

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.



Radon

Health Concerns

- Radon is the leading cause of lung cancer among non-smokers.
- Radon is the leading environmental cause of cancer in America, claiming approximately 20,000 lives annually.

What Is Radon?

Radon is a radioactive gas that you can't see or smell. It is produced by the natural breakdown of uranium in soil and water. Uranium is found in soils worldwide, with some areas having higher concentrations than others.

Any building can have a radon problem. Radon gets into a building by moving up through the ground and then through cracks and holes in the foundation. Buildings can trap radon, which can lead to harmful concentrations indoors. It is imperative that each child care facility test their building for radon to be sure that children and staff are safe.

Radon and Children

- Children have smaller lungs and therefore higher breathing rates.
- Children spend up to 70% more time indoors than adults on average.

- Radon-related lung cancer is correlated with a person's total lifelong exposure.
- According to the U.S. Environmental Protection Agency (EPA), a nationwide survey estimates that 1 in 5 schools has at least one schoolroom with a radon level that exceeds the recommended level of 4 picocuries per liter (pCi/L) or higher. (A picocurie is a measure of radioactivity.)

Reducing Your Exposure to Radon

The EPA and the office of the Surgeon General recommend that all homes be tested. If your average indoor radon level measures at or above 4.0 pCi/L, take action to reduce it.

Fixing buildings to reduce radon exposure may entail sealing cracks in the foundation, ventilating the area or depressurizing the soil.

How to Test for Radon

Common test kits are available at larger home improvement stores. They typically cost about \$15. Test kits also can be ordered from online retailers, as well as from the National Radon Program Services. Visit *sosradon.org* or call 1-800-SOS-RADON.

There are different kinds of test kits:

charcoal canisters are used for short periods (2-7 days)

- an "E-perm" can be used for short or longterm periods (2 days to 12 months)
- alpha track detectors measure radon over 3 months to one year
- charcoal liquid scintillation devices measure radon for short periods (2-7 days).

When using a radon test kit:

- Follow the directions of the kits closely since the length of time the kits can remain open varies.
- Place the test kit in the basement or lowestlived-in level of a home, school, or child care.
- Ensure the test kit is placed midlevel, not too close to ground or ceiling (place on top of a book shelf or dresser).
- Be careful not to disturb the test kit until

- testing is finished.
- After the specified amount of time, mail the kit to the manufacturer to be analyzed.

Since radon levels vary, a long-term test (90 or more days) provides the best measure of year round radon levels. If levels need to be determined quickly, short-term tests (usually between 2 and 7 days) can be conducted. It is recommended that two short-term tests be done either at the same time or one after another to obtain an average.

Test your child care facility and home every two years or following a significant renovation.

If your facility has a radon level of 4 pCi/L or more contact your state radon office www.epa.gov/radon/whereyoulive.html for assistance.

Radon Resources

- US Environmental Protection Agency www.epa.gov/radon
- National Safety Council www.nsc.org/news_resources/Resources/ Documents/Radon.pdf
- National Radon Proficiency Program: Residential Mitigation Provider http://www.nrpp.info/ radon_mitigation_service.shtml
- National Radon Safety Board http://www.nrsb.org/find_a_professional.asp
- National Radon Program Services sosradon.org or 1-800-SOS-RADON

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.

Eco-Healthy Child Care®

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