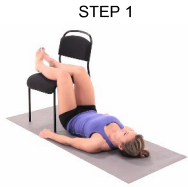


### Clinician Notes

This is a standard rehab protocol that you can do at home. Do not hesitate to contact [crwathletictraining.ecu.edu](http://crwathletictraining.ecu.edu) for a thorough evaluation and a rehab protocol specific to you



### Ankle Alphabet in Elevation

REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7

#### Setup

Begin lying on your back with your legs resting on a chair.

#### Movement

Slowly trace each letter of the alphabet with the tip of one foot.

#### Tip

Try to keep the rest of your leg relaxed while you move your ankle.



### Isometric Ankle Inversion at Wall

REPS: 10 | SETS: 3 | HOLD: 5" | DAILY: 1 | WEEKLY: 7

#### Setup

Begin sitting upright with one leg bent and the other straight, holding a ball between the inside of your foot and a wall.

#### Movement

Gently press the inside of your foot into the ball, hold briefly, then relax and repeat.

#### Tip

Make sure to keep your back straight during the exercise.



### Isometric Ankle Eversion at Wall

REPS: 10 | SETS: 3 | HOLD: 5" | DAILY: 1 | WEEKLY: 7

#### Setup

Begin sitting upright with one leg bent and the other straight, holding a ball between the outside of your foot and a wall.

#### Movement

Gently press the outside of your foot into the ball, hold briefly, then relax and repeat.

#### Tip

Make sure to keep your back straight during the exercise.



### Long Sitting Ankle Eversion with Resistance

REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7

#### Setup

Begin sitting upright on the floor with a resistance band secured around one foot. The resistance band should be looped around the bottom of your other foot with the end held in your hand.

#### Movement

Move the foot with the resistance band away from the other foot by rotating your ankle outward, then slowly return to the starting position and repeat.

#### Tip

Make sure to avoid any hip movement.

STEP 1



STEP 2



### Long Sitting Ankle Inversion with Resistance

**REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7**

#### Setup

Begin sitting upright on the floor with your legs crossed and a resistance band secured around one foot. The resistance band should be looped around the bottom of your other foot with the end held in your hand.

#### Movement

Move the foot with the resistance band away from the other foot by rotating your ankle inward, then slowly return to the starting position and repeat.

#### Tip

Make sure to avoid any hip movement.

STEP 1



STEP 2



### Long Sitting Ankle Plantar Flexion with Resistance

**REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7**

#### Setup

Begin sitting upright on the floor with your legs straight and a resistance band secured around one foot. The band should be looped around the bottom of your foot with the end held in your hand.

#### Movement

Bend your foot away from your body, creating further tension in the band.

#### Tip

Make sure to keep your toes relaxed and maintain good sitting posture.

STEP 1



STEP 2



### Long Sitting Ankle PNF D1 Dorsiflexion with Resistance

**REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7**

#### Setup

Begin sitting on the ground with your leg straight in front of you resting on a towel roll, with a resistance band that is anchored in front of you, wrapped around your foot.

#### Movement

Slowly bend your foot backward toward the inside of your knee, pulling against the resistance band. Then point your toes away from your body toward the inside of your ankle and repeat.

#### Tip

Make sure to keep the movements slow and controlled and only move at your ankle joint.

STEP 1



STEP 2



### Long Sitting Ankle PNF D2 Dorsiflexion with Resistance

**REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7**

#### Setup

Begin sitting on the ground with your leg straight in front of you resting on a towel roll, with a resistance band that is anchored in front of you, wrapped around your foot.

#### Movement

Slowly bend your foot back toward the outside of your knee, pulling against the resistance band. Then point your toes away from your body and toward the inside of your ankle and repeat.

#### Tip

Make sure to keep the movements slow and controlled and only move at your ankle joint.

STEP 1



STEP 2



### Sidelying Ankle Inversion with Ankle Weight

**REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7**

#### Setup

Begin laying on your side on a table or bed with your bottom leg hanging off the edge and an ankle weight secured around your foot.

#### Movement

Rotate your ankle upward, then return to the starting position and repeat.

#### Tip

Make sure to keep the rest of your leg still as you rotate your ankle.

