# How to Clean Spilled Mercury (for Homes)



Use these instructions only <u>after</u> you've followed the steps in the "Mercury Spill Quick Guide".

Be sure to call your local health department or the Michigan Department of Community Health (MDCH) at **1-800-648-6942** for advice about your exact situation <u>before</u> you begin cleaning the spill yourself.

# Do you know how much mercury has spilled?



#### Very Little - CFL light bulb

If you break a CFL light bulb, please use the MDCH "Compact Fluorescent Light Bulbs (CFLs)" fact sheet available at <u>www.michigan.gov/mercury</u>. The amount of mercury in a CFL is very, very small and the way you clean it up is different than other mercury spills.



#### **Small Amount - fever thermometer**

A small spill is considered to be less than 2 tablespoons of mercury. Some items that contain less than two tablespoons of mercury are fever thermometers and wall thermostats.



# Large Amount or Unknown Amount - barometer, blood pressure unit, small jar

A large spill is 2 tablespoons or more of mercury. Some common items that can contain more than 2 tablespoons of mercury include barometers and old blood pressure units. If you're not sure how much mercury was spilled, treat it like a large spill.

# Decide who should do the cleanup:

# You can most likely do the cleanup yourself if:

- It's a <u>small spill</u> like a thermometer.
- It happened in your home.
- You are not pregnant or planning on becoming pregnant within the year.
- Continue below for information on cleaning up small spills.

#### You will need help if:

- It's a large spill (or an unknown amount).
- It happened in a public area.
- You are a woman who is pregnant or planning on becoming pregnant within the year or a child.
- Go to page 9 for information on large spills.



Note: Pregnant women and children should <u>not</u> help with the cleanup.

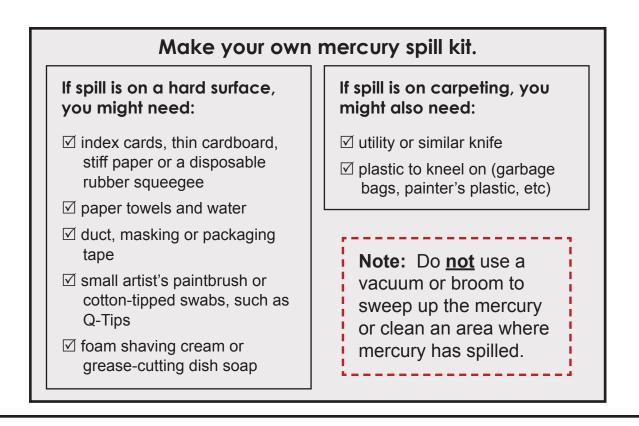
# Gather your cleaning supplies:

#### For all spills, you will need:

- ✓ flashlight
- ☑ small plastic bags (zip-top storage bags are best)
- ☑ large trash bags (heavy-duty thick plastic bags are best)
- ☑ old clothes (that you don't mind throwing away after the cleanup, if necessary)
- ☑ plastic bags to wear as shoe covers (grocery store bags will work)
- ☑ gloves (that you can throw away after the cleanup like plastic and not cloth)
- ☑ a mercury spill kit\*



\* You can make your own mercury spill kit with the common household supplies listed on page 3. Or, if you prefer, ask your local health department or fire department to find out where you can buy a mercury spill kit. Both of these kits will contain most items that you need to clean up a small mercury spill yourself.



### Before you go near the mercury spill:



- 1. Remove any jewelry you are wearing especially rings. Mercury will bind to metal and will eventually destroy it.
- 2. Change into your old clothes.
- 3. Tie the grocery store plastic bags over your shoes (like in the picture).



4. Put on your gloves.

# Carefully pick up the glass.

- Carefully pick up any glass and container parts, wrap them in a damp paper towel or disposable cloth, and put them in a small plastic bag (zip-top is best).
- Use tape or another damp paper towel to pick up smaller pieces of glass. Put the tape or paper towel and broken glass into the small plastic bag, too.
- Repeat as needed.
- When you're done, seal the bag tightly tying or taping if the bag does not have a zip-top.

#### Remember! Do not vacuum or sweep up the glass.

# Directions for spills on wood, linoleum, tile or any other smooth surface:

#### 1) Collect visible mercury beads.

- Use the sticky side of the tape to gently pick up any mercury that you can see. You can either wrap the tape around your finger, sticky side out (like in the picture), or hold the tape with two hands and gently lay it over the mercury.
- Do not push down on the mercury too hard or you could cause the mercury to split apart and spread further.
- Carefully put the tape and mercury into a plastic bag.
- Repeat as many times as needed until all the visible beads are gone.
- When you're done, seal the plastic bag tightly tying or taping if the bag doesn't have a zip-top.

