



## Indoor Mercury Spills

When liquid mercury spills, the silver puddles that form scatter into tiny beads and droplets. Mercury gives off an invisible vapor. Breathing this vapor can cause health problems such as learning and behavioral disorders, mood changes, seizures and kidney damage. This is especially true for young children and unborn babies carried by pregnant women. Household pets that are close to the floor are at risk too. By acting quickly to stop the mercury from spreading and removing it from your home, you can lessen the chance that anyone will be harmed by it. This brochure gives you information on what you need to know right away when mercury spills.

### **After a Spill... Read This First!**

- ❑ Close all doors that lead to uncontaminated areas, areas where the mercury has not spilled.
- ❑ Get people out of the room. Take off any clothing and shoes that might have mercury on them and seal them in plastic bags. Leave the bags in the room where the mercury spilled.
- ❑ Remove your jewelry. Mercury can stick to gold and other metals.
- ❑ Get pets out of the area. If the pets have walked through the mercury, wipe their feet with a rag moistened with foam shaving cream. The shaving cream will help to stop the spread of mercury to other areas. Put the rags into a bag and seal it, leaving it in the room where the mercury spilled.
- ❑ Isolate the room from the heating and air conditioning system by closing all air vents or registers.

- ❑ Open an outside window or door in the room. If possible, place a fan so that it can blow air from the room to the outside.
- ❑ Valuable or important items that might be contaminated, like an oriental rug, should be placed in a warm, airy, non-living area for several months. Then have it tested to see if mercury vapor can still be detected.

### **Decide Who Can Do the Cleanup**

You can probably do a safe and thorough cleanup if:

- The spill is a small amount – a pea-sized bead or less (like in a fever thermometer).
- The spill has not been spread or tracked over a large area.
- The spill has happened recently – within a day.
- The spill is on a hard surface like a countertop or a hardwood or vinyl floor.
- The spill is on an easily bagged and disposable rough object like a throw rug or pillow.

### **Pregnant women should not be involved in mercury cleanups!**

Even if you can clean up the spill yourself with the help of this brochure, you may want to get more advice or have your house tested. You can call your state or local health department or the Poison Control Center, 1-800-222-1222.

## **DON'TS**

- ❑ **Don't stay in a place where mercury has been heated! Get everyone out of the area until the air can be tested.**
- ❑ Don't vacuum or sweep spilled mercury. This will spread the mercury around.
- ❑ Don't enter or allow any person to enter a contaminated area without shoe covers. Plastic grocery bags tied or taped around shoes will protect your feet and shoes from the mercury.
- ❑ Don't leave a contaminated area wearing contaminated clothing (including contaminated shoe covers.)
- ❑ Don't wear jewelry (rings, watches, bracelets) near spilled mercury.
- ❑ Don't heat or burn items with mercury on them.
- ❑ Don't pour mercury down a drain. It will sit in the drain and keep giving off vapor.
- ❑ Don't wash mercury-contaminated clothing or other items in a washing machine. You may contaminate your washing machine. Bag the items that may have mercury on them, seal them, and mark them "mercury hazard". Put them in a place away from people and pets such as a storage shed or garage.
- ❑ Don't use household cleaning products containing ammonia or chlorine to clean up mercury. They can react strongly with mercury and produce poisonous gas.

## **DO's**

- ❑ **Do get people and pets out of an area where mercury has been heated immediately!**
- ❑ Do act quickly to keep mercury from spreading!
- ❑ Do remove people and uncontaminated pets from the spill area, leaving contaminated clothing and other items in the room where the spill occurred.
- ❑ Do put pets that have touched mercury in a crate or outdoors until they can be washed with a shampoo that has selenium sulfide like Selsun Blue®, Exsel® or Head and Shoulders Intensive Treatment Dandruff Shampoo®. Don't throw the bathwater into a storm drain or garden. Scatter it on outside on the cement where the water and mercury can evaporate. Products with selenium sulfide should not be used by pregnant women. If your pet is pregnant, ask your veterinarian for advice on how to safely remove the mercury from its fur.
- ❑ Do isolate the area from the "clean spaces". Shut the interior doors. Close off or cover the furnace and air conditioning vents or registers in the room. If possible, make the room cooler but don't open the door to a room where the mercury has not spilled.
- ❑ Do open windows and doors that lead from the contaminated area to the outdoors. A fan blowing air out of the room will work best to remove mercury vapors.
- ❑ Do decide if you are able to clean up the spill yourself or if you'll need help.

