

# Noise pollution assignment



**ASSIGN  
BUSTER**

Noise resulting from road traffic, jet planes, jet skis, garbage trucks, construction equipment, manufacturing processes, lawn mowers, leaf blowers, and boom boxes, to name a few, are among the audible litter that are routinely broadcast into the air (Noise, Noise Pollution and Clearinghouse). They interfere with sleep, concentration, communication, and recreation. The potential health effects of noise pollution are numerous, pervasive, persistent, and medically and socially significant.

Health problems related to noise include hearing loss, stress, high blood pressure, sleep loss, distraction and lost productivity, and a general reduction in the quality of life and opportunities for tranquility. Noise is among the most pervasive pollutants today, its more severe and widespread than ever before, and it will continue to increase in magnitude and severity because of population growth, urbanization, and the associated growth in the use of increasingly powerful, varied, and highly mobile sources of noise.

However, strategies such as noise mitigation and its three distinct methods: control, path control and receptor shielding (Noise Mitigation) can reduce environmental noise. Noise intensity is measured by decibel units. The decibel scale runs from zero for the perceptible sound, to one hundred and thirty for sound that causes pain. Examples of noise levels in decibels are; 10 db for noise as low as breathing, 60 db for a quiet conversation, and 140 db for noise as high as a jet take-off or power lawn mower and if exposure is sustained for years it can lead to serious hearing damage (Noise, Noise Pollution and Clearinghouse).

Almost one-fourth of Americans suffering from hearing loss is credited to noise-induced hearing loss (NIHL). NIHL can be caused by a one-time exposure to loud sound as well as by repeated exposure to sounds at various loudness levels over an extended period of time. Damage happens to the microscopic hair cells found inside the cochlea. These cells respond to mechanical sound vibrations by sending an electrical signal to the auditory nerve. Different groups of hair cells are responsible for different frequencies (Noise Induced Hearing Loss).

Exposure to harmful sounds causes damage to the hair cells as well as the auditory, or hearing, nerve. Impulse sound can result in immediate hearing loss that may be permanent however, exposure to impulse and continuous noise may cause only a temporary hearing loss and this is called a temporary threshold shift. Despite its temporary time, if continuous, it can be harmful. NIHL can affect people of all ages including children, teens, young adults and older people. It is also 100 percent preventable.

All individuals should understand the hazards of noise and how to practice good hearing health in everyday life. Taking precautions will lessen hearing loss. Sleep is essential for the restoration of normal bodily processes and functions. Getting sufficient amount of sleep should not be taken for granted like most people do. Sleep disorders can be caused by poor sleeping habits which can lead to a poor quality of life. Sleep disturbance is one of the most serious and common effects of environmental noise.

Factors from it can be external and internal. People who suffer from sleep disturbance often have the misconception that the noise comes from outside, misunderstanding that sometimes the slightest environmental noise sleep disturbance from inside prevents them from sleeping soundly (Environmental Sleep Disturbance: Discover What Effects are Doing to You). As we sleep, the brain continues to process environmental noise sleep disturbance, one person's sense of hearing is always active.

Guidelines say that for good sleep, sound level should not exceed db (Noise, Noise Pollution and Clearinghouse). Very high levels of noise can wake people from their sleep with a jerk and keep them awake or disturb their sleep pattern. This could make them irritable and tired the next day. Lack of sleep causes a major health issue that result into a socio-environmental problem. A person's social environment includes their living and working conditions, including self-deliverance. Lack of sleep leads to decreased work performance.

Increased noise levels gives rise to a lack of concentration at work and reduces one's productivity and performance. Depending on duties, difficult tasks can be impaired and instructions or warnings difficult to be heard and interpreted can cause accidents. In the workplace, noise can interfere with our ability to work and can cause stress and a disturbance to our motivation. When comparing two individuals with a Vasquez 4 discrepancy in sleep time, one having slept soundly for seven hours and the other having slept noisily for 5 hours, one can quickly identify their flaws.

Each individual's demeanor, body language and speech will differ. These qualities have a major effect in our daily routines and overall performances. Noise mitigation is a set Of strategies to reduce unwanted environmental sound. These methods, if taken into consideration, will lessen the risks and consequences that derive from noise pollution. The first method is the control at noise source. It is often a primary consideration to reduce noise at its source. Whenever possible, quieter working methods or technologies should be used.

Second method is noise reduction at the transmission path, and an obvious way of reducing noise is to separate the sources of noise from noise sensitive uses. The third method is Protection at the receiver end. By arranging noise sensitive uses such as bedrooms facing away from the noise sources, the impact of noise on the receiver can be reduced. (Principles of Mitigation) The following is an example of a common noise situation in many populated cities; a noise problem starts with a noise source such as a stream of traffic on a highway.