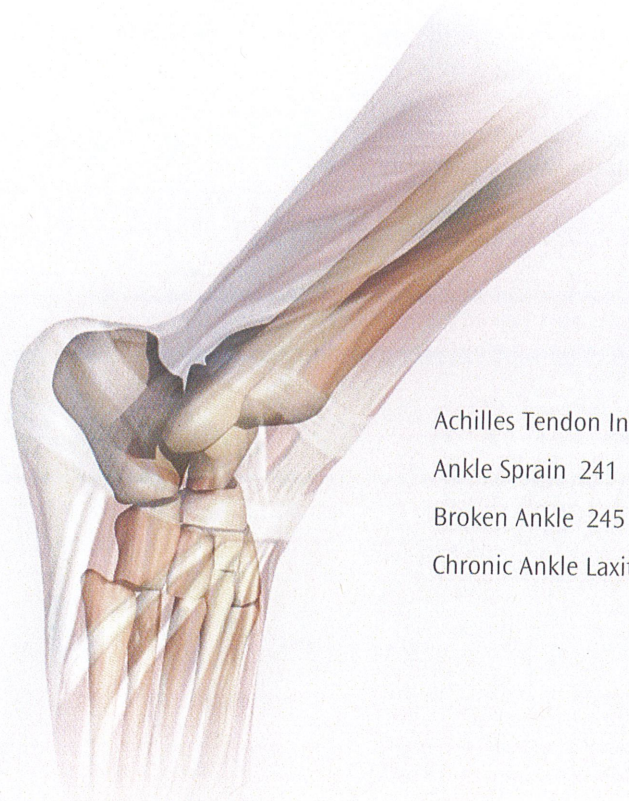


The Ankle



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ACHILLES TENDON INJURY

What is an Achilles tendon injury?

The Achilles tendon is a band of tissue that connects the heel bone to the calf muscle of the leg. Injury to the tendon may cause it to become inflamed or torn.

Achilles tendinopathy is an injury to your Achilles tendon from overuse. The term tendinopathy includes tendonitis and tendinosis. Achilles tendonitis is the term used when the tendon is inflamed. Tendinosis refers to tiny tears in the tendon. They both cause pain at the back of your leg by the heel.

How does it occur?

Achilles tendinopathy can be caused by:

- overuse of the Achilles tendon
- tight calf muscles
- tight Achilles tendons
- lots of uphill running
- increasing the amount or intensity of sports training, sometimes along with switching to racing flats, which are racing shoes with less heel lift
- over-pronation, a problem where your feet roll inward and flatten out more than normal when you walk or run
- wearing high heels at work and then switching to lower-heeled shoes for exercise

An Achilles tendon may tear during sudden activity. For example the tendon might tear when you jump or start sprinting.

What are the symptoms?

Achilles tendinopathy causes pain and may cause swelling over the Achilles tendon. The tendon is tender and may be swollen. You will have pain when you rise up on your toes and pain when you stretch the tendon. The range of motion of your ankle may be limited.

When the tendon tears or ruptures, you may feel a pop. If there is a complete tear, you will be unable to lift your heel off the ground or point your toes.

How is it diagnosed?

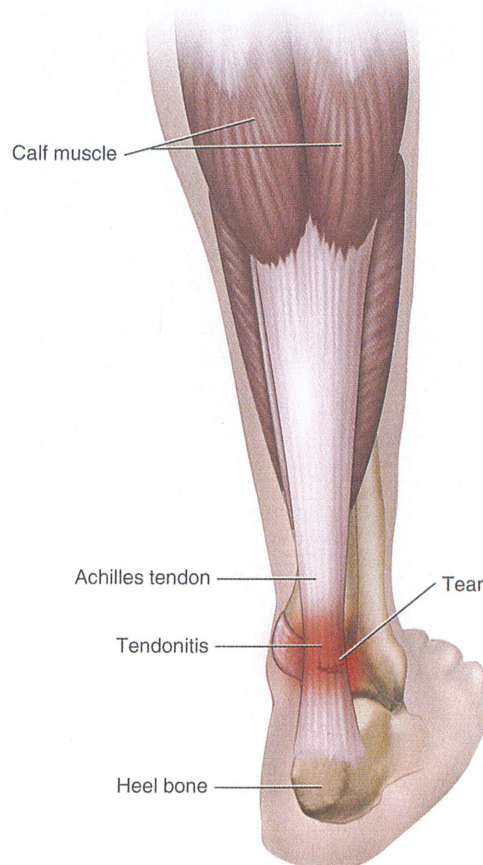
Your healthcare provider will examine your leg, looking for tenderness and swelling. Your provider will watch your feet when you walk or run to see if you over-pronate.

