

# Ankle sprain

## Emergency Department factsheets

### What is an ankle sprain?

Ankle sprains happen to people of all ages. They occur when you 'roll your ankle', which over-stretches the ligaments (the fibrous bands that hold the ankle together).

### What are the symptoms?

When ligaments are damaged, there is pain, swelling and sometimes bruising. Too much swelling can slow the healing process. Pain is usually worst in the first two to three days.

### Treatment

- You may require an x-ray to determine if you have a broken bone (fracture).
- Significant injuries may require an ankle brace, or even a plaster cast to allow ligaments to heal properly.
- Some people who have repeated ankle sprains may need surgery to stabilise the weakened ligaments.
- Take painkillers such as paracetamol if you have pain. Anti-inflammatory medications may be helpful and can help to reduce the swelling and pain. Ask your health care professional what is best for you.
- Ice will help relieve pain.
- Crutches may be helpful to offload the joint and promote a normal walking pattern.

### Care of a sprained ankle

By using RICE – Rest, Ice, Compression and Elevation for the first 2-3 days, you can minimise the pain, swelling, and bruising.

- Relative rest: Avoid activities that cause excessive pain. Gentle exercise will help with pain (see isometric exercise). Minimise the

amount of walking you do, but when you do walk, ensure that you walk as normally as possible. If you are unable to put weight on your leg comfortably, use crutches. Graduated loading of the tissues helps them to heal.

- Ice: Wrap ice cubes in a damp towel, use frozen peas or a sports ice pack in a towel. Apply to the injured area for 15-20 minutes every one to two hours while you are awake. Never apply ice directly to the skin.
- Compression: Apply a firm but not tight bandage from the toes to above the ankle. Ensure the bandage does not increase your pain or restrict blood flow to your toes. Remove any bandages when you sleep at night.
- Elevation: When resting, raise your foot so it is above the level of your heart.

#### Avoid 'HARM'

- Heat: Increases blood flow and swelling.
- Alcohol: Increases blood flow and swelling and can make you less aware of aggravating your injury.
- Re-injury: Protect your joint until it has healed adequately. It is important however to exercise the muscles, tendons, and ligaments to help the healing process
- Massage: Promotes blood flow and swelling. Massage can increase damage if begun too early.

#### After 2-3 days

Your ankle should not swell or bruise further, but it will stay stiff and painful unless you gradually start to use it and exercise it. The following exercises will help. These exercises should be done twice a day or as often as your health-care professional states.

## Weight bearing

Start to walk as normally as possible without causing undue pain (heel hits floor first, then toes; step forwards over foot; then heel leaves floor, then toes leave floor).

- Isometric exercises can be started early to activate the muscles that control the ankle. Attempt to move ankle through ranges of movement up and down, in and out against a static resistance e.g., coffee table or opposite foot. The muscles, tendons and ligaments are gently loaded without moving the joint.
- Lunge stretches: While standing or sitting, move your knee forward over your toes without lifting your heel from the floor. Hold for 10 seconds. This should not be painful. Do not push to extremes of motion.
- As pain settles, strengthening can begin – repeat 10 times twice a day. Stand with hands on wall or bench top. For help with balance, raise up on to toes and down.

## Strengthening and balance

- Stand/walk on your toes.
- Stand/walk on your heels.

## Balance

- Stand on one leg – eyes open; eyes closed; swing arms; on mini trampoline; in sand.
- Walk – on slopes; forwards; backwards; sideways.

## What to expect

Most people fully recover in one to six weeks. If you are no better after a week, see your local doctor or physiotherapist. For most injuries, a physiotherapist can provide assistance with healing and appropriate rehabilitation. As the pain settles down after the first few days, gradually increase your level of activity. Avoid activities on slippery or uneven surfaces and in areas with poor lighting.

## Prevention

There are simple measures you can take to reduce the risk of an ankle sprain.

- Warm up before exercise.
- Wear supportive shoes.
- Take care when exercising on uneven or slippery ground.
- Tape the ankle as directed by your physiotherapist.
- Cool down with slow stretches after exercise.

## Seeking help

In a medical emergency, go to the nearest hospital emergency department or call an ambulance (dial 000). For other medical problems see your local doctor or health-care professional.

13 HEALTH (13 43 25 84) provides health information, referral and teletriage services to the public in all parts of Queensland and is available 24 hours a day, 7 days a week, 365 days a year for the cost of a local call\*.

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