



## Common dance injuries

### Artists and athletes

Some people may not think that dancers are athletes, but dancers know better. In dance, artistic statements are presented through great displays of athletic skill. Dancing requires flexibility, strength and endurance. The training required to dance well is no less physically strenuous or mentally challenging than the training required for any competitive sport.

And, like any athlete, a dancer is at risk for a range of injuries. In 2009, some 160,000 people were treated for dance-related injuries. As you'd expect, the majority of dance-related problems affect the feet and ankles, but dancers can also sustain lower back, hip and knee injuries.

Repetitive practice of movements and routines may cause participants to get sprains, strains, stress fractures and tendon injuries. Dancers are particularly susceptible to these overuse conditions because repetitive practice is central to dance training. Without proper rest and treatment, overuse injuries may grow worse over time.



## Dancer Safety

### Common accidents, serious injuries

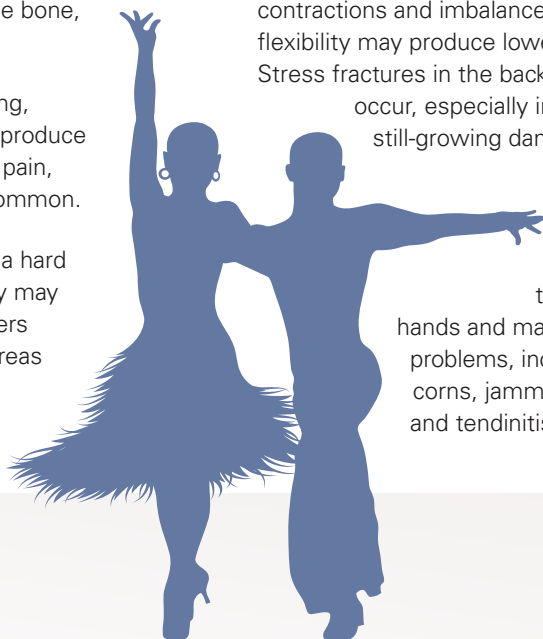
**Stress fractures** The foot hitting the floor repeatedly may cause a dancer to sustain a small crack in the bone, called a stress fracture.

**Knee pain** Turning, twisting, jumping and landing may produce knee pain. Patellofemoral pain, sprains, and strains are common.

**Shin splints** Jumping on a hard floor or landing improperly may lead to shin splints. Dancers experience pain in front areas of their lower legs.

**Lower back pain** Repetitive extension or flexion mixed with sudden muscle contractions and imbalanced strength and flexibility may produce lower back pain. Stress fractures in the back may also occur, especially in younger, still-growing dancers.

**Foot problems** The dancer's feet are akin to a pianist's hands and may see a range of problems, including bunions, corns, jammed toes and tendinitis.

