OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY



Mercury Exposure

In the past, mercury was used for many purposes and continues to be an important metal in many household items like thermostats and blood pressure cuffs. Many homes have old jars of mercury stored in their closets and garages. When mercury is enclosed, it poses no threat to human health or the environment.

Mercury is only dangerous if it comes into contact with the air. Household jars and containers holding mercury might not be air-tight, and could therefore pose a health threat. Additionally, mercury is an attractive toy for children because of its unique liquid metal properties. Playing with jars of mercury might result in a spill and spread mercury contamination throughout your home. Small spills of mercury from common items such as thermometers, thermostats, or compact fluorescent bulbs can be cleaned yourself (see Mercury Spill Cleanup Instruction Fact Sheet). Cleanup of larger spills is an expensive procedure and should only be done by a specialized cleanup crew.

Mercury is a poison that can enter your body through your mouth, lungs, or skin. The most common pathway for mercury is through inhalation. Mercury vaporizes at room temperature into a colorless and odorless gas that can be breathed without realization. Mercury vapor is extremely heavy and hugs the floor – in the breathing zone of small children and pets.

Mercury exposure causes detrimental effects to the nervous system. Long-term effects include brain damage, coma, and even death. Any exposure can be very detrimental to the developing brains of young children. Mercury can travel through the placenta and affect a developing fetus, causing birth defects. Mercury also travels through breast milk and can poison a nursing infant.

Symptoms associated with long-term mercury exposure include: 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, headaches, and trouble sleeping. It can also cause kidney disease, skin rashes, or mouth sores. Mercury has not been shown to cause cancer in humans.

Short-term exposure to high levels of mercury will have similar effects as the long-term exposure. Early symptoms of mercury poisoning are similar to many medical problems, and mercury poisoning is often misdiagnosed. There are readily available ways to accurately measure the mercury level in the body. Blood and urine samples can be taken by a doctor to diagnose mercury poisoning. The medical treatment for mercury poisoning is called chelation therapy. Chelation drugs help your body detect the small amount of mercury in your blood and get rid of it through your urine. Chelation therapy is very successful in removing mercury and preventing additional damage, but it cannot reverse any permanent damage. Any person exposed should consult a physician as soon as possible.



This publication is issued by the Oklahoma Department of Environmental Quality authorized by Scott A. Thompson, Executive Director. Copies have been prepared at a cost of \$0.106 each. Copies have been deposited with the publications clearinghouse of the Oklahoma Department of Libraries. (Fact Sheets\LPD\Mercury Exposure. indd 8/2022)

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What If...

If you or someone you know has been exposed to mercury please call Oklahoma Poison Control at (800) 222-1222.

If you have a mercury spill, please exit your home immediately and call DEQ at (405) 702-5100. After normal working hours and on weekends call the DEQ hotline at (800) 522-0206 for assistance.

For any other information on mercury, please refer to other Mercury related fact sheets at https://www.deq.ok.gov/land-protection-division/cleanup-redevelopment/mercury/ or call (405) 702-5100.