

Noise Pollution

By Dorothy Lockhart Lawrence

Editor: Provider Point of View

Noise Pollution - It's Everywhere and It's Worse Than You Think!

A couple of years ago I was drawn to an article called "The Muffled Epidemic" which was in the July/August issue of Health magazine. The subheading said "Noise is stealing the hearing of million of Americans. Are you one of them?" The author told the story of a young woman who took a hearing test to appease her husband who was concerned about her constant requests to repeat what he was saying. The disturbing result showed that at age 34, she needed hearing aids. When she looked at the possible causes of her hearing loss, the likeliest answer was something she had never imagined would harm her - aerobics classes. She had attended classes 5 days a week, an hour a day, for 15 years to music amplified to produce an adrenaline rush that keeps club members going. According to this article, aerobics classes can hit 105 decibels (dB) which would be like standing on the running board of a fire engine with the siren going.

But that's not the only place where the decibel levels are high enough to damage the delicate hairs in your ears. I recently found an on-line article from Reuters called "There's a Fly In Your What?" about the noise level in many restaurants. Researchers took sound readings Thursday through Saturday at dinnertime for several one-hour periods. Then they calculated the average noise exposure a waiter or other worker might get in an 8-hour shift.

In at least two cases, the continuous exposure topped the 85-decibel level. According to the National Institute of Occupational Safety and Health, this level threatens hearing loss. Noise problems were worst in restaurants with big bars, hard surfaces, high ceilings, open kitchens and large crowds, all standard in today's newest and trendiest restaurants.

Noise and Nature

Loud noise is also affecting nature. ABC Science News reports that all the noise from supertankers, oil exploration, and new military sonar equipment scrambles the communications systems of sea life. A new report warns that this underwater noise pollution has forced changes in migration routes and breeding grounds. An article called "Sound and Fury" in the March 2001 issue of Harper's reports that certain species of birds fail to learn their mating songs and therefore to reproduce in noisy environments.

As early as 1975, one researcher found that children on the train-track side of a New York public school were lagging a year behind their classmates on the other side of the building in learning to read. Numerous studies have been done about the effects of airport noise and families who live nearby and the same results have been found. The sound of toys can range up to 100 dB. Two hours of a power drill but only thirty minutes of continuous sound in a video arcade can cause permanent hearing loss. Even a baby's rattle can be as high as 110 dB. The Cornell Chronicle reported a new study shows that children don't tune out sound per se when in a chronically noisy environment; rather, they have difficulty acquiring speech recognition skills.

Other Effects of Loud Noise

The effects of noise pollution are more far reaching than just hearing loss. Persistent loud sounds have been linked to headaches, stomach aches, tinnitus, irritability, loss of sleep, learning difficulties, even heart disease and high blood pressure. One writer reports that anti-stress medications are actually tested by exposing subjects to loud sounds.

Perhaps the most disturbing story I found was in the July 1998 issue of Time magazine entitled "Mad About Noise." It began with the opening sentences, "Ever felt like murdering your neighbor for blasting music too loud? That's exactly what 78-year-old retired farmer Lambrinos Lykouresis did two years ago in Lithakia, on the Greek island of Zabynthos." Apparently Lambrinos had

complained to the neighbor for months about the noise. One evening during the evening news which he continuously had trouble hearing, he suddenly snapped. He took his hunting rifle from the shelf and rang the bell to the neighbor's apartment. When the housewife answered the door, he fired three times at point-blank range, killing her instantly and wounding her 24-year-old son. Lambrinos is now in a quieter place, a Greek maximum security prison. This is an extreme example of what someone felt compelled to do to have a little peace and quiet. But I think all of us have felt the irritation of unwanted sound.

It's pretty sad to read that an eighty-year-old Sudanese villager hears better than a thirty-year-old American. It's sad to read that noise may affect us morally as well as aurally. According to the March 2001 Harper's article "Sound and Fury" by Garret Keizer, people subjected to high levels of noise are less likely to assist strangers in difficulty, less likely to recommend raises for workers, more like to administer electric shocks to other human subjects.

The issue of environmental noise and its effect on children has long been an issue of great importance to the National Academy for Child Development (NACD). For over twenty years, NACD researched and experimented with ways to create the optimal sound environment, especially for children.

If you've visited the NACD website, you know that they describe the common environment of today's student. While little Max is trying to do his homework, he can hear his older brother listening to rock music upstairs, a car going down the street, the florescent lights, the hum of the computer, the sound of a jet flying overhead, and his mother talking on the phone. If Max is also hypersensitive to certain sounds and already has difficulty concentrating, he's in big trouble.

Examples of Environment Noise

Even relatively low levels of noise (55 to 60 dB) can interfere with conversation. The danger zone for hearing loss begins at about 85 dB. To give you an idea of noise levels in most of our environments, here are some decibel guidelines:

Hair Dryer: 75-90db
Lawn Mower: 90-100db
Leaf Blower: 95-115db
Rock Concert: 110-120db
Portable Stereo
(full volume): 115db
City Traffic: 80-100db
Jet Engines: 140db
Subway Trains: 100db
Fireworks: 130-190db
Handgun/Rifle: 160-170db

Sound Health

That's why ABT created Sound Health, to create an environment that would not only mask the irritating environmental noises but actually provide a therapeutic sound environment for both children and adults. When played at a low level, the CD's **LEARNING, CONCENTRATION, THINKING, PRODUCTIVITY, INSPIRATION** and **MOTIVATION** provide a healthy work and learning environment. For unwinding, **DE-STRESS** and **RELAX** take the edge off and encourage physical and mental relaxation.

What else can you do to keep noise levels low at home? Sacramento's Dr. Tom Hopkins suggests giving kids earplugs if they are going to be around loud noises. Mark the volume dial on your TV and tell your kids not to turn it past the mark. Buy appliances that run quietly.

While The Listening Program cannot repair organic damage, it can provide a valuable "tune-up." We believe that masking unwanted environmental noise with CD's from Sound Health plus regular use of The Listening Program will help to keep your hearing healthy. Become aware of the noise pollution in your life and learn to make your sound environment work for you!

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5748 South Adams Avenue Parkway | Ogden, UT 84405
801.622.5676 | fax: 801.627.4505 3
provider@advancedbrain.com | www.advancedbrain.com