

Noise pollution assignment



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BUSTER**

This is defined a form of air pollution that is audible unwanted sound that poses a threat to a person's health and well-being. This pollution has many sources from different things such as air conditioner, traffic, radio, a dog barking, human conversation, other machinery that causes sound and are associated with urban developments. According to an COED report "Transport is by far the major source of noise, ahead of building or industry, with road traffic the chief offender" motorcycles, trucks and busses are the major contributors to the traffic noise.

Noise is described in loudness (intensity) and pitch (frequency) the exposure is using a logarithmic decibel (db) scale. The Occupational Safety and Health Administration (OSHA) recommends the hearing protection in the workplace if the noise is greater than 85 DB for more than eight hours, because there is a chance of the potential hearing loss. Difference of the loudest and faintest sounds that humans can hear is about 120 DB, a range of one million amplitude. People who has a very good hearing can hear the sounds between to -15 Decibels.

If the sound reaches the 85 db and above can cause permanent damage of hearing. The more amount of time you listen in a sound effect greater damage it will cause. If the place is quiet the longer you sites safety and it will not cause a damage even if you listen to it for a very long time. The more exposure to the common sounds can cause a permanent damage. The normal conversation occurs 60 DB. According to my research, the causes of damage in our ears, like the bulldozer idling the sounds are loud 85 DB and can cause permanent damage after only 1 work day (8 hours).

Listening a music with earphone/ headphones in ears at a maximum volume, the sound can reach level over 100 Db, begin causing permanent damage after 15 minutes per day. A thunder from storm 120 Db, gunshot 140-190 DB an both cause immediate damage. There are groups of people who are affected by this noise pollution such as the young, elderly, and the hospitalized. Young children cannot protect their hearing and they only rely on their parents to keep them from noise exposure-Elderly may not have the capabilities to protect their hearing if they are the one who is disabled by mental or physical illness.

Also the patients from the hospitals are not safe because patients especially for orthopedic surgeries may be exposed to loud instruments during a procedure although they are not protected from it while under anesthesia. Noise has numerous health effects making noise pollution a public concern although it has not been well addressed. These could be effected our blood pressure, noise -induced hearing loss, sleep disorders and irritability. Noise pollution also affects the performance at work and school. Noise pollution is harmful because the sound energy is transferred through compressions, and rarefactions.

Because the intensity is very large and it can harm the human ears, and the animal ears also and it can damage to physical structure. When sound reach the human ear the structures will vibrate. The intense vibrations can be rapture the eardrum , loudness related hearing loss usually develops overtime. When the sound enters the ear, it is transferred to the brain as a nerve impulse. The nerves in our ears are composed of of tiny nerve fibers, it

is surrounded by special fluid within the ear. When intense sound transferred through fluid the tiny nerves may destroyed and the hearing loss is affected.

There is two kinds of effects the auditory and non-auditory. The effect of auditory may fatigue and deafness the non-auditory can be physiological and psychological change in human beings. Noise Induced Hearing Loss or (NAIL) is a type of sensoriousness hearing loss that is second only to age induced hearing loss or presbyteries. The people who are affected of NAIL are the workers that involved in manufacturing , construction, transportation , architecture , military, factory and mining because their ears are expose in hazardous noise levels.

Also the recreational activities like target shooting, speedboat riding, play in a band and listen to a loud music are also the examples of activities that increases the risk of NAIL . The studies revealed hat young children and young adults are also showing the signs of NAIL. Communication, cognition, social emotional development, academics and future careers may all be affected in the young secondary to hearing loss. Noise Induced Hearing Loss (NAIL) is permanent but it is preventable by using ear protection like earmuffs or earplugs to avoid the noisy environment and the harmful levels of noise.

Mental Health , mental illness is thought be exacerbated and intensified by noise pollution and not believed to be cause of mental illness. In one study at United States Country that read in my search there were a children who are exposed in noise levels above 55 DB had decreased attention, there is difficulty with social adaptation and increased the oppositional behavior to

others compared to the children who are not exposed in noise levels. The pollution in the community noise also may cause annoyance and disturbance there are depressed and anxiety and make their symptoms worse.

Other people always used sleeping pills for them to avoid the loud sound or the noise in their environment and mental hospital admission rates with those exposed to unwanted noise. The children or elderly who have depression and cannot control over their own hearing protection are the vulnerable to the mental effects Of noise pollution. Impairment of Task Performance there are many potential detrimental effects of noise pollution on task performance involving both children and adults. Cognitive task performance at school and at work has been well documented in several studies.

The children who are exposed to noise in their home or at school may have difficulty in their learning , language development and problem solving. In the study in London involving 340 hillier between ages of 8 and 11 who were exposed to high aircraft noise showed an association with increased annoyance and poorer reading comprehension. The most affected of noise is on the reading attention, problem solving and memory because we all know that most of the children or adults cannot focus in what they are doing if the environment is under in noisy condition .

