

# Hearing Health

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# Protecting Hearing Health

- The way you hear music, the way you recognize and differentiate pitch, the way you play music; all are directly connected to your hearing.
- The extent of the damage is normally related to the **length** and **frequency** of a person's exposure to loud sounds **over long periods of time**.
- Happens over time: Hearing loss may begin with trouble hearing high frequency sounds and eventually it will affect your ability to perceive both speech sounds and music.
- **It is very important to understand that these hair cells in your inner ear cannot regenerate. At this time, there is simply no way to repair or undo the damage.**

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

- You have to raise your voice to be heard.
- You can't hear someone who is an arm's length away from you.
- The speech around you sounds muffled or dull after you leave a noisy area.
- You experience tinnitus (pain, ringing, buzzing, or roaring in your ears) after you leave a noisy area.

# School of Music Noise Monitoring 2015-2016

	Maximum Rehearsal Average (decibels)	Time to Potential Hearing Damage (per day)*
Wind Ensemble	89 dB	3 hours
Concert Band	90 dB	2 hours
Symphony Orchestra	91 dB	1.75 hours
Latin Jazz	93 dB	1 hour
Jazz Orchestra	94 dB	30 minutes
Varsity Band	100 dB	15 minutes

\* National Institute of Occupational Safety and Health (NIOSH) permissible limits

# Disposable or Reusable Industrial Ear Plugs

## **GOOD: Disposable or reusable standard push in ear plugs**



**PROS:** Very inexpensive protection (\$0.30 – \$1.50 pr.), disposable or reusable, easy to insert and remove quickly

**CONS:** Can distort sound quality because higher frequencies are blocked better than lower frequencies, can provide too much protection



TIP: Look for noise reduction ratings (NRR) in the lower 20's



# High Fidelity Non-custom Ear plugs

## **BETTER: Reusable, non-custom, high fidelity (flat attenuation) ear plugs**

**PROS:** Flat attenuation preserves sound quality, many options at \$10-\$50 per pair

**CONS:** More expensive, comfort level not as high as custom



# Custom Molded Musician Ear plugs

## CUSTOM: Molded musician's ear plugs

### UW SPEECH AND HEARING CLINIC

UNIVERSITY OF WISCONSIN-MADISON  
GOODNIGHT HALL, 1978 WILLOW DRIVE  
608-262-3951



The UW Speech and Hearing Clinic offers a custom evaluation and hearing conservation package for musicians. The musician's hearing evaluation includes evaluation of hearing at inter-octave frequencies, otoacoustic emission testing, and assessment of change in hearing if previous tests are available. The hearing conservation package includes an individualized consultation about hearing conservation in a music environment as well as **the selection and fitting of custom musician's ("concert") earplugs**. This program is offered at a discounted price of \$150 to students in the UW-Madison School of Music.

# Mindful Listening and Hearing

- Play your instrument;
- Attend concerts;
- Adjust the volume of your car stereo;
- Listen to your radio, CD player, and MP3 player;
- Mowing grass;
- Other hobbies like woodworking, hunting, racing

*Reduce exposure by decreasing time, lowering volume, increasing distance, wearing hearing protection*