How is it treated?

- Put ice packs on the Achilles tendon for 20 to 30 minutes every 3 to 4 hours for the first 2 or 3 days or until the pain goes away.

- Raise your lower leg on a pillow when you are lying down.
- Take anti-inflammatory medicine as prescribed by your healthcare 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)
- If your healthcare provider prescribes a heel lift insert for your shoe, wear it at least until your tendon heals and possibly longer. The lift prevents extra stretching of your Achilles tendon.
- While you are recovering from your injury, change your sport or activity to one that does not make your condition worse. For example, you may need to swim instead of run.
- Do any exercises your healthcare provider gives you to stretch and strengthen your Achilles tendon.
- If you over-pronate, your healthcare provider may recommend shoe inserts, called orthotics, to keep your foot stable. You can buy orthotics at a pharmacy or athletic shoe store or they can be custom-made.

ACHILLES TENDON INJURY



- In some severe cases of Achilles tendinopathy, your foot may be put in a cast for several weeks.
- A tear of the tendon may require surgery. If you don't have surgery, your foot may be put in a cast for 6 to 10 weeks.

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 activity is determined by how soon your Achilles tendon area 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 leg compared to the uninjured leg.
- You have full strength of the injured leg compared to the uninjured leg.

- You can jog straight ahead without pain or limping.
- You can sprint straight ahead without pain or limping.
- You can do 45-degree 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-degree cuts, first at half-speed, then at full-speed.
- 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 Achilles tendinopathy?

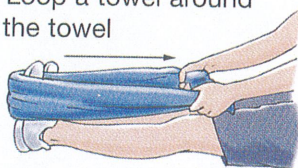
The best way to prevent Achilles tendon injury is to stretch your calf muscles and Achilles tendons before exercise. If you have tight Achilles tendons or calf muscles, stretch them twice a day whether or not you are doing any sports activities that day.

If you have a tendency to get Achilles tendinopathy, avoid running uphill a lot.

ACHILLES TENDINOPATHY REHABILITATION EXERCISES

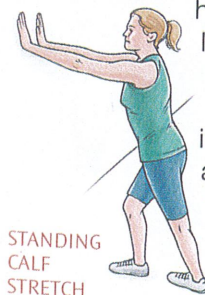
You can do the towel stretch right away. When the towel stretch is too easy, try the standing calf stretch, soleus stretch, and leg lift. When you no longer have sharp pain in your calf or tendon, you can do the step-up, heel raises, and static and dynamic balance exercises.

- 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.



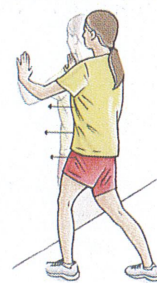
TOWEL STRETCH

- 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

- 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

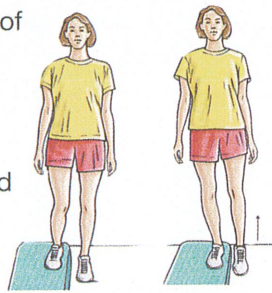
- 4. SIDE-LYING LEG LIFT:** Lying on your side, tighten the front thigh muscles on your top leg and lift that leg 8 to 10 inches away from the other leg. Keep the leg straight. Do 3 sets of 10.



SIDE-LYING LEG LIFT

ANKLE

5. STEP-UP: Stand with the foot of one leg on a support (like a block of wood) 3 to 5 inches high. Keep your other foot flat on the floor. Shift your weight onto the leg on the support and straighten the knee as the other leg comes off the floor. Lower your leg back to the floor slowly. Do 3 sets of 10.



STEP-UP



6. 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

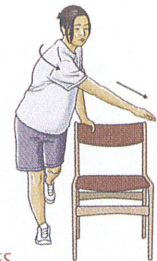
7. BALANCE AND REACH EXERCISES

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

ANKLE SPRAIN

What is an ankle sprain?

