### What is First Aid?

First Aid is the assistance or treatment given to a casualty for any injury or sudden illness before the arrival of an ambulance or qualified medical expert. It may involve improvising with facilities and materials available at the time.

## Aim of First Aid

First Aid treatment is given to a casualty in order:

- > to save life
- > to prevent the condition from worsening
- > to promote recovery

# Things to be aware of:

- > keep calm
- reassure everyone that everything is going to be OK.
- get as much information as possible about the accident (number of injured and their conscious state)
- prioritise those who need more help.

### **Protect-Examine-Alert**

### 1. Protect

**Protect** yourself and the injured person

**Avoid** another accident by eliminating the cause:

- Have someone control traffic
- Keep bystanders away from the scene of the accident
- Extinguish fire if possible without putting yourself in danger
- 2. Examine
- Look for severe external bleeding
- Check for responsiveness and unconsciousness

Ask simple questions

"Can you hear me?"

Give simple orders

"Press my hand."

Check for breathing:

Look – Listen - Feel

Check for circulation/pulse

#### 3 Alert

Call for assistance or have someone alert the emergency medical service rapidly. Always provide:

- Exact location or address of the accident or incident
- Telephone number where you can be called
- How many people are involved
- Nature of injuries (fractures, burns, etc.)
- Indication of the seriousness of the injuries (breathing or not, etc.)
- What first aid has been given

Do not hang up until you are sure that the person at the other end has all the information and have them repeat the address to send assistance.

## Musculo-skeletal injuries

### What is a sprain?

A sprain is an injury to a ligament (tissue that connects two or more bones at a joint). In a sprain, one or more ligaments is stretched or torn.

# What are the signs and symptoms of sprains?

- Pain
- Swelling
- Bruising
- Not being able to move or use the joint

## How are sprains treated?

- Put ice on the injury
- Apply anti-inflammatory creams and gels
- Compress (squeeze) the injury using special bandages
- Consult your doctor and prepare for an X-Ray

# What is a joint dislocation?

A dislocation is an injury in which the bones in a joint are forced apart and out of their usual positions.

## What are the symptoms of a dislocation?

- The area may be swollen or look bruised.
- You may notice that the area is red or discoloured.
- It may also have a strange shape or be deformed as a result of the dislocation.

# What should I do if I have a joint dislocation?

- You need to get medical help immediately
- **NEVER** try to put the joint back yourself
- Cool the injured area and, if possible, elevate it. Both of these will reduce swelling.

## What is a bruise and how do they occur?

Bruises are the result of your body colliding with a solid object, or vice versa. When this occurs, the soft tissues under your skin (muscle fibres and connective tissue) are crushed but the skin does not break or rupture. The symptoms associated with bruises are pain, swelling and restricted movement.

### Types of bruises

Bruises are graded into three categories and these are referred to as: first; second; or third degree depending on their severity.

- A **first degree** bruise is the least severe. It is the result of a minor rupture of the capillaries and is accompanied by mild pain, some swelling and stiffness.
- A second degree bruise is the result of a moderate rupture of the capillaries and increased bleeding. There is also increased swelling and pain as well as a moderate loss of movement at the injury site.

• A **third degree** bruise is the most severe of the three. It is the result of a major rupture of the capillaries and will result in massive swelling, severe pain and instability around the injury site.

#### **Treatment**

The most effective initial treatment for bruises is the R.I.C.E.R. regimen. This involves the application of **(R)** rest, **(I)** ice, **(C)** compression, **(E)** elevation and obtaining a **(R)** referral for appropriate medical treatment.

**R:** it is important that the injured area be kept as still as possible. This will help to slow down blood flow to the injury and prevent any further damage.

**I:** Apply ice as soon as possible after the injury has occurred.

**C:** Compression achieves two things. Firstly, it helps to reduce both the bleeding and swelling around the injury, and secondly, it provides support for the injured area.

**E:** simply raise the injured area above the level of the heart at all possible times.

**R:** if the injury is severe enough, it is important that you consult a professional physical therapist or a qualified sports doctor for an accurate diagnosis.

### Wounds

Wounds are injuries that break the skin or other body tissues. They include cuts, scrapes, scratches and punctured skin. They often happen because of an accident, but surgery and stitched also cause wounds. There are different types of wounds; each is distinctive in its appearance and the source of the injury.

### **Puncture**

A puncture wound is created when a sharp object enters the skin. These wounds are usually small and do not bleed a lot.

#### Incision

An incision wound is a cut in the skin caused by a sharp object such as a knife, broken glass or scissors. Incisions wounds are neat and the edges of the skin are usually smooth.

#### Contusion

A contused wound is one in which the edges and surrounding tissues are bruised or crushed.

Minor wounds can be treated at home. First, wash and disinfect the wound to remove all dirt. Use direct pressure and elevation to control bleeding and swelling. You should see a doctor if:

- The bleeding does not stop with direct pressure
- The bleeding lasts longer than 20 minutes
- The bleeding is the result of a serious accident

Wounds can have two types of complications: infection and haemorrhage

### **Fractures**

A fracture is the medical term for a broken bone.

There are many types of fractures, but the main categories are displaced, non-displaced, open and closed. Displaced and non-displaced fractures refer to the way the bone breaks.

In a **displaced fracture**, the bone snaps into two or more parts and moves so that the two ends are not lined up straight.

In a **non-displaced fracture**, the bone cracks either part or all of the way through, but does move and maintain its proper alignment.

A **closed fracture** is when the bone breaks but the skin is not damaged.

An **open fracture** is one in which the bone breaks through the skin.

## Symptoms of a fracture are:

- Intense pain
- Deformity the limb looks out of place
- Swelling, bruising or tenderness around the injury
- Problems moving a limb

## **Treatment of fractures**

The aim of treatment is to put your bones back into place and then prevent them from moving until they heal.

- Do not let the victim move except if necessary to avoid further injury.
- Immobilise the injured area if you will be moving the victim.
- Seek medical help