

Caring for Children's Environmental Health in Early Care and Education Settings: Evidence-Based Standards



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Children in Early Care and Education

11 million

U.S. children under the age of 5 attend early care and education programs daily

Avg. 36 hours

Per week is spent in ECE programs

(Child Care Aware, 2014)



National Resource Center Mission

To improve the quality of out-of-home child care and ECE programs and support the health & safety of the children they serve.

We Support:



- ❖ State/local health depts.
- ❖ State regulators
- ❖ Child care providers/family child care homes
- ❖ Policy makers
- ❖ Families
- ❖ Early Head Start /Head Start programs
- ❖ Home visitors
- ❖ Early educators
- ❖ Health professionals
- ❖ Early childhood comprehensive systems

Children's Environmental Health

Children are not just "little adults"

They are particularly vulnerable to environmental hazards

- ❖ Children have faster respiratory rates than adults.
- ❖ Children crawl on the floor and mouth objects.
- ❖ Children's nervous, reproductive, and hormonal systems are in development, creating windows of vulnerability.



Primary Resource

Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education, 3rd Edition (CFOC3)

Caring For Our Children

National Health and Safety Performance Standards: Guidelines for Early Care and Education Progress



686 evidence-based health and safety standards

A collection of national standards that represent the best evidence, expertise, and experience in the country on quality health and safety practices and policies that should be followed in today's early care and education settings.

Caring for Our Children: Environmental Health in ECE

123 Selected CFOC3 Standards

Technical assistance provided from the Children's Environmental Health Network through CDC's Health in All Policies Initiative

How Were CFOC3 Standards Chosen?

Question: If the standard is not followed, would the resulting harm be considered the result of:

- a) an environmental health incident (e.g. a chemical/allergen exposure, noise);
- b) a physical injury (e.g., a fall); or
- c) an infectious agent (bacteria, virus)?

If yes, include in EH collection

Standard 5.2.1.1 Fresh Air (Excerpt)

As much fresh outdoor air as possible should be provided in rooms occupied by children. Windows should be opened whenever weather and the outdoor air quality permits or when children are out of the room.

Policy Statements and Recommendations

- ❖ **Minimize children's exposures to pesticides**

American Academy of Pediatrics (AAP) Policy Statement, 2012

- ❖ **Avoid exposure to fragrances and other unnecessary chemicals**

AAP, American Lung Association, American Thoracic Society, Children's Environmental Health Network, and National Medical Association, 2014

Strategies for Healthy ECE Environments

- ❖ Survey your early care and education environment;
- ❖ Create action plan to improve environmental health;
- ❖ Share information with parents/guardians; and
- ❖ Collaborate with your local health department to address environmental concerns.

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American Public Health Association Annual Meeting and Exposition, November 2014

***Caring for Our Children*, 3rd Edition Standard 5.2.1.1: Fresh Air**

As much fresh outdoor air as possible should be provided in rooms occupied by children. Windows should be opened whenever weather and the outdoor air quality permits or when children are out of the room (1). When windows are not kept open, rooms should be ventilated, as specified in Standards 5.2.1.1-5.2.1.6. The specified rates at which outdoor air must be supplied to each room within the facility range from fifteen to sixty cubic feet per minute per person (cfm/p). The rate depends on the activities that normally occur in that room.

Rationale:

The health and well-being of both the staff and the children can be greatly affected by indoor air quality. The air people breathe inside a building is contaminated with organisms shared among occupants and sometimes the indoor air is more polluted than the outdoor air. Young children may be affected more than adults by air pollution. Air quality significantly impacts people's health. The health impacts from exposure to air pollution (indoor and outdoor) can include: decreased lung function, asthma, bronchitis, emphysema, and even some types of cancer. Children are particularly vulnerable to air pollution because their lungs are still developing and they breathe more air per pound of body weight than adults do. Indoor air pollution is often greater than outdoor levels of air pollution due to a general lack of adequate air filtration and ventilation (4). The presence of dirt, moisture, and warmth encourages the growth of mold and other contaminants, which can trigger allergic reactions and asthma (2). Children who spend long hours breathing contaminated or polluted indoor air are more likely to develop respiratory problems, allergies, and asthma (3-5).

Although insulation of a building is important in reducing heating or cooling costs, it is unwise to try to seal the building completely. Air circulation is essential to clear infectious disease agents, odors, and toxic substances in the air. Levels of carbon dioxide are an indicator of the quality of ventilation (6). Air circulation can be adjusted by a properly installed and adjusted heating, ventilation, air conditioning, and cooling (HVAC) system as well as by using fans and open windows.

(Accessible here: <http://cfoc.nrckids.org/StandardView/5.2.1.1>)

 = This standard is also part of *Stepping Stones*, 3rd Edition (SS3). SS3 presents 138 essential standards intended to reduce the rate of morbidity and mortality in child care and early education settings. (Accessible here: <http://nrckids.org/index.cfm/products/stepping-stones-to-caring-for-our-children-3rd-edition-ss3/>)



National Resource Center for Health and Safety in Child Care and Early Education (NRC) Contact Information

Our Primary Resource

Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd Ed. (CFOC3)

A collection of 686 national standards that represent the best evidence, expertise, and experience in the country on quality health and safety practices and policies that should be followed in today's early care and education settings.

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