

THE CARE CERTIFICATE

# Basic Life Support

- What you need to know

Standard

12

# Legislation and basic life support



## Introduction

The information in standard 12 provides knowledge about the administration of basic life support.

You should be provided with practical training by your employer to be able to put this knowledge into practice in order to be able to carry out basic life support competently.

Completion of this standard will not provide you with the competence to become a first aider. In order to achieve this you would be required to undertake specific first aid qualifications within your workplace. The qualification will be dependent on your job role and your employer's assessment of first aid needs.

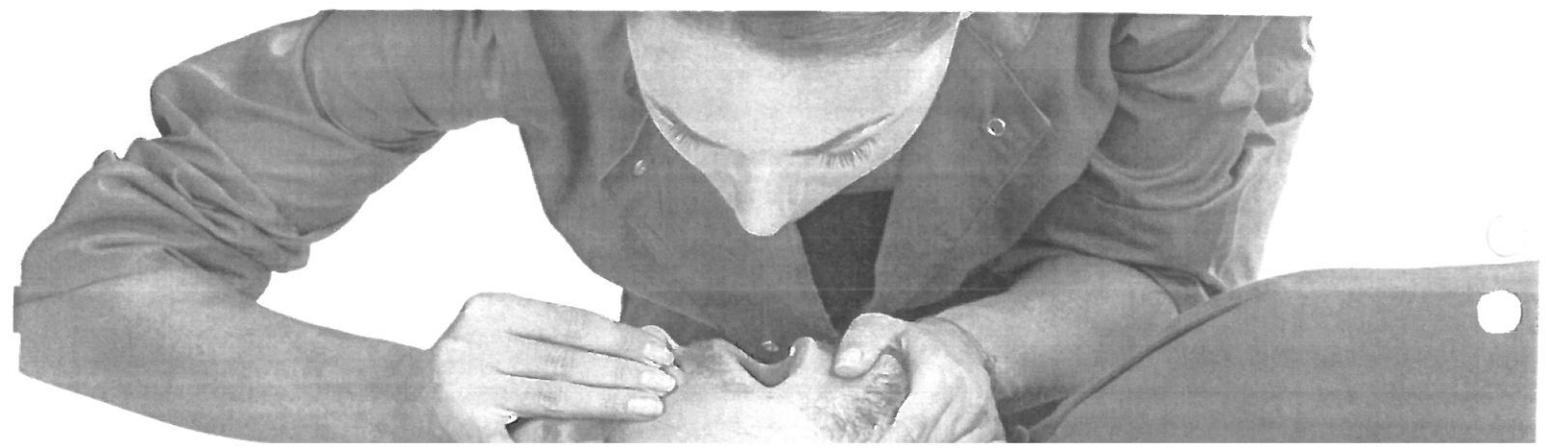
## Basic Life Support (BLS)

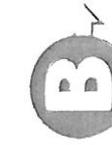
Basic life support comprises the following elements:

- Initial assessment
- Airway maintenance
- Cardiopulmonary Resuscitation (CPR).

When a casualty is unconscious we need to establish if they are breathing normally or not breathing. This is achieved by opening and maintaining the airway.

When approaching a casualty, an initial casualty assessment should be conducted; this initial assessment is called a **primary survey**. The primary survey is a systematic process of approaching, identifying and dealing with immediate and/or life-threatening conditions. The primary survey can be remembered by the acronym **DRSABCD** (or the easy way to remember; **Doctors ABCD**).





### Danger

Prior to approaching the casualty, ensure the scene is safe to do so.

### Response

If possible, approach the casualty from their feet as this prevents hyperextension of the neck from a responsive casualty. Use the AVPU scale when checking for a response.

### Shout for help

If you are on your own do not leave the casualty at this stage.



### Airways

With an unresponsive casualty open their airway using the head-tilt-chin lift method



### Breathing

After opening the airway look, listen and feel for normal breathing for no more than 10 seconds



#### Helpful Hint

Agonal Gasps  
Present in 40% of cardiac arrest victims not to be mistaken for normal breathing. Hence check for no more than 10 seconds.

### CPR/Circulation

**Casualty not breathing**  
Commence CPR (30 Compressions 2 breaths)



**Casualty breathing**  
Check for bleeding and consider putting in the recovery position.



#### Helpful Hint

Compression only CPR.  
If you are unable, not trained to, or are unwilling to give breaths, give chest compressions only. These should be continuous at a rate of 100 - 120 per minute for casualty not breathing to a depth of 5-6 cm.

