



Noise Pollution

What is Noise Pollution?

- Noise pollution is unpleasant noise created by people or machines that can be annoying, distracting, intrusive, and/or physically painful.ⁱ
- Noise pollution can come from sources such as "...road traffic, jet planes, garbage trucks, construction equipment, manufacturing processes, lawn mowers, leaf blowers, and boom boxes."ⁱⁱ



- Noise or sound is measured in decibels (dB). An increase of about 10 dB is approximately double the increase in loudness.ⁱⁱⁱ
- A person's hearing can be damaged if exposed to noise levels over 75 dB over a prolonged period of time. The World Health Organization recommends that the sound level indoors should be less than 30 dB.

What are the health concerns related to Noise Pollution?

- The World Health Organization (WHO) and the U.S. Environmental Protection Agency (EPA) recognize the harmful health effects of noise pollution.^{iv, v}
- According to the CDC, noise pollution is "an increasing public health problem" that can lead to a variety of adverse health effects.^{vi}
- Problems related to noise include 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.ⁱⁱ

Noise Pollution and Children in the Child Care Setting

- Studies show that children in classrooms who are exposed to noise pollution experience reading delays.^{vii}
- Children exposed to noise pollution learn to tune out not only noise but also the teacher's voice, which can harm their reading and language skills.^{viii}
- Children have more difficulty understanding spoken language and distinguishing the sounds of speech when learning in a noisy environment.^{viii}
- Children from noisier areas have higher resting blood pressure and higher stress levels.^{iv}
- Children develop better concentration skills in a quiet environment.^{ix}

What you can do:

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

- Try to use acoustical tile ceilings, wall coverings, and bookshelves to absorb sound.^{vii}
- Close windows and doors to shut out noise from road and plane traffic.
- Place noisy activities next to each other, away from areas needing quiet for concentration on quiet, learning activities.

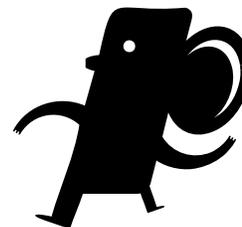


Resources

- Noise Pollution Clearinghouse-
<http://www.nonoise.org/>
 - web resources like classroom acoustics
 - assist with testimony and comments presented to planning commissions, zoning boards, city councils, and judges
 - can also get you in touch with experts in the field and others working on similar projects in your local area or nationally.Phone: 1888.200.8332

- NoiseOff –
<http://www.noiseoff.org/>
 - teaching guides for elementary students

- World Health Organization: Guidelines for Community Noise -
<http://www.who.int/docstore/peh/noise/Comnoise-1.pdf>



ⁱ Noise Off: Frequently Asked Questions web site. Available at: <http://www.noiseoff.org/faq.shtml>. Accessed 2 March 2007.

ⁱⁱ Noise Pollution Clearinghouse: About Noise, Noise Pollution, and the Clearinghouse web site. Available at: <http://www.nonoise.org/aboutno.htm>. Accessed 2 March 2007.

ⁱⁱⁱ Noise Abatement Society. FAQ. Available at: <http://www.noiseabatementociety.com/tcms/view.do?page=283>. Accessed 27 August 2007.

^{iv} Berglund B. Guidelines for Community Noise. World Health Organization. 1999. Available at: <http://www.who.int/docstore/peh/noise/Comnoise-1.pdf>. Accessed 2 March 2007.

^v Noise: A Health Problem. United States Environmental Protection Agency. 1978. Available at: <http://www.nonoise.org/library/epahlth/epahlth.htm#introduction>. Accessed 2 March 2007.

^{vi} Center for Disease Control: Noise web site. Available at: <http://www.cdc.gov/nceh/hsb/noise/>. Accessed 2 March 2007.

^{vii} League for the Hard of Hearing: Classroom Acoustics and Hearing web site. 2007. Available at: <http://www.lhh.org/noise/children/classroom.html>. Accessed 2 March 2007.

^{viii} Family Education: Noise Pollution in the Classroom web site. Available at: <http://school.familyeducation.com/child-psychology/educational-research/38357.html>. Accessed 2 March 2007.

^{ix} Family Education: Noise Pollution in the Classroom web site. Available at: <http://school.familyeducation.com/child-psychology/educational-research/38357.html>. Accessed 2 March 2007.