

# FOOT SPRAIN

## What is a foot sprain?

A foot sprain is an injury that causes a stretch or tear in one or more ligaments in the foot. Ligaments are strong bands of tissue that connect bones to bones.

## How does it occur?

A foot sprain occurs by twisting or bending the foot. This can happen if you stumble on an uneven surface, land awkwardly from a jump, or from kicking an object that doesn't move easily.

## What are the symptoms?

Pain, swelling, and tenderness in the foot. You may have difficulty walking.

## How is it diagnosed?

Your healthcare provider will review your symptoms, ask how you injured your foot, and examine you. Your provider may want to get an X-ray of your foot. The X-ray will be normal if you have a sprain.

## How is it treated?

Treatment may include the following:

- Apply ice packs to your foot for 20 to 30 minutes every 3 to 4 hours for the first 2 to 3 days or until the pain goes away. Thereafter, ice your foot at least once a day until the other symptoms are gone.
- Elevate your foot by placing a pillow underneath it. Try to keep your foot above the level of your heart.
- Wrap an elastic bandage around your foot to keep the swelling from getting worse.
- Use crutches until you can walk without pain.
- Take anti-inflammatory medicine or other pain medicine prescribed by your provider (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval).
- Do foot exercises to improve your foot strength and range of motion. The exercises will help you return to your normal activity or sports.

## When can I return to my sport or activity?

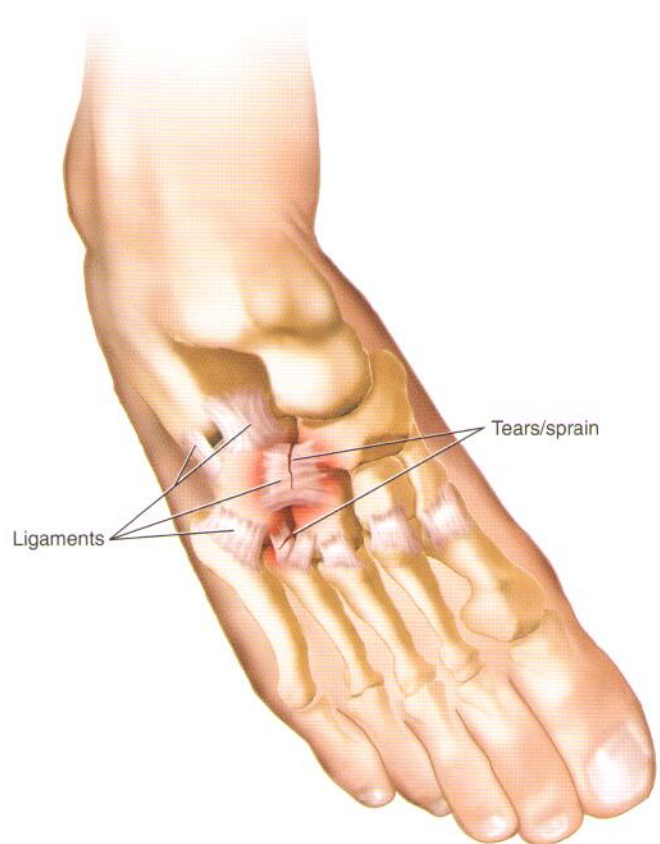
The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your foot recovers, not by how many days or weeks it has been

since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when, starting from the top of the list and progressing to the end, each of the following is true:

- You have full range of motion in the injured foot compared to the uninjured foot.
- You have full strength of the injured foot compared to the uninjured foot.
- You can jog straight ahead without pain or limping.
- You can spring straight ahead without pain or limping.
- You can do 45° cuts, first at half-speed, then at full-speed.
- You can do 20-yard figures-of-eight, first at half-speed, then at full-speed.
- You can do 90° cuts, first at half-speed, then at full-speed.

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- You can do 10-yard figures-of-eight first at half-speed, then at full-speed.
- You can jump on both legs without pain and you can jump on the injured leg without pain.

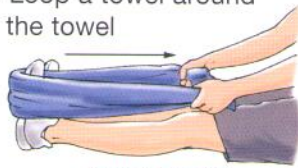
## How can I prevent a foot sprain?

Unfortunately, most foot sprains occur during accidents that are not preventable. However, it is important to wear proper fitting footwear and to avoid running or playing on uneven surfaces.

# FOOT SPRAIN REHABILITATION EXERCISES

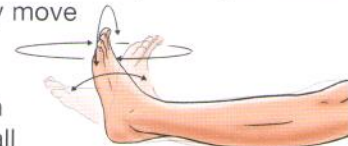
As soon as you can tolerate pressure on the ball of your foot, begin stretching your foot using the towel stretch. When this stretch is too easy, try the standing calf stretch and soleus stretch.

**1. TOWEL STRETCH:** Sit on a hard surface with one leg stretched out in front of you. Loop a towel around the ball of your foot and pull the towel toward your body keeping your knee straight. Hold this position for 15 to 30 seconds then relax. Repeat 3 times.



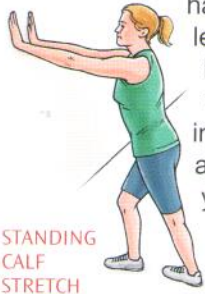
TOWEL STRETCH

**4. ANKLE RANGE OF MOTION:** Sitting or lying down with your legs straight and your knee toward the ceiling, move your ankle up and down by pointing your toes toward your nose, then away from your body; in toward your other foot and out away from your other foot; and in circles. Only move your foot and ankle. Don't move your leg. Repeat 10 times in each direction. Push hard in all directions.



