HEALTH, WELLNESS AND SAFETY AWARENESS FOR MUSICIANS



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Hearing Loss

As musicians, our hearing is an EXTREMELY valuable asset. Be smart, use common sense and know your own risk factors – how loud is the situation and how long is it safe to endure?

- Acoustic Instruments
- Amplified Instruments
- Ensembles(where you sit matters, sound shields save hearing!)
- Room Size
- Earphones
- Car/Room Sound Systems

HOW TO "LOOK" AT NOISE INTENSITY COMPARISONS WITH NIOSH RECOMMENDED PERMISSIBLE EXPOSURE TIME Note: For every 3dB the energy doubles.
85 dBA - 8 hour exposure limit 🤤
88 dBA - 4 hour exposure limit 🛛 ———————————————————————————————————
91 dBA - 2 hour exposure limit
94 dBA - 1 hour exposure limit
97 dBA - 30 minute exposure limit
100 dBA - 15 minute exposure limit
103 dBA 7 1/2 minute exposure limit
106 dBA - 3 3/4 minute exposure limit
NOTE:
Noise Levels for the Following: 91dB - Orbital Sander
96 dB - Router 101 dB - Circular Saw

How Loud Is Too Loud?

Protect Your Ears

Know which noises can cause damage. Wear earplugs when you are involved in a loud activity.

110 Decibels

Regular exposure of more than 1 minute risks permanent hearing loss.

100 Decibels

No more than 15 minutes of unprotected exposure recommended.

85 Decibels

Prolonged exposure to any noise at or above 85 decibels can cause hearing loss

How Loud is too Loud?	
Decibels	Sound Source
150	Firecracker
120	Ambulance siren
110	Chain saw, Rock concert
105	Personal stereo system at maximum level
100	Wood shop, Snowmobile
95	Motorcycle
90	Power mower
85	Heavy city traffic
60	Normal conversation
40	Refrigerator humming
30	Whispered voice
0	Threshold of normal hearing

Aligned/Balanced- Skeletal System

For proper alignment, balance & posture:

- Requires very little muscular effort
- Muscles are in neutral state ready to move
- Posture should be fluid and balanced, not held
- Nervous system & memory function at high levels

Ways to help prevent misalignment:

- Wear good shoes that provide good support and avoid shoes that do not
- Be aware of your posture when sitting, avoid slouching, get up and move around
- every 30 minute or so when sitting for a prolonged length of time is possible

- Do exercises that specifically target your abs and back, a strong core is important

- In addition to strengthening exercises, stretching is important as well

For exercises that aid in back alignment awareness and flexibility, see: http://www.livestrong.com/article/129697-back-alignment-stretches/

Poor alignment & posture

Compresses limited space for nerves, veins, tendons, ligaments

Critical areas where compression often occurs:

- Head-Neck; Carpal Tunnel

Symptoms can include:

- Sore / stiff neck or back
- Low energy, tiredness, or fatigue
- Headaches
- Muscle spasms in the back
- Joint pain
- Numbness, tingling, or altered sensations

Results can include:

- Restricted blood flow (oxygen & nutrients to muscles; waste removal-lactic acid)
- Presses on nerves, resulting in tingling, numbness
- Slows down or blocks communication from brain performance anxiety

- If tendons & ligaments forced to work around a curve, they fray, swell and put pressure on nerves

- Requires muscles to contract and hold
- Muscles not designed for posture will compensate and begin to fail

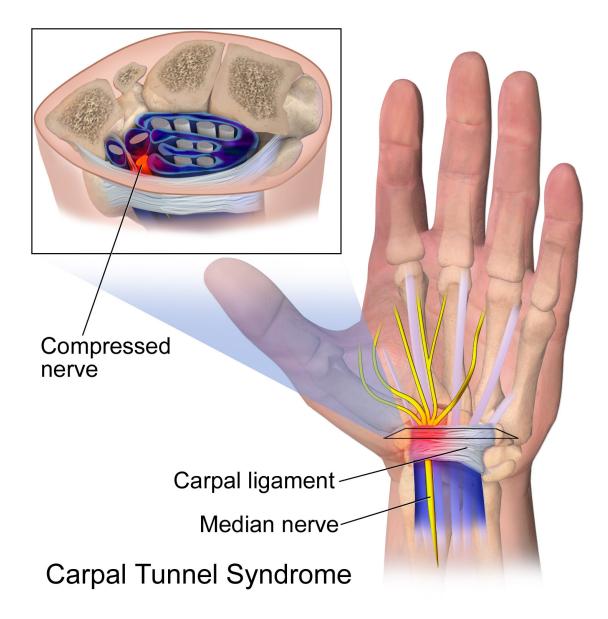
Carpal Tunnel

Computer Keyboards / Texting

- Wrist should be level
- Wrist should be straight between arm and hand (not twisted left or right)

