

Musician Health and Safety

Preventing Playing-Related Musculoskeletal Disorders

by Irina Foxman, MS, RN, ANP, and Barbara J. Burgel, MS, RN, COHN-S, FAAN

Due to the high physical and psychological demands of their work, musicians are at risk for developing a variety of health problems. They are often exposed to environmental hazards such as tobacco, noise, and alcohol. Those who sing may have vocal problems, those who play wind or brass instruments can have dental stress, those who play brass instruments may have increased intraocular pressure, and those who play string instruments can have skin dermatitis (Gambichler, Boms, & Freitag, 2004). Musicians may experience performance anxiety, tinnitus and noise-induced hearing loss (Hagberg, Thiringer, & Brandstrom, 2005), and fatigue and circadian rhythm disruption from altered sleep cycles. Playing-related musculoskeletal disorders arise from repetitive, awkward postures while playing, and postural stress from prolonged sitting or standing and transporting instruments, music stands, microphones, speakers, and other equipment. Some musicians actually accept musculoskeletal pain as a normal and necessary side effect of practice and musical improvement (Markison, Johnson, & Kasdan, 1998).

In 2003, a pilot project exploring occupational health concerns of musicians was implemented in a university–community agency partnership. Goals of the project included the evaluation, treatment, and ongoing education of the uninsured musician community. Musicians who volunteered were assessed and treated, primarily for musculoskeletal health complaints, in a university grant-funded occupational health clinic.

This article reviews the literature documenting playing-related musculoskeletal disorders of musicians. It also describes the health and safety educational outreach and clinical services provided to a small group of musicians. The clinical findings of 10 musicians are summarized, focusing on playing-related musculoskeletal disorders. Tendon gliding exercises and other preventive measures

used in the educational intervention are summarized for use by occupational health nurses.

INDUSTRY PROFILE

According to the Bureau of Labor Statistics (2005), musicians, singers, and related workers held approximately 249,000 jobs in 2004, with 40% working part-time and almost half self-employed. Many of these jobs are in New York, Los Angeles, and Nashville, where entertainment and recording activities are concentrated. In 2004, median hourly earnings of musicians and singers were \$17.85, ranging from \$12.17 an hour in religious organizations to \$20.70 an hour in performing arts companies (Bureau of Labor Statistics, 2005).

Musicians, singers, and related workers are employed in a variety of settings. Approximately 66% of those who earn a wage or salary are employed by religious organizations (Bureau of Labor Statistics, 2005). Classical musicians may perform with professional orchestras or in small chamber music groups. Musicians may work in opera, musical theater, and ballet productions. They also perform in nightclubs and restaurants and at weddings and other events. The U.S. military offers careers in bands and smaller musical groups. Musicians generally perform at night and on weekends and spend extensive time practicing and rehearsing. Performances often require travel. Many musicians supplement their incomes with other types of jobs.

RISK FACTORS FOR AND PREVENTION OF PLAYING-RELATED MUSCULOSKELETAL DISORDERS

The repetition, hours of exposure, and awkward postures associated with playing instruments often result in playing-related musculoskeletal disorders (Toledo et al., 2004). Because most musicians earn less than \$20,000 per year, they often hold other jobs that can exacerbate playing-related musculoskeletal disorders or cause disability (Zaza & Farewell, 1997). Playing-related musculoskeletal disorders can be painful and disabling, leading to financial hardships for musicians. Because most musicians work part-time, have intermittent periods of

ABOUT THE AUTHORS

Ms. Foxman is Nurse Practitioner, Department of Internal Medicine, University of California Medical Center; and Ms. Burgel is Clinical Professor and Adult Nurse Practitioner, Department of Community Health Systems, University of California San Francisco School of Nursing, San Francisco, CA.