

# Basic Life Support



Learning &  
Development



# Introduction

Why do this course?

Because it will help you save lives! *It will help you:*

- Assess a collapsed victim;
- See how to perform CPR (chest compression and rescue breathing);
- See how to place an unconscious (but breathing) victim in the 'recovery position';
- Learn about the 'choking algorithm'.

## Should you save all victims?

*It may sound callous at first, but some patients should NOT be resuscitated.*

Like other hospitals, the Trust has a 'Do Not Attempt Resuscitation' (DNAR) policy and it is the consultants' responsibility to enact this. Have a look at the form we use (on the right): you can see it full size on the L&D SharePoint site.

DNAR is very appropriate for some patients, and in their best interests when it has been determined as the necessary course of action. It doesn't alter their routine care, and it also supports:

- The Liverpool Care Pathway;
- The NW End of Life Care Model

*PS: For more information on End of Life Care please contact End of Life Co-ordinator, bleep 327*

**DO NOT ATTEMPT CARDIOPULMONARY RESUSCITATION FORM**  
Adults aged 16 years and over  
Blackpool, Fylde and Wyre Hospitals NHS Foundation Trust

This form is to be filed in section 8 of the patient's case notes

Write patient details or affix identification label

Hospital Number: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Date of Birth: \_\_\_\_\_  
NHS Number: \_\_\_\_\_

DNAR - Do Not Attempt Cardiopulmonary Resuscitation

Date of DNAR order: \_\_\_\_\_  
Type of DNAR order: \_\_\_\_\_  
Consultant in charge: \_\_\_\_\_

In the event of cardiac or respiratory arrest no attempts of cardiopulmonary resuscitation (CPR) will be made. All other appropriate treatment and care will be provided.

1. Does the patient have capacity to communicate decisions about DNAR?  
If "NO" go to box 2  
If "YES" was a decision of a valid advance decision refusing CPR taken in compliance with the current legislation? If "NO" go to box 4  
If "NO" has the patient appointed a person/relative with authority to make decisions on their behalf? If "NO" they must be consulted  
All other decisions must be made in the patient's best interests in compliance with current law. See notes 1

2. Summary of the main clinical problems and why CPR would be inappropriate, unsuccessful or not in the patient's best interests.

3. Summary of communication with patient (or personal welfare attorney), if this decision has not been discussed with the patient why?

4. Summary of any consultation with patient's relatives or friends.

5. Names of members of multidisciplinary team contributing to this decision.

6. Senior Doctor completing this DNAR order:  
Name: \_\_\_\_\_ Position: \_\_\_\_\_ Sign: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Name of nursing staff DNAR order communicated to:

7. Endorsed by Consultant:  
Signature: \_\_\_\_\_ Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Fast action saves lives...

Ischaemic heart disease is the leading cause of death world-wide. In Europe, cardiovascular disease accounts for roughly 40% of all deaths of people under 75 years old. Your FAST action could help reduce some of these deaths because:

- Each minute that CPR is delayed means the chances of a successful outcome decreases by 10-12%.
- Survival to hospital discharge is presently just over 10% for all rhythms & just over 21% for all VF arrests. [Source: RC (UK) 6th Edition ALS Manual 2011]
- Bystander or in-hospital CPR is a vital intervention before the arrival of Advanced Life Support (ALS) or emergency services.
- Early resuscitation and prompt defibrillation within 1-2 minutes can result in a better than 60% chance of survival.

# Steps to Basic Life Support

Step 1: **Shout for help**

Step 2: **Eliminate Dangers**

Step 3: **Evaluate Response**

- *Shout for help again, if necessary*

Step 4: **Airway**

Step 5: **Breathing**

Step 6: **Circulation**

We use a mnemonic to summarise the steps you should take after the initial shout for help: **'DR.ABC'** stands for:

Eliminate **DANGERS**

Evaluate **RESPONSE**

**AIRWAY**

**BREATHING**

**CIRCULATION**

Step 1: **SHOUT FOR HELP**

Shake the casualty's shoulders and shout "Are you alright?" in both ears.

