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

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