

# HOWARD UNIVERSITY DEPARTMENT OF MUSIC STUDENT AND FACULTY MUSICIAN HEALTH AND SAFETY RECOMMENDATIONS

As a member of the National Association of Schools of Music, the Howard University Department of Music is mandated to provide for its students and faculty published recommendations regarding Health and Safety (see NASM Handbook 2012-2013, item II.F.i.). **The following materials are provided as recommendations to help avoid student musician (instrumental and vocal) injuries, infections and hearing loss, by employing proper technology use practices and musculoskeletal well-being, and are available for all students on the Howard University Department of Music website and are included in all course syllabi. Additionally, this document is posted on the Department's main bulletin board.**

Anyone who performs instrumentally or vocally runs the risk of injury. It is of paramount importance for each student to understand that he/she assumes the responsibility of employing safe, healthy practices as it pertains to musician health. Taking breaks during practice or rehearsal, using proper posture, adequately warming up, and employing correct playing technique will minimize the risk of injury.

## I. Preventing Muscle and Skeletal Injuries

To reduce the risk of muscle and skeletal injuries, it is of paramount importance that all musicians employ the following prevention routines:

- Always adhere to the warm-up and stretching exercises prescribed by your studio coach.
- Do not dramatically increase duration of practice. Gradually increase practice length to avoid over-exertion.
- Schedule rest periods as a part of your practice routine.
- If you begin to experience any level of physical discomfort, rest and speak with your coach as soon as possible.
- It is important that when one practices, the level of musical difficulty should vary during the course of practice. Do not over-exert yourself practicing difficult music to the point of discomfort.
- Always be conscious of and employ good performance technique in a climate-controlled facility that is properly lit.
- Practice consistently. 'Cramming' in practice at the last minute most often results in unnecessary stress, lack of sleep, and poor diet and hydration habits resulting in increased risk of muscle and skeletal injuries.

In Cynthia C. Carsley's study titled *Musicians and Musculoskeletal Injuries*, it is recommended that seated musicians should support one's lower back by using a lumbar pillow or wedge cushion. It is also vital that music stands be properly placed at eye level or slightly lower.

## **II. Instrument Maintenance**

The Department of Music, in conjunction with the Office of Choirs and Bands, provides many loaner instruments to students. Loaner instruments pose particular challenges regarding hygiene. Hence, consistent, thorough cleaning is essential. Disinfectant cleaning solutions are readily available at local music stores and through Amazon.com. Roche Thomas Mi-T-Mist Disinfectant is a commonly used product for instrument cleaning and disinfecting, but must not be used on plastic instruments or parts.

It is important that at no time should mouthpieces or reeds for brass or woodwind instruments be shared. All students using borrowed instruments must provide their own mouthpieces and reeds. Additionally, if instruments are being shared within a class meeting, it is recommended that disinfecting wipes such as alcohol wipes be used by students as they exchange instruments (this does not apply to string or percussion instruments).

Saxophone crooks are notorious for harboring infectious bacteria. Using a crook brush with approximately a 12-inch wire, one can clean a large amount of buildup from the crook. For step-by-step instructions for cleaning a saxophone crook, visit the website [www.shwoodwind.co.uk](http://www.shwoodwind.co.uk). One can clean a metal saxophone mouthpiece with warm/hot water and mild liquid soap.

Alcohol-based wipes may be used to clean flute head-joints (lip plate and embouchure hole). A flute cleaning rod may be employed to clean the instrument interior. Bacteria and moisture buildup on a flute's interior can corrode the metal. Wiping the exterior with a silver polish cloth will maintain its cleanliness and shine. It is important to remember that under no circumstances should a flute be placed in or under running water to clean. This will cause damage to key pads.

After prolonged playing on a clarinet, the mouthpiece often develops a crust-like buildup, harboring germs and bacteria. Detailed instructions for cleaning a clarinet and its mouthpiece are provided at [www.clarinet.org](http://www.clarinet.org).

The bocals of such wind instruments as the bassoon and English horn should be cleaned regularly to avoid bacteria buildup. Bocals can easily be sanitized by using a mild liquid soap, a bocal brush or pipe cleaner, and soft cloth towels.

Generally, string, keyboard, and percussion instruments do not pose high risks of infection.

## **III. General Precautions for Singers**

Practicing “voice users,” that is, actors, singers, teachers, and orators, occasionally experience vocal problems associated with incorrect use, over use, colds, allergies, and improper care. The voice user is not always in control of his/her environment, and must take care to anticipate any possible challenges.

*Stay in Good Health* – This should be obvious. One should be vigilant about general health. Maintain routine, age-appropriate medical examinations.

*Maintain a Consistent and Healthy Diet* – The rigors of work, study, and travel leave us in a “catch can” method of eating. Set times for meals or plan to bring healthy snacks when a sit down meal is not available. It is crucial to eat breakfast to start the day.

