

### Hearing protection pocket guide for workers in music and entertainment

### Why do I have to use hearing protection?

Noise is part of everyday life, but loud noise can permanently damage your hearing. You might find conversation becomes difficult or you need the television on louder. You might have ringing in the ears (tinnitus). The damage is gradual and permanent. Most of us don't think of music as noise. Yet like any sound it can damage your hearing, and your employer has a duty to protect you.

# What does my employer have to do?

The law says your employer must find out the noise levels you are exposed to, and assess any risk to your hearing. If your work puts you at risk they must provide you with hearing protection. In addition, depending on the levels of noise exposure, your employer must:

- Make changes in the venue and in the way you work that reduces the noise risks – not just rely on hearing protectors
- Send you for regular hearing checks
- Provide you with training and information
- Consult with you and any worker representatives

#### What do I have to do?

 Wear your hearing protection all the time when doing noisy work, and when in hearing protection zone areas. Hearing protectors cannot be effective if they are removed from time to time in the noisy workplace.



The sign for a hearing protection zone

- Follow the instructions given on looking after your protectors.
- Report problems with your protectors and any ear trouble to your employer.

### What hearing protector is right for me?

Your employer should provide you with a choice suitable for your work. Choose a protector that:

- Fits correctly
- Allows you to hear enough to still do your job while reducing the sound,
- Is comfortable over long periods.

Also be realistic about its appearance. Don't pick something you won't wear.

# How to fit your protectors



**Earplugs** fit inside the ear canal. They come in a range of styles and size. Take time to choose the right style and size for you. Wash your hands before fitting and follow the fitting instructions you are given. Practise fitting them and get help if you are having trouble. Get someone to check they are inserted far enough into your ear. Move your jaw around and make sure they don't come loose.

#### Tips for earplugs

- Pulling back on your ear straightens your ear canal and makes inserting the earplug easier.
- 2. Check the fit of basic earplugs by cupping your hands over your ears. If it sounds different with your hands over your ears the earplugs aren't protecting you.
- 3. If you are wearing earplugs with sound filters (a small hole running along the length of the plug) put a finger over the filter opening. If that doesn't make it quieter then the earplug isn't providing its proper protection.



**Earmuffs** should totally cover your ears, and fit tightly without gaps around the seals. Avoid jewellery and hairstyles that get in the way of the seal. And don't stretch the headband too much as earmuffs become ineffective if the headband is loose.



**Canal caps** have a tensioned band (usually worn under the chin) with caps designed to block the ear canal entrance. Follow the fitting instructions exactly to ensure they are fitted correctly.

### Choosing protectors with the right performance – a note for the self employed

Your protectors must be CE marked and capable of sufficient protection without over protecting. Try out a range of sizes and styles before making your choice.

Protectors should reduce the level at the ear to below 85dBA, but going below 70dBA is considered over protecting. Attenuation depends on the frequency content of the sound. Attenuation calculators are available on the HSE web site but an indication of the protection factors you might require is in the table below. You will find the SNR value on or inside the hearing protector packaging.

A-weighted noise level (dB)	Likely suitable SNR values
85 to 90	20 or less
90 to 95	20 to 30
95 to 100	25 to 35
100 to 105	30 or more

Aim for protectors that have a flat frequency response as this improves audibility and clarity. Generally the smaller the numerical difference between the protector H, M and L values (also found on the packaging) the flatter the response.

# Specialist options

Custom moulded earplugs are made to fit your ears and can include filters to give the attenuation required. Custom moulded earplugs can be very comfortable and reliable but only if correctly made and fitted. Make sure your supplier checks the performance on you after they are made.

**Musicians' earplugs** have a flat frequency response and are available in both custom moulded or premoulded designs. Avoid low attenuation models that are not CE marked.

**Communication protectors** have integral communication systems designed especially for noisy environments. Some will also provide **electronic sound restoration** that reproduces safe levels of outside sound when it's quiet allowing you to hear clearly while still wearing the protector.

**Sound attenuating headsets** aid DJs and sound technicians to listen at lower levels. They attenuate the outside sound as a hearing protector and limit the headset signal to a safe level.