

MERCURY

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.



WHAT IS MERCURY AND WHERE IS IT FOUND?

Mercury is a naturally occurring heavy metal that is released into the environment via industries such as mining, incineration, and coal-burning. These activities emit mercury into the air, some of which then settles into soils, streams, and oceans, where it is changed to 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. Humans that eat these fish are then exposed to mercury.** Mercury is also released into the environment when mercury-containing items such as batteries, compact fluorescent light bulbs, and tubes, and mercury thermometers and thermostats break or are thrown away improperly.

HEALTH CONCERNS

Mercury is a potent neurotoxin that is readily absorbed

into our bodies. There is no safe level of mercury exposure. The effects of high-level mercury exposure include blindness, seizures, and brain damage. Lower level chronic exposure has been associated with developmental delays and cognitive defects. Infants and young children are most vulnerable to mercury because their brains are still developing.

HOW CAN I BE EXPOSED?

Exposure most commonly occurs through eating large, long-lived predatory fish such as tuna, king mackerel, shark, swordfish, tilefish, and marlin. People can also be exposed to mercury by breathing in vapors from broken mercury-containing items such as: glass thermometers and compact fluorescent lights (bulbs and tubes).

It is important to note that mercury can be transmitted in utero, from a mother to her fetus through the placenta, and to infants through breast milk. Thus, elimination or reduction of exposures not only to infants and children, but also to women who are of childbearing age, pregnant, or breastfeeding, is critical to protect children from mercury's harmful effects.



TIPS TO REDUCE MERCURY EXPOSURE

 Choose a variety of fish, particularly those with lower mercury levels. It is important to limit mercury in the diets of women who are pregnant, breastfeeding women and young children. This chart from the Food and Drug Administration can help you choose which fish to eat and how often to eat them:

www.fda.gov/media/102331/download

- Avoid eating long-live predatory fish such as albacore tuna, mackerel, shark, swordfish, tilefish, and marlin.
- If you eat locally-caught fish, check with your health department regarding fish advisories.
- Use digital thermometers and thermostats; do not use mercury thermometers or thermostats.
- Eliminate compact fluorescent light (CFL) bulbs and switch to mercury-free LEDs.
- 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 <u>https://searchearth911.com</u>; enter your item and zip code and locations will be provided.
- **Support green energy alternatives** to coal-fired power plants, such as wind and solar energy.



WHY SWITCH TO LEDS?

LEDs do not contain hazardous mercury. They are approximately 50% more energy-efficient and last 2-3 times longer than fluorescents and other traditional lighting products. They emit less mercury and other harmful air pollutants from coal-burning power plants because of their energy efficiency and lasting power. LEDs are a cost-effective option and are widely available in supermarkets, hardware stores, retail and online shops.

MERCURY SPILLS

Compact fluorescent lights (CFL) contain mercury, whenever possible you should replace them with LEDs. The U.S. Environmental Protection Agency offers helpful information about how to clean up small mercury spills from broken thermometers and broken CFL's, www.epa.gov/mercury/what-do-if-mercury-thermometerbreaks 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, 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 the carpet, the carpet area may need to be removed.

• 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 of bulbs/debris and clean-up tools at a 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 remain-ing 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

Agency for Toxic Substances and Disease Registry (ATSDR) <u>www.atsdr.cdc.gov/toxfaqs/tf.asp?</u> <u>id=113&tid=24</u>

Hazardous Waste Disposal https://search.earth911.com

Food and Drug Administration, Advice About Eating Fish:

www.fda.gov/media/102331/download

FOR MORE INFORMATION

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