STEP 1



STEP 2



### Sidelying Ankle Eversion Strengthening with Ankle Weight

REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7

#### Setup

Begin laying on your side on a table or bed with your upper leg hanging off the edge and an ankle weight secured around your foot.

#### Movement

Rotate your ankle upward, then return to the starting position and repeat.

#### Tip

Make sure to keep the rest of your leg still as you rotate your ankle.

STEP 1



STEP 2



### Towel Scrunches

REPS: 3 | SETS: 1 | DAILY: 1 | WEEKLY: 7

#### Setup

Begin in a staggered standing position with your forward foot resting on a flat towel, and the knee slightly bent.

#### Movement

Keep your back knee straight. Use your toes to scrunch up the towel.

#### Tip

Make sure to keep the rest of your foot in contact with the ground.

STEP 1



STEP 2



### Long Sitting Calf Stretch with Strap

REPS: 3 | SETS: 1 | HOLD: 15 SEC | DAILY: 1 | WEEKLY: 7

#### Setup

Begin sitting on the floor with one foot stretched in front of you, your other knee bent, and a strap secured around your foot.

#### Movement

Slowly pull your foot towards you with the strap until you feel a stretch in your calf.

#### Tip

Make sure to keep your knee straight during the stretch.

STEP 1



STEP 2



STEP 3



### Heel Toe Raises with Counter Support

REPS: 10 | SETS: 3 | DAILY: 1 | WEEKLY: 7

#### Setup

Begin in a standing upright position with your hands resting on a counter in front of you.

#### Movement

Rise up onto your toes, hold briefly, then lower back down and lift the balls of your feet off the ground. Repeat.

#### Tip

Make sure to maintain an upright posture and use the counter to balance as needed.

STEP 1



STEP 2



### Single Leg Balance with Knee Flexion

REPS: 3 | SETS: 1 | HOLD: 30 SEC | DAILY: 1 | WEEKLY: 7

#### Setup

Begin standing upright holding onto a chair for support.

#### Movement

Lift one leg off the ground by bending your knee and holding it at a 90-degree angle. Maintain your balance in this position.

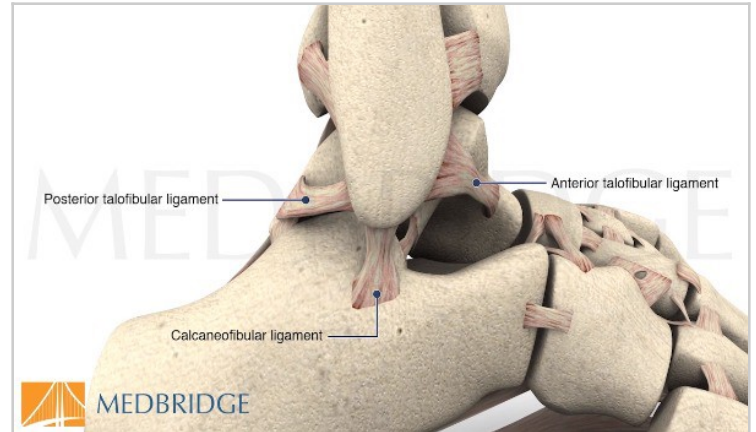
#### Tip

Make sure to engage your abdominals to help you balance. As you gain more control, try lifting your hands off the chair.

# Acute Ankle Sprain



**Side of Foot: Ankle Sprain Injury Mechanism**



**Side of Foot: Affected Ligaments**

Most ankle sprains are caused by rolling your foot inward. This is called a lateral ankle sprain, or an inversion sprain. It occurs when the ligaments on the outside of your ankle are stretched too far or torn.

The ligaments most often affected in a lateral ankle sprain are the posterior talofibular ligament, the calcaneofibular ligament, and the anterior talofibular ligament.

Ankle sprains may take from 6 weeks to several months to heal.

In early treatment, you may learn the R.I.C.E. principle:

**R** is for Rest. Avoid painful activities to give your ankle time to heal. Limit walking and standing while your ankle is painful and swollen.

**I** is for Ice. Apply ice for 20 minutes, up to once per hour. Place ice in a thin towel before placing it on your body.

**C** is for Compression. Your provider will show you how to apply a bandage or wrap to decrease the swelling and help the healing process.