An ankle sprain is an injury that causes a stretch or tear of one or more ligaments in the ankle joint. Ligaments are strong bands of tissue that connect bones at the joint.

Sprains may be graded I, II, or III depending on their severity:

- grade I sprain: pain with minimal damage to the ligaments
- grade II sprain: more ligament damage and mild looseness of the joint
- grade III sprain: complete tearing of the ligament and the joint is very loose or unstable

Sometimes sprains are just classified as mild or severe, depending on the amount of ligament damage.

There are many ligaments in the ankle. The most common type of sprain involves the ligaments on the outside part of the ankle (lateral ankle sprain). Ligaments on the inside of the ankle may also be injured (medial ankle sprain) as well as ligaments that are high and in the middle of the ankle (high ankle sprains).

How does it occur?

A sprain is caused by twisting your ankle. Your foot usually turns in or under but may turn to the outside.

What are the symptoms?

Symptoms of a sprained ankle include:

- mild aching to sudden pain
- swelling
- discoloration
- inability to move the ankle properly
- pain in the ankle even when you are not putting any weight on it

How is it diagnosed?

To diagnose a sprained ankle, the healthcare provider will review how the injury occurred and consider your symptoms. He or she will examine your ankle carefully. X-rays may be taken of your ankle.

How it is treated?

Treatment may include the following:

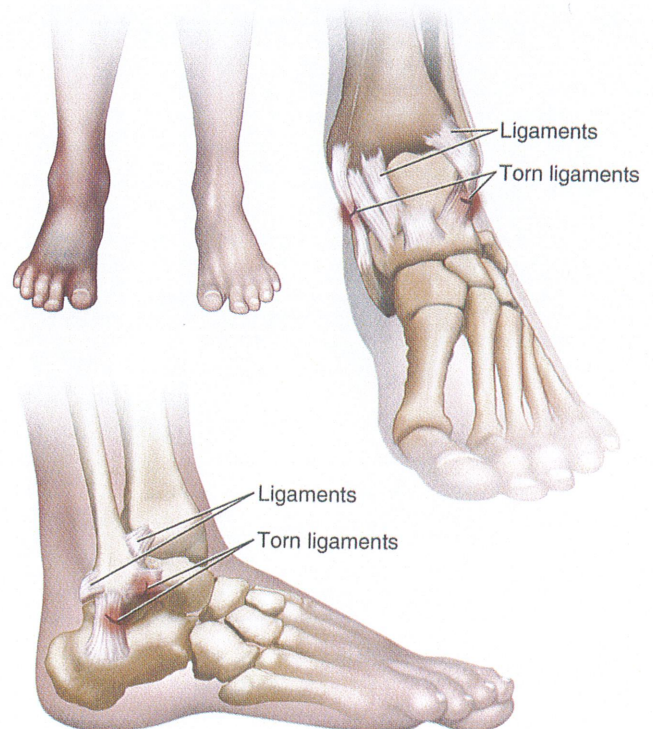
- Applying ice packs to your ankle for 20 to 30 minutes every 3 to 4 hours for the first 2 to 3 days or until the pain goes away. Thereafter, ice your ankle

at least once a day until the other symptoms are gone.

- Elevating your ankle by placing a pillow underneath your foot. Try to keep your ankle above the level of your heart.
- Wrapping an elastic bandage around your ankle to keep the swelling from getting worse.
- Wearing a lace-up brace or ankle stirrup (an Aircast or Gel cast).
- Using crutches until you can walk without pain.
- Taking anti-inflammatory medication, such as ibuprofen, or other pain medication 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)
- Doing ankle exercises to improve your ankle strength and range of motion. The exercises will help you return to your normal activity or sports.

Rarely, severe ankle sprains with complete tearing of the ligaments need surgery. After surgery your ankle will be in a cast for 4 to 8 weeks.

ANKLE SPRAIN



How long will the effects last?

The length of recovery depends on many factors such as your age, health, and if you have had a previous ankle injury. Recovery time also depends on the severity of the sprain. A mild ankle sprain may recover within a few weeks, whereas a severe ankle sprain may take 6 weeks or longer to recover. Recovery also depends on which ligaments were torn. A lateral sprain (outside ligaments) takes less time to recover than a medial sprain (inside ligaments) or a high ankle sprain (high, middle ligaments).

