CONSTRUCTION WORKERS EXPERIENCE THE SECOND HIGHEST RATE OF OCCUPATIONAL EXPOSURE TO NOISE HAZARDS

• Construction sites are noisy, no matter what precautions are taken
• The jobs conducted and tools used vary within a shift or project — so do the noise hazards
• Impact-noise exposures are plentiful
• It's challenging to train and fit a part-time or transient workforce with hearing protection
• Site managers are often responsible for mandating hearing protection

COMMON CONSTRUCTION NOISE HAZARDS

Table Saw 93 dB
Mortar Mixer 100 dB
Impact Drill 102 dB
Grinder 105 dB
Chain Saw 110 dB
Generator 115 dB
Hammer Drill 120 dB
Hammer on Rail 121 dB
Saw on Rail 130 dB

Regular 8-hour exposures to 85 dBA can damage hearing
Repeated exposure of just 1 hour/day to 100 dBA noise can damage hearing

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DURATION OF EXPOSURE AND PROXIMITY TO THE SOURCE ARE KEY FACTORS THAT IMPACT THE EFFECT OF NOISE ON HEARING

CFR 1926.101: OSHA’s regulation for hearing protection in construction. It states that whenever noise levels or duration of exposures exceed 85 dBA in an 8-hour time-weighted average, ear-protective devices shall be provided and used. Ear-protective devices inserted in the ear shall be fitted or determined individually by competent persons.

Yet, more than 35% of noise-exposed construction workers report not wearing protective devices

Noise Induced Hearing Loss is fully preventable, here is how:

TIPS FOR PROTECTING CONSTRUCTION WORKERS’ HEARING:

• Be mindful of communication needs among workers and provide them with comfortable, convenient and compatible hearing protection solutions
• Educate teams on site-specific noise hazards, invite safety specialists to speak on hearing protection, and encourage compliance through positive incentives
• Hold free training classes on hearing protection and how to achieve a reliable, comfortable fit and encourage peer-to-peer support for using protective devices

VARIOUS TYPES OF PROTECTION DESIGNED FOR SPECIFIC CONDITIONS:

Disposable Foam Earplugs – for comfort and greater protection
Reusable earplugs – for ease of insertion and reuse
Banded earplugs – for lower-level intermittent noise
Passive Earmuffs – for noise exposure
Electronic earmuffs – for communication or impact noise
Custom molded earplugs – for difficult to fit workers

EFFECTS

Leads to temporary or permanent hearing loss
Tinnitus (ringing in the ears)
Limits ability to understand speech
Impairs ability to communicate
Reduces productivity
Leads to social isolation and withdrawal
Increases risk of hypertension and high cholesterol

CAUSES

Continuous exposure to sounds ≥ 85 decibels
1-time impulse or impact noise exposure

EXPOSURE RATES AND EFFECTS:

51% 25% 16% 14% 7%

51% of construction workers have been exposed to hazardous noise
25% of noise-exposed (threshold shifts or permanent impairment, esp. in noisy, day to day activities
16% of noise-exposed (threshold shifts or permanent impairment, esp. in noisy, day to day activities
14% of construction workers have hearing difficulty
7% of construction workers have hearing difficulty

Noise Induced Hearing Loss is fully preventable, here is how: