



# DANCE INJURIES

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 as football players to injury. In particular, most 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 ARE SOME OF THE MOST COMMON DANCE INJURIES?

Across the whole spectrum of dance there is little doubt that the vast majority of injuries are the result of overuse rather than trauma. These injuries tend to occur at the foot/ankle/ lower leg, low back, and hip.

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?

Dancers are exposed to a wide range of risk factors for injury. The most common issues that cause dance injuries include:

- Type of dance and 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?

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.

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

#### Parental Oversight

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 counterproductive 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.

#### **Proper Instruction**

The first line-of-defense to prevent injuries may be dance instructors. 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 Care and Screening

The medical professional plays a significant role in not only treating and rehabilitating the injuries dancers incur, but also in preventing them. Dancers respond well to medical providers who respect both the aesthetics and intensity of dance. Physical therapists, athletic trainers, and other allied health professionals can initiate and facilitate screening sessions for dancers to help identify potential problems and prevent future injuries. They should be considered a natural part of a dancer's career and sources of insight into staying healthy. A dancer should return after an injury only when clearance is granted by a health care professional.

#### **EXPERT CONSULTANTS**

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

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

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

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