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 ankle 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 ankle compared to the uninjured ankle.

- You have full strength of the injured ankle compared to the uninjured ankle.
- You can jog straight ahead without pain or limping.
- You can sprint straight ahead without pain or limping.
- You can do 45-degree 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-degree cuts, first at half-speed, then at full-speed.
- 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 help prevent an ankle sprain?

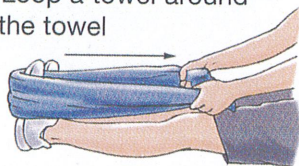
To help prevent an ankle sprain, follow these guidelines:

- Wear proper, well-fitting shoes when you exercise.
- Stretch gently and adequately before and after athletic or recreational activities.
- Avoid sharp turns and quick changes in direction and movement.
- Consider taping the ankle or wearing a brace for strenuous sports, especially if you have a previous injury.

ANKLE SPRAIN REHABILITATION EXERCISES

As soon as you can tolerate pressure on the ball of your foot, begin stretching your ankle 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.

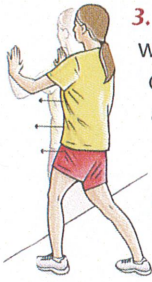


TOWEL STRETCH

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

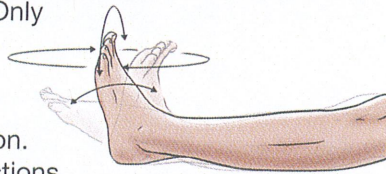


STANDING SOLEUS STRETCH

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.

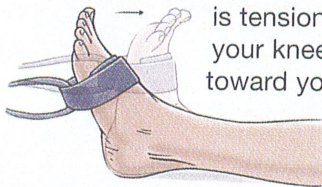
You can do the next 5 exercises when your ankle swelling has stopped increasing.

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.



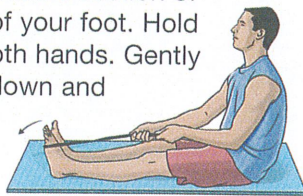
ANKLE RANGE OF MOTION

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.



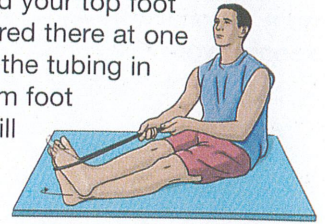
RESISTED ANKLE DORSIFLEXION

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.



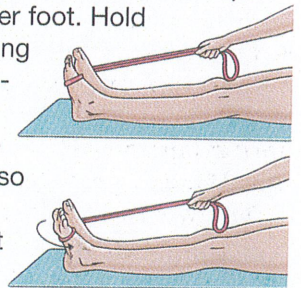
RESISTED ANKLE PLANTAR FLEXION

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

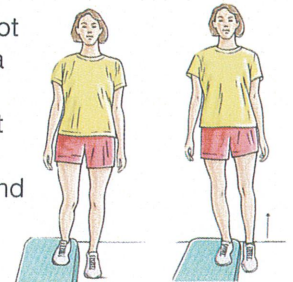
You may do the rest of the exercises when you can stand on your injured ankle without pain.



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. STEP-UP: Stand with the foot of one leg on a support (like a block of wood) 3 to 5 inches high. Keep your other foot flat on the floor. Shift your weight onto the leg on the support and straighten the knee as the other leg comes off the floor. Lower your leg back to the floor slowly. Do 3 sets of 10.

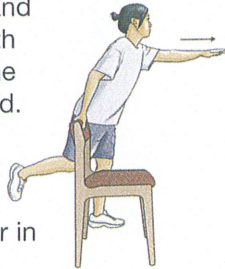


STEP-UP

11. 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.

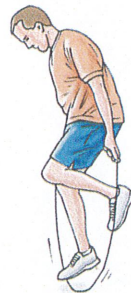
- A. Keep your foot in this position and reach forward in front of you with your hand farthest away from the chair, allowing your knee to bend. Repeat this 10 times while maintaining the arch height. This exercise can be made more difficult by reaching farther in front of you. Do 2 sets.



- 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



- 12. JUMP ROPE:** Jump rope landing, on both legs, for 5 minutes, then on only one leg at a time for 5 minutes.

JUMP ROPE

BROKEN ANKLE

What is a broken ankle?

