PATIENT HANDOUT

Hearing Wellness for Musicians

By Frank Wartinger, AuD

usic is powerful. It can connect people, communicate across languages, stir our emotions, and trigger nostalgia. Loud music is almost always exciting. There are technical and multifaceted reasons why music is often played loudly, but there is also a very simple reason: We enjoy loud music. We like the way it sounds, and we love the way it feels and moves us.

As musicians, we spend long hours practicing and improving our skills. While our polished musicianship is valuable, our sense of hearing is often overlooked as what it is—the essential and irreplaceable tool for music-making. Many professional and aspiring musicians instinctively understand that they are at risk for hearing loss from lifelong exposures to loud music. Rarely discussed, however, is that the risk includes developing other hearing disorders such as constant ringing (tinnitus), degraded pitch perception (diplacusis), or intolerance of loud sounds (hyperacusis).

Practical solutions can reduce the risk of music-induced hearing disorders without compromising the quality of your performance. In addition to the potential long-term benefits to your hearing, the following tips can reduce unnecessary stress on your auditory systems and can even improve critical listening ability.

REHEARSAL MANAGEMENT

- Consider the duration and venue of solo practice sessions and group rehearsals, which generally account for the vast majority of one's musical activities. While public performances are planned and relatively predictable, rehearsals are often held in varied locations with inconsistent access to proper monitoring equipment.
- Strategically plan the rehearsal schedule to consider your overall sound exposure. For example, reduce the time spent on louder sections or songs, or allow breaks between intense selections to avoid fatigue.
- Evaluate the acoustics of rehearsal venues. Professional rehearsal spaces and acoustically treated rooms can drastically improve listening clarity and support lower rehearsal levels.
- Introduce alternative rehearsal formats such as unplugged sessions that limit the use of amplification. Large groups may benefit from holding smaller, sectional rehearsals.
- Discourage "noodling" during conversations and between songs. This reduces constant sound levels and listener fatigue, and improves productivity.



Dr. Wartinger is an audiologist at the Children's Hospital of Philadelphia and the owner and founder of Earmark Hearing Conservation, a musician's clinic based in Philadelphia. He also serves as the director of communications at the National Hearing Conservation Association (NHCA).

USE OF HEARING PROTECTION

- When sound levels are consistently high and non-technologic solutions aren't sufficient, try using a pair of universal-fit filtered earplugs designed for music listening. While traditional foam earplugs will help keep your ears safe, they have the drawbacks of providing too much sound protection (attenuation) for most musical applications and have a poorly balanced frequency response.
- For a long-term option, consider custom-fit filtered earplugs, which provide a flatter frequency response, changeable level options, and improved comfort for extended use.
- When using hearing protection, it is important to practice listening and playing at lower sound levels. Listening at lower levels can actually improve pitch and loudness perception since your auditory system can distort subtle details at sufficiently high intensities.
- Use hearing protection when doing other activities and chores, such as operating loud tools and equipment, attending concerts or sporting events, motorcycle riding, and using recreational firearms. Save your ears for what matters—music-making.

EFFECTIVE USE OF MONITORING SYSTEMS

- Strive to reduce the duration or intensity of sound exposure.
 Assuming that the rehearsal or performance durations remain consistent, reducing the monitoring and stage levels is the next step.
- Try to first address the direct sound sources where adjustment won't compromise the sound quality. Depending on the situation, some options are to turn down instrument amplifiers and use clear and transparent sound barriers around drums.
- When on stage, work with your sound engineer to reduce extraneous signals and set a lower monitor speaker level.
- Consider the use of an in-ear monitor (IEM) system to replace the traditional wedge monitor system. IEMs are beneficial for certain musical styles and stage setups to better control personal monitoring levels and improve clarity. While not hearing protection devices on their own, IEMs can help reduce a musician's risk of hearing damage when coupled with an informed reduction in monitoring levels.

These tips vary in cost, time commitment, and effectiveness in different musical situations. No two musicians have identical needs, so speak with your bandmates, engineer, and audiologist about your specific circumstances. Get an annual hearing test to monitor the efficiency of your hearing conservation efforts. By treating our ears as the invaluable, irreplaceable assets they are, we can take important steps to improve our performance while reducing the risk of a career-limiting hearing injury.

2 The Hearing Journal April 2017