

# Mercury Quick Facts

## Health Effects of Mercury Exposure

### What is Elemental Mercury?

Elemental (metallic) mercury is the shiny, silver-gray metal found in thermometers, barometers, and thermostats and other electrical switches. Mercury:

- Can break into droplets when spilled. The droplets spread easily and can build up in tiny cracks and spaces in your house.
- Can vaporize (evaporate) into the air in your house. The vapor cannot be seen or smelled.
- Can be toxic to people's nervous system, lungs and kidneys.



### How can I be exposed to elemental mercury in my home?

People can be exposed to elemental mercury when household items that contain mercury are broken. Elemental mercury can also be brought into your house from abandoned industrial sites and other places. Breathing mercury vapors in air is the most common way to be exposed to elemental mercury, and is the most harmful to your health. If mercury is swallowed most of it passes through your body and very little is absorbed. If you touch mercury for a short period of time a small amount may pass through your skin, but not enough to harm you.



### How much mercury spilled in a room will make air in the room unsafe?

Any amount of mercury spilled indoors can be hazardous. The more mercury is spilled, the more its vapor will build up in air and the more hazardous it will be. Even a small spill, such as from a broken thermometer, can produce hazardous amounts of vapor if a room is small enough, warm enough and people spend a good deal of time there, as in a small bedroom.

If mercury spills in your house:

- it can adsorb, or be drawn into carpet, furniture, floors, walls and other items.
- it can be tracked throughout the house if it is not cleaned up right away.
- it will vaporize into the air over time. Mercury vapor is heavier than air and tends to remain near the floor or area where the spill happened. It can build up in poorly ventilated or low-lying areas in your house.
- vapors can get into the ventilation system and be spread throughout your house.

If mercury is spilled onto a hot surface, such as a burner on a stove, mercury will vaporize quickly and can be more dangerous.



**EPA cleaning up a mercury spill at a house.**



Call ATSDR at (800) 533-3508 (toll-free) if you have health-related questions about mercury. If you have questions about cleaning up a mercury spill of any size, call the U.S. Environmental Protection Agency (EPA) Region 6 office at (800) 533-3508 (toll-free).



## What are the Health Effects of Mercury Exposure?

The health effects that can be caused by breathing mercury depend on how much mercury vapor you breathe and how long you breathe the vapors. Health problems can result from short-term or long-term mercury exposure.

### Who is most likely to have health problems after breathing mercury vapors?

The following groups of people are particularly sensitive to the harmful effects of mercury:



- Pregnant women - Mercury can pass from a mother's body to her developing fetus.
- Infants - Mercury can also be passed to nursing infants through breast milk.
- Young children - They tend to play on floors where mercury may have been spilled, and are more likely to breathe more vapors than an adult because they breathe faster and have smaller lungs.

### Health effects caused by short-term exposure to high levels of mercury vapors

- Cough, sore throat
- Shortness of breath
- Chest pain
- Nausea, vomiting, diarrhea
- Increase in blood pressure or heart rate
- A metallic taste in the mouth
- Eye irritation
- Headache
- Vision problems



### Health effects caused by long-term exposure to mercury vapors

- Anxiety
- Excessive shyness
- Anorexia
- Sleeping problems
- Loss of appetite
- Irritability
- Fatigue
- Forgetfulness
- Tremors
- Changes in vision
- Changes in hearing



## What tests are available for elemental mercury exposure?

Urine or blood samples can be tested to see if you have been exposed to too much mercury. A urine test is preferred for measuring elemental mercury. Urine samples may be collected over a 24-hour period, or taken once (preferably in the morning after awakening). A blood test can be used to measure exposure to high levels of mercury if you can be tested within three days of being exposed.

If a test shows you have mercury poisoning (too much mercury in your body), your doctor can give you drugs that will remove the mercury from your body. Call your local Poison Control Center if you or your doctor need help understanding your test results.