Hearing Conservation
Noise, Hearing Protection and You

Loud noise is dangerous and hearing may be permanently damaged through exposure to on-the-job noise levels. This damage to hearing is irreversible and no known treatment or operation can repair it.

Everyone is affected by excess noise to some degree depending on:

- How loud the noise is
- The length of time a person is exposed to the noise
- The distance a person is from the source of the noise
- The position of the source of the noise
- The pitch of the noise

What are the signs of a noise induced hearing loss?
It is difficult to notice such a loss at first because it usually happens gradually and there is no associated pain or any visible sign of injury. However, you may notice:

- Difficulty hearing particular sounds e.g. the telephone ring. The hearing loss usually affects the high frequencies first
- The need to have the television louder than other people
- Difficulty hearing in background noise e.g. at meetings or parties
- Tinnitus (ringing in the ears)
- You may be asking for repeats more often

Hearing Conservation Regulations
The Occupational Health and Safety (Noise) Regulations 1992 state that exposure to noise of 85dBA for eight hours may not be exceeded (or louder sounds for shorter periods). No employee should be exposed for any length of time to a peak noise level greater than 140dB (lin).

Under the regulations the employer is required to ensure that employees are not exposed to noise exceeding these levels. This is achieved by the employer reducing the noise output, shortening exposure time and/or the provision of suitable individually fitted hearing protection. Employees must play their part and wear hearing protection.

Hearing Protections Devices
If your noise exposure can not be cut down to a harmless level by the sorts of controls just listed, the only way to avoid hearing damage is to protect yourself with ear plugs or ear muffs. Either type can provide effective protection in almost any industrial noise provided the protector makes an airtight seal in your ear (with plugs) or around it (with muffs). Noise travels easily through air, so an airtight seal is essential. In extremely loud noise you may need to wear plugs and muffs together.

A wide range of ear plugs and ear muffs are available. They vary in price, shape, weight, comfort and attenuation (how much they reduce noise).

Hearing protection devices are supplied by a number of companies listed in the Yellow Pages telephone directory under ‘Safety Equipment and Accessories’. Most audiologists and hearing aid dealers listed in the Yellow Pages also stock these devices.

Noise Dose Limits

<table>
<thead>
<tr>
<th>dBA Sound Level</th>
<th>Duration</th>
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<tbody>
<tr>
<td>97</td>
<td>30 min</td>
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<tr>
<td>94</td>
<td>1 hr</td>
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<tr>
<td>91</td>
<td>2 hr</td>
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<td>88</td>
<td>4 hr</td>
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<tr>
<td>86</td>
<td>6 hr</td>
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<td>85</td>
<td>8 hr</td>
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These are ‘safe’ noise exposure periods. Exposure to noise levels over and above these ‘safe’ periods can damage your hearing.

How Can I Tell if my Ear Protectors are Fitted Properly?
You can use the following simple noise reduction test to check that your ear protectors are properly fitted:

Find a noisy place, perhaps where you normally work, and block your ear canals firmly with your fingertips or use the heels of your hands to press your ears firmly against your head. Try different positions of your fingers or hands to get the most noise reduction you can.

A well-fitted protector should give you about the same amount of noise reduction as you can get with your fingers or hands.
Some Tips on Fitting Ear Protectors

To get good results, you need to take just a little care when you fit your protectors. Here’s what to do:

**Fitting Plugs**

The ear plugs you are supplied with should be the right size for your ears (you may need a different size in each ear). Your firm or the earplug supplier should have checked this.

- Make sure your hands are clean
- If the plug is a soft foam type, roll it smoothly and firmly into a thin cylinder
- Gently pull your ear outwards and upwards (this straightens your ear canal)
- Gently but firmly push the ear plug into your ear canal until it expands so that it doesn’t fall out

To check that you have a good fit, cover your ear firmly with the base of your hand. If the plug is properly sealed, everything will sound much quieter. Remember that plugs may work loose and need to be repositioned every now and then.

When you take your plugs out, remove them slowly so that the suction doesn’t hurt your ear.

**Fitting Muffs**

If you have not done so before, inspect the muffs and note which way they are meant to be worn; some ear muff shells are marked TOP or FRONT and should be worn that way; oval shaped muffs are meant to be worn so that the oval is vertical.

- Brush hair away from ears.
- Place muffs over ears, making sure that the ears fit right inside the shells.
- Adjust the headband so that the muffs are a snug fit on your head
- Run your fingers around the cushions to check that they are making a good seal against your head everywhere – some things that can prevent a good seal are high cheek bones, an unusually deep groove behind the lower jaw, thick hair, a cap, and spectacle side arms.
- If you can’t get a good seal, try different muffs, consider changing your spectacle side-arms to a thinner type, or try ear plugs instead.

Give yourself time to get used to wearing ear protectors. This usually takes about two weeks. Most people find them a bit strange to start with.

**Looking After Your Ear Protectors**

- Keep muffs and plugs clean with soap and water
- Replace plugs when they become hard or damaged
- Don’t stretch the headband on your earmuffs. It makes them less effective
- Replace the cushions on your earmuffs as soon as they start to harden
- If your earmuffs are damaged get the damaged part replaced

**Some Questions Answered**

“Why bother about hearing protection?”

- To preserve your hearing so you can continue to communicate with your family and friends
- To feel less tired and irritable at the end of the day
- To appreciate the sounds of birds, music, children’s voices ... TV ...

“Don’t you just get used to noisy environments?”

No! If you find you become used to a noise after long exposure to a noisy environment, it may be because your hearing has changed or been damaged.

“Why start wearing protection now after years without?”

If your hearing has become damaged, you can prevent further deterioration by using hearing protection.

“Don’t protectors make it hard to hear people speaking in the workplace?”

It is important that people continue to speak at raised levels; then, with the background noise reduced by the protection, it is actually easier to hear speech.

“How can I tell if my machine is running properly if its noise is reduced?”

You adjust very quickly to the change in sound quality when wearing protection.

“Isn’t it uncomfortable to wear hearing protection, especially in the heat?”

The comfort of ear muffs varies. You should be able to select a comfortable fit from the wide range available. Cotton covers, which fit over the muffs, make wearing them in the heat more comfortable.

“What can I do if I have working in noise for some time and suspect I have a hearing loss?”

A medical practitioner, particularly an ear specialist, can assist with information on the cause and nature of your hearing loss. An audiologist can provide a comprehensive range of hearing tests, and advice on coping with hearing problems. Your union representative may be able to advise you on a general procedure for applying for WorkCover, if this is appropriate.
Vicdeaf regularly updates our fact sheets. To ensure that your information is current, or for further information about Vicdeaf and the services offered, please visit our website or contact us.

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