



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.

Noise Pollution

Health Concerns

The World Health Organization (WHO) and the U.S. Environmental Protection Agency (EPA) recognize the harmful health effects of noise pollution. According to the Centers for Disease Control and Prevention (CDC), noise pollution is “an increasing public health problem” that can lead to a variety of adverse health effects, including: hearing loss, stress, high blood pressure, interference with speech, headaches, disturbance of rest and sleep, productivity and mental health effects, and a general reduction in one's quality of life.

What is Noise Pollution?

Noise pollution is unpleasant noise created by people or machines that can be annoying, distracting, intrusive, and/or physically painful. Noise pollution can come from outdoor sources, such as road traffic, jet planes, garbage trucks, construction equipment, manufacturing processes, lawn mowers, leaf blowers, and indoor sources, including, but not limited to: loud music or television, heating and air conditioning units, and metal chairs scraping on floors.

Noise Pollution and the Developing Child

- Children develop better concentration skills in a quiet environment.
- Children who are exposed to noise pollution while learning are more likely to experience reading delays.
- Children who suffer from noise pollution learn to tune out not only loud and unpleasant noises, but also the teacher's voice, which can harm their reading and language skills.
- Children have more difficulty with the acquisition of speech, understanding spoken

language and distinguishing the sounds of speech when learning in a noisy environment.

- Children who spend time in noisier areas have higher resting blood pressure and higher stress levels.
- Children who are exposed to noise pollution can exhibit tinnitus (ringing or buzzing sound in the ear) a symptom associated with many forms of hearing loss.
- Noise pollution can have a negative impact on long-term memory.

Take Charge!

Consider the possible sources of noise pollution in and around your child care setting and identify effective ways to reduce harmful impacts:

- Close windows and doors to shut out noise pollution from lawn mowers, leaf blowers, and garbage trucks. Open windows when the noises cease for good ventilation.
- Install noise absorbent materials on ceilings and walls – wall quilts and carpeting, cork board.
- Only play music intentionally as part of the curriculum. Never play music or a radio that is for background/white noise. Never use white noise machines. Allow children to nap in quiet – do not play music while children are sleeping.
- Fight the noise. Noise pollution is often an environmental justice issue. Work with neighbors, your city and/or licensing agency to request that noisy activities are adjusted to meet the needs of your program (i.e., loud construc-

tion should not be done while children are sleeping).

- Place noisy activities next to each other and away from “quiet areas” reserved for learning activities requiring concentration.
- Limit the amount of time spent doing noisy activities.
- Provide headphones for listening centers and monitor volume.
- Encourage parent/caregivers to have their child’s hearing tested if he/she routinely participates in noisy activities, such as playing an instrument or attending concerts or sports events.

Signs that a child has damaged hearing

- Asks people to repeat themselves.
- Regularly hears buzzing or ringing sounds.
- Speaks loudly, yells, or raises their voice to

speak to someone standing nearby.

- Does not react to unexpected loud noises.

Examples of Decibel (dB) Readings

Noise or sound is measured in decibels (dB). A person’s hearing can be damaged if exposed to noise levels over 75 dB over a prolonged period of time.

Painful

120-140 dB = jackhammer, jet plane take-off, amplified rock music at 4-6 ft

Extremely Loud

90 dB = lawnmower, shop tools, truck traffic, subway

Very Loud

60-80 dB = dishwasher, alarm clock, busy street, vacuum cleaner, normal conversation

Moderate

40-50 dB = moderate rainfall, quiet room

Faint

30 dB = whisper, quiet library

Noise Pollution Resources

- American Speech-Language-Hearing Association
www.asha.org/
- Noise Pollution Clearinghouse
www.nonoise.org/
Phone: 1-888-200-8332
- NoiseOff
www.noiseoff.org/
- World Health Organization: Guidelines for Community Noise
www.who.int/docstore/peh/noise/Comnoise-1.pdf
- How to test for noise levels in an empty classroom
www.quietclassrooms.org/library/test.htm

FOR MORE INFORMATION

Call: 202-543-4033, ext. 13

Email: ehcc@cehn.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.

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