

LAND

Mercury Exposure Prevention

Elemental mercury poisoning is preventable! Yet, in the past year, several Oklahoma families experienced the trauma of having a child diagnosed with mercury poisoning. Mercury was brought into the home from work, from curiosity or from an accumulation for profit perspective. Many concerned citizens worry about the small amount of mercury in old fever thermometers, yet many people think of mercury as a plaything.

The Oklahoma State Department of Health, Oklahoma Department of Environmental Quality, and the Oklahoma Poison Control Center have teamed up to deliver the message that mercury should not be brought into the home. For people who already have mercury thermometers, there are two disposal options:

One, the thermometer may be wrapped in plastic and then put into a metal or heavy plastic container and then placed in the household trash. The state is attempting to get funds to have a mercury amnesty day where mercury in all types of containers can be turned in.

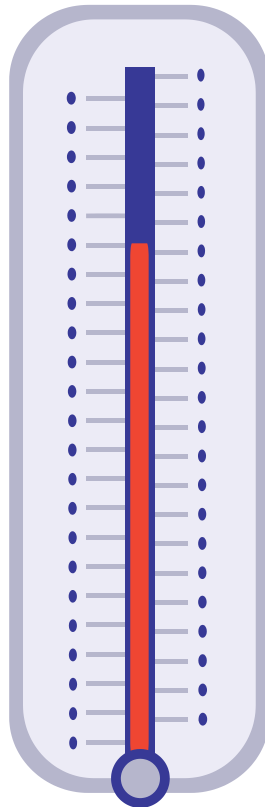
Two, if your city has a household hazardous waste collection day or collection center, check to see if they will take mercury. These events provide an opportunity for the mercury to be collected and recycled at a processing facility designed to recycle or "retort" mercury. This is obviously the more environmentally safe procedure. There are currently no such facilities in state. If you have mercury in your home or business,

call waste disposal facilities listed in the telephone book and pay the cost of packaging and shipping the material to be recycled. This is the optimum procedure, but the cost may be prohibitive for many citizens.

That is why we recommend not acquiring mercury in any form. It is very difficult to clean up and dispose of. If you break a household mercury thermometer, do not vacuum the area. If it is on a hard surface, use two pieces of stiff paper and scoop up all of the mercury. Use absorbent, disposable toweling rather than mops, brooms, or rags. Make sure that any mercury that is in the cracks of a hard surface is absorbed on the toweling. If the material spills on carpet or upholstery fabrics, that material should be removed, placed in double plastic bags and disposed in the trash. Contaminated carpet and padding has been the source of mercury releases that resulted in children receiving a toxic dose of mercury. Ventilate the area well before allowing household members back.

Professional environmental firms with high quality mercury vapor measuring devices are the only sure way of removing all mercury contamination after a spill. These services may be costly, so the agencies efforts today are to inform citizens about the dangers of bringing mercury into the home.

Contacts: Poison Control 1-800-222-1222; OSDH (405) 271-4060; DEQ (405)702-5100.



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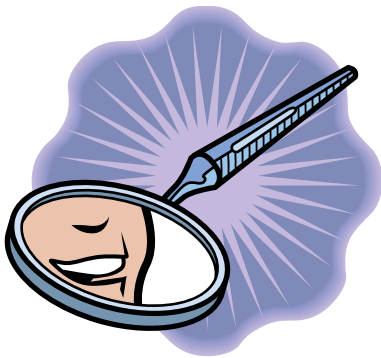
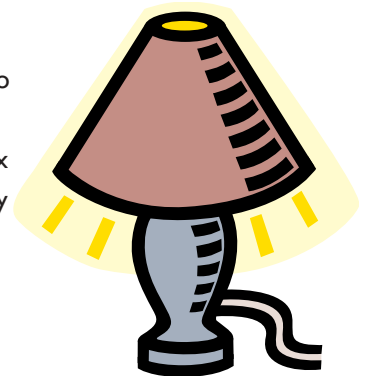
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What is Mercury?

- Mercury is a chemical that occurs naturally in the environment.
- Elemental mercury is a heavy, silver-white metal.
- It is liquid at room temperature and volatilize fast at 25 C.
- Mercury can exist in three forms: metallic (or elemental) mercury, inorganic mercury compounds (primarily mercuric chloride), and organic mercury compounds (primarily methyl mercury).

Uses

- Elemental mercury is used in thermometers, barometers and pressure-sensing devices. It is also used in batteries, lamps, industrial processes, refining, lubrication oils, and dental amalgams.
- In organic mercury was used in the past in laxatives, skin lightening creams and soaps, and in latex paints. In 1990, EPA cancelled registration for all interior paints that contained mercury. Mercury use in exterior paint was discontinued after 1991.
- Methyl Mercury has no industrial uses; it is formed in the environment from the methylation of the inorganic mercurial ion.



Route of Exposure in the body

- Mercury can easily enter the body if it's vapor are breathed in or if it's eaten in organic forms in contaminated fish or other goods.
- Mercury, in all forms, may also enter the body directly through the skin.
- Once mercury has entered the body, it may take months before it leaves through the urine and feces.

Effects on Health

- Long-term exposure to mercury affects the central nervous system. Among the effects are increased excitability, irritability, excessive shyness, tremors or shakiness, paresthesia (a sensation of pricking on the skin), blurred vision, malaise, speech difficulties, constriction of the visual field, memory loss, and kidney disease. Effects on the gastrointestinal tract and respiratory system have also been noted from acute inhalation of the elementary mercury.
- Short-term exposure to high levels of mercury will have similar effects as the long-term exposure, but full recovery is more likely after short-term exposure, once he body clears itself of the contamination.
- Mercury can also effect the developing fetus. Infants born to women exposed to high levels of mercury exhibited mental retardation, ataxia, constriction of visual field, blindness, and cerebral palsy.
- Mercury has not been shown to cause cancer in humans.

Tests to Determine Exposure to Mercury

- There are reliable, accurate, and easily available ways to measure mercury levels in the body.
- Blood and urine samples can be taken in a doctor's office and tested using special equipment in the laboratory.