**E** is for Elevation. Keep your ankle elevated above your heart as much as possible during the day to help reduce swelling and speed up your recovery.

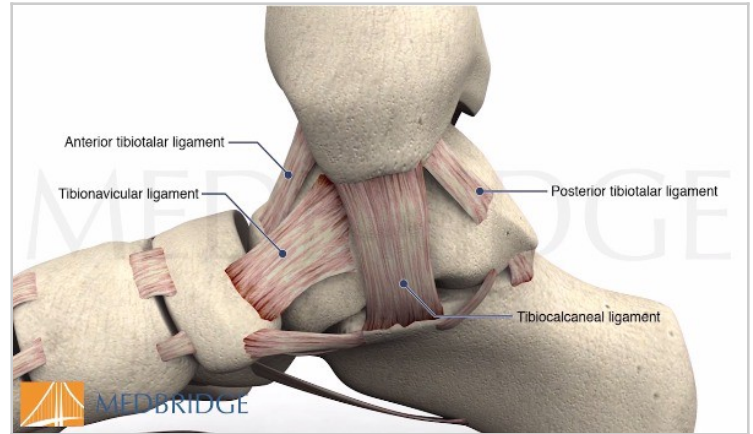
Early treatment, specific exercises, and bracing can speed up your recovery, decrease your pain, and help prevent reinjury.

Your provider may give you a walking aid or a brace to keep weight off your injured ankle and support it while it heals. You will be given a home program that includes stretching and strengthening exercises to help your ankle recover.

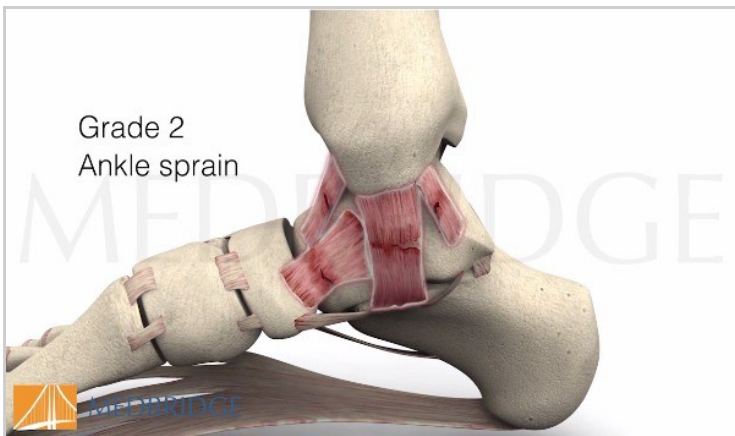
## Medial Ankle Sprain



**Right Foot: Medial Ankle Sprain**



**Inner Right Foot: Ligaments**



**Inner Right Foot: Sprained Ligaments**

A medial ankle sprain occurs when the inside of the ankle is twisted or stretched too far. There are many muscles that connect the leg, ankle, and foot, as well as strong, thick ligaments that connect the bones together. The ankle joint is formed by the shinbone (tibia), the outside leg bone (fibula), and the ankle bone (talus). The lower leg bones fit snugly around the talus. An ankle sprain can injure the joints, ligaments, muscles, nerves, and affect how your ankle works.

When a person rolls their ankle to the inside, the injury is called a medial ankle sprain. The ligaments affected in this injury may include the anterior tibiotalar, the tibionavicular, the tibiocalcaneal, and the posterior tibiotalar ligament. These four ligaments are also known as the deltoid ligament.

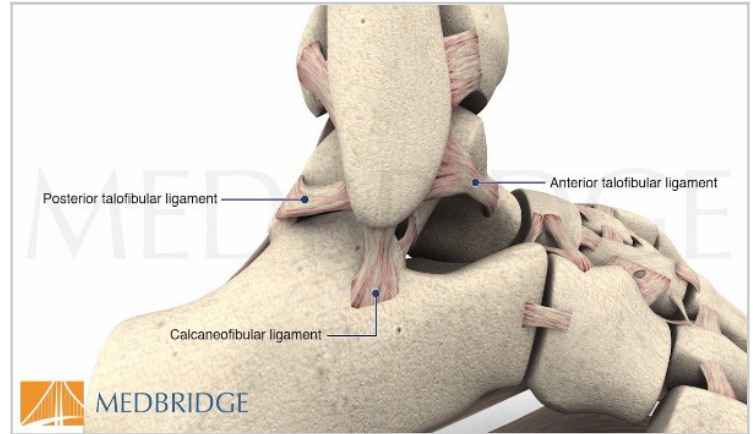
The severity of an ankle sprain can be described as grade 1, which involves slight stretching and injury to the ligament fibers, grade 2, when partial tearing of the ligament occurs, or grade 3, when the ligament is completely torn. Medial ankle sprains often occur from a quick change of direction, from contact sports, or from a fall or trauma that turns the ankle towards the inside.

