



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.

Pesticides

Health Concerns

Children may be exposed to pesticides by playing on floors, lawns, and play areas; eating pesticide-treated foods; or by handling treated pets. When pesticides are applied indoors as a spray or aerosol, vapors often linger in the air. Small droplets from the sprays can end up on carpets, floors, desks, toys and other surfaces with which children may come into contact either by crawling or mouthing objects. Pesticide sprays used outdoors can drift into child care facilities and homes through ambient air or ventilation systems.

The health effects of pesticides are dependent upon the chemical class and formulation of each pesticide, the level and length of exposure, and the age of exposure, with children being more vulnerable. Pesticide poisoning incidents are most often associated with accidental ingestion of a pesticide or improper application, i.e. not following label instructions. Acute poisoning to pesticides can cause breathing difficulty, chest tightness, vomiting, cramping, diarrhea, blurred vision, sweating, headaches, dizziness, and loss of concentration. Long-term exposure to pesticides may lead to asthma, cancer, reproductive harm, kidney/liver damage, birth defects, nerve tissue damage and neurobehavioral problems.

What Is a Pesticide?

A pesticide is any substance used inside or outside to prevent, control, repel, or kill insects, plants, fungi, and other pests. Therefore, bug spray, weed killer, insect repellents, flea and tick collars and disinfectants are all forms of pesticides. Of main concern is children's exposure to pesticides because of their small size and developing nervous system. Many

chemical pesticides can spread through the air when sprayed, and seep into soil and water.

Pesticides and the Developing Child

Even low levels of some pesticide exposure are a threat to young developing bodies. Many pesticides can take a very long time to break down. They persist indoors for weeks on furniture, toys and other surfaces and can persist for years in household dust. Research indicates that pesticide levels in indoor air are often higher than those found in outdoor air.

Integrated Pest Management (IPM)

Integrated Pest Management (IPM) is an effective and environmentally sensitive way to control pests and weeds. IPM does not prohibit pesticide use but uses the strategy of 'least toxic methods first.' IPM uses techniques that pose the least hazards to people, property, and the environment. It is also cost-effective.

Think twice before buying or using any chemical pest control products. Usually there are non-chemical solutions that work just as well. Determine whether the pest is a real or perceived problem. Not every living thing that doesn't "belong" is a pest that needs to be eradicated using chemicals. For example, dandelions may be "weeds", but these plants can up-rooted by hand if necessary or simply tolerated. Be a "pest detective" – look for and eliminate the root causes of pest problems (i.e., standing water, food crumbs). The only way to successfully and sustainably control pests is to eliminate the conditions that allow them to enter and thrive in the buildings where they live. This summarizes the IPM approach.

Examples of IPM:

- Clean up food and drink spills right away.
- Don't leave dishes standing in the sink.
- Do not allow children to eat food other than in designated areas (that can be cleaned up immediately after the meal/snack is over).
- Limit use of food items for crafts and always store food items in tightly sealed glass or metal containers.
- Fix all leaks promptly and remove standing water.
- Seal or caulk cracks and holes (insect entryways).
- Remove clutter so pests have fewer places to hide.
- Keep trash in a closed container and take it out frequently; don't let trash pile up.
- Remove empty trash cans from inside the building at the end of the day.
- Use environmentally friendly strategies to deter pests: cedar chips or fragrant herbs.
- Work with local institutions to adopt an IPM policy. Aspire to limit the use of chemical pesticides.

If You Must Use Chemical Pesticides

- ◆ Choose a time when children will have the least exposure to the application area for at least 12 hours (see manufacturer's instructions to ensure 12 hours is enough time)

- ◆ Notify families and staff in advance about the timing and location of applications and what product(s) will be used.
- ◆ Make certain that the individual applying pesticides is a licensed professional. Choose a pest management professional (PMP) that practices IPM. See resource box below for finding a Certified PMP.
- ◆ Ensure that pesticides are not applied when children are present. Follow label instructions for the allotted time between application and children's re-entry.
- ◆ Do not apply pesticides in places where children sleep and play (as pesticide residues can linger for a long time).
- ◆ Read and follow the label instructions on the pesticides.
- ◆ Choose pesticides of low toxicity first, such as boric acid (be sure products are EPA registered).
- ◆ Use of bait traps is preferable over spraying. Ensure baits/traps are not accessible by children.
- ◆ Do not use flea bombs or other "bug bombs" or "foggers." (A pesticide product that releases a spray, fume, smoke, or aerosol.)
- ◆ Store pesticides out of children's reach. Place child-resistant latches on container lids and cabinet doors.
- ◆ Keep all pesticides in their original containers, with their original cap securely in place.
- ◆ Keep the National Capital Poison Center telephone number handy: 1-800-222-1222.

Pesticide and IPM Resources

- Healthy Child Care – US Environmental Protection Agency- IPM Training
www2.epa.gov/childcare/training-and-curriculum-resources-healthy-child-care-providers
- IPM Toolkit for Early Care and Education Programs (Free!)
https://cerch.berkeley.edu/sites/default/files/ipm_curriculum_final_10.2010.pdf
- Look for Certified PMPs at one of these sites:
Green Shield Certified (www.greenshieldcertified.org), Green Pro (www.npmagreenpro.org), or Eco-Wise (www.ecowisecertified.org)
- IPM Toolkit for Family Child Care Homes (Free!)
cchp.ucsf.edu/content/family-child-care-homes

FOR MORE INFORMATION

Call: 202-543-4033, ext. 13

Email: ehcc@cehn.org

Visit: www.cehn.org/ehcc

Eco-Healthy Child Care® 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.

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