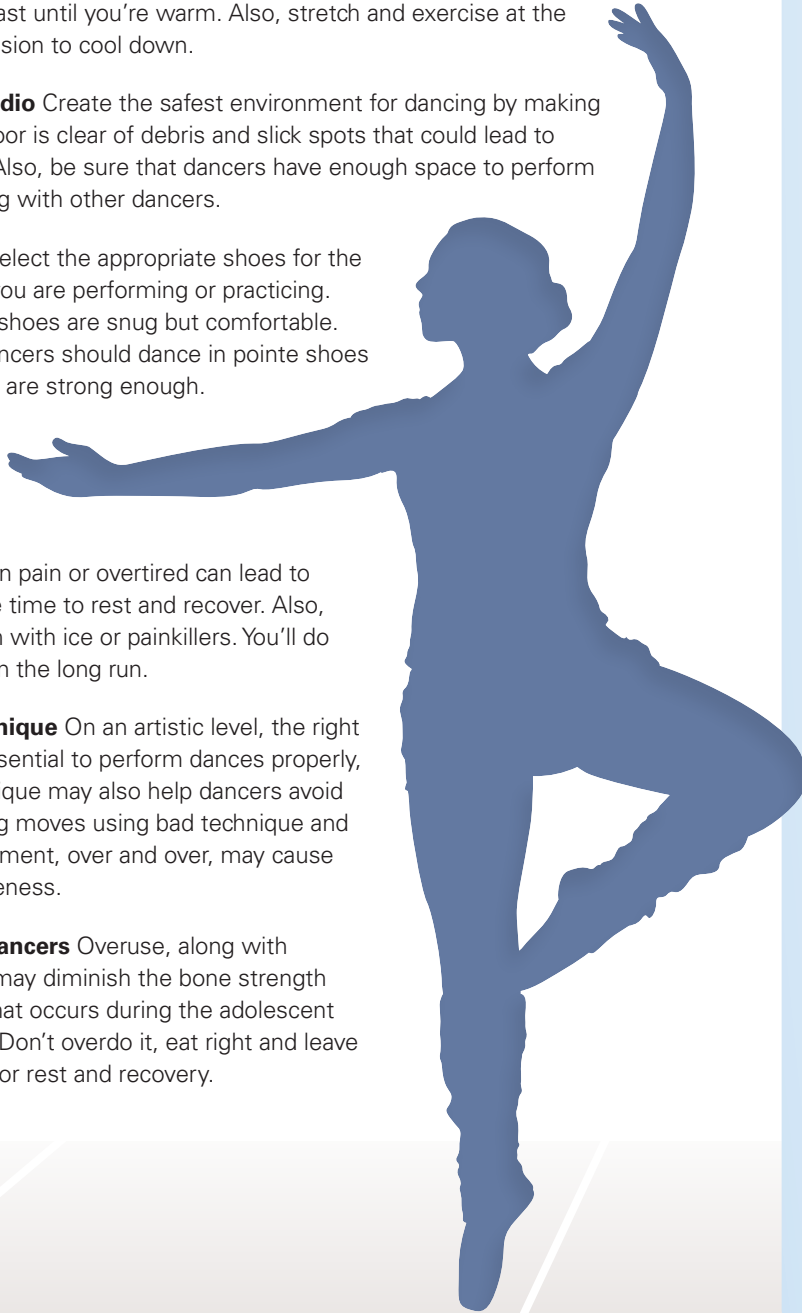


# How can you prevent dance injuries?

## So you think you can dance safely?

### You can. Here are some tips:

- **Warm up and cool down** Before dancing, warm up with stretches and light aerobic exercises. If it's cool in the dance studio, wear a sweater and leggings—at least until you're warm. Also, stretch and exercise at the end of your session to cool down.
- **Safe in the studio** Create the safest environment for dancing by making sure that the floor is clear of debris and slick spots that could lead to slips and falls. Also, be sure that dancers have enough space to perform without colliding with other dancers.
- **On your feet** Select the appropriate shoes for the type of dance you are performing or practicing. Make sure the shoes are snug but comfortable. Young ballet dancers should dance in pointe shoes only when they are strong enough.
- **Sit one out**  
If you're tired or hurt, stop dancing.  
Dancing while in pain or overtired can lead to injuries, so take time to rest and recover. Also, don't mask pain with ice or painkillers. You'll do more damage in the long run.
- **The right technique** On an artistic level, the right technique is essential to perform dances properly, but good technique may also help dancers avoid injury. Practicing moves using bad technique and poor body alignment, over and over, may cause strains and soreness.
- **For growing dancers** Overuse, along with poor nutrition, may diminish the bone strength development that occurs during the adolescent growth period. Don't overdo it, eat right and leave plenty of time for rest and recovery.



## The Right Steps

Here are steps that parents and instructors can follow to help prevent dance injuries.

- **Tell students to speak up when they are injured or need a break.** Let them know that their health comes first.
  - **Create an encouraging environment, one that recognizes effort and rewards progress but does not demand perfection.** Putting too much pressure on a young dancer may lead to overtraining injuries, along with emotional stress.
  - Pay close attention to the maturity, physical development and skill levels of the dancers. **Don't move a dancer to the next level if he or she isn't ready.**
  - Both male and female dancers may become overly concerned with weight and physical appearance, but these concerns are most often seen in female dancers. An obsession with being thin may lead young women to take extreme measures in diet and exercise. **Watch for symptoms of the "female athletic triad."**
    - 1. Abnormal eating**  
When athletes try crash diets or binge eating, they may not be getting the proper nutrition.
    - 2. Menstrual dysfunction**  
Hormonal changes that stop menstrual periods (amenorrhea) may be caused by poor nutrition, low calorie intake, excessive exercise, stress or low body fat levels.
    - 3. Low bone density for one's age**  
When female athletes don't have their periods, the body's bone-building process is disrupted, making bones more likely to break.
- If any of these three things is happening, talk to your doctor.**



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This piece is part of an informational series on sports injury prevention produced by the Orthopedic Center/Sports Medicine Division at Boston Children's Hospital. For materials on preventing injuries in other sports, call 617-355-3501 or visit [bostonchildrens.org/sportsmed](http://bostonchildrens.org/sportsmed).



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