Step 2: **ELIMINATE DANGERS**

*Help the casualty – Don't become one!*

- Approach carefully & safely
- Think about manual handling
- Don't move the patient unless you really have to
- Beware any environmental dangers (road traffic, nearby equipment, etc)
- Avoid infection by using the appropriate protection (gloves, apron, face visor, etc)
- Ensure the environment is a safe one for treating the patient

Step 3: **EVALUATE RESPONSIVENESS**

If necessary, ask "Are you alright?", again in both ears.

*Note: In cases of trauma the neck and spine should be immobilised by placing one hand firmly on the forehead.*

Is the patient responsive?

**Yes?**

Great! Now you can:

- Check for injuries
- Assess Early Warning Score (EWS)
- Calculate & call for help as necessary, following the graded response system
- Seek the appropriate level of help needed
- Reassess regularly

**No?**

Don't panic! Continue on to check A.B.C - Airway / Breathing / Circulation

#### Step 4: **AIRWAY**

Get the patient in position by using a head tilt & chin lift:

Is there any obstruction in the airway? Remove only visible objects using any relevant equipment available - for example, suction, or Magill's forceps (above)

#### Step 5: **BREATHING**

- Look, listen and feel for normal breathing *for no longer than 10 seconds*.
- Be aware of AGONAL breathing.
- Consider a simultaneous circulation check (if you are confident checking for a carotid pulse).

AGONAL BREATHING occurs shortly after the heart stops in up to 40% of cardiac arrests. It can be described as barely there, heavy, noisy, or gasping, and may be infrequent. *Recognise this as a sign of cardiac arrest: DO NOT DELAY CPR!*

#### Step 6: **CIRCULATION**

If you are confident about making carotid pulse you could be doing them while checking for breathing (for up to 10 seconds). If you are not confident about taking a pulse, look for other signs of life, such as movement, colour, coughing, and/or temperature. Check this (for up to 10 seconds) at the same time you check for breathing.

### **CPR (Cardio-Pulmonary Resuscitation)**

Is the patient breathing? Or are there other signs of life?

#### **Yes?**

- If it's safe to do so, put the patient in the recovery position.
- Call for help on 2222 (at the BTH), (9)999 (community) or 112 elsewhere.
- Reassess A.B.C. at one-minute intervals.
- Consider assessing the patient's condition through using EWS or POTTs.
- Check for signs of agonal breathing.

Is the patient breathing? Or are there other signs of life?

#### **No?**

- If local help is present, send them for advanced help and emergency equipment.
- In our acute Trust call the Adult Cardiac Arrest Team on 2222 and state 'Adult Cardiac Arrest' and your location.
- In a peripheral hospital or in the NHS community setting, call (9)999 or 112 for an ambulance and say "Adult Cardiac Arrest and we are doing CPR requesting paramedic crew and defibrillator".
- If no help is present leave the patient and telephone for help.
- Return and begin CPR.

***Remember to stay calm!***

# Chest Compressions

- Place the heel of one hand in the centre of the chest
- Place other hand on top
- Interlock fingers
- Compress the chest:
- 30 compressions
- Rate: 100-120 bpm
- Depth: 5-6 cm
- Equal compression to relaxation ratio
- When possible change CPR operator every 2 minutes

Remember: ***Good, effective, chest compressions from the start can save a life!***

- Mouth-to-mouth can be considered if a pocket mask is readily available.
- If no mask is available, and you are not prepared to perform mouth-to-mouth, perform continuous chest compressions until equipment arrives.
- Each ventilation breath should be given over 1 second.

The formula to follow is:

30 compressions  
2 breaths  
30 compressions  
2 breaths  
30 compressions  
2 breaths

& keep going! Continue BLS until:

- The advanced emergency team arrives and takes over;
- The patient shows signs of life; OR
- The rescuer becomes too physically exhausted to carry on.

