Michigan Department of Community Health

Is Your Home Mercury Free?



What is mercury?

Mercury is a silver liquid. It is naturally occurring. Just because it's natural doesn't mean it's safe.

Mercury was once used in a variety of household items. We now know that mercury is harmful to your health and the health of your family.



How can you and your family come into contact with mercury?

Mercury comes in many forms. You can see some forms of mercury, like the silver liquid that may be found in some thermometers and other items around your home. This type of mercury is known as *metallic mercury*.

Some forms of mercury you can't see, like the kind in certain types of fish that you eat. This type of mercury is called *methylmercury*. To learn more about mercury in fish, visit **www.michigan.gov/eatsafefish**.



Why is it important to make my home mercury free?

Mercury is harmful to your health and your family's health. Household items that may contain mercury can break. It is best to get rid of these items before they break. Read the Michigan Department of Community Health (MDCH) fact sheet "Get Rid of Mercury Safely" to learn how to pack your household mercury items for transporting them to a Clean Sweep site or community hazardous waste collection center.

If a mercury-containing item breaks, mercury vapors get into the air. These vapors can remain in the air for a long time if not cleaned up properly. Breathing in mercury vapors can cause health problems. To learn more about mercury and your health, see the MDCH fact sheet "Mercury and Your Family's Health".



Cleaning up spilled mercury should be done right. Large spills can be complicated and likely require a professional to assist in the cleanup, which can be expensive. Cleanup for mercury spills may not be covered by your insurance policy. Small spills can still be complicated and disruptive to you and your family. See the MDCH fact sheet "Mercury Spill Quick Guide" and "How to Clean Up Spilled Mercury," for more information about cleaning up spills.



Note: Household items that contain mercury should never be thrown away. Many Clean Sweep sites and community household hazardous waste collection centers accept mercury-containing items free of charge. Remember to transport your mercury-containing items safely.

What are some household items that contain mercury?

The following are some household items that may contain mercury. For more examples, visit the United States Environmental Protection Agency (EPA) website at: www.epa.gov/mercury.

Free-flowing mercury

Free-flowing mercury is usually stored in containers like old baby food jars.



These containers can be found in garages, basements, crawl spaces, pole barns and even backyards of homes.

If you find a container like the ones pictured, it is best not to open it, throw it away or dump it out. Carefully wrap the container and take it to a Clean Sweep site or your local community hazardous waste collection center. To find a Clean Sweep site in your area,

visit <u>www.michigan.gov/mercuryp2</u>, <u>www.michigan.gov/cleansweep</u>, <u>www.Earth911.org</u>, or <u>www.michiganenergyoptions.org</u>.

The amount of free-flowing mercury can vary. More than likely, if a container of free-flowing mercury spilled, it would be a large spill.

Clocks

Antique grandfather clocks, or long case clocks, are examples of the types of clocks that may contain mercury in the pendulums. The weighted pendulums in these clocks swing back and forth, with each swing counting one second.

Newer grandfather clocks and digital clocks use non-mercury alternatives and are just as accurate.



If you have a clock with mercury in the pendulums, talk with a clock shop to see if they are able to replace them with non-mercury alternatives. Remember to have the mercury weights disposed of safely at a Clean Sweep site or a community hazardous waste collection center.

The mercury in the pendulums could have several pounds (greater than two tablespoons) of mercury in them. If the mercury were to spill out, this would be a large spill.

Barometers

Barometers are devices that measure air pressure. Mercury in the barometer rises or falls with changes in air pressure.

Antique barometers can contain mercury. There are non-mercury barometers that are digital or have non-mercury liquid and are just as accurate.

If a mercury-containing barometer were to break, it could have more than quarter of a pound, or half a tablespoon, of mercury in it. This would be a large spill.





Note: Household items that contain mercury should never be thrown away. Many Clean Sweep sites and community household hazardous waste collection centers accept mercury-containing items free of charge. Remember to transport your mercury-containing items safely.

