



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.

Lead

Health Concerns

Lead is a neurotoxin. It accumulates in blood, bones, muscles, and fat. Children exposed to lead can experience headaches, hearing problems, delayed growth, delayed onset of puberty, decreased IQ, behavioral and learning problems, and damage to the brain and nervous system. At high levels, it can be fatal. Adult exposure can lead to reproductive problems, muscle and joint pain, decreased reaction time, affected memory, and nerve disorders. The people most at risk to exposures are pregnant women and young children.

What Is Lead and How Is It Used?

Lead is a naturally occurring heavy metal found in the environment and its harmful residue is odorless, colorless and tasteless. It is currently used in the production of certain batteries, metal and PVC (polyvinyl chloride) piping, art supplies, ceramics and other common and industrial items. Due to health concerns, lead has been significantly reduced in paint, ceramic products, caulking, and pipe solder. The federal government banned lead-based paint from housing in 1978. Lead was also banned as a gasoline additive in the U.S. in 1978. Despite these bans, lead can still be found in a number of products including play jewelry, art supplies, PVC toys, paint, ceramic pottery, and piping. Some urban areas have high levels of lead in their soil.

Lead Is Especially Harmful to Children

- Children are at a greater risk of lead poisoning



because their gastrointestinal absorption of lead is higher than in adults.

- Children are more sensitive to the damaging effects of lead because their brains and nervous systems are still developing.
- Young children often put their hands and other objects in their mouths – these objects can have lead dust on them.

Reducing Exposure to Lead

Symptoms of lead poisoning can be easily overlooked, so prevention and testing are necessary.

- Many American children have high blood lead levels.
◊ *Determine whether a child has a high blood lead level by having them tested. Find a testing location by visiting www.cdc.gov/nceh/lead*
- Children are exposed to lead by eating old paint chips (from 1978 or before) or inhaling old paint particles/dust.
◊ *Maintain paint to prevent flaking or peeling by washing all areas around doors and windows. Paint over old flaking paint with low-VOC (Volatile Organic Compound) paint.*
- Many older homes have water pipes made with lead solder.
◊ *Cold water is much less likely to leach lead from the pipes. Run cold water for 15-30 seconds before using for drinking, cooking, and making baby formula.*

- Imported, old, or handmade pottery often contains lead.
◇ Avoid these types of pottery when eating, drinking and cooking.
- Soil is often contaminated with lead (exhaust from lead-contaminated gasoline settling on the ground before 1978).
◇ Use a rough mat for wiping feet or go shoe-free inside where allowable.
- Many children’s vinyl products (rubber duckies, rain coats) contain high levels of lead. *See Plastics & Plastic Toys fact sheet.*
◇ Avoid children’s vinyl products. Test vinyl products for lead with your own lead testing kit, found at most local hardware stores (\$8 and up). Or, send in your product to the [Center for Environmental Health](#) for testing.
- Some homeopathic non-traditional medicines can contain dangerously high levels of lead. Some medicines can contain as much as 90 percent lead.
◇ Use caution when considering homeopathic non-traditional remedies.
- Costume jewelry and jewelry sold in vending machines often contain lead.
◇ Keep metal jewelry away from children.
- Projects that disturb lead-based paint can create dust and endanger you and your family.
◇ Follow work safe practices as outlined in the brochure, “Renovate Right, Important Lead Hazard Information for Families, Child Care Providers and Schools” EPA-740-F-08-002
- Some artificial turf/grass contains lead (to keep the colors vibrant over time).
◇ Use caution when purchasing artificial turf. If already installed, test turf for lead. Ensure children wash hands and shoes after playing on artificial turf containing lead.

FOR MORE INFORMATION

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

- ### Lead Resources
- Environmental Protection Agency:
www.epa.gov/lead/pubs/leadinfo.htm#health
 - Lead Hotline - The National Lead Information Center
[1\(800\) 424-LEAD \(5323\)](tel:1800424LEAD5323)
 - Agency for Toxic Substances and Disease Registry (ATSDR):
<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=93&tid=22>
 - Healthy Toys:
www.healthystuff.org/departments/toys/
 - Center for Environmental Health:
www.ceh.org
 - California Childhood Lead Poisoning Prevention Branch:
www.dhs.ca.gov/childlead

A recipient of EPA’s Children’s Environmental Health Excellence Award in 2006, Eco-Healthy Child Care® (EHCC) is a 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.