Instruments

- Keep wrist as neutral as possible
- Passive (reactive) movements away from neutral are safe



Muscles

Aim for well-coordinated technique

Activate only the needed muscles:

- Know which are active and which are passive
- Focus on efficient and restorative muscle use
- Muscles should contract and release
- They contract faster than they release
- Fingers should contract on preparation; release back to neutral state to play
- Chronic contraction limits movement (speed and facility)

Fatigue or pain are warning signs of inefficient body usage Find ways to work with the body rather than against it

Whole-Body Education Programs

Increase kinesthetic awareness Andover Educators – www.bodymap.org

What Every Musician Should Know About the Body Alexander Technique – www.amsatonline.org

Egoscue – www.egoscue.com "Pain Free Workout" (DVD) "Posture Solutions" (DVD) Yoga / Tai Chi Developmental Fitness – sensory/motor integration www.developmentalfitness.org

Mind/Body Balance

Three areas of brain - need integrated balance:

- Survival (mostly subconscious)
- Emotions
- Intellect

Fear sends brain into survival mode & initiates fight-or-flight response (performance anxiety)

Use body to restore balance/reduce negative effects:

- Conscious Breathing
- Stretches release muscular tension
- Expend excessive energy run/jump rope/climb stairs

Emotions

Can promote or inhibit learning

Release negative emotions:

- Vent your frustrations in a safe, professional way
- Exercise regularly
- Find something to be thankful for
- Laugh
- Keep a positive attitude and don't let others pull you down
- Keep your distance from overly negative people

Smart Practicing

Stress reducing techniques

It is an important skill to know how we react to stress and also how to deal with it. Following are some points to consider:

- Acknowledge that stress happens. It is usually caused by something that occurs outside of you and you can control your response to it

- Distract yourself form the stress until you can address it approximately

- Think positively
- Take a mental vacation and visualize something moere pleasant than the stress
- Use affirmations: "I can handle this", I am a work in progress", etc.
- Take several deep breaths

- Press on your temples. Acupressure using the fingertips moving in small in small circles over your temples relaxes muscles in your neck

- Engage in a physical activity such as jogging or yoga

To reduce stress while practicing

Avoid mindless repetition

Layer information, noticing various details:

- Pitches/fingerings/articulations/diction/intonation
- Practice SLOWLY to learn music as accurately as possible
- Body usage: balance, posture, tension, movement

Simple yoga stretch

The following can be used for relaxing muscle tension that results from stress:

- Stand relax, arms hanging to your sides and with your feet above one foot apart
- Gently tilt your head forward and hold for five second
- Gently roll your head to each shoulder and hold on each side for five seconds

- Curl your chest and stomach forward as you bend at the waist; let your arms dangle for five seconds

- Inhale slowly through your mouth as you straighten back up

- Raise your arms overhead; drop arms slowly to your sides as you exhale through your mouth

Seek Help – Physical/Mental

Applied Instructor – tell them of any issues Medical Profession – MRI, x-rays, scans

Research – articles/books/programs Repetitive Stress Injury:

Whole Body EducationYour particular instrument

Keep looking until you find the information or help you need

For night or weekend mental health emergencies:

- Contact University Police immediately at 325-942-2071 so that a counselor can be paged, or

- Go to the nearest hospital emergency room, or

- Call the MHMR Crisis Hotline at 325-653-5933

National Suicide Prevention Lifeline: Available 24/7 1-800-273-8255

Campus Resources

University Health Clinic and Counseling Services 2601 W. Avenue N San Angelo, Texas 76909 325-942-2171 health@angelo.edu http://www.angelo.edu/services/health_clinic_counseling/

Additional Resources

Texas Center for Music and Medicine: http://music.unt.edu/tcmm/ Performing Arts Medicine Association: http://artsmed.org The Musician's Survival Manual; A Guide to Preventing and Treating Injuries in Instrumentalists: http://musicianssurvivalmanual.com/Welcome.html



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