### Defibrillation

If available, an AED (Automated External Defibrillator) should be used alongside CPR. (If trained to use)



**A - Alert** – Is the casualty moving/talking? - No – Proceed to V  
**V - Voice** – Does the casualty respond to speech? - No – Proceed to P  
**P - Place** – Place your hand on the casualty's shoulders and gently shake them. Ask loudly 'Are you alright?', if NO response then proceed to U  
**U - Unresponsive** – Assume the casualty is unresponsive.

The 'P' in the acronym AVPU is sometimes also referred to as 'Pain' depending on the scale used. Examples of this would include pinching the ear lobes or finger tips.

## Cardiopulmonary resuscitation (CPR)

Cardiopulmonary resuscitation (CPR) should be administered to a casualty who is not breathing normally (and no signs of life). CPR is a method of combining chest compressions with effective rescue breaths in order to artificially circulate blood and to put air into the lungs. The depth of compressions is as follows:

- Adult – 5 – 6 centimetres (similar to the height of a credit card) using both hands
- Child (1 year to onset of puberty) – Compress at least one third of the chest's depth, using one hand
- Infant (0-1 years of age) – Compress at least one third of the chest's depth, using two fingers.

The rate of compression should be 100-120 compressions per minute. 30 chest compressions should be administered prior to moving on to breaths (expired air ventilation).

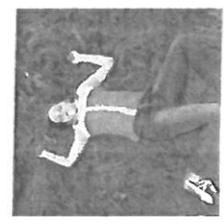
After completing 30 chest compressions two effective breaths should be administered. Each breath should take one second to complete and the casualty's chest should rise as in normal breathing; this is known as effective rescue breathing. Or in the case of an infant, from the infant's mouth and nose. Turn your head and watch the chest rise and fall, then administer the second breath.





### Danger

Prior to approaching the child or infant, ensure the scene is safe to do so.



### Response

If you are on your own do not leave the child or infant.



### Shout

If you are on your own do not leave the child or infant.



### Airways

Open the airway using the head-tilt-chin-lift method. Position airway in a neutral position and in a child slightly extended.

#### Helpful Hint

Use 1 finger to lift the chin to open the airway of an infant.



### Breathing

After opening the airway look, listen and feel for normal breathing for no more than 10 seconds.



If the casualty is not breathing call 999/112.

#### Helpful Hint

If the casualty is not breathing and you are on your own give 5 initial breaths followed by 1 minute of CPR before making the call yourself.

### CPR/Circulation

#### Infant/child not breathing

Administer 5 initial breaths  
Commence CPR (30 compressions 2 breaths). If no help has arrived within 1 min, call 999/112.



**Casualty breathing**  
Check for bleeding.  
Call 999/112.

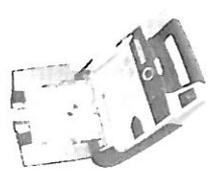


#### Helpful Hint

For chest compressions:  
Infant – 2 fingers  
Child – 1 hand (dependant on the size of the child).

### Defibrillation

The use of an AED is not recommended on infants less than 1 year old.  
An AED with paediatric pads should be used on children aged 1-8 years of age.  
For children aged 8 years and over standard AED pads are suitable if available and trained to use.



#### Child

- Talk to the child
- Gently tap their shoulders and ask "Are you alright?"
- If a response is gained move onto 'Priorities of Paediatric First Aid Treatment' followed by a **Secondary Survey**
- Phone for medical assistance.

#### Infant

- Talk to the infant
- Gently tap their shoulders and tickle soles of feet
- If a response is gained move onto 'Priorities of Paediatric First Aid Treatment' followed by a **Secondary Survey**
- Phone for medical assistance.

## The respiratory system

The main aim of the respiratory system is to supply oxygen to all parts of the body. Breathing is essential to life. When we inhale we breathe in a mixture of:

- Nitrogen (79%)
- Oxygen (20%)
- Other gases (1%).

When we exhale we breathe out a mixture of:

- Carbon dioxide (4%)
- Nitrogen (79%)
- Oxygen (16%)
- Other gases (1%).

