RNLI Lifeboats

First Aid Manual

VERSION 1

DEVELOPED FOR LOW-RESOURCE AREAS

About this manual

The primary aim of the *First Aid Manual* is to equip people with the skills and knowledge to provide basic first aid in the community.

The programme is designed for organisations based in low-resource areas with limited access to equipment.

This manual has been designed as a guidance document and can be adapted to suit the local environment.

Version 1:

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This manual has been adapted from the International Drowning Research Centre Bangladesh (IDRC-B) First Responder Manual and part of the RNLI Casualty Care Manual.

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Contents

First Aid

Contents

First Aid

Aim

To have a practical understanding of basic CPR and first aid skills.

Learning outcomes:

1. Understand the principles of first aid.
2. Understand casualty assessment.
3. Understand how to provide immediate treatment for a variety of medical emergencies.

What is first aid?

First aid is the temporary immediate care given to an injured or sick person.

A casualty may:

- Cut their foot on a sharp object in the water.
- Be stung or bitten by an animal.
- Slip over and hit their head on a rock.
- Go underwater for a long period of time.

Most incidents will require only minor treatment. A rescuer should provide treatment for minor and severe injuries, particularly in a rural location.

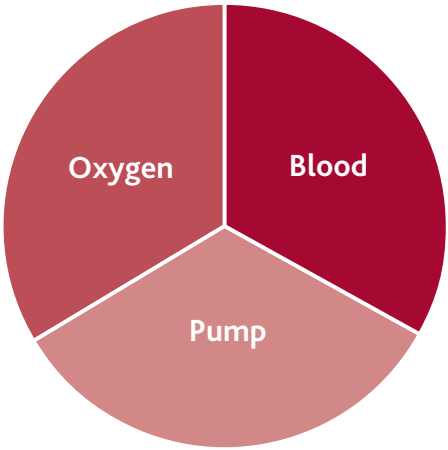
The principles of first aid

The specific aims of First Aid are to:

- Save life.
- Stop worsening.
- Help recovery.

Save life

For any human to stay alive, three things are needed:



Oxygen

If a casualty is lacking oxygen a rescuer needs to think about managing their airway.

Blood

If a casualty is bleeding it needs to be controlled.

Pump

If a casualty's pump (heart) stops, the rescuer may need to pump for them.

Stop worsening

The condition of a casualty could worsen at any time. Correctly positioning a casualty may stop them getting worse.

Help recovery

The rescuer should constantly monitor the casualty. Any improvement can be recorded and any worsening can be treated accordingly.

Primary Survey

A primary survey is the first check of the area and the condition of the casualty.

It is important to consider what happened as it can help predict their injuries and the likely signs and symptoms.

Check for dangers

The rescuer must consider the dangers on arrival at the location of an incident. Some examples include:

- Weather, tide/sea, conditions on scene.
- Craft that are sinking or out of control.
- Loose / unstable debris or casualty craft breaking up.
- Fire, smoke, gas or electrical dangers.
- Unstable natural environment such as rock falls.
- People, crowds, aggression, emotion.
- Blood that may contain a virus.

Blood

The rescuer must protect themselves from blood at all times, as it may contain a virus.

To reduce the risk of contact with blood the rescuer should use a barrier (such as gloves or a plastic bag).

Assess response

- Talk to the casualty to see if they respond to voice.
- Tap the shoulder of the casualty to see if they respond to touch.

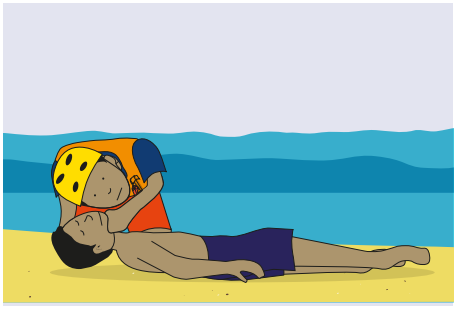
If the casualty can talk, they are fully responsive. If the casualty does not respond to voice or touch then they may be unconscious.

Open Airway

Check that the casualty has an open, clear airway.

- Tilt the head backwards.
- Lift the chin with two fingers.

By providing a clear airway the casualty may be able to breathe.



Check Breathing

- Look, listen and feel for the casualty's breathing for 10 seconds.