A broken ankle is a break in one or more of the bones that make up the ankle joint. These bones are the tibia, fibula, and talus.

How does it occur?

Ankle breaks, or fractures, can occur in many ways: for example, by falls, contact sports and exercise injuries, and force from a blow.

There are many types of fractures, which determine the severity of the injury and its treatment:

- Nondisplaced fracture: the broken pieces of bone remain properly aligned
- Displaced fracture: the broken pieces of bone are not properly aligned
- Comminuted fracture: there are more than two pieces of bone at the fracture.
- Compound (open) fracture: one end of the broken bone has broken through the skin.
- Closed fracture: neither end of the broken bone has pierced the skin.
- Impacted fracture: the ends of the broken bone are driven into each other.
- Avulsion fracture: the muscle or ligament has pulled a portion of the bone away from where it was originally attached.
- Pathological fracture: the bone has been weakened or destroyed by disease (such as osteoporosis) so that the bone breaks easily.

What are the symptoms?

Symptoms of an ankle fracture include:

- a snapping or popping sound at the time of the injury
- loss of function (hurts to move the ankle)
- pain
- tenderness
- swelling
- deformity (sometimes)
- discolored skin, or bruising, which appears hours to days after the injury

Rarely, you may have an open wound with an ankle fracture.

How is it diagnosed?

To diagnose an ankle fracture, the healthcare provider will review your symptoms, ask about how the injury

occurred, and examine you. He or she will also order X-rays. Several different views of the bone may be taken to pinpoint the fracture.

How is it treated?

The immediate emergency treatment for a fractured ankle is immobilization (keeping it from moving), elevation, compression (wrapping it with an elastic or Ace bandage), and the application of ice packs.

The healthcare provider may need to set your ankle bone back into its proper place and put you in a cast for 6 to 8 weeks. If the fracture is not too severe, you may be able to walk in the cast after a short period.

If the ankle bone cannot be aligned perfectly before it is ready for a cast, surgery will be necessary.

In the first 2 to 3 weeks after the injury, be sure to keep your ankle elevated on pillows and place ice packs on top of the cast for 20 to 30 minutes every 3 to 4 hours to help reduce swelling.

You should also do the following:

- Make sure the cast does not get wet. Cover the cast with plastic when you bathe.
- Use crutches or a cane, as directed by your healthcare provider. He or she will tell you how much weight you can put on your leg, if any.
- Don't scratch the skin around the cast or poke things down the cast. This could cause an infection.

How can I take care of myself?

To help take care of yourself, follow the full course of treatment your healthcare provider prescribes. Also, follow these guidelines:

- Get plenty of rest.
- Elevate the leg when possible to reduce any swelling.

Call your healthcare provider immediately if:

You have swelling above or below the fracture.

- Your toenails or feet turn grey or blue and stay grey or blue even when your leg is elevated.
- You have numbness or complete loss of feeling in the skin below the fracture.
- You have lingering pain at the site of the fracture under the cast, or increasing pain not helped by elevation or pain medicine.
- You have burning pain under the cast.

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 ankle recovers, not by how many days or weeks it has been since your injury occurred. Some people return within a few days after the cast is removed, some in several weeks. Your ankle will be healing while you are doing your rehabilitation exercises. These exercises will help improve your ankle strength and range of motion.

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 leg compared to the uninjured leg.
- You have full strength of the injured leg compared to the uninjured leg.
- You can jog straight ahead without pain or limping.

- You can sprint straight ahead without pain or limping.
- You can do 45-degree 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-degree cuts, first at half-speed, then at full-speed.
- 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.

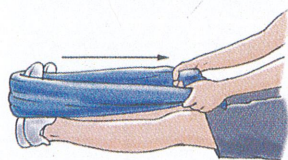
How can I help prevent an ankle fracture?

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.

BROKEN ANKLE REHABILITATION EXERCISES

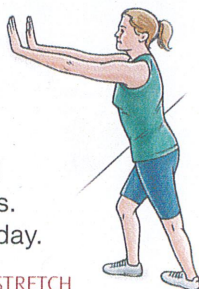
Do these exercises as soon as your healthcare provider says you can.

