An official website of the United States government.



What to Do if a Mercury Thermometer Breaks

If you have questions about the potential health effects after being exposed to a broken thermometer, please call your physician or your local poison control center at 1 (800) 222-1222.

On this page:

- Determining Whether Your Non-Digital Fever Thermometer Has Mercury in It
- Cleaning Up Mercury Spills
 - What NEVER to Do after a Mercury Spill
 - Prepping for Clean Up of a Broken Mercury Thermometer
 - Items Needed to Clean Up a Small Mercury Spill
 - Mercury Spill Clean Up Instructions

Determining Whether Your Non-Digital Fever Thermometer Has Mercury in It

Newer non-digital fever thermometers often use alcohol or a non-toxic compound that looks similar to mercury.

Ask:

- Is the liquid in the thermometer any color other than silver? Then it is most likely alcohol.
- Is it silver? Then it may be mercury or possibly a non-mercury substance.

Mercury is a liquid metal with properties different from most substances. Small droplets will combine into a larger sphere shape, which will roll on a flat surface and break back into smaller droplets if dropped or if pressure is applied. Care must be taken to avoid scattering the mercury or allowing it to roll to a hard-to-reach location.

If there is a paper calibration strip inside of the thermometer that includes the words "mercury free", then the liquid in the thermometer is not mercury. If you do NOT see the words "mercury free," assume that the liquid is mercury.

EPA recommends that consumers use mercury-free thermometers, but not does not endorse, recommend, certify, authorize or approve of any specific brand of mercury-free thermometer.

Cleaning Up Mercury Spills

What NEVER to Do After a Mercury Spill

- Never use a vacuum cleaner to clean up mercury. The vacuum will put mercury into the air and increase exposure.
- Never use a broom to clean up mercury. It will break the mercury into smaller droplets and spread them.
- Never pour mercury down a drain. It may lodge in the plumbing and cause future problems during plumbing repairs. If discharged, it can cause pollution of the septic tank or sewage treatment plant.
- Never walk around if your shoes might be contaminated with mercury. Contaminated clothing can also spread mercury around.

Prepping for Clean Up of a Broken Mercury Thermometer

NOTE: These instructions also apply to spills from other sources, if the amount spilled is less than or similar to the amount in a thermometer (see <u>specific information about how to clean up broken fluorescent bulbs</u>). If your spill is greater than the amount in a thermometer, visit our <u>What to Do if You Spill More Mercury than the Amount in a Thermometer</u> page.

- Have everyone else leave the area; don't let anyone walk through the mercury on their way out. Make sure all pets are removed from the area. Open all windows and doors to the outside; shut all doors to other parts of the house.
- DO NOT allow children to help you clean up the spill.
- Mercury can be cleaned up easily from the following surfaces: wood, linoleum, tile and any similarly smooth surfaces.
- If a spill occurs on carpet, curtains, upholstery or other absorbent surfaces, these contaminated items should be thrown away in accordance with the disposal means outlined below. Only cut and remove the affected portion of the contaminated carpet for disposal.

Items Needed to Clean Up a Small Mercury Spill:

- 1. Zip locking plastic bags (4 to 5 as needed)
- 2. Trash bags (2 to 6 mils thick)
- 3. Rubber, nitrile or latex gloves
- 4. Paper towels
- 5. Cardboard or squeegee
- 6. Eyedropper

- 7. Duct tape, or shaving cream and small paint brush
- 8. Flashlight or small task light
- 9. Optional: powdered sulfur
 - Do not worry if you don't have this available.
 - The sulfur binds to the mercury and makes clean-up easier. It is sometimes found in the gardening departments at hardware stores, near the fertilizer, or with garden pesticides and fungicides. Pharmacists may also have it.

Mercury Spill Clean Up Instructions

- Put on gloves.
- If there are any broken pieces of glass or sharp objects, pick them up with care. Place all broken objects on a paper towel. Fold the paper towel and place in a zip locking bag. Secure the bag and label it as directed by your local health or fire department.
- Locate visible mercury beads. Use a squeegee or cardboard to gather mercury beads into small mercury balls. Use slow sweeping motions to keep mercury from becoming uncontrollable. Take a flashlight, hold it at a low angle close to the floor in a darkened room and look for additional glistening beads of mercury that may be sticking to the surface or in small cracked areas of the surface.

Note: Mercury can move surprising distances on hard-flat surfaces, so be sure to inspect the entire room, including any cracks in the floor, when searching.

- Use the eyedropper to collect or draw up the mercury beads. Slowly and carefully squeeze
 mercury onto a damp paper towel. Alternatively, use two pieces of cardboard paper to roll
 the mercury beads onto the paper towel or into the bag. Place the paper towel in a zip
 locking bag and secure. Make sure to label the bag as directed by your local health or fire
 department.
- After you remove larger beads, put shaving cream on top of small paint brush and gently "dot" the affected area to pick up smaller hard-to-see beads. Alternatively, use sticky tape, such as duct tape, to pick up any remaining small glass fragments. (Peel the tape very slowly from the floor to keep the mercury beads stuck to the tape.) Place the paint brush or duct tape in a zip locking bag and secure. Make sure to label the bag as directed by your local health or fire department.
- OPTIONAL STEP: It is OPTIONAL to use commercially available powdered sulfur to absorb the beads that are too small to see. The sulfur does two things:
 - It makes the mercury easier to see since there may be a color change from yellow to brown; and
 - It binds the mercury so that it can be easily removed and suppresses the vapor of any missing mercury.

Where to get powdered sulfur? It is sometimes found in the gardening departments at hardware stores, near the fertilizer, or with garden pesticides and fungicides. Pharmacists may also have it.

Note: Powdered sulfur may stain fabrics a dark color. When using powdered sulfur, do not breathe in the powder as it can be moderately toxic. Additionally, users should read and understand product information before use.

- Place all materials used with the cleanup, including gloves, in a trash bag. Place all mercury beads and objects into the trash bag. Place the trash bag outside in a secured area and label it as directed by your local health or fire department.
- Contact your local health department, municipal waste authority, or your local fire department to find out how to conduct proper disposal in accordance with local, state and federal laws.
- After cleanup:
 - Remember to keep the area well ventilated to the outside (i.e., windows open and fans in exterior windows running) for at least 24 hours after your successful cleanup. You may want to request the services of a contractor who has monitoring equipment to screen for mercury vapors. Consult your local environmental or health agency to inquire about contractors in your area.
 - Continue to keep pets and children out of cleanup area.
 - If sickness occurs, seek medical attention immediately. View information on health effects related to exposures to vapors from metallic mercury. For additional information on health effects, the Agency for Toxic Substances and Disease Registry (ATSDR) provides a Public Health Statement on Mercury that also presents information on health effects related to exposures to vapors from metallic mercury.

If you have further questions, please call your local poison control center at 1 (800) 222-1222.

LAST UPDATED ON DECEMBER 18, 2019