# The Recovery Position

If the patient is unconscious, breathing normally, has an adequate circulation, and there is no suspicion of cervical spine injury, then consider using the recovery position to ensure fluid can drain freely out of the mouth:

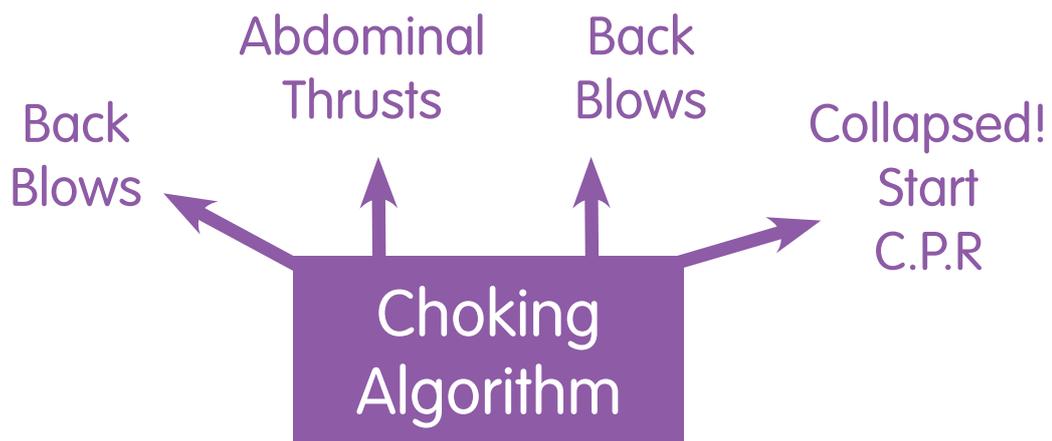
<p><b>Stage 1</b> Place the patient's arm nearest to you upwards as if they are asking a question:</p>	
<p><b>Stage 2</b> Place the hand furthest away from you against the patient's cheek:</p> <p>Note: If your patient is wearing rings with stones in them, spin the rings around so the stone is not against the patient's face.</p>	
<p><b>Stage 3</b> Bend the knee furthest away from you:</p> <p>Note: Check that your patient has no items in pockets that could cause injury when rolled onto them (such as phones, or keys).</p>	
<p><b>Stage 4</b> Roll the patient towards you and onto their side:</p> <p>Note: pregnant ladies should be placed on their LEFT side.</p>	

# Signs of Choking

<p><b>General signs of choking</b></p> <ul style="list-style-type: none"> <li>• Attack occurs while eating</li> <li>• Victim may clutch his neck</li> </ul>	
<p><b>Signs of mild airway obstruction</b></p> <p>Response to question 'Are you choking?'</p> <ul style="list-style-type: none"> <li>• Victim speaks and answers yes</li> </ul> <p>Other signs</p> <ul style="list-style-type: none"> <li>• Victim is able to speak, cough, and breathe</li> </ul>	<p><b>Signs of severe airway obstruction</b></p> <p>Response to question 'Are you choking?'</p> <ul style="list-style-type: none"> <li>• Victim unable to speak</li> <li>• Victim may respond by nodding</li> </ul> <p>Other signs</p> <ul style="list-style-type: none"> <li>• Victim unable to breathe</li> <li>• Breathing sounds wheezy</li> <li>• Attempts at coughing are silent</li> <li>• Victim may be unconscious</li> </ul>

# Choking

**5 Back Blows**  
 (check the patient after every back blow)  
**followed by**  
**5 Abdominal Thrusts**  
 (check the patient after every abdominal thrust)  
**If unconscious**  
**Open airway, attempt to any remove visible object**  
**And start CPR**



# BLS induction assessment

Please select only one answer to each question:

1. What depth should chest compressions be made to?  
 3-4cm  4-5cm  5-6cm
2. How fast should chest compressions be?  
 80-100 bpm  100 bpm  100-120 bpm
3. In a choking patient, how many backslaps would you perform initially?  
 3  5  7
4. When would you NOT start CPR on a patient?  
 When they have been dead for a while  
 When a patient's relative asks you not to  
 When an active DNAR is in place
5. Which number would you dial for a cardiac arrest at Blackpool Victoria Hospital?  
 2222  4444  (9)999
6. Is mouth-to-mouth ventilation essential if you have no pocket-mask?  
 Yes  No
7. If your patient has a cardiac arrest on the floor, where would you deliver CPR?  
 Bed  Chair  Floor
8. If your patient had a cardiac arrest in a chair, where would you deliver CPR?  
 Bed  Chair  Floor
9. In adult CPR, what do we begin with?  
 Chest compressions  Rescue breaths
10. When placing a pregnant patient in the recovery position, which side do you roll the patient to?  
 Left side  
 Right side  
 Either
11. What is the correct hand position for external compressions?  
 Lower chest  
 Upper chest  
 Centre of chest
12. What does EWS stand for?  
 Easy Weighing System  
 Early Warning Score  
 Early Waste Signal