## Obstructed airway (adult)

The obstruction of the airway can be due to different causes including foreign bodies (foods), allergic reactions, asthma, blood, vomit and infections. An obstruction can cause minor or major breathing difficulties and, in severe circumstances, may cause the casualty to become unconscious and unresponsive.

Someone who is choking will have either a partial or complete obstruction of the airway. The severity of the blockage will determine the difficulty in breathing.

### Recognition

- Grasping at the throat area
- Difficulty in breathing and speaking
- Difficulty in crying or making a noise
- Redness of the face
- Eyes enlarged and watering
- Displaying distress.

### Treatment

- This should not be carried out by any worker who has not successfully completed formal practical training provided by their employer
- Encourage the casualty to lean forward and cough, if the obstruction remains
- Administer a maximum of 5 sharp back blows, if the obstruction still remains
- Administer a maximum of 5 abdominal thrusts (chest thrusts for an infant), if the obstruction remains
- Repeat the cycle a further two times (3 cycles in total)
- If after three cycles the obstruction still remains, shout for help, contact the emergency services and be prepared to carry out basic life support (CPR).

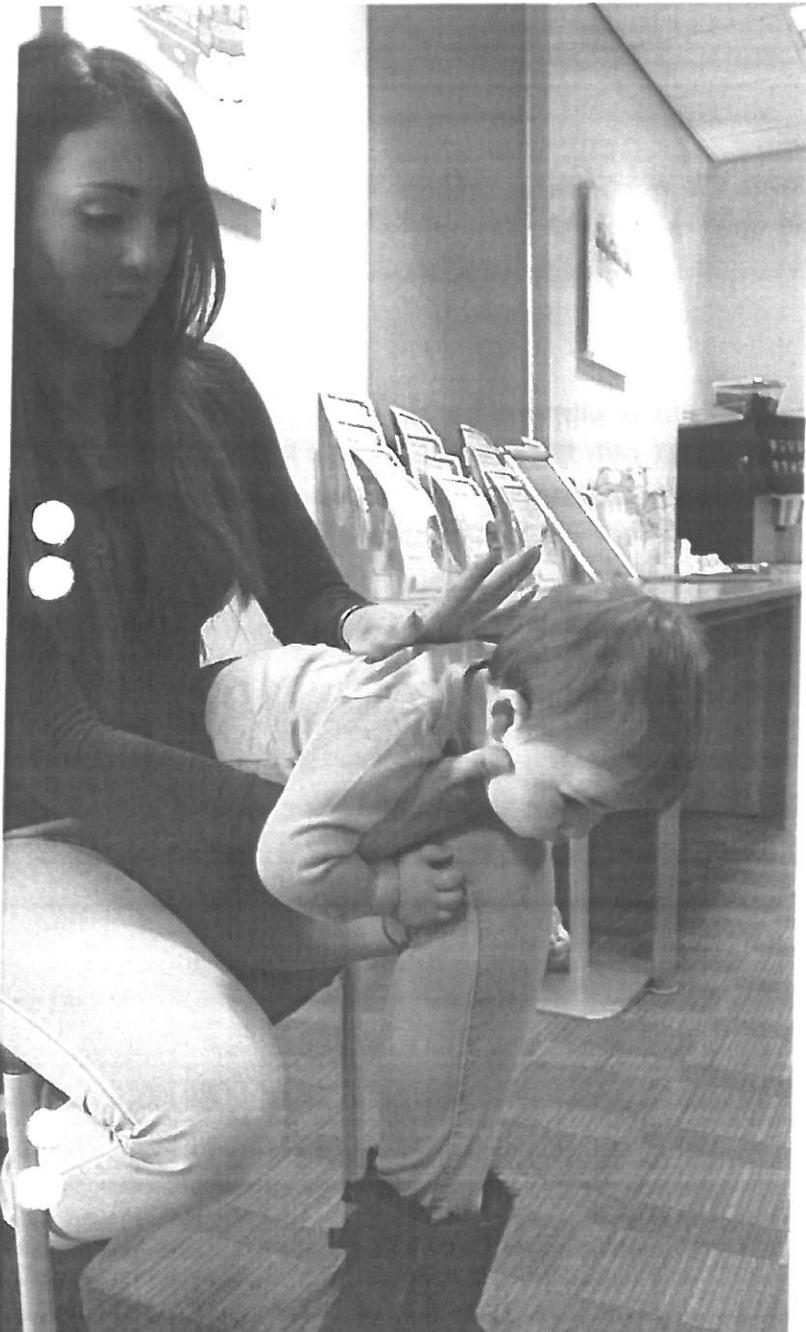
## Obstructed airway (infant and child)

An obstruction can cause minor or major breathing difficulties and, in severe circumstances, may cause the infant or child to become unconscious or unresponsive.

