

Exercise safety

Regular physical activity is vital for good health. While there is a risk of injury with any type of physical activity, the benefits of staying active far outweigh the risks.

You can reduce your risk of exercise injury by:

- Wearing the right shoes, gear and equipment
- Drinking lots of water
- Warming up and stretching.

Get good advice

You can obtain information and advice about exercise safety from your doctor, a sports medicine doctor, physiotherapist or an exercise physiologist or see a sporting association about sporting technique and equipment.

Take care and listen to your body

Injuries are more likely if you ignore your body's signals of fatigue, discomfort and pain. Suggestions include:

- See your doctor for a full medical check-up before embarking on any new fitness program.
- Cross-train with other sports and exercises to reduce the risk of overtraining.
- Make sure you have at least one recovery day, and preferably two, every week.
- Exercise at an appropriate intensity for your fitness level. It takes time to increase your overall level of fitness. Training too hard or too fast is a common cause of injury.
- Injuries need rest – trying to 'work through' the pain will cause more damage to soft muscle tissue and delay healing.
- If you have a pre-existing injury or an area that is prone to injury, consult your doctor or physiotherapist before starting. Rehabilitation exercises may help to strengthen the injured area or you may be advised to strap it prior to exercising to provide support.

Stop exercising immediately

If you experience any of the following symptoms, stop exercising and seek medical help:

- Feel discomfort or pain
- Have chest pain or other pain that could indicate a heart attack, including pain in the neck and jaw, pain travelling down the arm or pain between the shoulder blades
- Experience extreme breathlessness
- Develop a rapid or irregular heartbeat during exercise.

How to warm-up

- As the name suggests, your warm-up (5–10 minutes) should gradually warm your muscles and body temperature.
- The type of activity done in the warm-up should include major muscle groups that will be used in your sporting activity.
- Your warm-up could begin with a low intensity activity such as brisk walking or jogging.
- Stretching should be performed once the muscles have been warmed, as the stretching of cold muscles is less effective. It is also important to stretch after activity as well to assist recovery.

Why cool down?

- To reduce muscle soreness and stiffness
- In the last 5 minutes, slow down gradually to a light jog or brisk walk.
- Finish off with 5–10 minutes of stretching (emphasise the major muscle groups you have used during your activity).

Drinking lots of water

You can lose around one and a half litres of fluid for every hour of exercise. One of the first symptoms of dehydration is fatigue, which causes a significant drop in sporting performance. It may also make you susceptible to cramps, heat stress and heat stroke. Suggestions include:

- Avoid starting exercise dehydrated. Drink plenty of fluids for several hours prior to exercise.
- If you are well hydrated you should be able to pass a good volume of clear urine in the hour before exercise.
- Drink at least 500ml (2 cups) an hour before exercise.
- Drink at least 150ml every 15 minutes during exercise.
- During exercise take advantage of all breaks in play to drink up.
- After exercise drink liberally to ensure you are fully re-hydrated.

You can figure out whether you have drunk enough water by weighing yourself before and after exercise – a loss of one kilogram is equivalent to about one litre of lost fluid. Thirst is a clear indication that you need to drink.

Exercising in hot weather

Exercising in hot weather puts additional strain on your body. Heat-related illnesses, such as heatstroke and sunstroke, occur when your body can't keep itself cool. Sweating isn't enough to cool your body – your body temperature rises, you may become ill. Symptoms of heat illness can include:

- Irritability
- General discomfort
- Weakness
- Headache
- Nausea
- Cramps.

Suggestions to avoid heat illnesses include:

- Drink plenty of water before, during and after exercise.
- Wear lightweight, light-coloured, loose-fitting clothes.
- Protect yourself from the sun with clothing such as long-sleeved tops, full-length trousers, a hat and sunglasses or using an umbrella.
- Exercise in the cooler parts of the day – preferably before dawn or after sunset.
- Reduce your exercise intensity. Take frequent breaks and drink water or other fluids every 15 to 20 minutes, even if you don't feel thirsty. If you have clear, pale urine, you are probably drinking enough fluids.
- Don't drink alcohol, tea or coffee before or after exercising, as these beverages promote fluid loss.
- If you have travelled to a hotter climate, remember that it may take about 10 days of exercising before you fully acclimatise.

Exercising in cold weather

In cold weather, muscles are more susceptible to injuries. Suggestions include:

- Wear appropriate warm clothing. Multiple layers of clothing trap more body heat than one bulky layer.
- Devote more time to warming up and stretching before exercising and make sure you undertake a thorough cool-down.
- Keep up your fluid intake, since cold weather prompts fluid loss.
- Don't forget sun protection – it is possible to be sunburnt even in cold weather, especially at high altitudes or on clear days.

Wearing the right shoes, gear and equipment

Most sports and exercises rely on some type of equipment, such as shoes, bicycles or racquets. Protective equipment – such as mouthguards, shin pads and helmets – can significantly reduce the risk of injury by absorbing the impact of falls or collisions. Safety suggestions include:

- If your sporting equipment is handheld, make sure you are using the right grip – for example, holding a tennis racquet the wrong way can increase your risk of tennis elbow (tendonitis).
- Make sure your equipment is appropriate to your sport or activity and the size and age of the participant.
- Wear appropriate shoes for your sport and replace them before they wear out.
- Protective equipment should be worn during training, not just for competition and games.
- Check equipment regularly and replace if worn out. If you are unsure how to maintain or check your equipment, consult with your coach or sporting association.
- Injuries can also be caused by improper form or technique. Consult your gym instructor, coach, sporting association, exercise physiologist or physiotherapist for instruction on how to improve your sporting technique.

Where to get help

- Your doctor
- Sports medicine doctor
- Physiotherapist
- Sports association
- Exercise physiologist ESSA Exercise & Sports Science Australia

Things to remember

- Training too hard or fast is a common cause of sports-related injuries.
- Consult with your gym instructor, coach, sporting association, exercise physiologist or physiotherapist for instruction on how to safely approach physical activity.
- Wear appropriate protective gear and make sure your sporting equipment (including shoes) is well maintained.

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

Physical Activity Australia

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