Symptoms of a medial ankle sprain may vary, and often include pain, swelling, bruising, and difficulty in walking, standing, or running, depending on the extent of the injury. Because individuals who sprain an ankle are at risk for reinjury, therapy that includes strength and balance training is important.

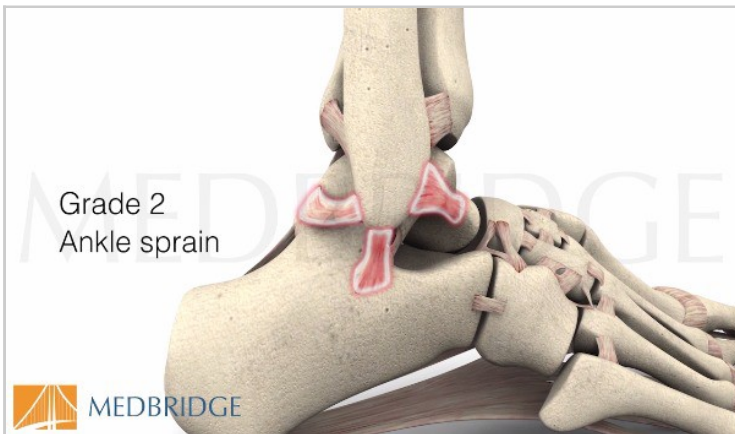
## Lateral Ankle Sprain



**Right Foot: Lateral Ankle Sprain**



**Outer Right Foot: Ligaments**



**Outer Right Foot: Sprained Ligaments**

A lateral ankle sprain occurs when the foot and ankle are stretched or twisted to the outside. The ankle joint is formed by the shinbone (tibia), smaller leg bone (fibula), and the ankle bone (talus). There are many muscles and ligaments that connect the leg, ankle, and foot. An ankle sprain can injure the joints, muscles, ligaments, and nerves, and affect ankle function.

If you roll your ankle to the outside, the injury is called a lateral ankle sprain, or an inversion sprain. The ligaments most affected in a lateral ankle sprain are the anterior talo-fibular ligament, the calcaneo-fibular ligament, and the posterior talo-fibular ligament.

The severity of an ankle sprain can be described as a grade 1, which involves slight stretching and injury to the ligament, grade 2, a partial tear of the ligament, or grade 3, when the ligament is

completely torn.

Symptoms of a lateral ankle sprain may include pain, swelling, and bruising. It is also common to have difficulty walking, standing, or running, depending on the injury.

Individuals who sprain an ankle are at risk for reinjury. Therapy that includes strengthening and balance training is important for preventing another ankle sprain.

## High Ankle Sprain



**Right Ankle: Ligaments**



**High Ankle Sprain: Sprained Ligaments**

A high ankle sprain occurs when the ligaments between the lower leg bones are injured during a twisting movement.

The ankle joint is formed by three lower leg bones: the shinbone (tibia), the smaller bone on the outside of the lower leg (fibula), and a foot bone (talus). The talus fits snugly between the tibia and fibula and sits on top of your heel bone. There are many muscles that connect the leg to the foot, as well as strong, thick ligaments that connect the bones tightly together. An ankle sprain can injure the joints, muscles, ligaments, nerves, and affect ankle function.

When a person turns the ankle, the ligaments that connect the fibula to the tibia may be injured. The ligaments injured include the distal anterior tibiofibular ligament, the distal posterior tibiofibular ligament, the transverse ligament, and the interosseous ligament.

Symptoms of a high ankle sprain may include pain located above the ankle, pain during walking, and outward rotation of the ankle. Because individuals who sprain an ankle are at risk for reinjury, therapy that includes strength and balance activities is important.