

Everyday Sources of Mercury and Alternative Products

Items Containing Mercury

- Thermometers with silver-colored liquid inside
- Non-electronic thermostats
- Pilot light sensors in some gas appliances such as ovens, clothes dryers, water heaters, furnaces, and space heaters
- Vintage toys-drawing screens and mercury maze games
- Switches in vehicle trunks and hoods
- Antiseptic products containing thimerosal or merbromin such as nasal sprays or contact lens solutions (check label)
- Pre-1997 sneakers with light-up soles (check label)
- Pre-1990 Latex Paint
- Button-type Batteries (hearing aid batteries)

Alternatives

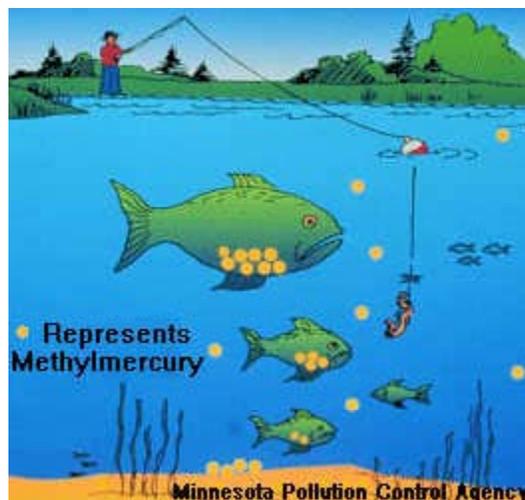
- Mercury-free alcohol thermometers (red bulb), Galinstan or digital
- When making new purchases, look for hot surface ignition systems for devices or products having electrical connections
- Toys which are mercury-free
- Mercury-free sprays or solutions
- Mercury-free shoes (check label)
- Latex Paint produced after 1990
- Lithium, zinc air, or alkaline batteries

What is the problem with mercury thermometers?

The small, silvery ball of mercury in a thermometer is very toxic if released into the environment and can cause serious health problems for humans and wildlife. When mercury is released, it evaporates into the air, and eventually makes its way back to the earth, often into rivers and lakes, where microorganisms transform it into highly toxic methyl mercury.

Once mercury is released into the environment it stays there for a long time and it builds up in the food chain, particularly in certain fish.

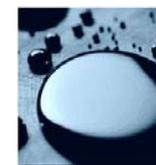
The U.S. Environmental Protection Agency estimated that in the year 2000, 17 tons of elemental mercury from thermometers was disposed of as municipal solid waste (USEPA 1997).



“Catch the Fever” Fort Campbell Mercury Thermometer Exchange Program



Protect Your Family from Mercury in Your Home



Fort Campbell
DPW – Environmental Division
Pollution Prevention Branch
Bldg. 2186, 13-1/2 St & Indiana Ave.
Fort Campbell, KY 42223
270-798-9771 (ph.); 270-798-3561 (fax)

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What is Mercury?

Mercury is a silver-gray liquid metal, also known as “quick silver.” It is a hazardous chemical that, even in small amounts, can cause serious health problems. It can linger indoors for months or even years, and it slowly evaporates into the air. Its vapors cannot be seen or smelled, but breathing them cause harmful effects.

Where is Mercury found?

Mercury is used to make many home products, including thermometers, electrical switches, fluorescent lights, thermostats and batteries.

In some cultural traditions, mercury is used as a folk remedy or for spiritual practice.

Some utility devices in your home may contain mercury, such as pressure control units attached to your gas meter.

Certain instruments used by plumbers can contain mercury. Sometimes these instruments can leak or spill in your home.

Certain types of fish contain mercury in a form known as methyl mercury. When we eat those fish, it is absorbed by our bodies.

How can I be exposed?

1. When mercury is not contained properly, its vapors get into the air, and you will breathe the vapors in, absorbing most of the mercury.
2. Mercury can be absorbed through the skin.
3. When swallowed, small amounts of liquid mercury is absorbed into your blood.

Mercury vapor is especially dangerous because it can get into carpets, curtains, furniture, and cracks in the floors. It can stay there for months or years, slowly letting off more vapors.

Children are more at risk for mercury exposure because it settles near the floor where children breathe the vapors or eat the droplets.

What happens if a mercury thermometer breaks?

If your mercury thermometer breaks, it is very important for the mercury to be cleaned up properly. Follow these steps:

- Increase ventilation in the room with outside air and close the room off from the rest of the house. If available, use fans for a minimum of one hour to help ventilate the room.
- Pick up the mercury with an eyedropper or scoop up beads with a piece of heavy paper (e.g., playing cards, index cards).
- Place the mercury, contaminated instruments (dropper/heavy paper) and any broken glass in a plastic zipper bag. Place this zipper bag in a second zipper bag and then in a third zipper bag (triple bag), tightly sealing each bag. Place the

bags in a wide mouth, sealable plastic container.

- If the spill is not cleaned up, the mercury will evaporate at room temperature, potentially reaching dangerous levels in indoor air. The risks increase if you clean up the mercury spill with a vacuum cleaner, if the mercury is heated, or if the spill takes place in a small, poorly ventilated room.
- Call the Fort Campbell Hazmat/ Environmental Education Training Programs Manager at (270) 798-9771 for information on proper mercury disposal.
- Call the Fort Campbell Spill Response Team at 911 for spill response and cleanup.
- Call the Fort Campbell Family Housing Spill Hotline at (270) 977-1920.

What are the health risks?

Mercury can cause permanent damage to your brain and central nervous system, resulting in behavioral or learning problems. It is especially dangerous for young children and fetuses, whose brains are still developing. The health effects depend on how much is absorbed and for how long a person is exposed.

It may take a long time for noticeable symptoms to develop. These include:

- Shaky hands
- Redness or swelling of the mouth or gums
- Memory loss
- Headache
- Loss of appetite

Vapors breathed in by pregnant women can harm the developing fetus. Mercury can also be passed to a baby via breast milk.