#### 7. What are the other adverse effects of noise?

Physiological Effects	Psychological Effects
Increase heart rate/ blood pressure	Anxiety
Problems in digestion/ulcers	Irritability
Cardiac problems	Annoyance

Noise also affects sleep and can reduce efficiency in performing difficult tasks by diverting attention from the job. One should be aware of the fact that individuals vary in their susceptibility to noise induced effects. It is not just us, the animals too are not spared from the ill effects of noise.





#### 8. Is NIHL reversible?

NIHL is temporary in the initial stages when the exposure to noise is for shorter duration. However, if the noise exposure continues for a longer duration, the hearing loss becomes permanent and irreversible.

# 9. Does listening to music for long periods of time also cause hearing loss?

Yes, but only if the level of music is too loud and listening for long hours. Preferably volume should be kept at 1/3<sup>rd</sup> of the total volume.

## 10. Can NIHL be prevented?

NIHL is irreversible. Fortunately, it can be prevented. For this, the individuals should understand the harmful effects of noise and follow simple guidelines to protect hearing from noise exposure. To protect ones hearing, the public including children should be educated regarding the harmful effects of noise and protection of hearing. There are different ways of protecting the ears

- If possible, the noise should be reduced at the source - for example, keeping the volume low on media players, purchasing machines/ devices with an effective muffler, following proper maintenance of the devices, and lubricating the machines.
- Even enclosing the noisy sources will be helpful in reducing the effects.

 The hearing should be protected with the use of hearing protecting devices (HPDs) such as earplugs and earmuffs. HPDs decrease the intensity of sound that reaches the eardrum.





Low noise areas should be designated to indicate that noise control and ear protection is mandatory.





The hearing should be checked periodically.



Whom do I contact for hearing checkup and advice on hearing protection?

Answer: An Audiologist is the right person.



Contact the following address if you need any clarification or help regarding hearing protection.

### All India Institute of Speech and Hearing

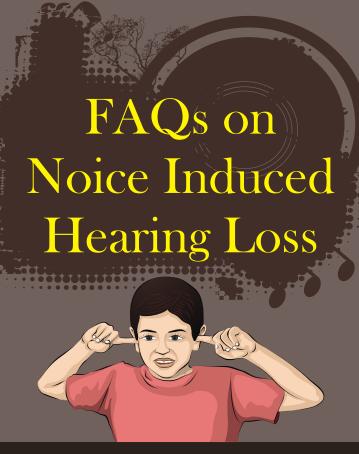
Naimisham Campus, Manasagangothri, Mysuru - 570006

Phone No.: 0821-2502000 Website: www.aiishmysore.in Toll free No.: 18004255218

Working days: Monday to Friday (9AM- 5.30PM) (Except on central Govt. holidays)

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All India Institute of Speech and Hearing Naimisham Campus, Manasagangothri Mysore - 570006



# DEPARTMENT OF PREVENTION OF COMMUNICATION DISORDERS

Phone No.: 0821-2502000 Website: www.aiishmysore.in Toll free No.: 18004255218

Working days: Monday to Friday (9AM-5.30PM)

(Except on central Govt. holidays)



# Do you also have similar complaints? Here are answers for such frequently asked questions regarding Noise Induced Hearing Loss (NIHL)

All of us are exposed to sounds in our environment, such as the sounds from television, radio, household appliances, and traffic. Some of these sounds are at safe levels that do not damage our hearing.

When we are exposed to harmful noise such as sounds that are too loud or loud sounds that last for a long time, the sensitive structures in our ear can get damaged, causing Noise Induced Hearing Loss (NIHL).

This type of damage is permanent or irreversible.

Hence, precautions should be taken to protect one's hearing from noise.



# 1. What is Noise Induced Hearing Loss?

Noise Induced Hearing Loss (NIHL) is damage to ear caused by loud sounds, such as those associated with work (industries, construction), discotheques, orchestras, loud music, and traffic.



### 2. Who is affected by NIHL?

People of all ages, including children, can develop NIHL. It depends on the sensitivity of your ears to sound/noise i.e., some people are more susceptible than others. The damage also depends on other factors such as smoking, vibrations, and colour of the skin.

#### 3. What noise can cause NIHL?

Damage to hearing can be caused by a sudden exposure to loud sound (such as a gunshot, explosion) called acoustic trauma, or by continuous exposure to loud sounds over an extended period of time (such as machinery noise) causes

### 4. Are all noises dangerous?

Noise Induced Hearing Loss.

No, only those noises that exceed a certain limit, in terms of intensity and duration, can be dangerous. The louder/longer the exposure, the greater is the damage. As a rough rule of thumb, in a noisy situation, if one has to shout to be heard by a person who is at a distance of one meter, then that noise is dangerous.

Long or repeated exposure to continuous sounds at or above 85 decibels (dBA) for 8 hours or more can cause a hearing loss. Louder the sound, the shorter is the time period required to damage hearing. Fortunately, sounds of <75 dBA, even after long exposure, are unlikely to cause a hearing loss.

Please note: The decibel is a measure of the intensity of sound. The faintest sound that the normal human ear can detect is 0 dB SPL, and normal conversation level is 60 dB SPL; whereas the noise from fire crackers or gun blast can reach 140 dB SPL; typical sound levels of common noise sources are given below.

# Typical average decibel levels (dBA) of some common sounds.



### 5. How can noise cause hearing loss?

The delicate cells in the cochlea in the inner ear,

which respond to sounds, get destroyed by the continuous exposure to noise, thus causing hearing loss. This structural change in the cells is irreversible.





The middle ear is also damaged if the sound is loud and brief such as loud blast.

# 6. What are the signs and symptoms of NIHL?

Dulled/muffled hearing soon after exposure to loud noise and ringing in the ears are some of the adverse effects due to noise exposure. This is usually seen in both ears. The hearing loss due to noise exposure is permanent.