If the casualty is NOT breathing normally start CPR

If the casualty IS breathing normally and the airway is clear and open, do a secondary survey.

If the airway cannot be kept clear and open, put the casualty in the recovery position

If medical help is available, send someone to get it.

If the person is not breathing normally start CPR

CPR is when the rescuer takes over the job of a casualty's heart and lungs. Chest compressions are given to manually pump blood around the body and breaths are given to provide oxygen.

When do we not start CPR?

The rescuer would not start CPR if:

- The casualty is decomposed.
- If it is clear the casualty cannot survive the injury.
- It is too dangerous to start.

When do we stop CPR?

Continue CPR until the person is breathing normally, or go for help after 30 minutes.

CPR for adults

Step 1

- Tilt the head back and lift the chin using two fingers.
- Pinch the nose to stop air escaping.

Step 2

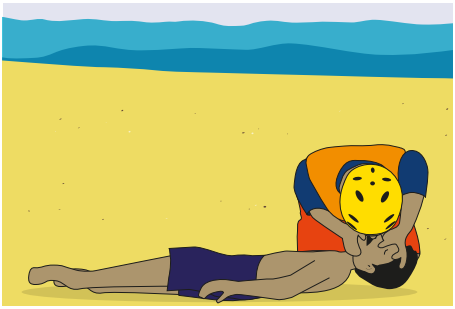
- Put your lips around the casualty's mouth and blow gently until the chest rises.
- Give another breath after the chest falls. Repeat until you have given 5 breaths.

Step 3

- Put the heel of one hand in the centre of the chest.
- Place your second hand on top of the first and link your fingers.

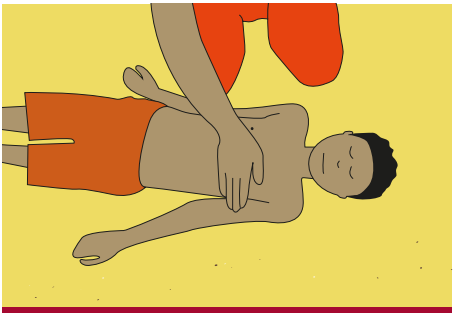
Step 4

- Compress the chest 5-6cm by keeping your arms straight and using the weight of your body.
- Repeat this 30 times doing 2 compressions per second.



Step 5

- After 30 compressions give 2 breaths.
- Then give another 30 compressions.
- Continue this cycle for 30 minutes.



Compressions on children

In children (aged approximately 1–8 years) use only a single hand to compress the chest to approximately one third of the chest depth.

If the casualty starts vomiting...

Roll the casualty onto their side immediately to reduce the chance of them choking.

Support the head, check the mouth and attempt to remove any vomit.

Recovery position

This position is for an unconscious casualty. In this position gravity will help vomit to drain out of the mouth.

Step 1

- Place the arm nearest to you at right angles to the body, elbow bent with the palm of the hand facing upwards.
- Bring the far arm across the chest, and hold the back of the hand against cheek nearest to you.

Step 2

- With your other hand, grasp the far leg just above the knee and pull it up, keeping the foot on the ground.
- Keeping the hand pressed against the cheek, pull on the far leg to roll the person towards you onto their side.

Step 3

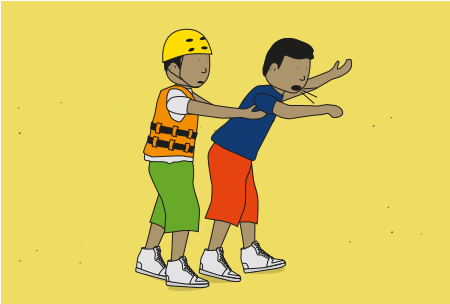
- Adjust the upper leg so that both the hip and knee are bent at right angles.
- Tilt the head back to make sure that the airway remains open.
- Check breathing regularly.

Choking

If the casualty is choking, they may have an object in their airway. This may be a full or partial blockage. The object might be something the casualty has eaten, or they have put something in their mouth. They may:

- Be struggling to breathe.
- Have their eyes wide open.
- Be unable to talk, possibly holding their throat.

Choking for Adults and Children (aged over 1 year)



Step 1

- Lean the casualty forwards.
- Support them so they do not fall.
- Encourage the casualty to cough.

