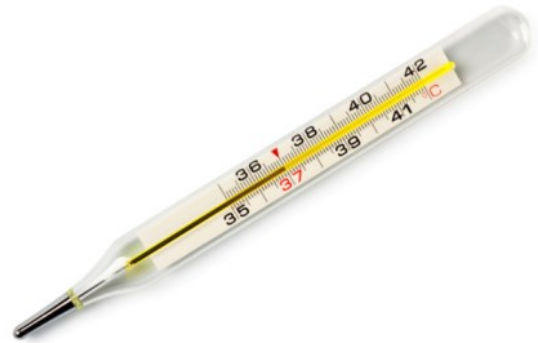




Eco-Healthy Child Care®

Eco-Healthy Child Care® helps early childhood learning environments to be as healthy, safe and green as possible by reducing children's exposure to toxic chemicals.



Mercury

What Is Mercury and Where Is It Found?

Mercury is a naturally occurring heavy metal that is released into the environment by human activity, such as mining, coal burning, and other industrial activities. Coal-burning power plants release mercury into the air and can fall into bodies of water, where it is changed into a highly toxic, organic compound called methylmercury. Once methylmercury is in the water plants, and small organisms like plankton absorb/ingest it causing methylmercury to increase in concentration as it moves up the food chain (with higher levels in big, long-lived fish). People that eat these types of fish (tuna, king mackerel, shark, swordfish etc.) can then suffer from high mercury exposure. Mercury is also released into the environment when mercury-containing items such as batteries, fluorescent lights (including compact fluorescent light bulbs and tubes) and mercury thermometers and thermostats break or are thrown away improperly.

Health Concerns

Mercury is a potent neurotoxicant that can damage the brain and nervous system. Infants, children, pregnant women, and breast feeding mothers are most vulnerable to the adverse health effects of mercury. This neurotoxicant is readily absorbed by the mother and is passed to the fetus during pregnancy, and to newborns through breast milk. Exposure to low levels of mercury vapor (airborne mercury) for prolonged periods of time may produce subtle effects, such as irritability, sleep disturbances, excessive shyness, tremors, coordination problems, changes in vision or hearing, and deficits in cognitive thinking, memory, attention, language, and fine motor and visual spatial skills. Exposure to very high levels of mercury vapor can cause brain, kidney, and

lung damage, nervous and digestive system damage and may seriously harm a developing fetus. Harmful effects include blindness, seizures, brain damage, and inability to speak.

How Can I Be Exposed?

- Eating fish contaminated with methylmercury (high-risk species include king mackerel, shark, swordfish, tilefish, marlin, orange roughy, and tuna).
- Breathing vapors from broken glass thermometers or broken compact fluorescent lights (bulbs or tubes).

How Can I Reduce My Exposure?

- Fish are an important source of nutrition, but one can limit their intake of large, long-lived fish which are more likely to contain mercury. Adults, including pregnant women, should not eat canned white or albacore tuna more than 3 times a month (Adult serving = 6 oz.). Children under six years old should not eat more than one 3 ounce portion per month. Children 6-12 years should not eat more than two 4.5 ounce portions per month. If you eat locally-caught fish, check with your health or environment department regarding fish advisories.
- Choose light tuna over white albacore tuna because it is likely to have lower levels of mercury.
- Use digital thermometers and thermostats; do not use mercury thermometers or thermostats.
- Do not use mercury lamps.

- Take used batteries, mercury thermometers and thermostats, compact fluorescent light bulbs/tubes, and other mercury-containing products to a hazardous waste facility. Visit <https://search.earth911.com>; enter your item and zip code and locations will be provided.
- Support green alternatives to coal-fired power plants, such as wind and solar energy.

support and resources; national toll free number: 1-800-222-1222. Remove children and pets from the room, turn off the heating or air conditioning and air out the room for 5-10 minutes before cleaning. Never use a vacuum cleaner as it will spread the mercury. If a broom, mop or wet rag is used to clean the mercury, it should be disposed of at a hazardous waste facility. If a mercury containing item is broken on carpet, the carpet area may need to be removed.

How to Safely Clean a Mercury Spill

Because compact fluorescent lights (CFL) contain mercury, every child care facility should have a mercury spill kit. Mercury released from a broken CFL bulb or tube will be a vapor and is not visible, while drops from something like a broken thermometer is a spill and will be visible. The mercury spill kit should be labeled and include tools to clean up both types of mercury spills. The U.S. Environmental Protection Agency (EPA) offers helpful information about how to clean up small mercury spills from broken thermometers and broken CFL's, and a list of items you need in your clean-up kit, at www.epa.gov/mercury/what-do-if-mercury-thermometer-breaks and www.epa.gov/cfl/cleaning-broken-cfl, respectively.

For any type of mercury spill, immediately contact the national poison control center for clean-up instructions,

- To safely clean up a broken CFL: 1) Wear gloves; 2) Scoop glass into a rigid container (such as a glass jar) lined with bag and seal lid; 3) Store away from children; 4) Air out room for 24-48 hours; 5) Dispose bulbs/debris and clean-up tools at local hazardous waste collection facility.
- To clean a mercury spill where mercury beads are present: 1) Wear gloves 2) Use cardboard or an eyedropper to gather mercury beads; 3) Put beads in ziplock bag; 4) Wrap tape around gloved fingers (with sticky side out) to pick up any remaining beads; 5) Put all items that were used to pick up mercury (cardboard, eyedropper) in the trash bag; Store away from children; 6) Air out room for 24-48 hours; 7) Dispose debris and clean-up tools at local hazardous waste facility.
- Never pour mercury down a drain.

Mercury Resources

- U.S. EPA: Mercury
www.epa.gov/mercury
- CFL Cleanup
epa.gov/cfl/cflcleanup.html
- Eco-Healthy FAQs on Mercury
www.cehn.org/ehcc/toxFAQs
- Agency for Toxic Substances and Disease Registry (ATSDR)
www.atsdr.cdc.gov/toxfaqs/tf.asp?id=113&tid=24
- Hazardous Waste Disposal
<https://search.earth911.com>
- Mercury calculator for interpreting your fish choices
www.gotmercury.org/
- Fish Consumption Advisories
water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/index.cfm

FOR MORE INFORMATION

Call: 202-543-4033, ext. 13
Email: ehcc@cehn.org
Visit: www.cehn.org/ehcc

Eco-Healthy Child Care® is a science-based, award-winning national program that seeks to improve the environmental health of children by partnering with child care professionals to eliminate or reduce environmental health hazards found in child care facilities.

