

# **Dealing with Noise Pollution in Your Neighborhood**

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Many people aren't aware that the sounds they hear every day could be harming their hearing, increasing their stress levels, and impacting their general health in a negative way. We take certain sounds and noises for granted as just being part of our surroundings—a lawn mower, the sound of passing traffic—these are the normal sounds that make up daily life. But when noise reaches an unnatural level it can wear away at the hearing. Though hearing loss is treatable, it is a permanent condition, and prevention is what we must strive for. It is important to know what constitutes noise pollution, if you are being exposed to an unsafe level of noise in your neighborhood, and what steps you can take to minimize noise in your home.

## **Noise pollution – A subtle health risk**

Unlike many other bodily injuries, hearing loss can occur without causing pain or immediate obvious symptoms, and for this reason it is a subtle but serious health risk. According to David Sykes of the Acoustic Research Council, “It’s a survival mechanism. Your body isn’t designed to turn off your hearing or to always know when its hearing mechanism is being damaged. The most dangerous thing is when you’re exposed, but you don’t feel pain because of the exposure.”

Our ears are amazingly adept at picking up sound vibrations, which have to travel through an intricate, complex system to reach our brains. An average human with healthy ears can hear from 20-20,000 HZ, though this does decrease somewhat with age. And hearing in all of these frequencies, from birds chirping to people talking on the street, adds to the fullness of each day, helps to round out our many experiences—some mundane, some monumental.

But there are also times when sound becomes bothersome, and we wish we could turn off our ears for a little while. Many people who live in cities know this feeling all too well. Traffic, sirens, construction, loud music blasting from clubs and bars—it is often man-made noises that are the hardest to endure, and the most harmful to the ears. When noise in a neighborhood is constant, inescapable, and loud enough to harm the ears, we call it noise pollution.

## **Why is noise pollution harmful?**

Although the inhabitants of very noisy neighborhoods may be troubled by the constant intrusion of noise into their homes, they may not always realize that this type of pollution, just like air and water pollution, can impact their health in lasting ways.

High noise levels have long been known to contribute to hearing loss. Though the sound level above which damage can occur is widely recognized as 85 dB (decibels), the sound threshold for damage is actually lower. If someone is exposed for a 24-hour period, the EPA recommends a decibel limit of just 55 dB. The average dishwasher or washing machine is 70.

The constant influx of unwanted sound also disturbs sleep and acts as a daily stressor, triggering our bodies' fight or flight response and raising blood pressure levels. Researchers have now linked noise pollution to heart conditions such as cardiovascular disease and hypertension. According to the World Health Organization, roughly 3 percent of ischemic heart disease in Europe can be attributed to long-term exposure to traffic noise.

Then there are the negative psychological effects, with people living in noisy areas reporting higher levels of stress, anxiety, nervousness, and fatigue. Research also shows that growing up in heavy noise pollution has an extremely detrimental effect on child development, including a child's acquisition of language.

## **What are the major sources of noise pollution?**

As cities are getting louder and louder, there also is a growing public awareness of the hazards of noise, and a strong desire among health experts and researchers to see noise pollution defined as a major public health issue, rather than just a nuisance. So, what are the major contributors of unwanted noise in a neighborhood?

Industrial activity, construction, airport noise, and traffic sounds are the primary sources of noise pollution, though unwanted noise can come from a variety of other places as well. Here is a list of some common sources of noise in neighborhood:

- – Traffic sounds from a major highway or freeway
- – Music and event venues with loudspeakers
- – Construction sites with heavy machinery
- – Airport traffic passing overhead
- – Living in close proximity to barking dogs
- – Lawn mowers, leaf blowers, and other loud domestic machinery
- – Frequently passing trains
- – Living near a fire or police station

### **How to defend yourself against noise pollution**

If you are living in an area with a bothersome level of noise, and you have exhausted your means of trying to protect your home from it, you might want to consider contacting your local government, who are responsible for handling issues of noise pollution. Most cities and states enforce quiet hours from the late evening to early morning, during which time no loud noise is allowed. Speaking to your neighborhood association is also a good idea—they may share your concerns and be able to help.

As a first step to reduce noise from your neighborhood, and if space allows, consider building an elevated fence around your home, with an abundance of vegetation to help shield your home from unwanted racket. A water feature like a fountain will add gentle white noise to help cancel out unpleasant sounds.

You can reduce noise pollution in your own home by placing foam or vibration mounts under major appliances, using drapes and curtains for your windows (rather than blinds), installing carpet or linoleum, and sealing any cracks or holes in your doors with foam sealant or caulk.