

**Introduction**

The School of Music, as required by the National Association of Schools of Music, is obligated to inform students and faculty of health and safety issues, hazards, and procedures inherent in practice, performance, teaching, and listening both in general and as applicable to their specific specializations. This includes but is not limited to information regarding hearing, vocal and musculoskeletal health, injury prevention, and the use, proper handling, and operation of potentially dangerous materials, equipment, and technology.



Vocal Health Center, University of Michigan Health System, recognized locally, regionally and nationally as a leading institution for the treatment and prevention of voice disorders. At the heart of the Center is a professional team comprised of experts from the University of Michigan Health System and U-M School of Music, encompassing the fields of Laryngology, Speech Pathology, and Vocal Arts. <http://www.med.umich.edu>

### **School-Owned Instruments**

The School of Music maintains a collection of musical instruments for checkout and use by members of the music faculty and students enrolled in our courses and performing ensembles. As with other items we use in the course of our daily lives, musical instruments must be cared for properly and cleaned regularly. Each instrument in the School's collection receives a thorough inspection at the conclusion of the academic year. Every year, thousands of dollars are spent to clean, adjust, and return instruments to full playing condition.

### **Antiseptically Clean**

More and more our society is pushing for products that are anti-fungal, anti-bacterial and anti-viral. Some even go the next step further aiming to achieve sterile. However, our bodies by design are not meant to live in a sterile environment. As kids we played in the dirt, ate bugs and countless other things and became stronger because of it. Keep in mind that total sterility is a fleeting moment. Once a sterile instrument has been handled or exposed to room air it is no longer considered to be sterile. It will however remain antiseptically clean until used.

Most viruses cannot live on hard surfaces for a prolonged period of time. Some die simply with exposure to air. However, certain groups are quite hardy. Therefore, musicians must be concerned with instrument hygiene. Users of school owned and rented musical equipment might be more susceptible to infections from instruments that are not cleaned and maintained properly.

causing noise-induced hearing loss (NIHL). These sensitive structures, called hair cells, are small sensory cells that convert sound energy into electrical signals that travel to the brain. Once damaged, our hair cells cannot grow back. NIHL can be caused by a one-time exposure to an intense "impulse" sound, such as an explosion, or by continuous exposure to loud sounds over an extended period of time. The humming of a refrigerator is 45 decibels, normal conversation is approximately 60 decibels, and the noise from heavy city traffic can reach 85 decibels. Sources of noise that can cause NIHL include motorcycles, firecrackers, and small firearms, all emitting sounds from 120 to 150 decibels. Long or repeated exposure to sounds at or above 85 decibels can cause hearing loss. The louder the sound, the shorter the time period before NIHL can occur. Sounds of less than 75 decibels, even after long exposure, are unlikely to cause hearing loss. Although being aware of decibel levels is an important factor in protecting one's hearing, distance from the source of the sound and duration of exposure to the sound are equally important. A good rule of thumb is to avoid noises that are "too loud" and "too close" or that last "too long."

*It is very important to understand that the hair cells in your inner ear cannot regenerate. Damage done to them is permanent. There is no way to repair or undo this damage.*

According to the American Academy of Audiology, approximately 26 million Americans have hearing loss. One in three developed their hearing loss as a result of exposure to noise. As you pursue your day-to-day activities, both in the Department of Music and in other educational, vocational, and recreational environments, remember:

1. Hearing health is essential to your lifelong success as a musician.
2. Your hearing can be permanently damaged by loud sounds, including music. Technically, this is called Noise-Induced Hearing Loss (NIHL). This danger is constant.
3. Noise-induced hearing loss is generally preventable. You must avoid overexposure to loud sounds, especially for long periods of time.
4. The closer you are to the source of a loud sound, the greater the risk of damage.
5. Sounds over 85 dB (your typical vacuum cleaner) in intensity pose the greatest risk to your hearing.
6. Recommended maximum daily exposure times to sounds at or above 85 dB are as follows: 85 dB (vacuum cleaner, MP3 player at 1/3 volume) - 8 hours 90 dB (blender, hair dryer) - 2 hours 94 dB (MP3 player at 1/2 volume) - 1 hour 100 dB (MP3 player at full volume, lawnmower) - 15 minutes 110 dB (rock concert, power tools) - 2 minutes 120 dB (jet planes at take-off) -

Health and Safety Standards Organizations American National Standards Institute (ANSI) (<http://www.ansi.org/>)

The National Institute for Occupational Safety and Health (NIOSH) (<http://www.cdc.gov/niosh/>)

Occupational Safety and Health Administration (OSHA) (<http://www.osha.gov/>)

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