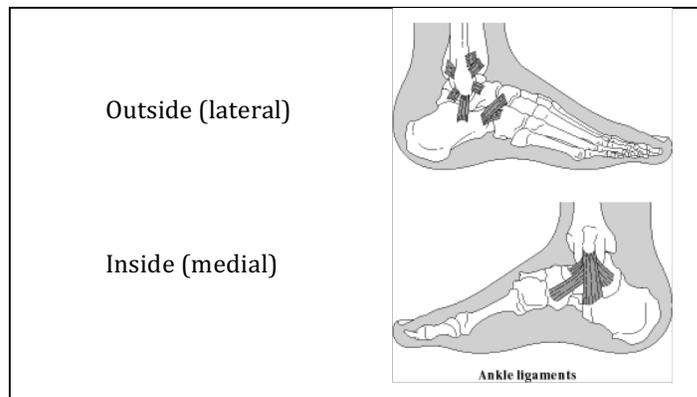


## Ankle Sprain

A sprain is an injury to the ligaments at or near a joint. Ligaments are strong bands of tissue that connect one bone to another and so help to hold joints together. In a sprain, the ligaments may have been overstretched, twisted or torn.



## Symptoms

Symptoms of a sprain include: a sensation of the ankle "giving way" at the time of injury, pain at or near the injury site, swelling, bruising, stiffness.

Sprains are classified into three grades, based on how severe the injury is:

**Grade 1** - the ligaments have been stretched but are still intact. There will be pain and a small degree of swelling but no difficulty moving the ankle.

**Grade 2** - a more severe injury, involving a partial tear of a ligament. Pain will be moderate to severe, the ankle will be swollen and difficult to move and there will be some bruising. Weight bearing will be painful.

**Grade 3** - a complete tear through a ligament. There will be severe pain, swelling, loss of joint motion and inability to walk. The ankle is often unstable and bruising is more extensive.

Even a grade 3 injury can be treated effectively if addressed properly

## Consequences of Ankle Sprain

The consequences of an ankle sprain can be serious, both in the short and longer term. Pain due to bone, cartilage and soft tissue injury, and recurrent sprains due to muscle weakness and tissue damage can all occur. This is why **early attention** to the injury is important.

## Initial Management

*Do you need an x-ray?* Often not, but if you truly cannot weight bear, or have bony tenderness, an x-ray to look for a fracture is indicated.

After a sprain, your ankle may be swollen and painful for some time. Here are some simple suggestions that may help you to recover.

**Rest:** In the first 24 -48 hours after an ankle sprain, you may wish to rest the ankle. If you do so, try to elevate it (for example place your leg on a stool or chair) to try to keep the swelling down. **After 24 - 48 hours** it is important to try to start to try to walk on the ankle, progressively building up the time that you are on your feet. This will prevent wasting of the muscles and other important tissue.

**Ice:** Ice, or a bag of frozen peas, placed in a moist tea towel applied to the ankle for 10-15 minutes every 2 hours, may help to reduce the pain and swelling. Gently rubbing the ice pack over the painful area may also help. Don't use ice if you have a circulatory problem. Heat is **not** useful in the initial injury; nor is massage.

**Painkillers** such as ibuprofen may also reduce the pain and swelling.

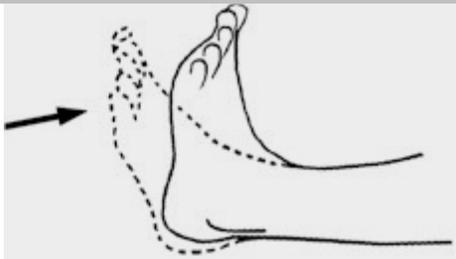
## Stretching and Exercises

Begin some simple exercises as early as possible, as these are very important to prevent stiffness and weakness. Do not stretch too far in the first 48 hours, but gentle motion is generally good.

### Range of Motion Exercises

Help you regain normal ankle motion.

**Technique** Sit with your knee straight and hold the foot position as long as possible. Do as frequently as possible for the first 3-10 days.



#### Pullback

- Flex your foot back toward your body.

## Flexibility (Stretching) Exercises

Loosen tight leg muscles. Tightness makes it hard to use stairs, walk, run and jump.

