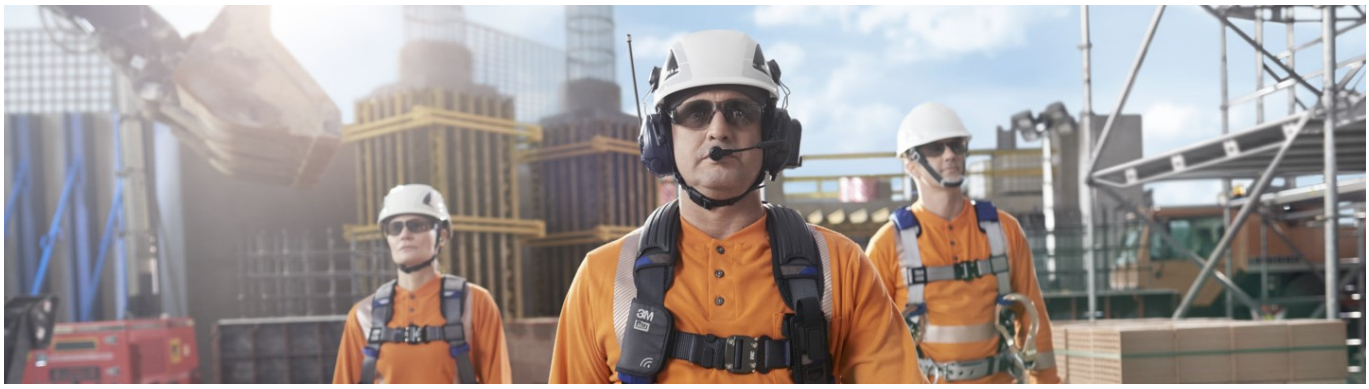


Hearing Loss

Make Hearing Protection a Priority in Construction

Brought To You by 3M Personal Safety Division | Jun 03, 2024

Hearing protectors need to be worn for the full time of noise exposure. Removing them for even a short time in a work day significantly increases the noise exposure. For example*, not wearing the hearing protector for one hour of an eight-hour work shift, essentially drops the effective protection from 30 dB to only 9 dB[1]. Minutes matter.

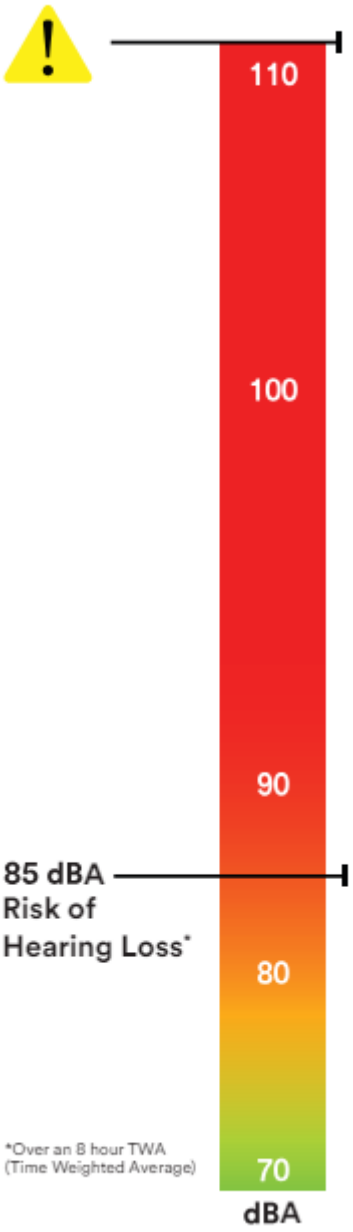
Even when noise seems to be at a reasonable level, noise above 85 dbA can still lead to long-term damage. Noise-induced hearing loss is caused by the damage and eventual death of the sensory cells in your ears, called hair cells. Unlike some other cells, human ear hair cells never grow back.[1]

***Exposure to 95 dBA of noise and using NIOSH Recommended Exposure Limit of 85 dBA and 3 dB exchange rate.**

Construction operations often exceed dangerous noise levels.

Many construction site processes create noise that may exceed 85 dBA. Exposure to noises above this level may put construction workers at risk for noise-induced hearing loss.[2]

Sound Levels in Construction Operations, dBA[2,6,7]



Chain saw	110
Air arc gouging	110
Grader, scraper	107
Jackhammer	102
Bulldozer	100
Flame cutting	100
Plasma cutting	98
Concrete saw, electric grinder	98
Nail gun	97
Grinding	95
Flame gouging	95
MIG (GMAW)	95
Forklift	93
Belt sander	90
Backhoe	85
MMA (SMAW)	85
Framing saw	82
TIG	75

73% of construction workers are exposed over the NIOSH recommended exposure level of 85 dBA[3]

52% of construction workers with noise exposure do not wear hearing protection[4]

Factors that may increase noise-induced hearing loss risks:

- Not wearing hearing protection during hazardous noise exposure or removing it to communicate[1]
- Not wearing hearing protection that provides enough noise reduction for the task
- Not verifying that the hearing protection fits the worker and that the worker is properly trained
- Absence of hearing protection fit testing to help achieve proper attenuation[5]

Consider these hearing protection and protective communication solutions:

3M™ PELTOR™ X4 Earmuffs

Designed for comfort and moderate to high noise exposure during tough jobs where loud sounds are frequent.

3M™ E-A-R™ Push-Ins™ Earplugs 318-1001, Corded, Poly Bag

Fitting stems help for an easier insertion of the earplugs even when wearing gloves and help keep the earplug clean for construction workers with dirty hands.

3M™ PELTOR™ Electronic Earplug, EEP-100

Helps protect workers' hearing and can help promote auditory situational awareness and communications in challenging environments.

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