

Hearing Protection Safety

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Most of us go through life taking our senses for granted. Like touching, tasting, smelling, and seeing, hearing is something we do automatically. But when something goes wrong with any of our senses, we expect that it can be fixed through medical science.

Unfortunately, medicine offers only moderate improvement for people with hearing loss. Hearing loss cannot be restored for most people. Exposure to constant loud noises on a construction site can lead to hearing problems if certain precautions are not taken. We need to take a serious look at precautions we can take to prevent hearing loss.

Exposure to normal noise levels does not cause hearing loss. Hearing loss occurs because of overexposure to high noise levels. Noise is measured in units called "decibels" (dB). The higher the decibel, the louder the noise. To help see the difference in the decibel scale, here are a few examples of various noise levels:

- 20 dB - soft whisper
- 30 dB - leaves rustling, very soft music
- 60 dB - normal speech, background music
- 85 dB - heavy machinery with soundproof cab
- 90 dB - lawnmower, shop tools
- 100 dB - heavy machinery without soundproof cab, motorcycles
- 115 dB - loud music, sand blasting
- 140 dB - jet engine, shotgun



In the workplace, hearing protection must be used to reduce noise exposure for anyone who is generally exposed to 90 dB or more over the course of their workday. Hearing protection may be used at lower levels, particularly for people who are very close to the 90 dB exposure level. Sounds above 120 dB can cause hearing damage after brief exposure and should be avoided unless hearing protection is worn.

Most hearing protection is given a Noise Reduction Rating (NRR) between 20 and 30 dB. However, due to complicated scientific reasons, you should deduct 7 dB from the earplug NRR if you want to accurately determine the protection offered. For example, if we say a jackhammer's noise exposure level is 102 dB and we use earplugs with a NRR of 29, you should figure the actual NRR to be 22 dB. This would reduce your noise exposure from 102 dB to 80 dB, which also takes it below the OSHA permissible exposure limit.

Speaking of hearing protection, you have probably seen lots of different types. Keep in mind that not every type of hearing protection is good for every type of noise. Disposable foam earplugs may be fine for some noise exposure, whereas earmuff-type protection may be suitable for another.

Remember, equipment operators are not the only ones who may need protection; people who work nearby may also be exposed. If you work in a noisy area, even if you are not the one making the noise, be aware of the hazard and use protection.

Safety Starts with You



Company Name
Project #/Name

Date

Meeting Location

Person Conducting Meeting

Items Discussed

Problem Areas or Concerns

Attendees

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Comments
