

CONSTRUCTION NOISE

KNOW THE RISKS AND HOW TO PROTECT WORKERS



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



Over a working day, periods of a few minutes of unprotected exposure can easily accumulate. An example of reduced effective protection is removing your hearing protector for 10 minutes during a total exposure time of 1 hour. The effective protection provided by a high attenuating hearing protector (30dB) is reduced to 8dB. This makes the effective protective value 22dB less than expected, by wearing the hearing protector 83% of the time over 1 hour. **It is vital that every effort is made for 100% wear time.**

CAUSES

EFFECTS

Continuous exposure to sounds \geq 85 decibels

1-time impulse or impact noise exposure

- 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

EXPOSURE RATES AND EFFECTS:

51%

of construction workers have been exposed to hazardous noise

25%

of noise-exposed tested construction workers have a material hearing impairment (impacts day-to-day activities)

16%

of noise-exposed tested construction workers have hearing impairment in both ears

14%

of construction workers have hearing difficulty

7%

of construction workers have tinnitus

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

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



Electronic earmuffs – Impact Sport

Optional: Custom molded earplugs – for difficult-to-fit workers