



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

Health Concerns

Mercury is a potent neurotoxicant that can damage the brain and nervous system. Infants, children, and pregnant women 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 lower levels of 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 metallic 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.

What Is Mercury and Where Is It Found?

Mercury is a naturally occurring metal that is released into the environment by human activity. For example, coal-burning power plants release mercury that then falls from the air into streams and oceans, where it is changed into methyl-mercury. Once methyl-mercury is in the water, it increases in concentration as it moves up the food chain, with higher levels in big, long-lived fish. Animals like birds or people that eat these fish can then suffer from high mercury exposure. Mercury is also released into the environment through mining, and when mercury-containing items such as batteries, fluorescent light bulbs (including compact fluores-

cent light bulbs) and mercury thermometers are thrown away improperly.

How Can I Be Exposed?

- Eating fish contaminated with methyl-mercury (high-risk species include king mackerel, shark, swordfish, tilefish, marlin and tuna).
- Breathing vapors from broken compact fluorescent light bulbs or other mercury-containing products.

How Can I Reduce My Exposure?

- Fish are an important source of nutrition, but limit intake of large, long-lived fish which are more likely to contain mercury. Pregnant women, nursing mothers and children under six years old should not eat more than two servings per week (Adult serving = 6 oz.; child serving = 3 oz.). 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; do not use mercury thermometers.
- Do not use mercury lamps.
- Take used batteries, mercury thermometers, fluorescent light bulbs, and other mercury-containing products to a hazardous waste fa-

cility. Visit www.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.

How to Safely Clean a Mercury Spill

Because fluorescent lights contain mercury, every child care facility should have a mercury spill kit. Mercury released from a broken fluorescent light bulb will not be visible, while drops from something like a broken thermometer will be visible. The mercury spill kit should be labeled and include tools to clean up both types of spills, including: 4-5 ziplock bags, thick trash bags, gloves, paper towels, cardboard, an eye-dropper, and duct tape.

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

- Treat broken fluorescent bulbs as a mercury spill. To clean safely: 1) Wear gloves; 2) Scoop glass into rigid container lined with bag and seal lid; 3) Store away from children; 4) Air out room for 24-48 hours; 5) Dispose bulbs/debris 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 bulbs/debris at local hazardous waste facility.
- Properly dispose of broken mercury-containing items and clean-up tools by taking the waste to a 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/FAQ
- Agency for Toxic Substances and Disease Registry (ATSDR)
www.atsdr.cdc.gov/toxfaqs/tf.asp?id=113&tid=24
- Hazardous Waste Disposal
www.earth911.com
- Mercury calculator for interpreting your fish choices
www.gotmercury.org/
- Fish Consumption Advisories
water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/index.cfm

➔ More Mercury resources can be found at: www.cehn.org/ehcc/resources

FOR MORE INFORMATION

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

Eco-Healthy Child Care® (EHCC) 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. Originally created by the Oregon Environmental Council in 2005, EHCC is now managed by Children's Environmental Health Network.

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