

## How can you protect your hearing?

You can protect your hearing by keeping the noise level down, by using noisy equipment for only short amounts of time and by wearing earplugs or earmuffs.

Personal hearing protection such as earmuffs or earplugs should be labelled with a Class number between 1 and 5. Since 1999 this new classification has replaced an older "Grade" system phased out in 2003. Class 2 earmuffs will be ideal for mowing the lawn with a typical mower. Class 5 earmuffs are designed for dBA (8 hours) exposures of 105–110.

You will find earmuffs and earplugs in many appliance and equipment stores or from suppliers of safety equipment. They should be labelled with a Class rating under a Standard AS/NZS 1269, 3-2005.

### Tips to protect your hearing:

- Ask if hearing protection is needed when you hire equipment, tools or machinery. Hire companies often provide earmuffs or earplugs you can use.
- Read the material provided when you buy equipment, tools and home appliances. It will tell you if hearing protection is needed.
- Shop around and find out what is comfortable for you to wear.
- Make sure you have the right class of earmuffs or earplugs for the equipment, tools or machinery you want to use.

You need to **protect** your hearing!

- If the earplugs or earmuffs you have are not the right class, wear them anyway and limit the amount of time you spend using the equipment, tools or machinery.
- If you find that you are sensitive to noise, see your GP.

## What to do when hearing is a problem...

Arrange to have a hearing test if you seem to have difficulty hearing or you have the early signs of hearing damage. A number of health professionals can help:

- Your GP can refer you to an audiologist for a free hearing test. If you want to go privately, you can find an audiologist in the yellow pages of the phone book (make sure the person is a member of the New Zealand Audiological Society).
- New school entrants are screened using screening audiometry and tympanometry by Vision Hearing Technicians and Public Health Nurses employed by District Health Boards or Health Trusts throughout New Zealand. Three year-old children are screened using tympanometry only.

### Making a complaint about noise

There may be noise in your neighbourhood that you think is annoying, for example, a noisy party, a building site or a neighbour who uses loud machinery at night. Call the Noise Control Officer at your city or district council. Local Authorities have statutory powers to control noise under the Resource Management Act.

For further information contact your local Hearing Association. A video demonstration of hearing loss can be found at: <http://www.e-a-r.com/hearingconservation/audio%20files/aearo56s.wma>

FAQs about hearing protection can be found at: <http://www.elvex.com/FAQ.htm>

Other information can be found at: <http://www.osh.govt.nz/order/catalogue/733.shtml>  
<http://www.cdc.gov/niosh/topics/noise/>

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# Noise around the home can cause hearing problems...



Many of the tools and machines used at home or when you're out having fun can damage your hearing – even if they're not used for long and not used very often.

## How does noise **cause** hearing damage?

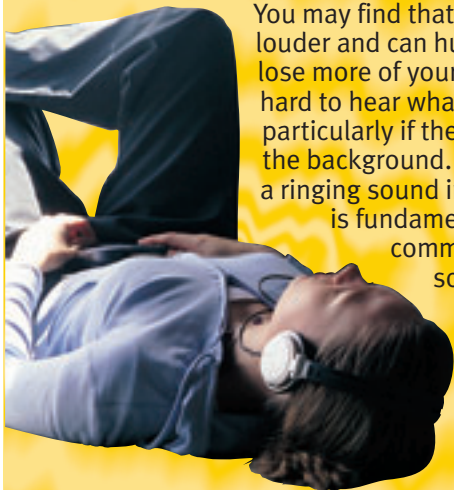
Spending long periods of time in noisy places can damage or destroy your hearing. But short, sharp, loud noises can also cause hearing problems and the damage can happen more quickly.

Loud noises damage delicate cells inside the ear that allow you to hear. When you spend a short time near a loud noise, the damage to your ears may not last. Your hearing can return after a few hours away from the noise. But if you keep spending time near a loud noise, the cells in your ear cannot recover and the damage to your hearing lasts for life.

### Signs of hearing damage

As cells in the ear are destroyed, you begin to lose your hearing. Hearing loss causes isolation both at home and in social situations, and decreases efficiency at work. The ability to clearly hear higher-pitched sounds such as the voices of women and children, and the consonants T, K, S, Sh, and P, is reduced in people with a hearing loss.

You may find that other noises sound louder and can hurt your ears. As you lose more of your hearing, it becomes hard to hear what people are saying, particularly if there is other noise in the background. You might also have a ringing sound in your ears. Hearing is fundamental to language, communication, and socialisation. The ability to hear is key quality-of-life issue at all ages.



## How much noise does it take to **damage** hearing?

Sound is measured in three ways:

- What pitch – how high or low is the sound? The measured frequency is Hertz.
- What level is the sound? The sound pressure level is measured in decibels abbreviated dB. dBA is usually used.
- How long does the noise last? Is the exposure over the daily limit?

Some people are more sensitive to noise than others and find many noises annoying, stressful and tiring. Noise can also stop you sleeping and make it difficult to concentrate, to listen or to talk.

But loud noises will damage anyone's hearing. How much damage is done depends on the sound level and duration of exposure. To avoid noise-induced hearing loss, employers must reduce workplace noise and employees must use personal hearing protectors, (earplugs and earmuffs) where their daily noise dose exceeds an average of 85 dBA over an 8 hour period.

### Examples of approximate noise levels

	Decibels	How long before there is hearing damage
Gunshot	120	Instantaneous if close
Angle grinder	110	2 minutes
Noisy rave	110	15 minutes
Chainsaw	100	15 minutes
Skilsaw	95	60 minutes
Lawn mowing	90	
Average factory	80-90	
Busy road at 10metres	80	
Talking at 1metre	66	
Average home	50	
Quiet office	40	
Library	30	



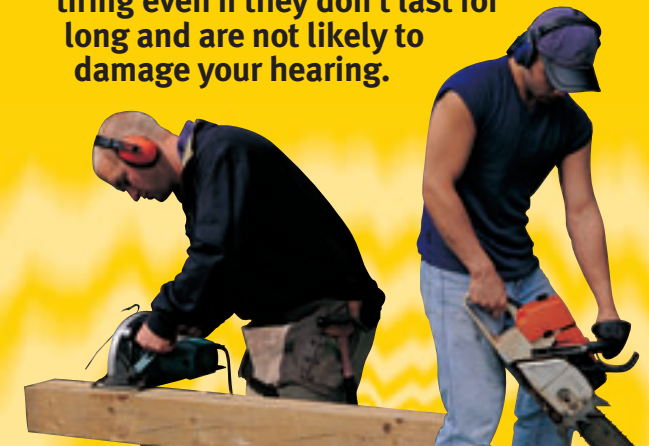
When you are at home or out having fun, you may also be around noise that is annoying or can damage your hearing.

Always remember that personal music devices, radios, home or car stereos, TVs and computer games all give out high levels of noise when the volume is not turned down.

### As a general rule:

**If the noise is so loud that you have to shout to be heard by someone standing 1 metre away – the noise is too loud and may damage your hearing. So you need to protect your hearing by turning down the sound or wearing hearing protection.**

**You may also choose to protect your ears from noises that are annoying and tiring even if they don't last for long and are not likely to damage your hearing.**



noise + time = **hearing damage**