

## AAS Information & Exercise

# Acute Ankle Sprain

A sprained ankle is a very common injury and is caused by overstretching of a ligament. Ligaments are strong tissues around joints which attach bones together and give support to joints. The outlook for sprains is good and most people will be able to get back to normal activities within 6-8 weeks. A sprained ankle is diagnosed by what you tell the healthcare provider.

In the majority of cases you do not need an x-ray or scan to confirm what is wrong. However, If you heard a crack when you had your injury, your ankle looks to have changed shape or it is numb, discoloured or cold to touch you may have broken a bone and will need an Xray.





## Causes

- Having a slip, trip or fall - Going over on your ankle.
- Wearing unsuitable footwear; flip flops, high heels or sandals which don't support the feet
- Weakness in the muscles of your feet or legs
- Problems with the position of your foot
- Previous ankle injuries

## Symptoms

- Pain
- Swelling
- Weakness of the ankle
- Bruising of the foot, toes or calf muscle
- You may find it difficult putting weight through the leg
- You may be unable to move the ankle normally

## Management

Try to walk as normally as possible; wearing supportive lace up shoes/boots/trainers can help

You may need to limit activities that increase your symptoms in the first 24-48 hours

If you feel it helps you to move and walk more normally then you may try a support such as a tubular compression bandage. Only wear this during the day.

When sitting, keeping your foot elevated higher than the level of your hip; This can help to help reduce swelling.

The use of specific exercises should be started as soon as possible to help the ankle sprain recover. Exercises are also important to help prevent recurring sprains.

## Pain Management

### Pain Relief

Pain relief is not always required but can help you to get your ankle moving in the early stages.

To limit pain and swelling you may apply an ice pack. It must be wrapped in a damp towel so it isn't in direct contact with your skin and only in place over the injured area for 5-10 minutes. It can be re applied 3-4 times per day. Ice can cause burns so please check your skin regularly whilst it is on and discard immediately if your skin is starting to go red. Do not apply ice if your skin sensation is abnormal.

Paracetamol and ibuprofen are the most common over the counter pain killers that can be used to reduce the pain. You should not take ibuprofen for 48 hours after your injury as it may slow down healing. All medications have side effects and must be used carefully. Some medical conditions will prevent you from taking them so, you should always check with your Pharmacist or GP if you are unsure whether they are safe for you.

## Prognosis

Healing of ligaments normally takes 6 to 8 weeks although everyone recovers from injuries at different rates. Healing time is related to how severe the injury is and any other medical problems you might have.

As healing gets underway it's important that you begin a series of exercises to help you get back the full use of your ankle by improving flexibility, strength and balance. This will help to reduce the risk of further sprains.

**Exercise can prevent ankle injuries from happening again.**

## Further Information

<https://www.versusarthritis.org/media/21785/anklesprains-exercise-sheet.pdf>

<https://www.nhs.uk/conditions/sprains-and-strains/>

If you are struggling to take weight through your foot and pain and walking ability have not improved in 5-7 days, then you should seek further advice from a healthcare practitioner.

## Exercise

Start these exercises as soon as you can, pain during exercise should be manageable. Aim to stay within the green and amber zones.

If experiencing excessive pain try to adapt the exercise before giving them up, once they become easier you can slowly build it back up over time;

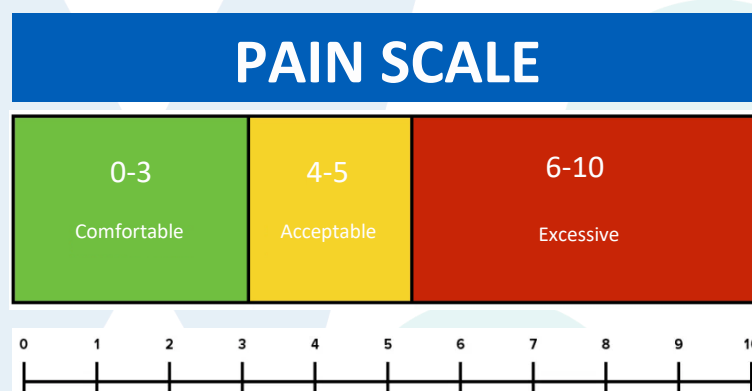
- Reduce the range of movement
- Reduce repetitions
- Reduce the resistance/weight being used
- Slower, less intensity and control the movement more
- Increase the rest between each set of exercises

Progress onto the next stage of exercise once they become easier and you are able to fully complete the exercises in the comfortable/acceptable zone of the pain scale.

- Pain after exercise should settle to your pre exercise levels within 30-60 minutes.
- Pain or stiffness the next morning should not last longer than 60 minutes.
- Use your pain relief, ice/heat or anything else you have found that eases your symptoms to help.

