

Protect Your Hearing Everyday

Information and Recommendations for Student Musicians

Version for Customization

National Association of Schools of Music
Performing Arts Medicine Association

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Protect Your Hearing Everyday

Introduction

Welcome to the Music Department at Towson University.

In working toward a degree in music, you are joining a profession with a long and honored history. Part of the role of any professional is to remain in the best condition to practice the profession.

For all of you, as aspiring musicians, this involves safeguarding your hearing health. Whatever your plans after graduation—whether they involve playing, teaching, engineering, or simply enjoying music—you owe it to yourself and your fellow musicians to do all you can to protect your hearing.

As you may know, certain behaviors and your exposure to certain sounds can, over time, damage your hearing.

You may be young now, but you're never too young for the onset of hearing loss. In fact, in most cases, noise-related hearing loss doesn't develop overnight. (Well, some does, but we'll address that issue later in this document.) But the majority of noise-induced hearing loss happens gradually.

So the next time you find yourself blasting music through those tiny earbuds of your iPod or turning up the volume on your amp, ask yourself, "Am I going to regret this someday? You never know; you just might. And as a musician, you cannot afford to risk it."

The bottom line is this: If you're serious about pursuing a career in music, you need to protect your hearing. The way you hear music, the way you recognize and differentiate pitch, the way you play music; all are directly connected to your hearing. Do yourself a favor: protect it. I promise you won't regret it.

Disclaimer

The information in this document is general in nature. It is not a substitute for professional, medical judgments. It should not be used as a basis for medical treatment. If you are concerned about your hearing or think you may have hearing loss, consult a licensed medical professional.

To make an appointment to speak with a medical professional at the Towson University Speech, Language and Hearing Center call 410-704-3095.

Purpose of this Resource Document

The purpose of this document is to share with you some information on hearing health and hearing loss and let you know about the precautions that all of us should practice daily.

Music and Noise

This paper addresses what is termed noise-induced hearing loss. You may be wondering why we're referring to music this beautiful form of art and self-expression as noise.

Here's why: What we know about hearing health

The inner ear, also known as the cochlea, is where most hearing-loss-related ear damage tends to occur. Inside the cochlea are tiny hair cells that are responsible for transmitting sound waves to the brain. When a loud noise enters the inner ear,

2. The closer you are to the source of a loud noise, the greater the risk that you'll experience some damage to your hearing mechanisms.

At this point, it helps to have some frame of reference. How loud are certain noises? Consider these common sounds, their approximate decibel levels, and the recommended maximum exposure times established by the National Institute for Occupational Safety and Health (NIOSH), a branch of the Centers for Disease Control and Prevention (CDC).

Sound	Intensity (dB)	Maximum Recommended Exposure (approx.)*
A Whisper	30	Safe, No maximum
Rainfall (moderate)	50	Safe, No maximum
Conversation (average)	60	Safe, No maximum
Freeway Traffic	70	Safe, No maximum
Alarm Clock	80	Safe, No maximum
	85	Potential Damage Threshold
Blender, Blow dryer	90	2 hours
MP3 Player (full		

FACT: More than 30 million Americans are exposed to hazardous sound levels on a regular basis.

Musicians and Noise-Induced Hearing Loss

Nowadays, more and more is being written about the sound levels of certain musical groups. It is no secret that many rock concerts expose audiences to dangerously high levels of noise. The ringing in your ears after a blaring rock concert can tell you that. But now professional and college music ensembles are under similar scrutiny.

It is true that musicians are exposed to levels of sound when they rehearse and perform music. But that doesn't equate to a significant risk for hearing loss.

Take for instance a typical practice session. When taken at close range to the instrument over a limited period of time, a level meter fluctuates between a reading of 60 and 70 decibels. That is similar in intensity to average conversation (60dB). There will, of course, be moments when the music peaks and this level rises. But these moments are not sustained over several hours. At least not under normal practice conditions.

While the same is true for most instruments, it is important to understand that certain instrumental sections tend to produce higher levels. Sometimes these levels relate to the piece of music being performed and to notational requirements (e.g., fortissimo). Other times, these levels are what naturally resonate from the instrument.

For example, string sections tend to produce decibel levels on the lower end of the spectrum, while brass, percussion, and woodwind sections generally produce decibel levels at the higher end of the spectrum.

What is important is that you are mindful of the volume of your instrument and of those around you. If you are concerned about volume levels, share your concerns with your instructor.

FACT: Approximately 50% of musicians have experienced some degree of hearing loss.

Mindful Listening

Now, let's talk about how you can be proactive when it comes to music and hearing loss.

It is important to think about the impact noise can have on your hearing health when you:

1. Attend concerts;
2. Play your instrument;
3. Adjust the volume of your car stereo;
4. Listen to your radio, CD player, and MP3 player.

Here are some simple ways to tell if the music is too loud:

It's too loud (and too dangerous) when:

1. You have to raise your voice to be heard.

Resources Information and Research

Hearing Health Project Partners

National Association of School of Music (NASM)

<http://nasm.arts-accredit.org/>

Performing Arts Medicine Association (PAMA)

<http://www.artsmed.org/index.html>

PAMA Bibliography (search tool)

<http://www.artsmed.org/bibliography.html>

General Information on Acoustics

Acoustical Society of America <http://acousticalsociety.org/>

Acoustics.com <http://www.acoustics.com>

Acoustics for Performance, Rehearsal, and Practice Facilities
Available for purchase through the NASM Web site

National Institute on Deafness and Other Communication Disorders Noise-Induced Hearing Loss <http://www.nidcd.nih.gov/health/hearing/noise.html>

Other Organizations Focused on Hearing Health

Dangerous Decibels <http://www.dangerousdecibels.org>

Musicians Clinics of Canada <http://www.musiciansclinics.com/home.asp>

National Hearing Conservation Association <http://www.hearingconservation.org/>