13. What protective equipment is available to you when addressing an infectious patient?

- Gloves  Apron  Visor  All of these

14. What does DNAR stand for?

- Do Not Attempt Rescue  
 Doesn't Need Attempted Resuscitation  
 Do Not Attempt Resuscitation

15. If faced with a choking patient, how many abdominal thrusts would you deliver?

- 3  5  7

16. What system do we follow for BLS?

- Danger, Response, Airway, Breathing, Circulation  
 Shout for help, Danger, Response, Airway, Breathing, Circulation  
 Response, Airway, Breathing, Circulation, Shout for help

17. What equipment can we use to remove a foreign body from a patient's airway?

- Magill's forceps  
 Suction  
 Both would be useful

18. If you are struggling to remove a foreign body from a patient's airway, what should you do?

- Seek help  
 Keep trying to remove it  
 Pretend you didn't see it and ignore it

19. If you're not confident about doing carotid pulse checks, what should you do?

- Nothing  
 Check anyway  
 Look for signs of life instead

20. Is agonal breathing a sign of cardiac arrest?

- Yes  No

21. If agonal breathing were present, would you delay CPR?

- Yes  No

22. How long would you check for breathing & circulation?

- Up to:  5 secs  8 secs  10 secs

23. If no pocket mask is available, and you're not prepared to deliver mouth-to-mouth, what should you do?

- Nothing  
 Continuous chest compressions  
 Stop after 30 compressions

24. How long should a ventilation breath last?

- 1 second    2 seconds    3 seconds

25. When would you NOT stop CPR?

- When your patient shows sign of life  
 When the emergency team arrives and takes over  
 When you're too physically exhausted to continue  
 When the patient's relative asks you

26. What ratio CPR should you use?

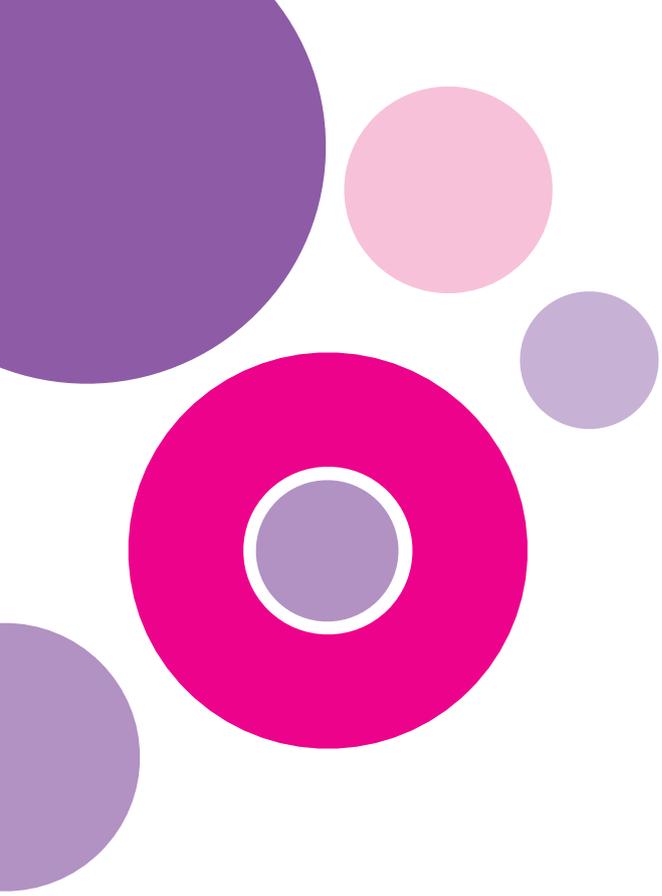
- 30:2    15:2    15:1

27. What should be classed as 'dangerous' on your approach to the patient?

- Fluid  
 Equipment  
 Sharps  
 Traffic  
 All of these

28. When assessing the responsiveness of your patient, do you:

- Press the shoulders & shout in both ears?  
 Shout at the patient?  
 Shake the patient?



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