

## **Noise Exposure**

Understanding the impacts of Noise Exposure in the workplace

## Listen to the signs

Prolonged exposure to loud noise has the potential to damage your hearing and can also have other negative effects such as; reduced productivity, inability to understand speech or communication issues, can cause irritability, sleeping problems and can have negative psychological effects.

### **Health Effects**

### **Exposure to noise**

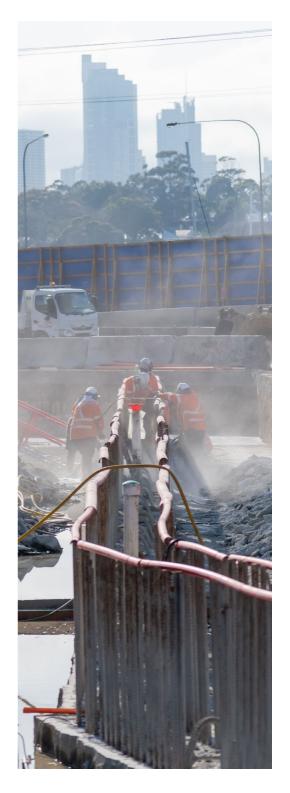
- Temporary or permanent hearing loss (i.e. Noise Induced Hearing Loss - NIHL)
- Tinnitus (constant ringing in ears

   can disrupt sleep/make you
   irritable)
- Physical and psychological stress

### Did you know

- Noise above 80 dB(A) (averaged over 8-hours) but less than 85 dB(A) – worker is advised to wear hearing protection (although is not mandatory)
- Noise above 85 dB(A) (averaged over 8-hours) – workers must wear hearing protection

Generally speaking if you have to raise your voice to speak to someone who is a meter away it is likely that you are being exposed to noise that is higher than the workplace exposure standard and as a precaution you should wear hearing protection if you are going to be remaining in the area or continue to do the activity for more than 10 minutes.





## Above the line Elimination

We are unable to effectively eliminate the majority of noise from the workplace, which means we are more dependant than ever on our other above the line controls





## Above the line Substitution

- When a quieter tool/piece of plant is available, buy or use the quieter option so long as it can still safely and efficiently perform the required tasks (ie. use road headers to bench instead of multiple excavators with hammer attachments)
- Choose a quieter process to perform when working on site (ie. pile splitting instead of pile breaking with jack hammers)





# Above the line Isolation

- Plant cabins (note workers to keep doors closed and windows up)
- Only authorised persons allowed into noisy areas





# Above the line **Engineering**

#### **Tunnel**

- Plywood/acoustic enclosures around the vent fans, generators etc.
- Use noise blankets or some form of plywood enclosures around dewatering pumps when they are bolted/ suspended off the ground

### **Surface:**

- Use noise blankets when working on noisy works (ie. jack hammering or around excavators that are hammering)
- Acoustic enclosures around generators





## Below the line Administration

- Ensure your health monitoring (audiometric testing for workers exposed to noise, done every two years) is completed and up to date
- Utilise noise exposure monitoring to ensure noise standards remain at an acceptable level.
- Participate in training on how to wear hearing protection properly
- Read and understand awareness packages distributed on noise
- Look at posters as a reminder for the standard practices of wearing hearing protection properly
- Acknowledge and follow recommendations on signage (such as hearing protection required in area / PPE poster)





## Below the line

### **Tunnel**

- Mandatory hearing protection for all tunnel workers
- Where possible wear moulded hearing protection
- Get fit tested on the disposable plugs available

### **Surface:**

 Hearing protection is required when operating power tools or participating in noisy activities

