

DANCE INJURIES



AOSSM SPORTS TIPS

For many people dance may not spring to mind when thinking about sports, but the physical demands placed on the bodies of dancers have been shown to make them just as susceptible to injury as are football players. In particular, as the majority of professional dancers began dancing at the age of five or six, the repetitive practice of movements that require extreme flexibility, strength, and endurance make them prime candidates for overuse injuries.

WHAT TYPE OF DANCE INJURIES OCCUR?

Across the whole spectrum of dance there is little doubt that the vast majority of injuries are the result of overuse as opposed to trauma. These injuries tend to occur at the foot/ankle/lower leg, low back, and hip, with the frequency often being in that order. The foot/ankle/lower leg area is vulnerable to a wide range of injuries, including stress fractures, tendon injuries, sprains, and strains. These injuries show up with greater frequency in dancers as they age, so it is extremely important to emphasize what the young dancer can do to prevent future injuries.

WHAT CAUSES DANCE INJURIES?

It is generally acknowledged that dancers are exposed to a wide range of risk factors for injury. The most common things that cause dance injuries include:

- Type of dance
- Frequency of classes, rehearsals and performances
- Duration of training
- Environmental conditions such as hard floors and cold studios

- Equipment used, especially shoes
- Individual dancer's body alignment
- Prior history of injury
- Nutritional deficiencies

HOW CAN DANCE INJURIES BE PREVENTED?

Dancers

Dancers should remember a few key things to prevent injury:

- Wear properly fitting clothing and shoes
- Drink plenty of fluids
- Resist the temptation to dance through pain
- Pay close attention to correct technique
- Be mindful of the limits of your body and do not push too fast too soon
- Perform proper warm-up and cool-down

Parents

Parents play a large role in injury prevention. First, they must be careful not to encourage their children to advance to higher levels of training at an unsafe rate. Specific to ballet, parents should ensure that the decision to begin pointe training is not made before the child's feet and ankles develop enough strength. Age 12 is the generally accepted lower limit, but strength and maturity are more important than age. Second, parents must be cognizant of any nutritional or psychological changes their children display as a result of trying to conform to an unhealthy dance image. Eating disorders, disrupted menstruation and counter-productive perfectionism are examples of problems that are more prevalent in dancers

than non-dancers. The observant parent should be alert to the development of such conditions and head them off before they become truly problematic.

Teachers

The first line-of-defense to prevent injuries may be dance teachers. Teachers from the onset of instruction should establish a class environment where students are not afraid to share that they are injured and need a break. Students should also be instructed consistently on the importance of warm-ups and cool-downs, proper equipment, and at what point, whether by age or maturity, it is appropriate to move on to the next level of dance.

Medical Personnel

The medical professional plays a significant role in not only treating and rehabilitating the injuries dancers incur, but also in preventing them. While remembering that dancers are athletes, medical personnel must care for them with an understanding of the unique performance capabilities they possess. Dancers respond well to medical providers who respect both the aesthetic and intensity of dance.

A special word should be said for the role of physical therapists, certified athletic trainers and other allied health professionals who initiate and facilitate screening sessions for dancers. These screening procedures help identify potential problems and prevent future injuries; they should be considered a natural part of a dancer's career and something that can give insight into staying healthy.

Getting and keeping dancers free of injury in a fun environment is key to helping them enjoy a lifetime of physical activity and dance. With a few simple steps, and some teamwork among parents, teachers and medical professionals, dancers can keep on their toes and in the studio with a healthy body.

REFERENCES:

Clippinger, K. Dance Anatomy and Kinesiology. Champaign, IL: *Human Kinetics*, 2007.

Howse, J. *Dance Technique and Injury Prevention*. 3rd ed. London: A & C Black, 2000.

Watkins, A. and Clarkson, P. *Dancing Longer Dancing Stronger: A Dancer's Guide to Improving Technique and Preventing Injury*. Princeton, NJ: Princeton Book Co., 1990.

Solomon, R, Solomon J, and Minton, SC. Preventing Dance Injuries. 2nd ed. Champaign, IL: *Human Kinetics*, 2005.

Journal of Dance Medicine & Science. Andover, NJ: J. Michael Ryan Publishing, Inc.

Expert Consultants

Ruth Solomon, Professor Emerita

Jeffrey A. Russell, MS, ATC

Sports Tips are brought to you by the American Orthopaedic Society for Sports Medicine. They provide general information only and are not a substitute for your own good judgement or consultation with a physician. To order multiple copies of this fact sheet or learn more about other orthopaedic sports medicine topics, please visit www.sportsmed.org.



The American Orthopaedic
Society for Sports Medicine

Copyright © 2009. American Orthopaedic Society for Sports Medicine. All rights reserved. Multiple copy reproduction prohibited.

Terence Delaney, MD

14911 National Ave, Ste. 3

Los Gatos, CA 95032

Phone: (408) 402-5742

Fax: (408)358-2089