

Sports Injury

More than 10 million sports injuries occur each year. Most sports injuries are due to either **traumatic injury** or overuse of muscles or joints. Many sports injuries can be prevented with proper conditioning and training, wearing appropriate protective gear, and using the correct equipment.

1. Wounds

A **wound** is any break in the skin or body surface.

Cuts can be caused by sharp edges such as jewellery or stones. When the skin is cut, the blood vessels at the wound edges are cut straight across, so blood loss is very likely.

Grazes are wounds in which the top layers of skin are scraped off. Grazes are commonly caused by a sliding fall (trip on a running track) or friction burn (hands sliding along a rope).

This information looks at how to **treat** cuts and grazes:

Cuts

Apply pressure over the cut with your hand or fingers, preferably over a pad or dressing.
Raise and support the cut limb above the level of the head.

Grazes

Clean the graze under running water.
Cover the graze with a piece of gauze.
Elevate the wound above the level of the heart and support the limb with one hand.

2. Fractures

A fracture is a break or crack in the bone. Bones can break when a direct impact is received (hockey stick striking the shin) or indirect force is produced by a twist or a wrench (a trip or stumble).

Treating fractures

- To deal with a major fracture you should keep the casualty still and call for professional medical help. All fractures should be seen by a doctor.
- Never move the casualty (unless in danger) and never let the casualty eat or drink.

3. Joint/Muscle Injuries

A joint is formed where two or more bones meet. A sprain is an injury to a ligament at, or near, a joint. It is often the result of a sudden or unexpected wrenching movement at the joint that pulls the bones within the joint too far apart and tears the tissues surrounding the joint. Muscle damage can occur in three ways:

1. **Strain**
Overstretching of the muscle, which may result in a partial tearing.
2. **Deep bruising (soft tissue injury)**
These injuries are usually accompanied by bleeding into the damaged area, which can lead to pain and swelling.
3. **Rupture**
Complete tearing of the muscle, which may occur in the fleshy part or in the tendon.

Treatment

R	Rest the injured part.
I	Apply I ce to reduce the swelling for 10 minutes (max).
C	Compress the injury, possibly using a bandage.
E	Elevate the part to decrease the blood supply.

4. Heat Exhaustion

Heat exhaustion, an advanced condition of hyperthermia, is very common in marathon runners; especially in hot, humid conditions. The body temperature rises, which makes blood rush to the skin to cool it down. This makes less blood available to the working muscles and so extreme tiredness, breathlessness and dizziness occurs.

Treatment

The casualty should be taken to a cool place and wrapped in cold, wet sheets. Cool water (nothing caffeinated or alcoholic) may be given slowly to the casualty.

5. Unconsciousness

Unconsciousness occurs from an interruption of the brain's activity.

Treatment:

When dealing with a collapsed casualty you should follow the DR ABC procedure:

D	Check for d anger to both you and casualty.
R	Check for a r esponse in the casualty.
A	Check the a irway. Is it open and unobstructed?
B	Listen, look and feel to determine if the casualty is b reathing.
C	Check c irculation by feeling the pulse. Is the person bleeding?

Never move the casualty, unless in danger.

6. Shock

The circulatory system distributes blood round the body, so that oxygen and nutrients can be fed into the tissues. When the system fails, circulatory shock will develop. If not treated immediately, vital organs such as the brain may fail. A typical cause of shock is a blow to the chest (winding).

Symptoms include: cold and pale skin, shaking or chills, chest pain, a weak but rapid pulse, shallow breathing, dizziness or general weakness, vomiting, unconsciousness.

Treatment

1. Lay the casualty down on his/her back
2. Raise the legs
3. Loosen tight clothing
2. Keep the casualty warm

TASK

Test your knowledge of injuries!

Mark the following statements **True (T)** or **False (F)**.

1. A first-aid provider would treat a cut by applying pressure with a pad over the wound.
2. A wound where the top layers of skin are scraped off is called a rupture.
3. If a player fractures a leg on the playing field during a match, (s)he should not be moved off the pitch.
4. R.I.C.E. stands for Rest, Ice, Compression and Elimination.
5. R.I.C.E. should be used to treat a fracture.
6. Hypothermia occurs when the body is exposed to excessive heat.
7. The person suffering from heat exhaustion should drink plenty of tea.
8. If a player is knocked unconscious, you should tap his/her face gently to wake them up.
9. A player who is winded and knocked to the ground could go into shock.
10. Shock occurs when blood pressure drops and the organs do not receive enough blood.