#### 2) Collect the smaller beads.

- After you remove any additional larger beads that you find, spray a large circle of foam shaving cream or dish soap around the area you just cleaned.
- Using an index card, or something similar, spread the shaving cream or dish soap over the area from where you removed the visible mercury beads.
- Carefully scoop up the shaving cream or soap, dumping it into a plastic bag.
- If there are cracks in the floor or between the baseboard, use the paint brush or cotton-tipped swab dipped in shaving cream or soap to pick up any small mercury beads that may have settled there.











If you do not have foam shaving cream or grease-cutting dish soap, you can also continue to use tape to collect smaller hard-to-see beads the same way you did the larger beads of mercury.

#### 3) Search for and collect the "hidden" beads of mercury.

- Turn off any lights in the room.
- Hold your flashlight at a low angle, close to the floor, and watch for shiny beads of mercury that may be on the floor.
- Pay close attention to uneven areas of the floor like grout lines or cracks in wood floors.
- Mercury can roll easily on hard and flat surfaces, so be sure to search the entire room – further than you think the mercury had spilled.

#### 4) Clean the floor.

- Use a sponge, rag, or disposable wipes and water mixed with grease-cutting dish soap to scrub the exposed floor boards.
- Dry the floor with paper towels.
- Put the sponge/rag and paper towels into a plastic bag when done. Seal the bag up tightly - tying or taping if it doesn't have a zip-top.

Do NOT use household cleaning products that contain ammonia or chlorine/bleach to clean up mercury. They can react strongly with mercury and produce poisonous gas.

#### 5) Double bag everything.

- Make sure that everything including the broken mercurycontaining item and the cleanup items - is in sealed plastic bags.
- Put all of the bags inside another trash bag and seal it well tying or taping.
- Set these bags outdoors away from any open windows or air intakes.
- Your health department will be able to tell you how you can dispose of the mercurycontaminated items. **Never burn anything that has mercury on it.**

#### 6) Air out the room.

 When you are done, continue to air out the room (with windows open and fans blowing to the outdoors) for at least 24 hours after the mercury has been cleaned up. Keep pets and children out of the area until it can be tested by your health department using special equipment that can detect mercury vapors in the air. In Michigan, this testing is a free service.







# Directions for spills on carpet:

**Note:** Mercury beads cannot be cleaned from carpeting. The carpet must be carefully removed and thrown out.

### 1) Spread out plastic (garbage bags, painter's plastic).

 To protect your clothing, put down plastic to kneel on near the spill site.

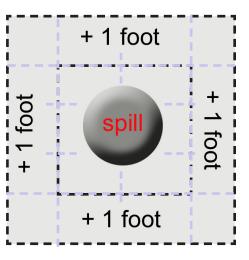
#### 2) Carefully cut the carpet into small squares.

- Cut the area of the carpet that may have mercury on it into small sections that you can work with and fit into a large trash bag.
- Then, cut out one more foot in each direction surrounding the area of the spill to be sure you actually have gotten all of the mercury.
- Fold each carpet piece to keep the beads from spilling out and put it in a large trash bag.
- When you fill up a bag, seal it up tightly tying or taping, put it inside another bag, and then set it outside.
- Continue until all the carpeting around the spill is removed.

\* For spills on area rugs, fold the rug to keep the beads from spilling out and put it in a large trash bag. Seal the bag tightly - tying or taping, put it inside another bag and then set it outside.

### 3) Next, carefully cut the carpet pad into small squares.

- Cut the padding that was under the removed carpet into small sections that you can work with and fit into a large trash bag.
- Fold the padding to keep any beads from spilling out and put it in the bag.
- When you fill up a bag, seal it up tightly tying or taping, put it inside another bag, and then set it outside.
- Continue until all the exposed padding is removed.







#### 4) Clean the floor.

- Use a sponge, rag, or disposable wipes and water mixed with grease-cutting dish soap to scrub the exposed floor boards.
- Dry the floor with paper towels.
- Put the sponge/rag and paper towels into a plastic bag when done. Seal the bag up tightly tying or taping if it doesn't have a zip-top.



