

## Responding to Mercury Spills: Fever Thermometers

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### ISOLATE THE SPILL AREA

Keep children and pets away. Avoid traffic going through the spill area. Those who may have come into contact with mercury should be directed to remove contaminated shoes or clothing, which should be placed in two bags, sealed and closed. Otherwise, mercury could be tracked around the building or home.

**Note:** If the mercury was vacuumed, exposed to heat or entered the ventilation system, refer to large spill guidance on the web at <http://dhs.wisconsin.gov/eh/HlthHaz/fs/HGlgspills.htm>. Higher mercury vapor levels may exist and could require additional protective equipment and professional expertise.

### ASSEMBLE CLEAN UP SUPPLIES

Many clean up supplies are available from hardware stores. Mercury spill kits are also available from suppliers (See the links on the web under Resources at <http://dhs.wisconsin.gov/eh/HlthHaz/fs/hgresources.htm>). The following are some common household articles that could be used to construct an in-home mercury cleanup kit:

- eye dropper- to pick up the mercury
- plastic container with lid- to hold the mercury
- tape; wide, duct, or masking –to help pick up mercury beads
- plastic bags with zipper seal – to store mercury-contaminated debris and equipment
- rubber gloves- to protect hands from mercury contact
- syringe without needle- to pick up mercury
- trash bags- for containing mercury waste
- playing cards or index cards- for collecting mercury beads

### PICK UP ALL VISIBLE MERCURY DROPLETS

Inspect the spill area with a bright light to help illuminate any hidden droplets. Clean up any beads of mercury by using an index card and plastic dustpan. With the card, gently push the mercury droplets away from any carpet, fabric, or porous surfaces and toward other droplets to combine them into larger droplets. Slide droplets onto a sheet of rigid paper like an index card. *Never use a broom or a vacuum on a mercury spill because it will only scatter the mercury droplets, making them harder to find and pick up.*

## **GENTLY PLACE MERCURY INTO AN UNBREAKABLE PLASTIC CONTAINER**

Use a plastic jar or double-bagged ziplock baggie, to deposit the mercury into (avoid using glass because it can easily break). If necessary, suction off the droplets using an eyedropper or syringe. Adhesive tape strips may also be used to clean up any tiny remaining mercury droplets. Place the plastic container inside a plastic bag to provide additional safety. Tighten the lid securely so that liquid and vapors will be contained.

## **CONSIDER REMOVAL AND DISPOSAL OF CONTAMINATED CARPETING AND OTHER SOFT ITEMS**

It takes very little mercury in air to create unhealthy levels of vapor. Further, vacuuming any surface with mercury will make more vapor. Factors that affect the severity of risk from mercury in carpet or soft-surfaced items include the amount of mercury spilled, how much was recovered, the type of room and whether young children or pregnant women frequent the room. Local health departments and spill response contractors may be able to monitor for the presence of mercury vapor on contaminated items. However, private testing may be costly. The value of the item should be weighed against such cost and the peace of mind offered by the testing and/or removal of the contaminated item. When removing contaminated items, double wrap them in plastic bags and contact your local health department or Wisconsin Department of Natural Resources for proper disposal. (Do not expose to heat or incinerate.)

## **CHECK CAREFULLY FOR MISSED MERCURY**

A very bright flashlight may be used to better illuminate mercury beads in the spill area. If additional assurance is desired, sprinkling powdered sulfur (available from garden supply stores) over the spill area may also help identify missed mercury as the powder will turn brown on contact with mercury. Collect the powder as was done with mercury beads. The sulfur will bind with the mercury, reducing the amount of vapor. (Do not apply to carpet or soft items). Special precautions should be taken if mercury was spilled in a high traffic area or a confined area where children or infants play. Young children playing on the floor are particularly at risk to mercury's effects on the central nervous system. Call the Department of Health Services, Bureau of Environmental and Occupational Health at 608-266-1120 or your local health department to see if additional testing or other measures may be needed.

## **CONTINUE VENTILATION**

Ventilate as much as possible to completely air out the room or spill zone with outside air.

## **SET ASIDE EVERYTHING YOU THINK MIGHT BE CONTAMINATED WITH MERCURY**

Package materials securely and label as "Mercury-Contaminated." Specific labeling and disposal requirements may differ depending on whether the spill occurred at a household or at a regulated business. Clothing or personal belongings that may be contaminated can be tested following the guidance under Large Spills (on the web at

<http://dhs.wisconsin.gov/eh/HlthHaz/fs/HGlgspills.htm>) to see if they can be safely returned for use. Contact the disposal resources listed under Resources (on the web at <http://dhs.wisconsin.gov/eh/HlthHaz/fs/hgresources.htm>) for assistance.

## **INVENTORY ALL REMAINING MERCURY-CONTAINING DEVICES AND REPLACE THEM WITH MERCURY FREE ALTERNATIVES**

The best way to address a mercury spill is to prevent it from ever happening in the first place. For assistance with reducing mercury use contact Wisconsin Department of Natural Resources at 608-267-7639.

## **MEDICAL TESTING**

If significant exposure is believed to have occurred, you should discuss with your family doctor whether urine mercury tests should be conducted for the people who use the area the most. Results should not be above 20 micrograms per liter of urine (20ug/L).

## **For more information**

For health related information, contact the Wisconsin Division of Public Health, Bureau of Environmental and Occupational Health, 1 West Wilson St, Box 2659, Madison, WI 53701, (608) 266-1120 or online at <http://dhs.wisconsin.gov/eh>.



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