### Recognising a choking infant or child

- Grasping at the throat area
- Difficulty in breathing and speaking (in the case of a child)
- Difficulty in crying or making a noise
- Redness of the face
- Eyes enlarged and watering
- Displaying distress.

With a complete obstruction the infant or child may show the above signs but also the skin colour may develop a blue/grey tinge; they will get progressively weaker and eventually they will become unconscious.



### Treating a choking infant

#### Back blows

- Shout for help
- Look into the infants mouth and remove any visible objects (if they are easily accessible, do not perform a blind finger sweep)
- Place the infant in a downward facing position with the infants head at the lowest point. Support the infants head by making a cradle with your fingers and thumb of one hand supporting the infant's lower jaw
- The palm of the hand supports the infant's chest and the trailing arm supports the infant's body
- Administer a maximum of 5 sharp back blows with the other hand (the heel of the hand should strike inbetween the infant's shoulder blades).

## Chest thrusts

- If, after five sharp back blows the obstruction still remains, then carefully turn the infant over to face you, once again, ensuring that the head is below chest level and administer a maximum of five chest thrusts; use two fingers to carry this out (chest thrusts are similar to chest compressions but should be administered more slowly and sharply)
- Check the infant between each chest thrust and if the obstruction is cleared then cease administering chest thrusts immediately
- If after three cycles of administering back blows and chest thrusts, the obstruction is still present, contact the emergency services and continue with the cycles of back blows and chest thrusts
- If the infant becomes unresponsive then place on a firm flat surface and be prepared to carry out **CPR**.

### Helpful Hint

Under no circumstances should abdominal thrusts be performed on an infant. These must be replaced with chest thrusts.

## Treating a choking child

Encourage the child to cough. If coughing clears the obstruction, monitor the child. If after coughing the obstruction still remains and the child is choking, then administer up to a maximum of 5 back blows.

## Back blows

- Lean the child forward (supporting the upper chest with one hand)
- Administer a maximum of **five** sharp back blows with the other hand (the heel of the hand should strike inbetween the child's shoulder blades)
- If, after **five** sharp back blows the obstruction still remains, then administer up to a maximum of **five** abdominal thrusts.

## Abdominal thrusts

- Stand or kneel behind the child, lean them forward and place your arms and hands around their waist
- Make a clenched fist with one hand and place the thumb of the clenched fist above the navel
- Cup the clenched fist with the other hand and thrust inwards and upwards sharply in one motion
- Repeat this procedure up to a maximum of five times
- Check the child between each abdominal thrust and if the obstruction is cleared then cease administering abdominal thrusts immediately
- If after 3 cycles of administering back blows and abdominal thrusts, the obstruction is still present, contact the emergency services and continue with the cycles of back blows and abdominal thrusts
- If the child becomes unresponsive then place on a firm flat surface and be prepared to carry out **CPR**.

### Helpful Hint

If the child is small it may be beneficial to lay the child across your knee in order to administer back blows. Children should be taken to seek medical attention if they have received abdominal thrusts or if they have difficulty in swallowing or still feel as though they have an object stuck in their throat, even with a cleared obstruction.

## Confidentiality

All confidential information regarding infants, children and individuals must be kept securely and only accessible or available to those who have a right to access them. Anyone who is responsible for the storage of records and information must be aware of their responsibilities under the Data Protection Act (DPA) 1998 and, if relevant, the Freedom of Information Act (FOI) 2000.

## Record keeping

Depending on your specific job role, there will be information and records that will require completing should an infant, child or adult be involved in an accident, or become ill whilst in the health and social care setting.

This recorded information in the accident book can:

- Help to identify trends
- Help to control health and safety risks
- Be used for reference in future first aid needs assessments
- Prove useful for investigations.

Please refer to your employer policy and procedures and forms. If you need further clarity, speak with your manager

## Refresher training

Refresher training should be conducted regularly.