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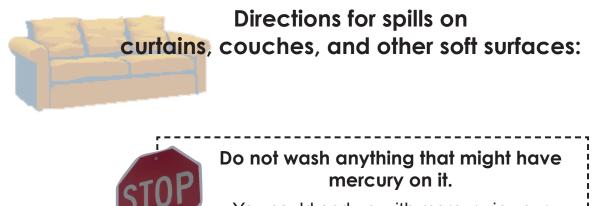
- Make sure that everything including the broken mercury-containing item and the cleanup items is in sealed plastic bags.
- Put all of the bags inside another trash bag and seal it well - tying or taping.
- Set these bags outdoors away from any open windows or air intakes.
- Your health department will be able to tell you how you can dispose of the mercury-contaminated items. **Never burn anything that has mercury on it.**



#### 6) Air out the room.

 When you are done, continue to air out the room (with windows open and fans blowing to the outdoors) for at least 24 hours after the mercury has been cleaned up. Keep pets and children out of the area until it can be tested by your health department using special equipment that can detect mercury vapors in the air. In Michigan, this testing is a free service.





You could end up with mercury in your washing machine and dryer, and it may ruin them.

#### 1) Bag up items.

- Put anything that you think might have touched the mercury into plastic bags, if it will fit. This includes cushions, throw rugs, or stuffed toys.
- You may want to use a separate bag for each item so that you don't end up with mercury on something that originally was clean.

- Seal the bags tying or taping, if necessary.
- If your local health department or fire department is coming soon to test your home for mercury, leave the bags in the room where the spill happened. If they can't respond right away, ask them if you should set the items outside.

#### 2) Have items tested for mercury.

- If you request it, most local health departments can come to your home and test the bagged items for mercury.
- In Michigan, this testing is a free service.
- Based on the results of the testing, the representatives from the health department can tell you if the items can be saved or if they should be thrown away.
- If your local health department is unable to come to your home to test for mercury vapors, call MDCH at 1-800-648-6942 for assistance.



What if it was a large spill (of 2 tablespoons or more)? - OR -I don't know how much actually spilled?



#### If the spill was large or the amount spilled unknown, contact:

#### 1) Your health department

- You can find your local health department phone number in your phone book or at: <u>http://www.</u> <u>malph.org/page.cfm/108</u>. Ask for someone in the Environmental Health section.
- If your local health department is not able to help you, call MDCH at **1-800-648-6942**.
- After 5pm or the weekend, call the non-emergency phone number for your local fire department or the Poison Control Center at 1-800-222-1222.

Please do not call 911 for a mercury spill.

#### 2) DEQ Environmental Assistance Hotline

- The Michigan Department of Environmental Quality (DEQ) may be able to suggest a place near you where you can drop off mercury, and it can be disposed of in a way that is safe for both people and the environment.
- Call 1-800-662-9278 during regular business hours for help or visit <u>www.michigan.gov/mercuryp2</u>.

3) National Response Center (NRC)

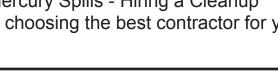
 The NRC hotline is open 24 hours a day / 7 days a week. Call 1-800-424-8802.

# Hiring a Mercury Cleanup Contractor

If you would rather not clean the mercury up yourself, or it is a large spill, you may want to hire a contractor.

Call your local health department or MDCH, at 1-800-648-6942, to get a list of contractors in your area. Please note, these contractors are not endorsed or recommended by MDCH or your local health department.

See the MDCH fact sheet, "Mercury Spills - Hiring a Cleanup Contractor," to be sure you're choosing the best contractor for your problem.





# Stop spills before they happen!



Metallic mercury is the silver liquid found in old thermometers, barometers, and other common items that can sometimes be found around your home. A list of common mercury-containing items can be found at www.michigan.gov/mercury.

If you have any of these items, it is best to get rid of them **BEFORE** they break. Read the MDCH "Get Rid of Mercury Safely" fact sheet to learn how to pack, transport and get rid of mercury safely.

Many Clean Sweep sites and community household hazardous waste collection centers accept mercury-containing items from the public at no charge.

To find a collection site near you, visit www.michigan.gov/mercuryp2, www.michigan.gov/cleansweep, www.Earth911.org, or www.michiganenergyoptions.org.



Recycling sites are not able to take cleanup debris. To find out how to dispose of cleanup debris, call the Environmental Assistance hotline at 1-800-662-9278.

# Want to learn more?

Contact the Michigan Department of Community Health at 1-800-648-6942 or visit www.michigan.gov/mercury for these other fact sheets:

- Mercury Spill Quick Guide •
- Mercury Spills Hiring a Cleanup Contractor ٠
- Mercury & Your Family's Health •
- **Mercury Spills & Your Pet** •
- Is Your Home Mercury Free? •
- **Get Rid of Mercury Safely** •