Step 2

- Give up to 5 back blows between the shoulders, using the heel of a hand.
- Check between each back blow in case the object has been dislodged.

Step 3

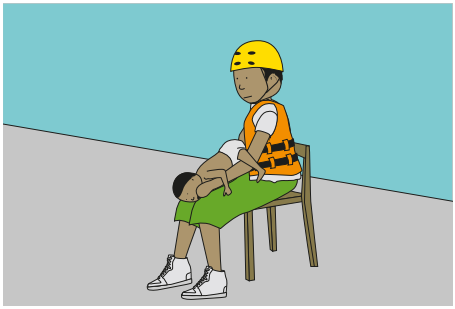
- Give up to 5 abdominal thrusts. Stand behind the casualty, place one hand in between the belly button and rib cage, making a fist and place the other hand on top. Pull sharply inwards and upwards.
- Check between each abdominal thrust in case the object has been dislodged.

Step 4

- Repeat the cycle of 5 back blows then 5 abdominal thrusts until the casualty recovers or collapses.

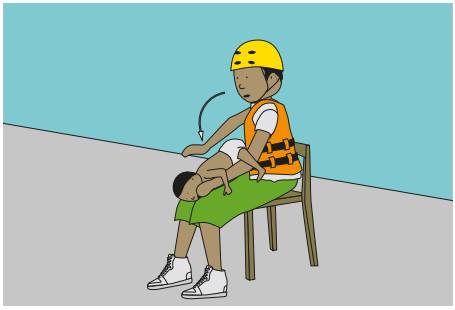
If the casualty collapses start CPR

Choking for a baby (aged under 1 year)



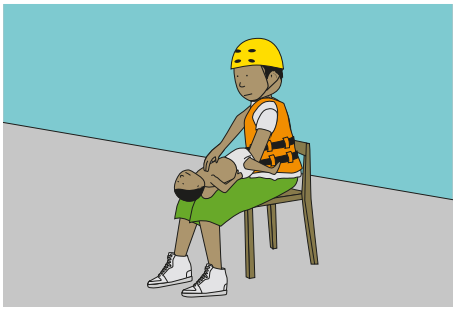
Step 1

- Hold the baby on a forearm, with the arm braced against a leg.



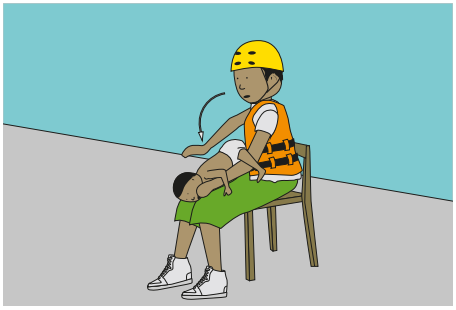
Step 2

- Give up to 5 back blows, between the shoulders, using the heel of a hand.
- Check between each back blow in case the object has been dislodged.



Step 3

- Give up to 5 chest thrusts by placing two fingers in the centre of the chest and compressing by 1/3 chest depth.



Step 4

- Repeat the cycle of 5 back blows then 5 chest thrusts until the casualty recovers or collapses.

If the casualty becomes floppy start CPR

When a casualty has been injured, it is important to keep them warm and handle them gently.

Control of Bleeding

It is important to control and manage major bleeding quickly.

To stop heavy bleeding, apply direct pressure.

An injured casualty should sit or lie down, as at any point they may collapse.

Cuts and grazes

Direct pressure and elevation

Direct pressure is when pressure is applied directly
to the wound. Apply pressure to the wound so that the bleeding stops. To slow the flow of blood
the wound should be lifted above the heart.

Direct pressure can come from the casualty's own hand, the rescuers hand, or a bandage.

Removing an object from a wound may make it bleed more. If possible leave the object in the wound and go to hospital.

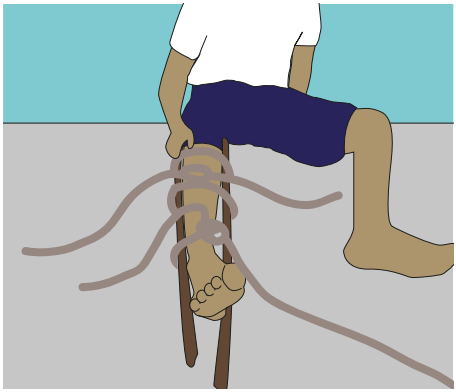
Applying pressure around the object can slow the bleeding.

