

Protecting your hearing



Tips on how you can best
preserve your hearing

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Your hearing is precious

Throughout our lives we are bombarded with a steady stream of sound – in schools, at home, at work and out and about. Sometimes these sounds get so loud that they begin to damage our hearing.

Today, around 40% of people over the age of 50 have a hearing loss¹, and that number is likely to increase in the future.

Young people are at risk of losing their hearing faster than previous generations due to more exposure to loud music and noisy environments.

Our hearing helps us get educated, find jobs, build families and lasting friendships, which is why it is worth taking care of. This brochure tells you what you can do to protect this precious sense.

What constitutes loud noise?

The intensity of sound is measured in decibel sound pressure level (dB SPL). A soft whisper might be no higher than 30 dB SPL, while a firecracker might be as loud as 150 dB SPL.

Sounds are considered harmful when they exceed 85 dB SPL, which is about the loudness of heavy traffic. But at nightclubs and rock concerts, sound levels soar to more than 100 dB SPL. Over time this can lead to hearing loss and tinnitus (a permanent ringing or buzzing in the ears).

Noise can be harmful virtually anywhere. The blast of a gun or fireworks can cause instant impairment, whereas the steady drone of heavy machinery can do damage in the long run. In most cases this happens gradually, so you still have time to care about your hearing and learn to protect it!

When is it time to react?

If there is too much noise, this is how you will experience it:

- You cannot hear someone talking
 - even though they are within an arm's length away.
- You hear loud sounds as unclear
 - even though there is no noise in the surroundings.
- Your ears hurt after leaving a noisy area.
- You hear ringing or buzzing in your ears during or immediately after exposure to noise.
- After exposure to noise, you can hear people talking but you cannot understand them.

Noise at work and at home

We rarely think about it, but daily exposure to excessive noise is the primary cause of many cases of hearing loss in the working population. The degree of loss will depend on the level of noise and duration of exposure.

If you are surrounded by noise – whether it's construction, engineering, teaching or dentistry – you can reduce the risks by using earplugs or other hearing protection devices.

If your ears are not getting bombarded at work they might well be under pressure at home. Be aware that lawncare equipment, power tools and even the repeated “crack” of a simple hammer can put your hearing at risk.



Did you know?

Your employer should provide you with protection from excessive noise.

This involves taking measures designed to reduce the risk of hearing loss.

Things to watch out for during leisure time

Like many others, you probably enjoy a good action film at your local cinema. But up to 2½ hours of explosions, car chases and gunfire at the staggering volume levels produced by today's audio systems can eventually damage your hearing. So whenever those levels start to rocket, be prepared to put your fingers in your ears! It's recommended that you talk to the cinema manager to reduce the volume.

One night out is all it takes. At pop concerts and discos, loud music is played constantly for hours on end, thereby increasing the risk of hearing damage. At most rock concerts you can expect sound levels to exceed 100 dB SPL, which is why earplugs are highly recommended.

Hunting will also be hazardous because hunters often forget to wear ear protection. Just like sirens and loud whistles, the sudden sound of gunshot might easily cause immediate and lasting damage.

Two good tips

- Stand away from the speakers and always wear ear protection - even if it is slightly uncomfortable, or people tell you that it looks awkward or is totally unnecessary.
- In noisy environments try to rest your ears as frequently as possible.



The downside of music players

Listening to music on the go is extremely popular - especially among young people. Being able to tune in to your favourite music anytime and anywhere is convenient and fun, but the price of listening to high-octane music day after day can be high.



Did you know?

Music players often shoot sound levels from 79-125 dB SPL², straight into both ears?

They do more damage because the small earbuds sit directly in the ears. This is less the case with cushioned headsets.

Two good tips

- If the person beside you can hear the music from your headphones, your volume is too loud.
- Use cushioned earphones rather than small earbuds.

² Keith, S.E, Michaud, D.S and Chui, V. Evaluating the maximum playback sound levels from portable digital audio players, The Journal of the Acoustical Society of America 123, 4227 (2008).

How noise can harm your hearing

The human auditory system contains delicate and complex mechanisms. The inner ear is home to a sea of tiny sensory cells and nerve fibres that pick up sound vibrations and turn them into electrical impulses for the brain to process.

Too many strong vibrations will damage these cells and fibres - and the more you lose, the worse your hearing will get. Damaged cells and fibres cannot heal themselves, so any damage will be permanent. This can take the form of Tinnitus, and/or noise-induced hearing loss.

If you have ringing in your ears, or are beginning to have difficulty hearing, contact your doctor or local hearing care professional for advice.



Did you know?

If you are surrounded by noise - whether it's construction, engineering, teaching or dentistry - you can reduce the risks by using earplugs or other hearing protection devices.

Some simple, protective steps

Think about your total sound exposure during the day. The simplest way to start protecting your hearing is by limiting the amount of time you expose your ears to loud noise. But there are other methods too:

Move away

- Stay as far away from the source of noise as possible.
- Walk away when sounds get too loud.

Turn things down

- At home, turn down the volume on the television, radio, stereo and music player.
- Reduce the number of noisy appliances running at the same time.
- Buy quieter products (compare dB ratings - the smaller the better).

Cover your ears

- Use ear protection wherever needed.
- When you are exposed to unexpected sudden loud noises (e.g. a jackhammer) and don't have any hearing protection within reach, cup your hands over your ears or put a fingertip into each ear canal.

Earplugs for all occasions

Ear protectors come in all shapes and sizes. Even though they might feel strange at first, getting used to wearing them does not take long.

Disposable earplugs

Crafted in expandable foam or silicone, and available from any pharmacy, disposable earplugs come in one size that fits most ears.



Disposable earplugs

Reusable plugs

Made of rubber or silicon, reusable plugs are often cone-shaped, with a safety cord. They can be cleaned with warm soapy water and worn safely for months, but as soon as they become hard or damaged they should be replaced.



Reusable plugs

Earmuffs

Resembling stereo headphones, these cushioned earmuffs are available from sporting goods, safety equipment stores or Do-It-Yourself retailers. Worn alone they should tightly cover your ears, but they can also be combined with earplugs in extremely noisy situations.



Earmuffs

Custom-fit earplugs

Also called “musician’s earplugs”, these hand-crafted earmoulds sound more natural because they attenuate all sounds to the same degree. If you are in frequent need of protection, these are the best option. Ask your local hearing care professional for more information.



Custom-fit earplugs

If you are worried about your hearing

If you have been exposed to loud noise and are worried about your hearing, you should call your doctor for a referral to a hearing care professional. Within one hour they will be able to perform a completely painless hearing test that will reveal whether there is any real cause for concern.

Get regular check-ups

If your workplace is very noisy you should get your hearing checked at least once yearly. Your hearing care professional can then compare the results to determine whether any changes have occurred.

Where to get help

You can check your local phone book or search the internet to find the right professionals to help you.

In your area

- Your doctor.
- An audiologist or hearing care professional.
- An ear, nose and throat specialist.

For more information on hearing and hearing loss please visit:
www.oticon.global



Your hearing care professional