**Instructions** Hold each exercise 20seconds at a gentle stretch. Do not bounce!

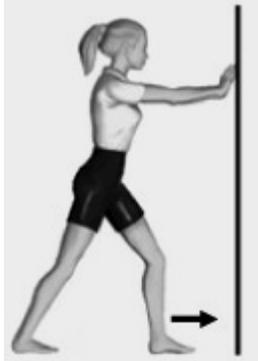
**Frequency:** 6-10 repetitions/exercise, 5-7 days per week



### Calf Stretch

**Basic:** Sit with your knee straight and towel looped around the ball of your foot.

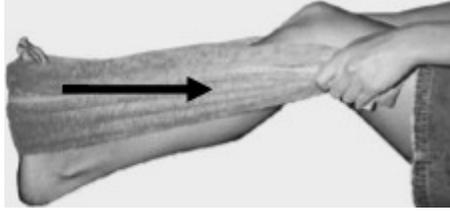
- Slowly pull back until you feel your upper calf stretch.



### Calf Stretch

**Advanced:** Once you can stand, try stretching with your hands on a wall.

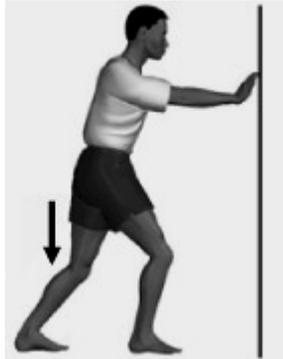
- Place the injured foot behind the other with your toes pointing forward.
- Keep your heels down and back leg straight.
- Slowly bend your front knee until you feel the calf stretch in the back leg.



### Heel Stretch

**Basic:** Sit with your knee slightly bent. Loop a towel around the ball of your foot.

- Slowly pull back until you feel a stretch in the lower calf and heel.



### Heel Stretch

**Advanced:** Once you can stand, try placing your injured foot behind the other with your toes pointing forward.

- Keeping your heels down, slowly bend your back knee until you feel a heel stretch in the back leg.

## Strengthening Exercises

Strong leg muscles help the ligaments hold the ankle together.

**Frequency:** Three sets of 20 repetitions, 5-7 days per week



### Front of Shin

#### Basic - Push Out

- With your foot flat on the floor, push it outward against a wall, file cabinet or bookcase. Hold for three seconds.



### Front of Shin

#### Advanced - Band

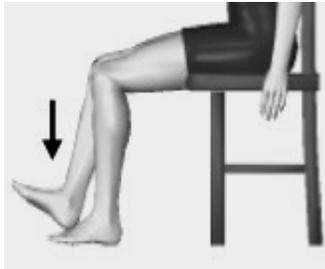
- Tie the band to a desk or dresser.
- Sit with your foot and knee in line and loop the band over the outside of your foot.
- Push your foot out against the band.



## Inner Shin

### Basic - Push In

- With your foot flat on the floor, push it inward against your other foot. Hold for three seconds.



## Front of Shin

### Basic - Push Up

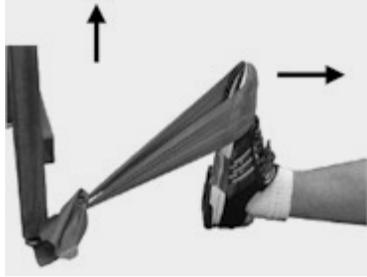
- Place the heel of your other foot on top of the injured one.
- Push down with the top heel while trying to push up with the injured foot. Hold for three seconds.



## Inner Shin

### Advanced - Band

- Tie the band to a desk or dresser.
- Sit with your foot and knee in line, and loop the band over the inside of your foot.
- Push your foot in against the band.



## Front of Shin

### Advanced - Band

- Tie the band to a desk or dresser.
- Sit with your leg straight and loop the band over the top of your foot.
- Slowly pull your foot back against the band.

**Stand.** Push up on your toes. Repeat 5-10 times.

## Ongoing Symptoms?

If you have persisting pain, swelling or instability of your ankle in spite of the advice above, you should seek advice from a doctor. You may need further investigations such as an x-ray, ultrasound or MRI scan. You may need other approaches to treatment.