Nosebleed

To stop a nosebleed lean the casualty forward and pinch the soft part of the nose for up to 10 minutes. Check for bleeding every 10 minutes.

If after 30 minutes the flow of blood has not decreased or stopped, the casualty should go to hospital.

Broken Bones



When a casualty breaks a bone, it may be closed, where there is no bone visible, or open, where the bone is visible. The casualty will be in pain,
and may have swelling, deformity or bruising.

When treating a broken bone keep the limb as still as possible.

Care must be taken to handle broken bones gently.

Closed fractures

If possible remove watches and jewellery as the limb may swell.

For upper limbs, support the limb close to the chest in a comfortable position. This can be done using the free arm or material for support.

For lower limbs, tie the legs together for support. Place padding between the legs for comfort. If both legs are broken, place a straight object such as a stick between the legs to stop them moving.

Open fractures

If a casualty has an open fracture, stopping bleeding is the first priority. Major bleeding must be controlled by direct pressure and bandages.

Do not put any pressure onto the broken bone.

Continue treatment the same as for closed fractures.

Burns

Remove the casualty from the cause of the burning to a place of safety.

Remove any watches or jewellery as the area around the burn may swell.

Burns must be cooled as soon as possible. Seawater or freshwater may be used to cool a burn.

The burn should be cooled for at least 10 minutes so that it is less painful and cool. If the pain has not been reduced, continue cooling.

Stings and Bites

The treatment of stings and bites differs slightly depending on what caused the sting or bite. You should find out about the types of stings and bites in you local area, and how to treat them.

Stings

Insect stings are often red, raised circles with a puncture wound in the middle of them. They may or may not leave behind the stinger. If present, remove the sting by scraping and then wash the area with soap and water. Cool the area using water.

Common jellyfish

The skin may look red where jellyfish tentacles have touched the it.

Scrape off any remaining tentacles, but avoid rubbing the area as this will worsen the pain. Apply cold seawater. Do not apply freshwater or cold packs as this could increase the pain.

Bites

Snake

A snake bite normally has two puncture marks. Do not approach the casualty unless it is safe. Keep the casualty calm and minimise movement.

Remove any watches and jewellery because the area around the bite may swell.

Make the casualty comfortable and reassure them.

Do not attempt to suck out the poison.

Transport the person to hospital

Dog bite

Dog bites can cause heavy bleeding or infection.

Rabies is a common concern in many countries and it is important that you do not put yourself or anyone else in danger of infection.

- Make sure the animal is no longer a danger.
- Remove any watches and jewellery because the area around the bite may swell.
- Wash the wound well with soap and clean water for 15 minutes. Use running water if possible.

If running water is not available then regularly change the water used to clean the wound. Do not touch the wound.

- Apply a dry wound dressing.
- If the wound is bleeding heavily then give treatment as described on page 73.

If the casualty shows signs of infection then take them to hospital. Signs and symptoms of infection may include:

- Pain around the wound.
- redness and tenderness.
- swelling.
- pus or discharge.

Allergies

There are many things people may be allergic to, the most common include pollen (hay fever), foods (such as nuts, shellfish and some fruits) and drugs including penicillin and aspirin.

A casualty may show some of the following signs and symptoms:

- Itchy and then runny nose and eyes.
- Noisy breathing.
- Rash.
- Redness of the skin.
- Swelling of throat and mouth.
- Difficulty swallowing, speaking or completing a sentence.
- Swollen lips.
- Fast breathing.

A casualty suffering from any kind of breathing difficulty should be reassured as this may help to calm their breathing.

Encouraging the casualty to take slow deep breaths through their nose may be helpful in some cases.

If an obvious cause is present, try to remove it or move the casualty away if possible.

- Sit the casualty in upright position or stand leaning forwards.
- Encourage casualty to take their own medication or obtain antihistamine if possible.

Submersion

If water has entered the casualty's lungs, then they should be transported to hospital.

Immersion casualties may appear initially fine but can deteriorate rapidly or up to 72 hours later. Without immediate hospital treatment this may be fatal.

Eyes

If a casualty has something in their eye, tilt their head back with the affected eye lower than the other.

The eye should be washed with clean water. If this does not work the casualty should be advised to go to hospital.