



DEPARTMENT OF DEFENSE

HEARING

CENTER OF

EXCELLENCE

HEARING PROTECTION INFORMATION SHEET





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FOR OUTDOOR ACTIVITIES OR NOISY HOBBIES

There are several types of hearing protection options to select from when performing non-occupational activities such as lawn mowing, carpentry work, tree cutting, loud concerts, movies, or any other noisy activity. There is no single “best” hearing protection for individuals or situations, as it depends on individual comfort, size and shape of earcanals, communication needs, and the specific noise environment or activity. However, the “best” hearing protection is the one that an individual wears consistently and correctly whenever exposed to hazardous noise. Individuals exposed to non-occupational exposures may select over-the-counter earplugs such as disposable foam earplugs, reusable push to fit earplugs, flange earplugs or noise muffs. Additionally, bluetooth hearing protection devices are available and provide protection from hazardous noise exposures while maintaining the ability to effectively hear and communicate. For example, you can bluetooth your hearing protection to a personal listening device which allows you to listen to music as well as protect your hearing while mowing the lawn.



FOR HUNTERS AND RECREATIONAL SHOOTERS

Hunters must protect their hearing from the impulse noise levels from a shotgun blast, while at the same time maintain the ability to hear very soft nature sounds. Hunters have many hearing protection options to choose from such as custom or over-the-counter earplugs, noise muffs, or protection devices with a filter that spontaneously closes, reducing the sounds of gunfire down to a safe level. Electronic earplugs contain microprocessor features where loud sounds are reduced more than soft noises, and soft sounds are enhanced. For example, you can hear game movement but also hear reduced impulse sounds (such as gunfire) down to a safe level. Electronic earplugs are available in custom molds as well as standard, less expensive alternatives. Shooters also have a variety of options to select from, depending on the personal needs of the individual. For instance, a noise muff is a popular option for those who shoot at indoor ranges, because it protects from their own gunfire as well as from other shooters firing nearby. Shooters can select a custom shooter earplug that can be ordered and obtained through a hearing healthcare professional. The custom shooter earplug requires an earmold impression of the ears. You can obtain earmold impressions from an audiologist or hearing technician. The earmolds are then sent to a hearing protection manufacturer to make the earplugs. Electronic shooter earplugs are available in custom molds as well as standard, less expensive alternatives.



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FOR MUSICIANS

Musicians, including school age kids in band and orchestra, are exposed to high decibel musical levels in which hearing loss and tinnitus can occur without the use of hearing protection.

Traditional earplugs are not adequate for musical exposures because they reduce sound by muffling low-to-mid-range frequencies that distort musical sounds. Musicians need to hear everything without distortion, so a high-fidelity earplug is ideal for this type of exposure. A high-fidelity earplug is designed to retain the same resonant properties of the open ear, enabling an undistorted listening experience. Professional musicians often use custom musician ear molds, because they are comfortable and provide protection from loud sounds without distorting what they hear. Many other products are also available that will enhance the music experience. A wide range of premolded earplugs is available in different designs, styles, and price categories.



FOR MOTORCYCLISTS

Motorcyclists must protect their hearing from the wind noise they encounter while riding. Wind noise is continuous high-frequency sound created when you rush through the air at high speeds. Wind noise is the biggest danger to hearing while riding and increases as you increase your speed. For example, at highway speeds the wind noise levels range around 100-110dB. It is a constant, high frequency sound, most damaging to your hearing. Motorcyclists require hearing protection that protects their hearing from the hazardous wind noise but still allows lower frequency sounds such as conversation, sirens, and horns to be heard. The ideal earplug for the motorcyclist is one that protects from the high-frequency wind noise while still allowing important low-frequency sounds to be heard. There are a variety of earplugs available (basic foam earplug to custom-molded earplug) for the motorcyclist and selection of which earplug to purchase is an individual preference. For example, you can select an earplug that enables listening to music while protecting your ears from the harmful wind and road noise. High fidelity earplugs are also available that protect from hazardous wind noise while still allowing for hearing of voices and natural environmental sounds. For motorcyclists, it is important to select an earplug to wear underneath the helmet that is comfortable, to ensure consistent and regular use while riding.





FOR SLEEPING

Individuals who have difficulty sleeping would benefit from wearing sleep earplugs. Circumstances may include snoring partners, noisy sleep environment, noisy neighbors or frequent travelers. Sleep earplugs are generally made for comfort so they can be worn all night long. There are many options to select from regarding sleep earplugs. You can select from disposable, reusable, moldable and even custom sleep earplugs. Similar to hearing protection, disposable sleep earplugs are made for one or two times use whereas reusable sleep earplugs can be used several times before replacement is needed. The moldable sleep earplug is ideal for someone who has difficulty obtaining a comfortable fit with the other sleep earplug options. Moldable sleep plugs are made with a wax or silicone material and are formed to the shape of the user's outer ear canal. Lastly, custom sleep earplugs can be obtained by visiting a hearing healthcare professional. This type of sleep earplug requires an earmold impression of your ear so it can be sent off to an earplug manufacturer who then makes a pair of custom sleep earplugs. The custom sleep earplug option is one that provides the greatest sound attenuation.



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