

Athletes and the Arts: Staying Healthy as a Musician

by Randall W. Dick, M.S., FACSM

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Lessons from the Sports World

Performing artists are athletes. Just like "sport" athletes they:

- Practice or perform almost every day
- Play through pain
- Compete in challenging environments
- Experience little "off season"
- Face extreme competition
- Face real risk of career-threatening injury

Yet, performing artists rarely have access to the injury prevention, nutrition, and practice and competition guidelines afforded most sports athletes, even at the youth level. Performing artists--musicians, dancers, singers, conductors, actors, and marching band members--of all ages and their instructors need this information, along with education and research associated with optimizing performance and unique performance related problems.

Why the Concern?

Consider these factors:

- In one year, 64% of world-class drum corps had members who developed stress factors.
- 50% of all musicians have some form of noise-induced hearing loss (NIHL).
- 75% of orchestra instrumentalists will develop at least one musculoskeletal disorder from playing during their lifetimes.

Initiated in 2008 and formally launched in 2013, Athletes and the Arts (www.athletesandthearts.com) is a multi-organizational initiative that recognized that athletes exist throughout the performing arts community and that established performance, wellness, and injury prevention research for sport athletes is also applicable to performing artists. Health and wellness are generally foreign concepts in the performing arts community.

Athletes and the Arts (AATA) believes sports medicine physicians have the skill set to expand their practices to an entirely new and underserved population once they understand the needs and key risk factors of performing artists. Music instructors can address wellness, hearing, and cross-training, similarly to the way sports coaches introduce injury prevention initiatives.

Put Practice and Performance in Perspective

At some point the number of practice hours may hurt rather than help. Consider focused practice segments with different goals in each session. Rote repetition for extended periods of time has not proven successful.

Large increases in the time spent practicing increases the risk of injury. If the volume or intensity of practice must increase, do it gradually.

Cross-train: employ a mental or physical activity that allows the body to focus on something different. Emphasize both mental and physical rest and recovery.

How to Put These Findings into Practice

Select appropriate repertoire for yourself and your students.

Select repertoire that challenges growth but does not overwhelm physical or musically.

Learn and teach healthy practice strategies. Seek a problem-solving strategy to avoid mindless practice. Break up practice sessions to enhance concentration and avoid overuse.

Observe, record, and review the strength and posture needed during practice. Don't underestimate the value of core strength when it comes to posture and being strong enough to hold their posture (or instrument) for long stretches.

Promote the joy of performance. Open yourself and your students up to a range of different performance opportunities in order to feel comfortable in any performance setting.

Avoid Overuse/Burnout

Consider repetitive motion, a major source of injury in the sport world.

- About 150 pitches per team are thrown in a professional baseball game.
- Around 8,000 steps are taken by each field player during a soccer match.
- Approximately 50,000 steps are taken in a marathon.
- About 3 million musical notes are played in a full-length Broadway performance.

Youth in today's culture are driven to train early and extensively. Early specialization and extensive training creates documented risks of overuse injury, burnout, stress, and less enjoyment in youth sports.

The performing artist faces many of these same challenges, but specific research for this population is scarce. Minimize the risk of physical and mental overuse by monitoring how often and intensely you perform.

Noise-induced Hearing Loss

Be aware of exposure to both the intensity of the sound (measured in decibels of dB) and its duration. Government standards for occupations with high noise exposure have a foundation exposure value of no more than 85dB for an eight-hour period. For every three dB increase, time exposure should be halved:

- 88 dB for four hours per day
- 91 dB for two hours per day
- 94 dB for one hour per day

The dynamic range of music, live or recorded, can peak at or above 95 dB. Normal piano practice ranges from 60 dB to 90 dB, more intense, 70 dB to 105 dB. Hearing damage can occur when exposed to 94 dB for 60 minutes or less daily. Protect your hearing by limiting your exposure to loud noise when not performing, using musicians' ear plugs on stage, and getting an annual hearing test with an audiologist.

Find a Health Professional and Wellness Coach

Establish a relationship with a health professional before an injury occurs. Let your physician know you are a performing artist, demonstrate your craft, and explain how often/intensely you perform. Keep a performance diary to document a "typical" week of practice, performance, and other related activity. Insist on regular hearing checks. Your healthcare provider needs to understand how you play your instrument in order to counsel on injury prevention.

Resources

The Athletes and the Arts (AATA) website, www.athletesandthearts.com, is a resource for artist health information through its own content and links to the 13 collaborating organization websites. There are one-pagers on subjects ranging from hearing loss to performance anxiety to nutrition. Use

the website to educate yourself, your colleagues, and your students to enhance their long-term wellness and performance.

Summary

Performing artists are an underserved population related to medical coverage, care, injury prevention, and wellness. Your short-term and long-term health will benefit from a knowledgeable medical team that understands what you do (including the volume and intensity of your activities). Your body is an extension of your instrument. Be as proactive about protecting your health as you are your instrument.

-Randall Dick, M.S., FACSM, is a member of the American College of Sports Medicine. He worked for 20 years with the National Collegiate Athletic Association, managing its sports medicine and injury prevention programs. He has authored more than 50 peer-reviewed publications and serves on the US Lacrosse Sports Science Committee and as a consultant for Major League Baseball injury surveillance. He began developing the Athletes and the Arts initiative after a conversation with the New Orleans-based Preservation Hall Jazz Band.