

# Athletes and the Arts®

## What's the Issue?



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There is limited peer-review epidemiology research on performing arts injuries. However, from what exists and many anecdotal reports, it is obvious there is a need for awareness and appropriate medical support for prevention efforts. Long hours of repetitive motion are real threats for overuse injuries. The competitive nature of the profession incents many to “perform through pain” in order to sustain their careers.

### Dance

67 to 95% of professional ballet and modern dancers report at least one injury (mostly foot and ankle overuse) per contract year.

### Orchestra

75% of orchestra instrumentalists will develop performance-related musculoskeletal disorders (PMRD) during their lifetimes,

- Only 40% reported full recovery.
- High levels of performance anxiety and other psychological issues also were reported.

### Piano

- 33% of keyboard players in one study suffer from upper extremity musculoskeletal disorders
- 65% of 341 professional and amateur pianists currently suffered from or previously had a repetitive strain injury

### Marching Band/Drum Corps

64% of a 2013 World Class Drum Corps reported stress fractures, due in part to intricate marching maneuvers and choreography at speeds exceeding 200 beats per minute.

- More than 66% of these stress fractures occurred in the foot and pelvis

- Color guard members had twice as many individual pain sites as wind players in marching band.
- Marching bands can produce sounds at the same decibel level as a construction site

### Voice

>50% of surveyed occupational voice patients reported that voice problems had negatively affected past (53%) and current (49%) work abilities

- 76% of these respondents believed voice problems would negatively affect future work
- 65% of these patients described moderate to severe depression due to vocal impairment

### Hearing Loss

Musicians are at risk for Noise-Induced Hearing Loss (NIHL) (up to 45% of all musicians according to one study).

- Professional orchestra musicians exhibit a greater incidence of NIHL than the general population.
- 53% of surveyed professional orchestra members would have exceeded permissible daily noise exposure during their 2.1 hours per day/5 days a week practice—with volumes ranging between 60-107 and peaks between 101 and 130 decibels.

### New Orleans Musicians Clinic (NOMC) data

83% of all NOMC patients receive medication for at least one chronic condition.

- Top chronic diagnosis for over 2,500 musician patients: Hypertension, Depression and Diabetes.
- 67% of NOMC patients did not have a regular health provider before becoming an NOMC patient.
- 56% of these patients went to the ER when sick and did not seek follow-up care before becoming NOMC patients.



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**Athletes and the Arts®** - Integrating the science of sport and the performing arts for mutual benefit.

A collaborative initiative of: American College of Sports Medicine (ACSM), Center for Music Arts Entrepreneurship, Loyola University (New Orleans), Performing Arts Medicine Association (PAMA) and supporting organizations—American Academy of Podiatric Sports Medicine (AAPSM), American Medical Society for Sports Medicine (AMSSM), American Osteopathic Academy of Sports Medicine (AOASM), Drum Corps International (DCI), Music Teachers National Association (MTNA), MusiCares, National Association for Music Education (NAFME), National Association of Teachers of Singing (NATS), National Athletic Trainers' Association (NATA), National Hearing Conservation Association, New Orleans Musicians Clinic, and The Voice Foundation.