Thermostats

Older thermostats use mercury tilt switches to control room temperature. The tilt switch is a

glass bulb with mercury in it. Digital thermostats are mercury-free.



Mercury-containing thermostats have 3 grams, or about an 1/8 of a teaspoon, of mercury in them. If mercury is tracked around, the small amount of mercury spilled can turn into a large cleanup.

Michigan law, Public Act 492 of 2006, bans the sale of thermostats that contain mercury or a mercury compound. Visit

www.michigan.gov/mercuryp2 for more information about mercury legislation in Michigan.

Thermometers

Common household mercury thermometers include fever thermometers and oven, candy and meat thermometers.

Mercury thermometers are made of glass with the mercury inside.



Newer thermometers don't have mercury in them. Some newer thermometers are digital, while others are glass with an alcohol-based red or blue liquid inside. They are just as accurate.

A mercury thermometer has about 0.5 grams, or much less than an 1/8 of a teaspoon, of mercury. This amount would be considered a small

spill, unless mercury is tracked around.

Under Michigan law, Public Act 578 of 2002, a person shall not sell, offer for sale or offer for promotional purposes a mercury thermometer in the state of Michigan. Visit www.michigan.gov/mercuryp2 for more information about mercury legislation in Michigan.

Compact Fluorescent Light (CFLs)

CFL bulbs are energy-efficient light bulbs. They contain a very small amount of mercury. Mercury is not released when the bulb is intact or in use.

The amount of mercury vapor released from one broken CFL bulb is not enough to make anyone sick. A fever thermometer has about 100 times more mercury than a CFL bulb.

Remember when your CFL bulb burns out to recycle it at a Clean Sweep site or a household hazardous waste collection center. Some local home improvement stores also recycle CFL bulbs.

For more information on CFLs, check out the MDCH fact sheet "CFLs and Mercury".



Note: Household items that contain mercury should never be thrown away. Many Clean Sweep sites and community household hazardous waste collection centers accept mercury-containing items free of charge. Remember to transport your mercury-containing items safely.

Summary

Below is a summary of some of household items that may contain mercury.

Common Item	Source of Mercury	Amount (Weight) of Mercury	Spill Risk (No spill risk if intact.)
CFL bulbs	Sealed in the bulb	Cannot be seen (about 4 milligrams); 100 times less than a thermometer	Very small - if bulb is broken.
Thermometers	Sealed in the bulb of glass thermometers	Much less than 1/8 teaspoon (about 500 milligrams)	Small - if mercury is not tracked around.
Thermostats	Sealed in the glass tilt switch	Less than 1/8 teaspoon (about 3,000 milligrams)	Varies - if tilt switch is damaged or broken and is tracked around the home, a large spill.
Barometers*	In the dial or glass tube	At least 1/2 tablespoon (more than 1/4 pound)	Large - if dial, wheel, or glass tube is damaged.
Clocks*	As weights in the pendulum	More than 2 tablespoons (several pounds)	Large - if pendulum is damaged.
Free-flowing Mercury*	A container or jar	Varies	Large - if container is broken or open.

^{*}The release of a large quantity of mercury, such as a barometer or clock, or an unknown quantity, should be reported to the National Response Center (www.nrc.uscg.mil/nrchp/html)

Find a Recycling Site Near You

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





Want to learn more?

For Public Health Questions

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

- Mercury Spill Quick Guide
 How to Clean Up Spilled Mercury
 Mercury & Your Family's Health
 Mercury Spills & Your Pet

- Mercury Spills Hiring a Cleanup Contractor
 Mercury and Renovation/Energy Upgrade
- Get Rid of Mercury Safely
- Mercury and Electrical Work
- Mercury and HVAC Systems
 Mercury and Plumbing

For Mercury Pollution Prevention and Recycling Questions

Contact the Michigan Department of Environmental Quality (MDEQ) at 1-800-662-9278 or visit www.michigan.gov/mercuryp2 for more information on mercury pollution prevention.





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