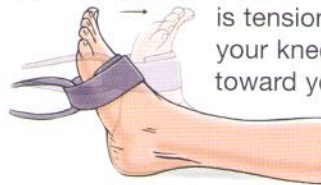
ANKLE RANGE OF MOTION

**2. STANDING CALF STRETCH:** Facing a wall, put your hands against the wall at about eye level. Keep one leg back with the heel on the floor, and the other leg forward. Turn your back foot slightly inward (as if you were pigeon-toed) as you slowly lean into the wall until you feel a stretch in the back of your calf. Hold for 15 to 30 seconds. Repeat 3 times. Do this exercise several times each day.



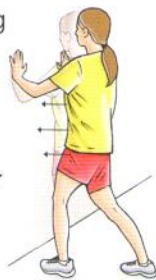
STANDING CALF STRETCH

**5. RESISTED ANKLE DORSIFLEXION:** Sit with one leg out straight and your foot facing a doorway. Tie a loop in one end of elastic tubing. Put your foot through the loop so that the tubing goes around the arch of your foot. Tie a knot in the other end of the tubing and shut the knot in the door. Move backward until there is tension in the tubing. Keeping your knee straight, pull your foot toward your body, stretching the tubing. Slowly return to the starting position. Do 3 sets of 10.



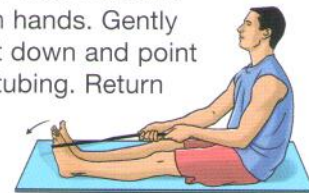
RESISTED ANKLE DORSIFLEXION

**3. STANDING SOLEUS STRETCH:** Stand facing a wall with your hands on a wall at about chest level. With both knees slightly bent and one foot back, gently lean into the wall until you feel a stretch in your lower calf. Angle the toes of your back foot slightly inward and keep your heel down on the floor. Hold this for 15 to 30 seconds. Return to the starting position. Repeat 3 times.



STANDING SOLEUS STRETCH

**6. RESISTED ANKLE PLANTAR FLEXION:** Sit with your leg outstretched and loop the middle section of the tubing around the ball of your foot. Hold the ends of the tubing in both hands. Gently press the ball of your foot down and point your toes, stretching the tubing. Return to the starting position. Do 3 sets of 10.

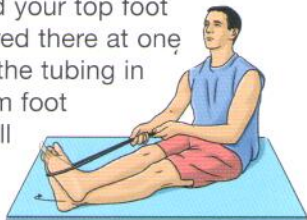


RESISTED ANKLE PLANTAR FLEXION

You can do the next 5 exercises when your foot swelling has stopped increasing.

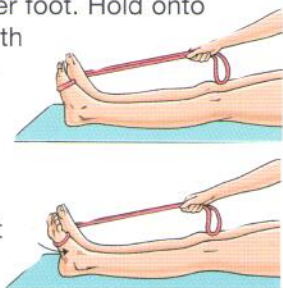


**7. RESISTED ANKLE INVERSION:** Sit with your legs out straight and cross one leg over your other ankle. Wrap elastic tubing around the ball of your bottom foot and then loop it around your top foot so that the tubing is anchored there at one end. Hold the other end of the tubing in your hand. Turn your bottom foot inward and upward. This will stretch the tubing. Return to the starting position. Do 3 sets of 10



RESISTED ANKLE INVERSION

**8. RESISTED ANKLE EVERSION:** Sit with both legs stretched out in front of you, with your feet about a shoulder's width apart. Tie a loop in one end of elastic tubing. Put one foot through the loop so that the tubing goes around the arch of that foot and wraps around the outside of the other foot. Hold onto the other end of the tubing with your hand to provide tension. Turn the foot with the tubing up and out. Make sure you keep your other foot still so that it will allow the tubing to stretch as you move your foot with the tubing. Return to the starting position. Do 3 sets of 10.



RESISTED ANKLE EVERSION

You may do the rest of the exercises when you can stand on your injured foot without pain.



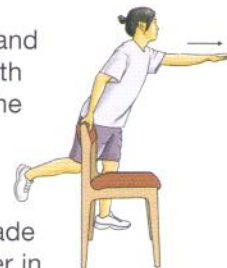
**9. HEEL RAISE:** Balance yourself while standing behind a chair or counter. Raise your body up onto your toes and hold for 5 seconds. Then slowly lower yourself down. Hold onto the chair or counter if you need to. When this exercise becomes less painful, try lowering on one leg only. Repeat 10 times. Do 3 sets of 10.

HEEL RAISE

**10. BALANCE AND REACH EXERCISES**

Stand upright next to a chair. This will provide you with balance if needed. Stand on the foot farthest from the chair. Try to raise the arch of your foot while keeping your toes on the floor.

A. Keep your foot in this position and reach forward in front of you with your hand farthest away from the chair, allowing your knee to bend. Repeat this 10 times while maintaining the arch height. This exercise can be made more difficult by reaching farther in front of you. Do 2 sets.



B. Stand in the same position as above. While maintaining your arch height, reach the hand farthest away from the chair across your body toward the chair. The farther you reach, the more challenging the exercise. Do 2 sets of 10.



BALANCE AND REACH EXERCISES

**11. SINGLE LEG BALANCE:** Stand without any support and attempt to balance on one leg. Begin with your eyes open and then try to perform the exercise with your eyes closed. Hold the single-leg position for 30 seconds. Repeat 3 times. When you have mastered this, try doing this exercise standing on a pillow.



SINGLE LEG BALANCE