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

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

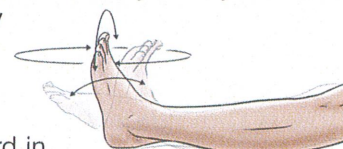
3. STANDING SOLEUS STRETCH: Stand facing a wall with your hands on a wall at about chest level. With both knees slightly bent and one foot back, gently lean into the wall until you feel a stretch in your lower calf. Angle the toes of your back foot slightly inward and keep your heel down on the floor.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



STANDING SOLEUS STRETCH

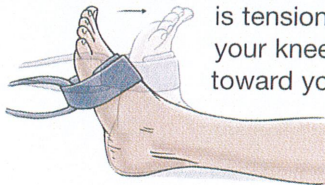
You can do the next 5 exercises when your ankle swelling has stopped increasing.

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.



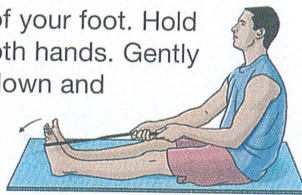
ANKLE RANGE OF MOTION

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.



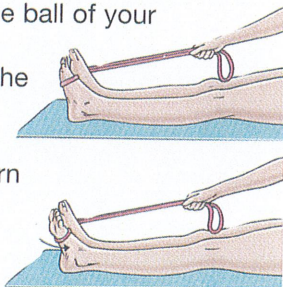
RESISTED ANKLE DORSIFLEXION

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.



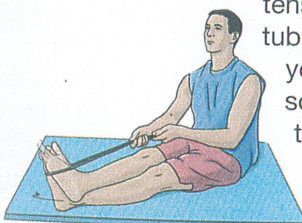
RESISTED ANKLE PLANTAR FLEXION

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

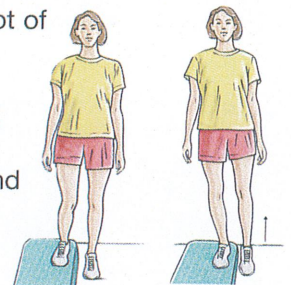
You may do the rest of the exercises when you can stand on your injured ankle without pain.



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. STEP-UP: Stand with the foot of one leg on a support (like a block of wood) 3 to 5 inches high. Keep your other foot flat on the floor. Shift your weight onto the leg on the support and straighten the knee as the other leg comes off the floor. Lower your leg back to the floor slowly. Do 3 sets of 10.

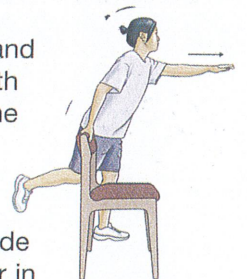


STEP-UP

11. 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

CHRONIC ANKLE LAXITY

What is chronic ankle laxity?

Chronic ankle laxity is looseness and instability of the ankle joint.

How does it occur?

Chronic ankle laxity occurs because of previous ankle injuries. Ankles that have become loose or unstable usually have had several severe sprains where ligaments have been torn. The more sprains that you have, the looser your ankle will become. Because of the stretched or torn ligaments, the ankle joint doesn't have its natural support and may twist or sprain more easily.

What are the symptoms?

Symptoms can include:

- looseness of the ankle
- feeling your ankle is giving way
- recurrent swelling
- pain

How is it diagnosed?

Your provider will ask you about injuries you have had and examine your ankle. The injured ankle may be looser, more swollen, or more painful than your other ankle.

Your provider may take an X-ray of your ankle. You may have a stress X-ray, which means that your ankle joint is stressed while the X-ray is taken. Your provider will look to see if the stress causes the bones to move apart. You may have an MRI or CT scan of your ankle to see it in closer detail.

How is it treated?

At first, chronic ankle laxity is treated with proper rehabilitation exercises. It is very important after an injury to do exercises that work on range of motion, strength, balance, and coordination.

Treatment may also include:

- an ankle brace
- anti-inflammatory medicine (such as ibuprofen) (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)
- ice and elevation

If your ankle remains loose or unstable, surgery can be done to reconstruct the damaged ligaments. This will make the ankle more stable and stop the feeling that your ankle is giving way.

Without treatment, you may keep injuring and twisting your loose ankle. These repeated twists may eventually cause wear and tear to your ankle joint.

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 ankle recovers, not by how many days or weeks it has been since your last ankle 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 ankle compared to the uninjured ankle.
- You have full strength of the injured ankle compared to the uninjured ankle.
- You can jog straight ahead without pain or limping.
- You can spring straight ahead without pain or limping.
- You can do 45-degree 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-degree cuts, first at half-speed, then at full-speed.
- 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.