### **If you decide to do the cleanup yourself, gather the things you'll need.**

- ✓ A flashlight
- ✓ Several zipper-seal plastic bags
- ✓ Some large plastic trash bags
- ✓ An eyedropper or a syringe without a needle
- ✓ A roll of duct, masking or packaging tape
- ✓ A utility or similar knife
- ✓ Index cards, thin cardboard, stiff paper or a rubber squeegee
- ✓ Paper towels and water
- ✓ Small artist's paintbrush
- ✓ Foam type shaving cream
- ✓ Shoe covers, newspaper to kneel on and old clothes to wear
- ✓ Rubber or latex gloves
- ✓ A cardboard box to carry the cleanup items to and from the spill site
- ✓ Or ask your local health department where you can buy a mercury spill kit



## Cleaning Up Small Spills – such as a broken fever thermometer

1. Remove your jewelry, change into old, disposable clothing and put on rubber or latex gloves (if available).
2. Pick up all the glass and container parts, wrap them in a damp paper towel or disposable cloth, place them in a zippered plastic bag and seal the bag.
3. Pick up the mercury using one or more of these methods:
  - Carefully push the mercury beads together with a card and move them gently onto a creased piece of cardboard or stiff paper. Tip them into a zippered plastic bag. Put the cardboard into the plastic bag.
  - Pick up beads with an eyedropper or syringe (without the needle attached) and place them into a zippered plastic bag. Put the eyedropper or syringe into the plastic bag.
  - Use the sticky side of tape to pick up the beads. Put the tape and mercury in the zippered plastic bag.
4. Additional instructions for cleanup on different surfaces:

### Small spills on a soft surface -

- Put contaminated materials such as cushions, throw rugs or stuffed toys into a trash bag and seal the bag. Put the bag inside another bag and seal it. Put everything in a secure, non-living space like a garage. Check with your local health department about testing the bagged items to see if they can be saved or if they should be thrown away.
- **Mercury beads cannot be removed from carpeting.** The carpeting must be carefully removed and thrown out. To protect your clothing, put down newspaper to kneel on. Carefully cut the carpet into small squares (1-3 foot squares). Cut out all the carpeting that you think has mercury in it. Then add one more foot in each direction to be sure you got all of the mercury. Fold each carpet piece to keep the beads from spilling out. Immediately put it in a plastic trash bag. Follow the same process for cutting, removing and disposing of the carpet pad. When all the pieces are bagged, seal the bag and put it in another trash bag. Wash the floor under the carpet with a household cleaner using a disposable cleaning pad like a sponge. Dry the floor with paper towels. Put the pad and paper towels into a trash bag when done.

### Small spills on a hard surface-

- Look for additional beads by turning off all the lights in the room, putting newspaper down to kneel on and shining a flashlight across the floor surface.
  - If you have a mercury spill kit, clean the area where there might be beads that are too small to see by sprinkling the powdered zinc over the area and wetting it. When you scrape or wipe the zinc powder, the mercury will come away attached to it.
  - If you don't have a spill kit, spray foam-type shaving cream across the surface, then scrape or wipe it with up a card or towel. Put everything into a zippered plastic bag.
  - Pay special attention to cracks, seams or places where molding meets a surface. Small beads often come to rest or roll out of sight in these areas.
  - Hard-to-get beads can be lifted with the sticky side of tape or with a small paintbrush. Wet the brush's bristles with shaving cream so that the beads will stick to it. Put the beads in a zippered plastic bag.
  - Wash the floor with a household cleaner using a disposable cleaning pad like a sponge. Dry the floor with paper towels. Put the pad and paper towels into a trash bag when done.
5. Make sure that everything - including the broken mercury-containing item and the cleanup items - is in sealed plastic bags. Put all of the bags inside another trash bag and seal the second one. Call your local Department of Public Works or your health department to find out how to dispose of them. Don't leave the bags inside your house!
  6. When you are done, air out the room to the outdoors for at least a full day (24 hours).

## Large Spills

For larger spills, especially in areas used by the public like a doctor's office, hiring a professional cleanup contractor is usually recommended. The Michigan Department of Environmental Quality (MDEQ) has a [list of professionals](#) that are experienced in mercury cleanup. You can also call the MDEQ at 1-800-292-4706.

All spills of one pound of mercury, approximately two tablespoons or more, must be reported to state and federal agencies. Information about the [notification requirements](#) can be found by contacting [your MDEQ office](#).

**Note:** This information is meant to help in cleaning up a mercury spill. However, every condition for every mercury spill cannot be known. When in doubt, call for advice.



## Find ways to reduce mercury in the environment.

**Stop spills before they happen!** Many [Clean Sweep Sites and community Household Hazard Waste \(HHW\) collection centers](#) accept mercury-containing items and spill waste from the public at no charge. Call first to get information on how to package and transport the item and for drop-off times.

## Testing After a Mercury Spill

### Testing a Building

If you ventilate the vapors and clean up the spill yourself, your local or state health department may be able provide testing. The testing is free and can help you find out if you have cleaned up all of the mercury.

If you hired a professional cleanup contractor, they should provide clearance testing. This test is done after the cleanup to ensure that all of the mercury has been removed. MDCH has a [fact sheet](#) for customers of professional mercury cleanup contractors.

### Testing People

If you think that you have been heavily exposed to mercury vapor, you should talk to your doctor. He or she might find it useful for you to have a blood test (for a recent exposure) or a urine test (for a longer term exposure) or both.

## For more information

- ❑ Call your local health department and ask to speak to someone in Environmental Health
- ❑ Check with your doctor
- ❑ Call the State of Michigan's Toxics Hotline 1-800-MI-TOXIC, (1-800-648-6942)
- ❑ Call the Poison Control Center 1-800-222-1222
- ❑ Visit the State of Michigan's mercury website, <http://www.michigan.gov/mercury>.

