

Preventing sport injury

Warm up and cool down

Information for young people

Being physically active is important in keeping yourself healthy and playing sport is a great way to do this. However sport can be very demanding on your body and muscles. Therefore it is important to warm up your muscles and get them ready for the sport, ensure you cool down properly, and improve flexibility to help reduce risk of injury.



What is a warm up?

A good warm up gets your blood flowing, raises your muscle temperature and increases your breathing rate. All of this gives your body time to prepare for exercise, improve your performance and helps you get the results you want. If new to the exercise you will need a longer warm up.

Below are examples of common warm up routines:

★ Aim for 5 - 10minutes to warm up

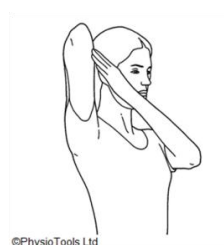
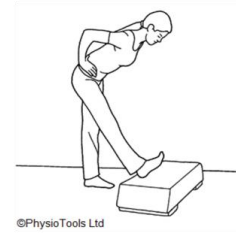
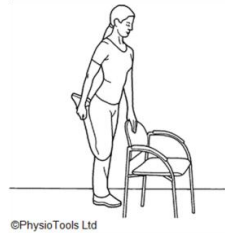
- Spend 3 to 5 minutes marching in place, jogging or cycling on a stationary bike at a slow pace
- Undertake 2 to 5 minutes of dynamic stretches. Examples of these are: knee lifts, bottom kicks, walking lunges, jumping jacks, side stepping and arm circles or swings.
 - Start with small movements and then increase to large movements
 - Complete 6-8 repetitions of each exercise
 - Make sure you cover all major muscles groups from head to toe.
- You can practice skills specific to your sport as part of your warm up (e.g. dribble through cones for football or pass the ball back and forth as you run with a partner; practice different passes in basketball).

It is not advisable to use static stretches (See cool down) in warm up – these are best left until after your exercise.

What is a cool down?

Developing flexibility in your muscles will both improve performance and decrease the risk of injury. It is important after exercise to ensure you stretch out the muscles that have been used. Static stretches (not bouncy- which can cause injury) should be used while muscles are still 'warm'.

Below are some common cool down stretches:



These stretches are to be **slow** and **gentle**. Hold the stretch for 30 seconds, breathing into your stretch to reduce muscle tension. Repeat up to three times for each stretch.

How do I improve flexibility?

The above stretches will help to improve the flexibility of your muscles.

Why I need to develop flexibility?

Lack of flexibility is common in very fit young people. Sports related injuries are common and are often caused by a lack of flexibility. These injuries can include muscle strain/ ligament sprain/ avulsion fracture and inflammatory conditions such as Osgood-Schlatter and Severs. Warming up and cooling down properly will help to avoid these injuries.



Further advice

Your sport may require a specific warm up routine or cool down stretches not covered in this leaflet; this is something you should check with your coach.

Returning to activities after injuries

If you have already sustained an injury and are returning to sport, it is particularly important to dedicate time for warm up and cool down and be mindful that your performance may have been affected by your injury. Therefore extra care should be taken as you gradually return to training.

Contact telephone numbers

If you have any concerns, contact:

Physiotherapy Team
Therapies Department
Royal Hospital for Children and Young People
50 Little France Crescent
Edinburgh
EH16 4SA

Telephone: **0131 312 1079**