You may need to wear a brace or tape your ankle while playing sports.

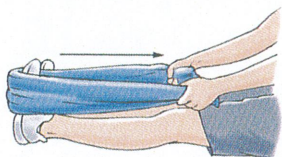
How is chronic ankle laxity prevented?

The most important way to prevent chronic ankle problems is by doing proper ankle exercises after an injury. For some people it is important to continue the rehabilitation exercises for a long time after their injury.

CHRONIC ANKLE LAXITY REHABILITATION EXERCISES

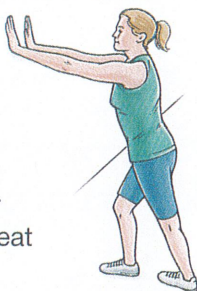
Do these exercises as soon as your healthcare provider says you can.

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.



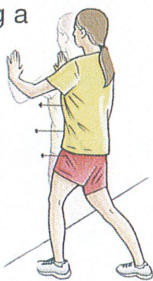
TOWEL STRETCH

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

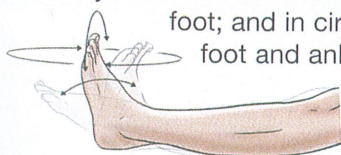
3. STANDING SOLEUS STRETCH: Stand facing a wall with your hands on a wall at about chest level. With both knees slightly bent and one foot back, gently lean into the wall until you feel a stretch in your lower calf. Angle the toes of your back foot slightly inward and keep your heel down on the floor.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



STANDING SOLEUS STRETCH

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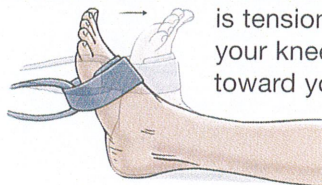
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ANKLE RANGE OF MOTION

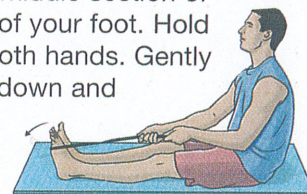
Repeat 10 times in each direction. Push hard in all directions.

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.



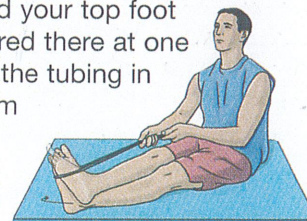
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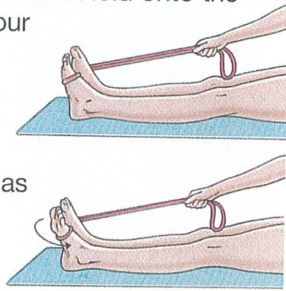
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RESISTED ANKLE INVERSION

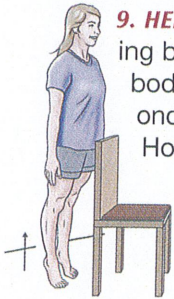
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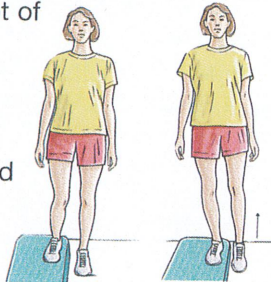
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9. HEEL RAISE: Balance yourself while standing behind a chair or counter. Raise your body up onto your toes and hold for 5 seconds. Then slowly lower yourself down. Hold onto the chair or counter if you need to. When this exercise becomes less painful,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



HEEL RAISE

10. STEP-UP: Stand with the foot of one leg on a support (like a block of wood) 3 to 5 inches high. Keep your other foot flat on the floor. Shift your weight onto the leg on the support and straighten the knee as the other leg comes off the floor. Lower your leg back to the floor slowly. Do 3 sets of 10.

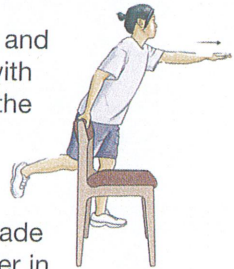


STEP-UP

11. BALANCE AND REACH EXERCISES

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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. JUMP ROPE: Jump rope landing, on both legs, for 5 minutes, then on only one leg at a time for 5 minutes.



JUMP ROPE