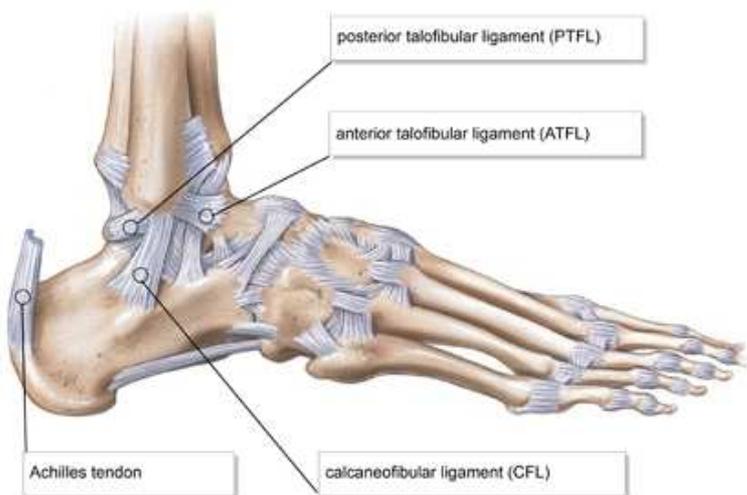


What is an ankle sprain?

An ankle sprain occurs when the ligaments, tendons and other soft tissues are overstretched beyond their normal length. This can cause strain to the soft tissues and / or bone injury (in the form of a bone bruise or fracture).

An ankle sprain occurs with rapid movement in any direction. Patients suffer overstretch injuries on one side and compression injuries on the opposite side. Most commonly, the ankle twists and the foot rolls inward, tearing the ligaments on the outside of the ankle¹.



Ligaments are strong fibrous bands which assist in the stability of the ankle. When overstretched or torn they result in pain, swelling, and bruising². It is likely that certain movements of your ankle joint will be limited and painful, and that you have difficulty and/or instability with weight bearing and trying to walk.

How do I manage an ankle sprain?

When soft tissue such as a ligament suffers an injury, bleeding occurs causing swelling and irritation of nearby tissues. A review of the research combined with clinical experience suggests that the key elements in the acute stages of an ankle sprain are:

- ✦ **Early diagnosis** by a physiotherapist or medical practitioner to decide whether an X-ray is required to rule out a fracture³.
- ✦ **Anti-inflammatory medication** has been shown to promote healing and reduce pain after an ankle sprain³. This medication is contra-indicated

for many people, so ask your pharmacist or doctor for guidance.

- ✦ **Mobilisation** to encourage movement of the foot and ankle within pain free ranges (3). Initially weight bearing may be painful and crutches or a cam boot may be needed to encourage a more normal walking pattern, and assist normal stresses on the healing tissue (3).

- ✦ **Protection** refers to immobilizing your foot to assist healing and using an elasticated compression bandage (3). Severe injuries may require use of an ankle support such as a camboot or aircast. This is to prevent further injury, help reduce swelling, and provide support and comfort.

- ✦ **Ice** wrapped in a damp towel, or alternatively put your foot and ankle in an ice bath, for 10-20 minutes every two to three waking hours to reduce pain (4).

BE WARNED ICE CAN BURN so check your skin regularly to ensure it is a healthy pink, and never leave the pack on for more than 20 minutes^{3,4}

- ✦ Elevating your ankle above the level of your heart helps to reduce swelling and thus discomfort (5).

Avoid the following **HARMful** factors in the first 48-72 hours after injury:

- ✦ **Heat** – wheat bags, heat packs and deep heat rubs cause increased circulation to the injured area which can increase the swelling
- ✦ **Alcohol** – dilates blood vessels which may increase the swelling. Alcohol also alters your balance increasing the risk of aggravation or re-injury
- ✦ **Rigorous activity** – places injured structures at risk of further injury by overloading them
- ✦ **Massage** that is too vigorous leads to increased circulation in the area and can therefore prolong the inflammatory period.



How will physiotherapy help me?

Current research suggests that early intervention and advice from a physiotherapist will be beneficial in the recovery of your injured ankle and will more likely lead to an early return to sport and/or work^{3,5}.

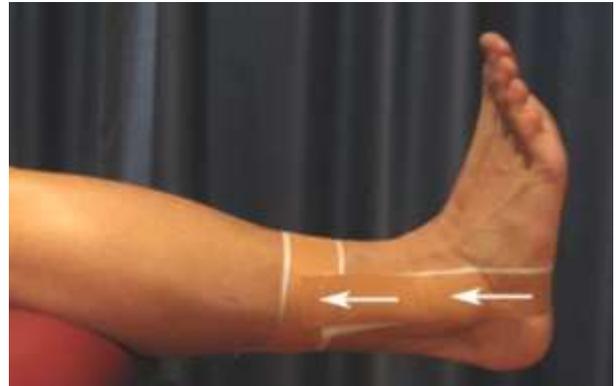
Your physiotherapist will physically examine your injured ankle and provide a diagnosis, as well as an idea of the grade and severity of the damage and thus some indication of how long your recovery will take. If required, they can refer you for further medical advice or can order an X-ray to rule out a more severe injury such as a fracture.

Early treatment aims to reduce pain and swelling, regain movement, and increase pain free weight bearing as soon as possible³. Depending on the severity of ligament damage to the ligaments, you may require a short period of time walking with crutches or require an ankle brace to provide external stabilization and support³.

As the pain and swelling settles, treatment involves physical mobilisation of the ankle joint and surrounding muscles to restore lost movement^{3,5}. A functional exercise program to promote movement, address any muscle weakness or tightness around the ankle and balance retraining should be undertaken^{3,5,6}. These exercises are necessary to challenge the ligaments and muscles and prepare for activities on unstable surfaces or uneven ground⁶.

Returning to work or sport

Your Ethos Health physiotherapist will be able to provide advice on the length of time your injury will take to fully recover, and guide your return to training and play. This depends on the severity of your injury, your rate of recovery, and your compliance with the program recommended. Taping or use of an ankle brace may facilitate your graded return to activity and is generally advised for the first 4-8 weeks back at sport to reduce the risk of recurring injury.



How can I prevent it happening again?

- ✳ Completing an exercise program prescribed by your physiotherapist to **fully** restore movement, strength and balance is essential
- ✳ Research suggests you should continue to use an ankle brace or taping to provide your ankle with some support in the return to sport phase (3,8,9), and wear appropriate footwear suitable for the activity you are participating in (7) .
- ✳ Ensure that you maintain a general level of fitness to enable you to participate in sporting or work activities without early fatigue and thus increased risk of re-injury (6).
- ✳ Use caution when engaging in activity on uneven ground, collapsible or slippery surfaces.

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