



Ankle Sprains Care and Treatment

GETTING YOU BACK FROM INJURY FASTER

Ankle Sprains

by Jeff Katzoff DPT, ATC, CSCS

Did you know that the ankle is one of the most common parts of the body to be sprained? Landing incorrectly on your foot can cause the ankle to roll. The incorrect landing can stretch or tear ligaments within the ankle. Once you have already had an ankle sprain, you may be more likely to sprain your ankle again. Your doctor diagnoses an ankle sprain based on symptoms, clinical examination, and x-rays. X-rays may be ordered by your doctor to confirm the diagnosis or to exclude other problems.

Symptoms

The symptoms vary depending on the severity of the ligament damages, but usually include:

- Pain and swelling at the ankle
- Inability to bear weight
- Bruising that may extend into the lower foot and leg

Treatment Options

Treatment options for ankle sprains include anti-inflammatory medication (as directed by the doctor), applying ice to the ankle, modification of activities, bracing, and physical therapy. Although

there is a higher risk of future ankle sprains, there are rarely any complications and symptoms generally resolve over time.

Icing

Ice packs or ice massage can be applied to the ankle immediately after the injury for 15 minutes. This can be repeated every 30-45 minutes, several times a day.

Ice massage is performed by filling several paper cups with water and placing them in a freezer. When frozen, tear off the rim of the cup to create an ice cone. The ice is then directly applied to the sore area until the area becomes numb.

Activity Modification

Symptoms may be relieved by avoiding activities that cause the pain. It is always good to consider rest following an ankle sprain. Rest allows the muscles and ligaments involved to heal and avoids further damage.

Figure 1. Lateral Ankle Muscles

Below is a diagram of the lateral ankle muscles that may be involved in an inversion ankle sprain. It can be suggested that any of these muscles can be stretched during an injury.

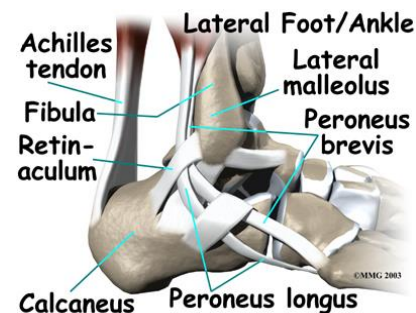


Figure 2. Medial ankle muscles

Below is a diagram of the medial ankle muscles that may be involved in an eversion ankle sprain.



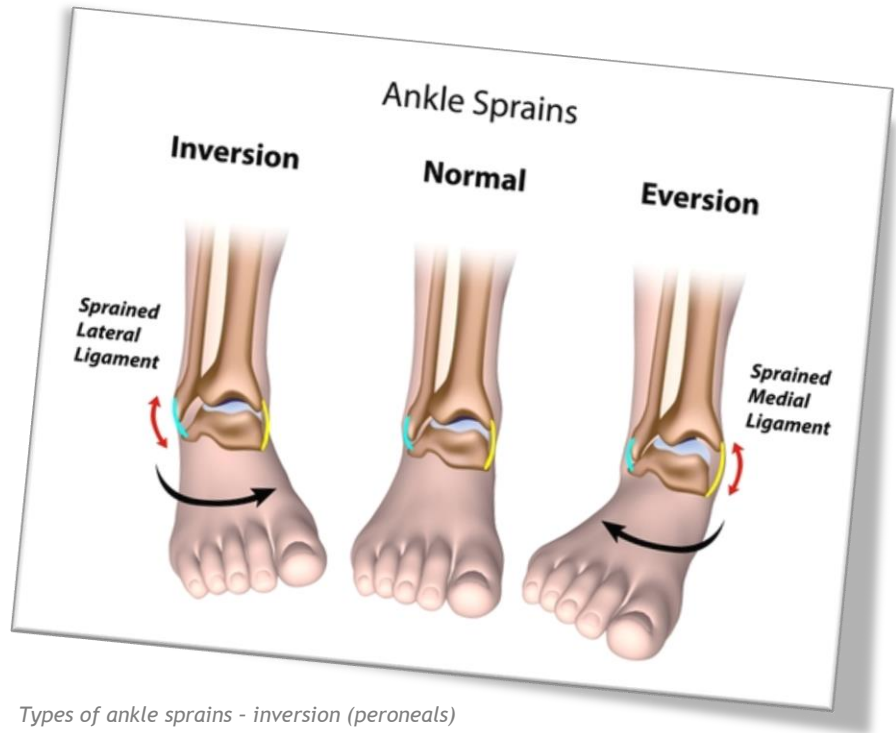
After Injury

Rest: Stay off your ankle as much as possible. Crutches may be used.

Ice: Ice the ankle for 15 minutes at a time. Rest and remove the ice pack for 30-45 minutes; repeat. Continue icing for three days. Ice will help to reduce swelling and cause some pain relief.

Compression: Another way to reduce the swelling and prevent further injuries is to keep the joint stable by wrapping it with an elastic ace bandage or having it splinted. This can be done by the Primary Care Physician, Emergency Room, or Walk-in Clinic.

Elevation: Keep your ankle raised above your heart when you sit or lie down.



Types of ankle sprains - inversion (peroneals) and eversion (posterior tibialis)

Physical Therapy

What we do

A comprehensive rehabilitation program is a critical part in the treatment of ankle sprains. With the guidance of an experienced physical therapist or athletic trainer, stretching and strengthening of the ankle joint and calf muscles will quicken the recovery time and decrease the risk of re-injury. To maintain cardiorespiratory fitness during recovery, walking or jogging in a pool, or cycling is recommended as this decreases weight on the ankle. The most important focus in returning an individual to their activity is normalizing their gait. It must be understood that if someone is in pain, it affects their ability to walk without a limp. We have found that treating the muscles around the ankle, in most cases, reduces a person's discomfort. It can be thought that if one rolls their ankle, either inversion or eversion, the muscles on the medial or lateral aspect become tightened.

Trigger Point Dry Needling

Using trigger point dry needling is a way to reduce tension across these strained muscles; therefore, we have found that a treatment to include Dry Needling within 24 hours after the initial injury has been able to reduce an individual's

pain and help to normalize gait, so as to reduce pain and lost time from activity.

Balance

Loss of sensation (called proprioception) and postural control (balance) should be the next critical component of any rehabilitation program. Balance training using 'wobble boards' is an excellent rehabilitation technique that helps strengthen and stabilize the ankle, reducing the risk of re-injury. Returning to activities usually varies from a few days to two months, depending on the severity of injury.

Manual Therapy

Following ankle sprain, it is important to regain full range of motion as soon as possible to allow return to activity. In order to assist with improved motion, physical therapists may utilize various techniques aimed at the moving the bones of the ankle (talus and calcaneus). This decreases stress on the affected ligaments and helps achieve a normal gait pattern.