For an ankle sprain you would roughly aim to progress as follows;

- Stage 1; 1-2 weeks following sprain
- Stage 2; 2-6 weeks following sprain
- Stage 3; 6-12+ weeks following sprain



## Stage 1

### Active Dorsiflexion One Foot



Sit on the floor or bed with your legs out straight. Bring your toes and foot towards you and relax. Repeat the movement to help improve the mobility in your ankle joint. You can also hold the stretch.

Hold for 2 seconds | Repeat 10-15 times | Perform 3-4 times daily

### Active Plantar Flexion

Sit on the floor or bed (or lie down) with one leg bent, and one leg out straight. Bend your ankle towards the ground, this exercise will mobilise a stiff ankle joint.

Hold for 2 seconds | Repeat 10-15 times | Perform 3-4 times daily



### Alphabet Ankle

Lying bare foot, lift your foot off the floor. Use your toes and ankle to draw letter of the alphabet, Start with “a” and then progress right through the alphabet to “z”. Keep each letter and movement controlled and specific.

Repeat 1-2 times | Perform 3-4 times daily





### Toe Flexion

Bend your toes downwards. Hold and relax. This will help improve mobility of your toes.

Hold for 2 seconds | Repeat 10-15 times | Perform 3-4 times daily

### Toe Extension

Bend your toes upwards. This will help improve mobility to your toes.

Hold for 2 seconds | Repeat 10-15 times | Perform 3-4 times daily



### Ball Control

Sit upright on a chair. Place a ball underneath your foot. Practice moving the ball in different directions. Start forwards and backwards, then side to side. It's a good control exercise for the ankle, especially after injury.

1 minute | Perform 3-4 times daily



### Calf Stretch

Standing facing a wall, with your hands resting on the wall. You don't have to have them above your head. Move one leg forwards and gently bend your knee, this will be the passive leg and just there for support. The leg you will be stretching will remain straight with your heel on the ground. You should feel the stretch at the back of the calf muscle,

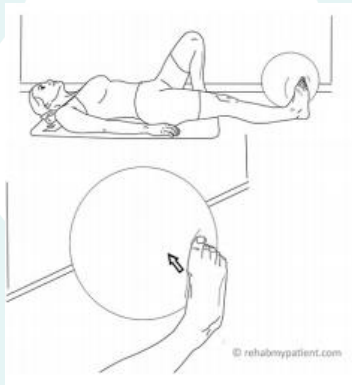
Hold for 20 seconds | Repeat 3 times | Perform 2-3 times daily



### Soleus Stretch

Stand facing a wall, place one leg in front of you and your hands flat against the wall. Keep both heels on the ground, and your front knee bent. Push your front knee forwards towards the wall to feel a stretch in the lower part of your leg.

Hold for 20 seconds | Repeat 3 times | Perform 2-3 times daily



### Resisted Inversion with Ball

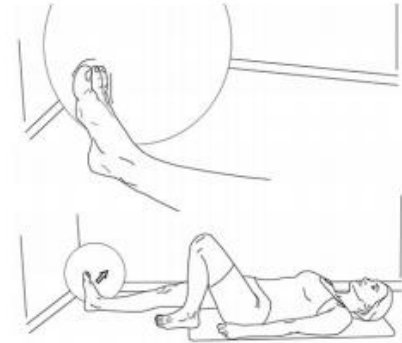
Place a goof ball or football against a wall. Lie down or sit down and push your foot inwards against the ball. This is a strengthening exercise for the ankle.

Hold for 5 seconds | Repeat 10 times | Perform 2-3 times daily

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## Calf Raise

Stand upright and hold onto a wall/table for balance if required. Slowly raise up onto your toes and control the movement back down. This exercise will strengthen the calf muscle.

Hold for 2-3 seconds | Repeat 10 times | Perform 2-3 times daily

## Calf Raise One Leg

Stand upright on one leg. Slowly raise up onto your toes and control the movement back down. Hold onto a wall or table for support.

Hold for 2-3 seconds | Repeat 10 times | Perform 2-3 times daily







### Knee Bent Calf Raise

Stand up with your knee bent and rise up onto your toes and hold. Slowly control the movement back down.

Hold for 2-3 seconds | Repeat 10 times | Perform 2-3 times daily

### Single Leg Balance

Stand on one leg and try to keep your balance. Be careful and hold on to a wall for support when you first start this exercise. A single leg balance exercise has many benefits, including strengthening the muscles and ligaments around the ankles and improving balance.

Hold for 30-60 seconds | Repeat 3 times | Perform 2-3 times daily



### Single Leg Balance with Towel

Roll up a towel, place it on the floor. Stand with your foot across the towel on one leg. Try to keep your balance. To progress try to close your eyes. Be careful and hold onto a wall for support when you first start.

