



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.

Arsenic: treated wood & water

Health Concerns

Arsenic is a toxic chemical element that occurs naturally in rock and soil. It is colorless, tasteless and odorless, and when it enters the body through ingestion or inhalation, it is readily absorbed and undetectable. The health effects related to long term, repeated arsenic exposure include irritation of the stomach and intestines, birth or developmental effects, skin cancer, lung cancer, bladder cancer, infertility and miscarriages.

Pressure Treated Wood

The wood in pre-2005 playground sets, picnic tables, benches and decks can contain potentially hazardous levels of arsenic due to the use of Chromated Copper Arsenate (CCA) as a wood preservative and insecticide. The EPA-registered CCA solution which is used to treat wood contains up to 30% arsenic. Due to health concerns, CCA was phased out for residential uses in 2004. Children who regularly spend time on treated structures built prior to 2005 could potentially be exposed to arsenic (e.g., by putting their hands in their mouths after playing on treated structures), but such exposures may be avoided or reduced by following the recommendations listed on this fact sheet.

Contaminated Drinking Water

Arsenic in ground and surface water is the result of naturally-occurring minerals as well as from agricultural and industrial activities. Exposure from arsenic in water is from ingestion of drinking water containing arsenic, not from showering, bathing or washing

with contaminated water. Federal standards set the maximum level of arsenic permitted in drinking water at 10 parts per billion (ppb). Not all water systems are in compliance with this standard. Private wells, which are unregulated, can be a potential source of drinking water with dangerously high levels of arsenic.

What to Do to Avoid Arsenic Exposure

Wash up. Encourage children to wash their hands with mild soap and water after playing on treated wood.

Test for it. If your water comes from a public water system, request a copy of the Consumer Confidence Report to verify system compliance with the maximum contaminant level set by your State's drinking water laws. If your water comes from a private well, call the U.S. Environmental Protection Agency's Safe Drinking Water hotline (800-426-4791) to find certified water-testing labs in your area.

Filter it. Remove arsenic by treating your private well water to reduce the arsenic concentration to below 10 ppb. Contact your state or local public health department to request advice on the best treatment methodology for achieving this goal. Make sure the filtration system or unit has been certified by one of the 3 certifiers listed in "Resources". Follow the manufacturer's instructions on how to install, operate and maintain the water treatment unit to ensure levels of arsenic in your drink-

ing water are safe.

Seal it. Apply 2 coats of waterproof stain or sealant on CCA-treated wood at least once a year. For more information go to www.cehn.org/ehcc/FAQs, 'How can I reduce exposure to arsenic in CCA?'

Take cover. Cover picnic tables with a tablecloth; avoid contact of food and drink with CCA-treated wood.

Do not burn it, sand it or cut it. Burning CCA-treated wood will release arsenic into the air. Sanding or cutting CCA-treated wood will create toxic dust.

Do not power wash it. Do not apply harsh cleaning products, such as bleach or acidic

cleansers, to CCA-treated wood. Use a mild soap and water solution and disposable cleaning supplies.

Dispose of it at a hazardous waste site.

Visit www.earth911.com; enter your item and zip code and hazardous waste locations will be provided.

Replace it. If you decide to replace CCA-treated wood structures with alternative materials, see a list of these materials at www.healthybuilding.net/arsenic/

Drinking Water and Playground Equipment Resources

- Chromated Copper Arsenate (CCA)
www.epa.gov/oppad001/reregistration/cca
- U.S. Environmental Protection Agency's Arsenic in Your Drinking Water factsheet
www.epa.gov/ogwdw/arsenic/pdfs/fs_arsenic_justthefactsforconsumers.pdf
- Agency for Toxic Substances and Disease Registry
www.atsdr.cdc.gov/toxfaqs/tf.asp?id=19&tid=3
- Certifiers of Home Water Treatment Units
NSF International (www.nsf.org/certified/DWTU), the Water Quality Association (www.wqa.org), and the Underwriters Laboratories, Inc. (www.ul.com/water)
- Arsenic Wood: Hazards and Alternatives
www.healthybuilding.net/arsenic and
www.healthybuilding.net/arsenic/hbn_wood_factsheet.html
- Beyond Pesticides
www.beyondpesticides.org/wood
- Eco-Healthy FAQs on Chromated Copper Arsenate (CAA)
www.cehn.org/ehcc/FAQ

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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