



NOISE POLLUTION

Noise is thwarted sound and has been a nuisance since the beginning of human civilization. During the 3rd Century B.C., Chinese rulers used noise as a method of torture, in place of hanging, for dangerous crimes. The tradition died down, but the torture remained. Today, we are exposed to noise in a number of ways.

Noise is one type of pollution that is often ignored, although it has an insidious, severe effect on human health. Noise pollution not only refers to noise from factories and construction work, but also community noise like road and air traffic, festivals, discos and firecrackers. Because sound is so much a part of our lives, its effect on the body and the mind, is often overlooked.

Although there is little statistical data available on the effect of noise on people in India, a general survey carried out in four major cities including Mumbai showed that 36% of the population, have bilateral sensorineural hearing loss. The average sound measured, was about 82 dbA, far above the normal permissible range of 45 db to 65 db. This despite the fact that the Environmental Protection

Act (EPA) provides for a fine of Rupees One Lakh and imprisonment upto five years. In case of public utilities being the noise polluter, their top executives are liable for prosecution. Where there are many residential places on either side of the railway tracks, people are more prone to acoustic trauma. A substantial portion of the residents are disturbed in their sleep due to the noise produced by the trains. Noise from firecrackers, diesel generators also often far exceed the safe limits. As the festive season arrives, so do the crackers and with it comes the worry of pollution. Thus, people agree, the country must ensure that crackers are burst at the appropriate hours and that the sound levels do not exceed the permissible limits. In Kolkata, the local police have successfully brought down the noise pollution during the Durga Pooja Festival and at times even fined religious heads for violating the pollution norms. The Supreme Court has recently ordered that firecrackers should be burst between 6.00 p.m. and 10.00 p.m. and that no crackers should be burst in the Silent Zone. It has also asked all States and Union Territories to strictly enforce the directions given. The Court has lauded the efforts made by school children last year in curbing the bursting of crackers to a large extent. The Court hoped that they would once again be able to play a constructive role by helping to reduce the ill-effects of air and noise pollution caused by crackers.

One of the widespread effects of noise is a psycho-social one. Continuous exposure to noise causes irritability, reduces concentration and efficiency at the work place. It also disturbs sleep patterns, even when the residents of a locality may

be used to it. More importantly, both short and long term exposure can cause hearing loss. Hypertension, altered breathing rate, digestive problems, fatigue and nervousness are some of the other physical effects of noise. It also has an adverse impact on human health by way of annoyance, anger, restlessness, lack of concentration, (especially in children), lack of efficiency, speech interference, nausea, headache and vomiting. Noise constricts the arteries, raises the blood pressure and may lead to nervous breakdown. Other psychosomatic problems like insomnia, allergies, depression etc., are also experienced.

In the interest of health, homes and offices should be sound contained to keep noise levels low. Here are some tips from sound specialists

- Place mats under appliances like kitchen mixers, washing machines, dish-washers.
- Heavy duty curtains on street side windows.
- Plants, trees and shrubs also help in deadening sound.
- Padded furniture can suck-up sounds in a noisy room.
- Large expanses of glass and bare walls reflect noise. A well-filled bookcase absorbs noise.
- Sound travels in straight lines. It spreads less, if interior doors are staggered, rather than directly facing each other.

Other measures that need to be taken are, introduction of Silent Zones, silencers in three-wheelers, can also bring down the level of noise. Bypass roads for heavy vehicles and stricter restrictions on

their plying near residential areas, are also essential. In short, what we need is strict enforcement of norms for the maintenance of low noise levels, in our environment.

The Police has the authority under various laws to control "Noise Pollution & Encroachment" with regard to all festivals held on public spaces. You can help in monitoring the levels of noise in your area by sending a complaint in writing with the name of the offender, the location, the date and time, to your Police Station requesting them to take action, with a follow-up from your end.

It is here that the need to educate people about the dangers of noise pollution becomes important. Due to the efforts of school children, in Delhi, the level of pollution during last year's Diwali festival was lower than in the previous years. All this was possible only due to initiatives taken by the community as a whole. People's movements have succeeded where government agencies have failed. Only a concerned community can make the difference.

DANGER DECIBELS

Being a compressed scale, even small differences in decibel values connote huge differences in the sound pressure impinging on the eardrums. For instance, at 129 db, the sound pressure is 100 times that experienced at 80 db and not just 1.5 times. Likewise, when there is an increase of 3 db in the sound pressure level, it amounts to doubling the sound pressure. The "threshold of pain" is pegged at 140 db (the sound of an aeroplane). Much of the festival noise in Mumbai comes perilously close to this.

(Source : The Saad Ali Report on Noise Pollution, 1985)

Issued in public interest, for promoting environmental awareness.

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