

## Ankle sprains

Ankle sprains are one of the most common sports injuries. A sudden jolt or twist can overstretch and tear the supporting ligaments of the joint, causing pain and swelling. Treatment options include rest, icepacks, and exercises to increase strength and mobility.

### The ankle joint

The ankle joint has three bones that are precisely shaped to interlock and give stability. Strong bands of connective tissue called ligaments reinforce the joint and help hold the bones together. These ligaments prevent too much movement of the joint.

### Ankle sprain

A sudden movement or twist, often when the foot rolls in, can overstretch the supporting ligaments, causing ligament tears and bleeding around the joint. This is known as an ankle sprain. This is a common injury, particularly in activities that require running, jumping and change of direction (such as basketball and netball). Some people are particularly prone to recurring ankle sprains.

### Symptoms

The symptoms of ankle sprain include:

- Swelling – the ankle can swell in minutes or over several hours.
- Pain in the ankle joint when trying to move it and when walking, especially when the knee goes forward over the foot.

### First aid

Suggestions for immediate treatment of an ankle sprain include:

- Stop your activity.
- Rest the injured joint.
- Use icepacks every two hours, applied for 15 minutes.
- Bandage the joint firmly, and extend the wrapping up the calf and down the foot.
- Raise the ankle above heart height whenever possible.
- Avoid exercise, heat, alcohol and massage in the first 48 hours, as these can all exacerbate swelling.

### Recurring ankle sprains

Some people suffer from recurring ankle sprains. This can be caused by a number of factors working in combination, including:

- Ligament scarring and excess looseness, as a result of previous ankle sprains
- Insufficient rehabilitation from previous sprains. This can lead to weak muscles surrounding the ankle joint, especially on the outside (peroneal muscles). It can also cause decreased capacity to judge where your foot is in relation to your leg; this is called a proprioceptive deficit.

### Professional help

If you are unable to take any weight on the foot at all, seek medical attention immediately. An x-ray may be needed to see whether a bone is broken.

If the pain from a sprained ankle that you are managing yourself has not improved after a day or so, it is best to seek medical advice. See your doctor or consult with a physiotherapist. If the ankle continues to be troublesome, your health professional may organise x-rays or other investigations, or both.

Recurring ankle sprains need thorough investigation and rehabilitation.

### **Physiotherapy provides rehabilitation and support**

Physiotherapy treatments may include:

- Exercise programs to improve mobility of the joint
- Exercises to strengthen the muscles surrounding the ankle (peroneal muscles)
- Advice on taping and ankle braces for use during activity
- The use of a wobble board or trampoline to encourage balance and improve the proprioceptive deficit.

If persistent instability does not respond to comprehensive physical therapy, surgery may be considered.

### **Preventing ankle sprains**

Suggestions to prevent ankle sprains include:

- Warm up prior to exercise – include movements that are specific to the sport you are about to play.
- Wear supportive shoes appropriate to the sport.
- Consider ankle braces or tape, as directed by your physiotherapist.
- Take care when exercising on uneven or wet ground, especially in the first few weeks after a sprain.

### **Where to get help**

- Your doctor
- Physiotherapist
- Australian Physiotherapy Association Tel. (03) 9534 9400

### **Things to remember**

- Ankle sprains are one of the most common sports injuries.
- Overstretching and tearing the supporting ligaments cause an ankle sprain.
- Professional treatment options include exercises designed to strengthen the joint and improve mobility.

**This page has been produced in consultation with, and approved by:**

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