

Guidelines for Handling a Small Mercury Spill

Mercury is present in a number of forms in the environment. Spills most commonly occur with elemental mercury. It is a shiny, dense, silver-gray metal that is a liquid at room temperature. Liquid mercury can be found in items such as:

- ? Thermometers, thermostats, barometers, and electrical switches
- ? Silver dental fillings and some medical equipment
- ? Light bulbs such as fluorescent, high intensity, mercury vapor, metal halide and high-pressure sodium
- ? Clock pendulums
- ? Athletic shoes and toys that light up
- ? Gel capsules used in folk medicine, sometimes known as “azogue”
- ? Older homes and building where jars of mercury remain, left over from earlier applications when the dangers of handling mercury were not well-known

When liquid mercury is spilled, it disperses into tiny round droplets. As it is exposed to the air, it emits a vapor that is odorless, colorless and *very toxic*. Under normal conditions, a small mercury spill will pose little risk to your health *if the proper steps are taken*.

Small spills are those that are two tablespoons or less. If a spill is larger, if the mercury has been tracked through a home or building, or if the mercury has spread into difficult to clean areas, do not attempt to handle the problem yourself. Contact a professional company that is skilled in the removal of mercury.

When a small spill occurs:

- ? Immediately isolate the area. Have all people leave the room and open windows to facilitate ventilation.
- ? If the mercury has come in contact with your skin and/or clothing, have someone bring you wet paper towels and a garbage bag. Use the paper towels to wipe off all visible mercury from your skin and place the paper towels and any contaminated clothing into the garbage bag. Shower well.
- ? Gather a pair of rubber gloves, a flashlight, Ziploc baggies, large garbage bags, wide-mouth plastic or glass containers with lids, eye dropper, stiff sheets of cardboard and duct tape.
- ? If the mercury has spilled in a heated device, allow it to cool *completely* before beginning the clean up. Warmer temperatures cause mercury to emit vapors at a much faster rate.
- ? Remove jewelry.
- ? Put on gloves.
- ? If the mercury has spilled onto an absorbent material, the material must be discarded. Carefully place the material into a Ziploc or container with lid, making sure to contain the mercury.

- ? Place any broken glass into a container with a lid.
- ? Use the flashlight to facilitate locating all of the mercury that has spilled. The light will reflect off of the mercury beads, making them easier to find.
- ? Use the cardboard to scrape the droplets together. ***Do not use a broom. It will cause the droplets to break into even smaller droplets, making the clean up more difficult. Additionally, never use a vacuum cleaner. Not only will the vacuum become contaminated and have to be thrown away, but also the vacuum will cause mercury vapor to disperse throughout the room.***
- ? Carefully suction the mercury droplets with the eyedropper, or scoop the droplets with the cardboard. Place the mercury droplets, eyedropper, and cardboard into a Ziploc or container with lid.
- ? Use the duct tape to lift any remaining beads of mercury. Place the tape in a Ziploc or container with lid.
- ? If a mercury spill clean-up kit is available, sprinkle the mercury absorbent powder lightly over the remaining droplets. Spray a water mist over the powder. Scrape the materials together and place into a Ziploc or container with lid.

- ? ***Remember: Anything that comes into contact with the mercury is contaminated and must be discarded. When the clean up is complete, all supplies used must be placed into the garbage bags. This includes the gloves, flashlight, tape, Ziplocs and containers utilized, and any clothing or shoes that may have come in contact with the spill. Contaminated clothing cannot be laundered in a washing machine. The machine will become contaminated.***

- ? Arrange to discard your mercury-contaminated waste. If the spill has occurred in the home, contact the [Cuyahoga County Solid Waste District](#) at (216) 443-3749 for the nearest drop-off site. If the spill has occurred in the business or institutional setting, label the bags or containers as hazardous waste and identify the contents as mercury spill debris. Contact a [hazardous waste facility](#) in your area to arrange for proper disposal.
- ? Do not pour mercury down a drain. It may contaminate our waterways. Mercury that is introduced into streams, lakes and other bodies of water is converted to methyl mercury, which builds up in the tissues of fish.
- ? Keep the doors to room closed and the windows open for a minimum of two days.
- ? If you have concerns about your exposure to the mercury vapors, consult your physician for urine mercury testing. Readings should not exceed 20 micrograms per liter of urine. Additionally, mercury vapor badges can be placed in the room to detect mercury vapor in the air. They should be placed at five feet and three feet high from the floor to measure vapors at breathing levels for adults and children. The badges are left in place for eight hours and then mailed away for analysis. Result should not exceed 0.005 milligrams per cubic meter of air.
- ? For additional information, you can visit the website for the Agency for Toxic Substances and Disease Registry at www.atsdr.cdc.gov/toxprofiles/46.html and the Ohio EPA at www.epa.state.oh.us/opp/mercury_pbt/mercury.html.