



The American Orthopaedic  
Society for Sports Medicine

## SPORTS TIP

# Ankle Sprains

EXPERT CONSULTANT: Andrew J. Cosgarea, MD

### What is an ankle sprain?

A sprain is a stretch injury of the ligaments that support the ankle. About 25,000 ankle sprains occur in the United States every day. The ligaments on the outside of the ankle are the most commonly injured when the foot is turned inward (inverted).

### What are the symptoms of an ankle sprain?

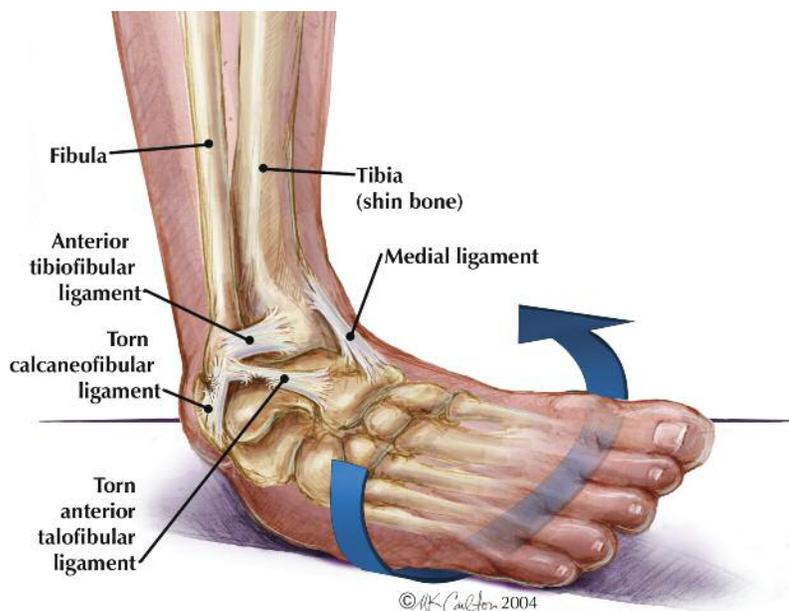
The ankle is tender and swollen on the outside, below, and just in front of the ankle bone. Typically, the bone is not as tender at the area above and in front of it. A sprain may be mild, causing only modest pain, or severe enough to prevent weightbearing.

### What should I do if I sprain my ankle?

Initial care is the same as for all other acute injuries: RICE (Rest, Ice, Compression, and Elevation). Use ice for 20 to 30 minutes each hour. Do not put the ice directly on the skin because it can cause frostbite. Wrap the ice in a wet towel or cloth to protect the skin. See a physician if you are unable to bear weight or if the ankle fails to improve within several days.

### How should I rehabilitate my ankle?

Rehabilitation can begin a few days after the injury, when the swelling starts to go down. There are three goals to aim for in rehabilitation.



- 1. Restore motion and flexibility.** Gently move the ankle up and down. After 5 to 7 days, start restoring motion to the hindfoot by turning the heel in and out.

You should also begin to restore flexibility to the calf muscles. One way to do this is to face a wall with one foot in front of the other and lean forward with your hands on the wall, bend the front leg while keeping the back leg straight and both heels on the floor. Lean forward until you feel a gentle stretch, and hold for 10 seconds. Switch legs and repeat.

- 2. Restore strength.** After 60 to 70 percent of the ankle's normal motion has returned, you can begin strengthening exercises using a rubber tube for resistance. Fix one end

of the tube to an immovable object like a table leg, and loop the other end around the forefoot. Sit with your knees bent and heels on the floor. Pull your foot inward against the tubing, moving your knee as little as possible. Return slowly to the starting position. Repeat with the other foot.

You can also sit on the floor with your knees bent and the tube looped around both feet. Slowly pull outward against the tube, moving your knee as little as possible. Return slowly to the starting position. Repeat with the other foot.

- 3. Restore balance.** As the ankle recovers and strength returns, balance is restored by standing on the injured leg with the other foot in the air and your hands out to the side.



## Ankle Sprains

After the first week you may want to warm the ankle before doing these exercises by soaking it in warm water. Warmed tissue is more flexible and less prone to injury. Use ice when finished with the exercises to minimize any irritation to the tissue caused by the exercise.

### When can I return to sports?

Return to sports only after you have met these goals:

1. You have full range of motion in all directions (up and down, side to side, and in and out).
2. You have near-normal strength in all muscles around the ankle.
3. You have good balance.
4. You have no pain or swelling with exercise or activity.

### Should I use a brace when I play sports?

Taping the ankle or using a brace for support can help prevent re-injury. There are many different types of braces: some made of neoprene, some made of elastic material, and some that have extra straps or ties for support. Select a brace that feels like it gives you the best support for the activity you want to do. Braces with straps or ties generally provide greater support. Never use a brace that is too tight.

Remember, a brace helps support strong muscles but should never be used as a substitute for a strengthening program. Continue to do strengthening exercises as you return to sports.