The noise can impair concentration, decrease the motivation because of irritation , increase the rate of errors and can lead to preventable accidents in workplace. Communication can be affected and eating to misinterpretation of instructions and can cause reducing an employee's effectiveness an

accuracy. Negative Social Behavior and Annoyance Reactions noise levels have been associated with increased negative reactions such as increased agitation, and distraction.

This may cause social and behavioral affects including attempts to avoid environmental noise by closing windows or doors, acting out aggression and even result in a change of residence. The exposure to levels above 80 DB will increase aggressiveness when combined with alcohol , provocation and existing anger. Annoyance is a linings of displeasure when individuals believe in condition has and adverse effect on them. People is dependent on the type of noise, by the time it occurs and the activity that interrupt the noise.

A person have an individual sensibility and also expose in the role of annoyance level. Every people have a lack of sense of control over noise there is a higher level of annoyance especially if the noise is accompanied by low frequency components and loud impulse noise. The negative social behaviors and annoyance reactions to noise cause declines to one's sense of well being. Sleep Disturbances well Estes sleep is essential to maintain good health and mental function. Noise is the common offender interrupting sleep and it causes both primary and secondary sleep disturbance.

Primary effect have a difficulty in falling asleep, awakenings and differences of sleep patterns. The secondary effects are interrupted sleep including fatigue and decreased the well-being performance. This two kinds of effects have a environmental noise exposure during sleep is accompanied by several psychological effects. The levels of attributable to disturbed sleep

can be as low and continuous noise greater than 30 DB. According to study that they revealed the population who are living in the urban areas were at risk for increased neurotics, subjective noise sensitivity and noise annoyance.

The participants of the study have a difficulty to back falling asleep, their fatigue is increased , poorer sleep quality and need for increased use of sleeping agents. Cardiac Vascular Disturbances there is now growing body of evidence associating noise pollution with cadaverously disease. This effect are secondary to body's " fight or flight " response leading to autonomic nervous and endocrine effects seen with heroic daily levels of noise greater than 65 DB or acute exposure to levels above 80 to 85 DB.

These effects can lead to blood pressure, heart rate and peripheral resistance by the release of hormones such as s nonrecurring, epinephrine, and cortical-From the study of Roseland et al, the demonstrated an increase prevalence of high blood pressure of people that are exposed to aircraft noise. The participants of this study ages between 18 - 80 and the effects is common among the elderly. The second study of Jar et al reveal the relationship of the traffic noise and nighttime noise can increase the blood erasure participants are ages between 45-75 years old.

The cardiovascular effects to noise pollution not only in adults also the young children's are at risk. In other country they have the organization that can prevent the noise pollution the examples are The National Institute of Deafness and Other Communications Disorders (UNIDID) they created a national public education movement to prevent the NAIL they called it "

WISE EARS" this campaign initiated in 1999 by (UNDID) and many regional, national and state with their governments. Their main goals is to educate the people about NAIL and to titivated to have actions in NAIL .

According to the studies they are focusing on expanding their mission to reach the children's between 8-12 ages and also their parents. As a individual we can also reduce the noise pollution by construction of soundproof rooms for noisy machines in industrial and manufacturing installations. Most important for residential building their machines should be installed far from living or sleeping rooms, like in a basement of garage . And for the employee's they cannot reduce the noise of machine so they can only prevent by using earplugs. We can also avoid by stay away from sources of noise.

If we are living in noisy place make sure that our windows are dual paned. It also reduced by planting trees, because we all know the main function of trees is to absorb and protect the noise made by people. Community laws must silence zones near schools/colleges and hospitals that needs concentration. We also to know what are the causes of noise pollution and the world becomes more advanced the noise increases. As an individual we can also reduce the noise pollution if owning a car do not use the car urns unnecessarily in the areas that needs silent zones that honking is prohibited .

And avoid loud music which will hurt the ears and also others ear.

Furthermore , Firecrackers are very loud so don't try and burn them unnecessarily. Motors, vehicles and large machines produced a loud noise

when not maintained properly and it needs proper maintenance for a better performance. Len theme parks avoid riding on rides that produce lot of noise. Also turn off the engine of your car if you're not using it. It stops the annoying hum and also reduce the air pollution. It much better if using only a bicycle or walk go to school.

You're body will fit and also it reduce the air and noise pollution Noise pollution can make a mind and body stress, there are some techniques that can prevent like breathing exercises , deep breathing and other breathing exercises will work because it can be done anywhere and are effective for calming the body's physiology in minutes. Meditation, is also a stress reliever because it calms the mind and body and it helps the alter of brain, over time, you are less reactive to stress that happens.

Yoga, because his is the combination of breathing and meditation it adds an element of a exercise to be a stress reliever that acts on a different levels that benefit your health. Also provides a simple ways to ease into meditation. We can also stress free by noise pollution by going to the place that quiet and make a relaxation or have a leisure in a hotel and listen to a instrumental music in a low volume. There are so many ways that we can prevent the noisy place and this case study reminded us that we should take care Our ears and our environment most of all in urban areas who are near in hazardous noise.