill. The light will reflect off the shiny mercury beads making it easier to see them. Pick up any droplets using the procedure described above. Place all droplets and the cards, papers or squeegee used into the plastic bag. When finished, carefully remove your rubber gloves, place them into the bag, and tightly seal the bag.

### Dispose of the mercury waste responsibly.

When mercury is improperly disposed of down a drain or into the garbage, it ends up contaminating the environment for years. It eventually ends up in the air we breathe or the fish we eat. Bring mercury waste to your local household hazardous waste collection program during its hours of operation. Call your local officials to identify the hazardous waste collection program nearest you.

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# Mercury Minimization Program



South Huron Valley Utility Authority  
and  
United Water

In partnership to help protect the environment and human health by minimizing mercury pollution and exposure

Public Awareness  
and  
Participation

Information Brochure  
Prepared by  
United Water / SHVUA  
Wastewater Treatment Plant  
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### What is mercury?

Mercury is a natural occurring metal. It is liquid at room temperature, binds easily with other metals, and conducts electricity well. Because of these properties, mercury has been used in many household, medical and industrial products.

### Why is mercury of concern?

When mercury gets into our waterways, it changes. Through a natural chemical process it becomes methyl mercury, which is much more toxic. Methyl mercury in the food chain builds up in the tissue of fish and animals. It can cause weight loss, reproductive problems, and early death. In humans, mercury is a neurotoxin. This means it slows fetal and child development and impairs brain function. High exposure can cause tremors, numbness of fingers and toes, loss of muscle control, memory loss, and kidney disease.

### How does mercury get into the environment?

Most mercury in the environment comes from human activities. Mercury enters the air in emissions from coal burning power plants and waste incinerators. It enters our lakes, streams and rivers through rain and snow, through improper disposal of household products, and through wastewater discharges.

### How much is too much?

Mercury is toxic in very small quantities. Because mercury builds up in the food chain, even small amounts of mercury in water can make fish unsafe to eat and cause reproductive problems for wildlife.

### Where is mercury at my place of business or school?

- Fluorescent lights
- Mercury thermometers
- Mercury thermostats and switches
- Dental fillings

### How can I prevent mercury pollution?

- Check your home for mercury containing products and dispose of properly.
- Read labels. Avoid buying products with mercury when substitutes are available.

- Talk with your dentist to learn about possible alternatives to mercury amalgam fillings.
- Recycle mercury containing products. Contact your local officials for information about local collection events or the nearest household hazardous waste collection center.
- Don't pour products that may contain mercury down the drain. Dispose of properly.

### Mercury Search Checklist

Use this Mercury Search to locate mercury containing items in your home, school, or workplace. Mark them with stickers or some other form of identification as a reminder to ensure the mercury gets recycled. Store these items out of children's reach. Handle the products carefully to avoid breakage or spills. Remove unnecessary mercury-containing items from your home, school, or workplace and take them to your local hazardous waste recycling site.

- \_\_\_\_\_ Thermometers - silver-colored liquid inside.
- \_\_\_\_\_ Thermostats - non-electronic.
- \_\_\_\_\_ Fluorescent and other mercury vapor lighting - HID (high intensity discharge), metal halide, high-pressure sodium and neon bulbs.
- \_\_\_\_\_ Automotive headlamps - blue tint when lit.
- \_\_\_\_\_ Pilot light sensors - in some gas appliances: stoves, ovens, clothes dryers, water heaters, furnaces, space heaters.
- \_\_\_\_\_ Gauges - barometers, manometers, blood pressure and vacuum gauges with silver-colored liquid.
- \_\_\_\_\_ Switches and relays - in some chest freezers, pre-1972 washing machines, sump and bilge pumps, electric space heaters, silent light switches, vehicles and farm equipment.
- \_\_\_\_\_ Clothes irons - automatic or tilt shut-offs.
- \_\_\_\_\_ Elemental mercury - silver-colored liquid metal sometimes found in children's chemistry sets.
- \_\_\_\_\_ Vintage toys - toy drawing screens and mercury maze games.

- \_\_\_\_\_ LA Gear® athletic shoes - made before 1997 with flashing lights in soles.
- \_\_\_\_\_ Batteries - mercuric oxide and some alkaline batteries.
- \_\_\_\_\_ Paint - latex manufactured before 1990, and some oil base-paints; check the label.
- \_\_\_\_\_ Thimerosal or merbromin - in some antibacterial products.
- \_\_\_\_\_ Some pharmaceutical products contain mercury.
- \_\_\_\_\_ Some detergent products contain mercury.
- \_\_\_\_\_ Some disinfectant products contain mercury.
- \_\_\_\_\_ Dental amalgam (preparation/disposal).

### Disposing of Mercury-Containing Items

Keep these items out of the trash. When products containing mercury are placed in the trash or mercury is poured down the drain, it does not disappear. It finds its way into the environment from waste incinerators, landfills and wastewater treatment facilities. Take mercury containing items to your local hazardous waste recycle center, or contact SHVUA at (734) 379-3855 to locate your local recycle center.

### Cleaning up Mercury Spills

Even tiny mercury spills are difficult cleanups. Never use a vacuum cleaner or shop vac! For small mercury spills, such as those from fever thermometers or for broken fluorescent light bulbs, follow instructions for cleaning up a small mercury spill. If human contact with mercury occurs, call the Poison Control Center at (800) 222-1222.

For additional information on mercury, see the web at [www.epa.gov](http://www.epa.gov) and [www.michigan.gov/deq](http://www.michigan.gov/deq) or call the SHVUA Wastewater Treatment Plant at (734) 379-3855.