*Avoid “Fad” Dieting* – One should not take on diets that prescribe single items that are not fully nutritional. This can create a feeling of deprivation and will cause nutritional imbalances. If weight change is the goal, one should consult a professional for guidance.

*Maintain a Consistent Exercise Routine* – Exercise is necessary to build endurance and strength of the body, mind and spirit.

*Get Regular Sleep* – The voice suffers from lack of sleep. The body, mind and voice require rest for rejuvenation and proper function. Fatigue can cause lack of energy essential for full physical, vocal support.

*Drink 6-8 Glasses of Water Daily* – Hydration is vital to good health.

**The following can cause vocal discomfort:**

*Yelling, screaming or loud talking*

*Excessive talking*

*Clearing the throat* – Drink water or warm teas and do vocal coach prescribed vocal exercises.

*Pollution*

*Drafty Rooms* – Forced air can circulate dust mites and can create dryness and chills.

**Some things to avoid:**

*Smoke*- inhaling or smoking substances of any type

*Stuffy Rooms*

*Dairy Products Prior to Singing* – Any food that causes extraordinary production of mucous should be avoided.

*Iced drinks* – In general they are acceptable, but not after the voice user has vocalized or warmed up.

*Caffeine* - Tends to dry out the vocal cords.

#### **IV. Use of Audio & Video Equipment**

##### **A. Hearing Protection**

1. All persons should limit exposure to loud sounds, especially for extended periods. NIOSH guidelines recommend 85 dB as the maximum sustained levels of sound/noise for up to 8 hours a day.
2. All persons are encouraged download free SPL meters for use with smart phones to easily measure environmental noise levels.
3. Use of hearing protection (such as foam or rubber ear plugs) is recommended when in loud environments, especially rehearsals or performances that involve amplified music or sound.
4. Limit use of ear buds and headphones to no more than 45 minutes at a time, and using lowest possible volumes.
5. Encourage use of noise canceling headphones, which allow for lower volumes at the ear.
6. Use of plexiglass or other baffling is encouraged when proximity to loud or piercing acoustic instruments (e.g. drums and percussion, brasses, piccolo) causes any discomfort or plosive impact to the hearing.

##### **B. Eye Protection**

All persons should limit continuous time in front of video screens to 45 minutes, to avoid eye injuries (dry eye and eye strain).

##### **C. Posture**

Ergonomic placement of computer monitors and keyboards, MIDI keyboards, and laptop computers is recommended to prevent undue neck, back and carpal tunnel injuries.

##### **D. Electricity**

1. Use of grounded, 3-prong audio equipment is highly recommended for sound quality and safety.
2. Do not defeat/ break the 3rd prong on electrical cables trying to fit into 2-prong wall outlets. The ground is thus defeated causing a shock hazard.
3. Do not use 3- to 2-prong adaptors. The ground is thus defeated, causing a shock hazard.
4. Do not daisy-chain power strips, which may cause an overload and a fire.
5. Power cords that are frayed or damaged should be replaced before using equipment.
6. Outlets that show signs of arcing (burning) should be serviced before use.

7. Exercise common sense when dealing with electricity. If you don't know what you are doing, don't attempt electrical repairs or attempt risky connections.

**E. Moving of Audio Equipment**

1. Equipment should be moved using the least amount of individual physical effort as possible.
2. Use a helper to minimize potential for injury.
3. Use rolling carts as much as possible.
4. Exercise caution when mounting speakers or other devices in elevated positions. The added weight can easily tip over a ladder.

**F. Audio Setup**

1. Power and microphone cabling trip hazards
  - a. Always use a longer cable than what is needed. The slack will provide absolute and safe placement.
  - b. In public spaces, cables should be along walls as much as possible; elevated above the floor is best.
  - c. If cabling crosses a doorway or is in pedestrian traffic, cables must be taped down and covered with a bridging material (non-slip rugs or rubber cable bridges).
  - d. Microphone cable can be wrapped around the base of microphone stands after installation to minimize injuries if a tripping incident occurs.
2. Audio speaker monitors as part of a Public Address System (PA) are best elevated above the horizontal ear level of performers and audience.
3. Microphones should be positioned behind the plane of the speakers to avoid or minimize feedback issues.
4. Feedback elimination devices are recommended when multiple microphones are in use.

**For detailed information regarding student and faculty musician health and safety issues, the following books provide additional valuable information:**

- *Playing Less Hurt: An Injury Prevention Guide for Musicians*
- *Reach for the Top: The Musician's Guide to Health, Wellness and Success* by Timothy Jameson
- *Musicians and the Prevention of Hearing Loss* by Marshall Chasin

**These books will be made available to Department of Music students, and will be loaned free of charge.**