



# Mercury: Household Sources and Reducing Exposure

**Q: I am worried about mercury in my home. Where should I look for potential sources of mercury?**

**A:** Many common household items can release mercury when they are improperly disposed of, broken or mishandled. Some of the most common household sources of mercury are described below.

- Thermometers — Those used for fevers, candy, deep frying, ovens, indoors and outdoors with silvery temperature indicators may contain mercury.
- Barometers and manometers — Many barometers and vacuum gauges found in machinery contain mercury.
- Thermostats — Mercury-containing tilt switches have been used in thermostats for more than 40 years. Each switch contains approximately 3 grams of mercury.
- Lighting and electrical applications — Fluorescent lamps and high intensity discharge lamps commonly are found in garages and home workshop areas. Spent lamps must be managed properly because they contain mercury.
- Major appliances — Mercury-containing thermostat probes may be found in several types of gas-fired appliances that have pilot lights, including ranges, ovens, clothes dryers, water heaters, furnaces and space heaters. Although non-mercury thermostat probes also are used in these appliances, treat all probes as though they contain mercury, unless you know they do not.
- Pharmaceuticals and pesticides — Mercury can be found in some topical disinfectants, such as mercurochrome, tincture of merthiolate and older medications for psoriasis and eczema. Mercury also has been used as a fungicide in pesticides and older paints.

## Other sources of mercury in homes

- weight/counterweight in grandfather clocks
- jewelry with a glass ampoule containing mercury
- elemental mercury saved from an industrial application, laboratory or prior activity
- many button batteries, in particular from older hearing aids
- lights in some older model children's tennis shoes
- old batteries of any type (pre-1990)
- irons with tilt safety switches
- automotive trunk light switches, high intensity headlights and anti-lock braking systems
- some gas flow meters
- some latex paints manufactured before 1992 (to prevent mildew)
- old chemistry sets and toys
- home blood pressure gauges
- azogue capsules, which are gel capsules filled with liquid mercury, often sold in botánicas (Latino herb and spiritual shops), used in *espiritismo*, *santería* and folk medicine practices

Additional information can be found at  
<http://www.cdphe.state.co.us/HM/mercury/mercinthehome.pdf>.

More information about compact fluorescent lamps can be found at <http://www.cdphe.state.co.us/HM/mercury/cflfactsheet.pdf>.

**Q: Are the household products listed above dangerous?**

**A:** When liquid mercury is contained within these items, there is little chance of exposure. However, if the items break, mercury can be released, and exposure is much more likely. Liquid mercury vaporizes when it comes in contact with air.

Even small amounts of mercury such as that found in thermometers or fluorescent bulbs can represent an exposure risk if not cleaned up properly and promptly.

Additional information can be found at <http://www.cdphe.state.co.us/HM/mercury/mercinthehome.pdf>.

**Breathing mercury vapor is very dangerous - much more dangerous than swallowing it.** This is because inhaled mercury vapor is almost completely absorbed by the body. Mercury vapor is heavier than air and tends to settle to the floor. This puts children at increased risk, because they are closer to the ground and are more likely to breathe mercury vapor that has settled.

**Q: Is there anything I can do to reduce the amount of mercury in my home?**

**A:** Whenever possible, mercury-free alternatives should be chosen to replace these items. Please see the table below for suggested mercury-free alternatives.

Mercury-containing Product	Mercury-free Alternative
Latex paint manufactured before 1992	Use latex paint manufactured after 1992.
Thermometers	Replace with digital or red alcohol thermometers.
Thermostats	Replace with a digital thermostat; this has the added benefit of allowing you to program your thermostat to automatically adjust the temperature at night and when you aren't home.
Batteries	Replace with alkaline batteries or batteries that are easily recycled (e.g., rechargeable nickel-cadmium, long lasting lithium).
Fluorescent lamps	Replace with lamps that are labeled as low mercury lamps; these can be recognized by their green endcaps or green printing on the bulb.
Antiseptics	Mercury-free alternatives include Neosporin and mycin. Talk to your pharmacist about other alternatives.

Additional information can be found at <http://www.cdphe.state.co.us/HM/mercury/mercinthehome.pdf>.

**Q: How do I clean up small mercury spills at home?**

**A:** Please see the following fact sheets to learn more about how to clean up spills at home:

- Broken thermometers: <http://www.cdphe.state.co.us/HM/mercury/hgcleanup.pdf>
- Fluorescent lights: <http://www.cdphe.state.co.us/HM/mercury/lampcleanup.pdf>

**Q: How can families reduce the risk of exposure to mercury at home?**

**A:** There are a number of things families can do to reduce the risk of exposure to mercury:

- Carefully handle and dispose of products that contain mercury, such as thermometers or fluorescent light bulbs.
- Choose mercury-free products for your home whenever possible.
- If mercury is spilled, never use a broom, vacuum cleaner or washing machine. These tools will spread the mercury contamination and exposure.
- If a large amount of mercury has been spilled, contact your health department.
- Teach children not to play with shiny, silver liquids. **Make sure that children are not bringing mercury home from school.** For more information, see the fact sheet on school sources and Environmental Protection Agency resources at [http://cfpub.epa.gov/schools/top\\_sub.cfm?t\\_id=41&s\\_id=30](http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=30).
- Pregnant women and children should keep away from rooms where liquid mercury has been used.
- If you fish and/or consume fresh or saltwater fish, learn about national and local recommendations for fish consumption. See our fish fact sheet for additional information.
- If you have a private well and suspect your water has mercury in it, have it tested. If you use public water and suspect it has mercury in it, check with your water company.
- Avoid bringing mercury home from work if you work with mercury:
  - Change into work clothes and shoes before beginning work each day.
  - Keep your street clothes and shoes in a clean place.
  - Remove mercury from your work clothes and shoes before you take them off; use a special mercury vacuum to do this, if available.
  - Shower at work at the end of the day.
  - Launder your work clothes at work.

Additional information can be found at <http://www.atsdr.cdc.gov/tfacts46.html>.

Additional information on how the Colorado Department of Public Health and Environment is dealing with mercury pollution in Colorado can be found at

<http://www.cdphe.state.co.us/hm/mercury/index.htm>

For more information contact Shannon Rossiter, MPH, at 303-692-2617 or Raj Goyal, Ph.D., at 303-692-2634.