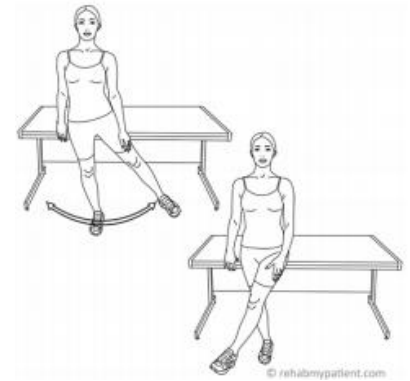
Hold for 30-60 seconds | Repeat 3 times | Perform 2-3 times daily



## Single Leg Swing

Stand on your injured leg. Swing your other leg from side to side. Hold onto support if required.

Repeat 10-20 times | Perform 2-3 times daily



## Stage 3



### Heel Drop with Knee Bent

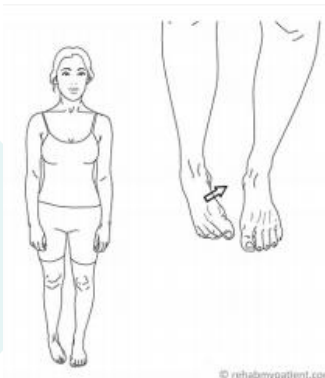
Stand with your toes on the edge of a step or box and knees bent slightly. Hold onto something stable for support if required. Drop your heels downwards. You should feel a stretch

Hold for 20 seconds | Repeat 3 times | Perform 2 times daily

### Heel Drop

Stand with your toes on the edge of a step or box. Hold onto something stable for support if required. Drop your heels downwards. You should feel a stretch just below the back of your knee in the calf muscle.

Hold for 2-3 seconds at the Top and Bottom | Repeat 3-4 times | Perform 2 times daily



### Active Inversion

In standing, move your foot inwards, lift your heel off the ground but keep your toes on the ground. This will stretch the outer aspect of the ankle.

Hold for 20 seconds | Repeat 3 times | Perform 2 times daily



### Heel Sit

Attempt to kneel on the floor or bed by sitting back on your heels very slowly. You may not be able to get your bottom to heels, just go as far as commutable. You should feel a stretch along your shins.

Hold for 20 seconds | Repeat 3 times | Perform 2 times daily



### Tip Toe Standing

In standing, raise your heels off the ground, onto your toes. Try to keep your balance. Be careful and use a wall/table for support if required.

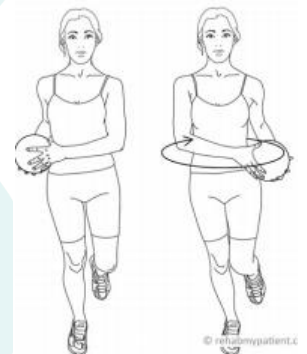
Hold for 30 seconds | Repeat 3 times | Perform 2 times daily

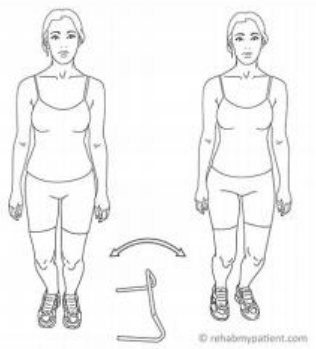


### Single Leg Stand with Ball Pass

Stand on one leg, try to keep your balance. Be careful and hold onto a wall for support when you first start this exercise. Once comfortable, start to pass a ball or small but light object around your back using both hands.

Hold for 30 seconds | Repeat 3 times | Perform 2 times daily





### Jump/hop- Lateral

Bend your knees and keep your feet shoulder width apart. Jump to one side, and then the other side.

Progress to hopping instead of jumping

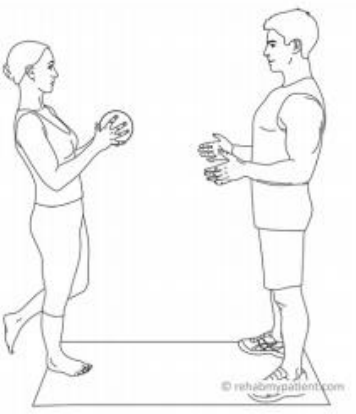
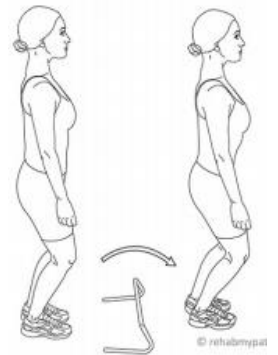
Repeat 5-10 times | Perform 2 times daily

### Jump/Hop – Forward/Backward

Bend your knees and keep your feet shoulder width apart. Jump in front of you, and then behind you, and repeat.

Progress to a hop rather than jump

Repeat 5-10 times | Perform 2 times daily



### Single Leg Stand Catching Ball

Stand on your injured leg, throw and catch a ball against the wall. If you have a partner, ask them to throw the ball to you. The added force from the ball puts you off balance, making this exercise challenging.

Repeat 2 minutes times | Perform 2 times daily