

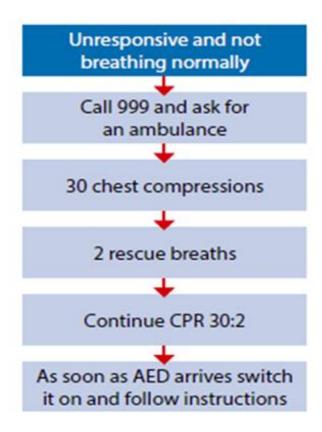
# **Update for RYA First Aid Instructors.**

https://www.resus.org.uk/resuscitation-guidelines/adult-basic-life-support-and-automated-external-defibrillation/

The changes to the guidelines are minimal, aimed at simplification and the integrating of AED use into BLS to reduce the time from cardiac arrest to first shock.

The separate step of "shouting for help" is no longer part of the algorithm and early contact with an emergency medical dispatcher, perhaps using the speaker function on a mobile phone is encouraged. Advice can then be given, allowing the first aider to stay with the victim and start CPR immediately. Instructors should demonstrate this function on phones if necessary.

On RYA First Aid Courses we must stress that a DSC Distress Alert and Mayday should be sent from a vessel at sea, and point out the limitations of using a mobile phone afloat.



New emphasis is put on recognising that a seizure-like episode could be a sign of cardiac arrest, caused by the brain being deprived of oxygen. This could be confused with epilepsy and first aiders should be suspicious of cardiac arrest in any patient presenting with seizures and carefully assess whether they are breathing normally.

### **Main teaching points:**

- Stress that if the casualty is unresponsive and not breathing <u>normally</u> they are in cardiac arrest. If in any doubt that breathing is normal, assume that it is not normal. Agonal breathing is present in about 40% of cardiac arrest victims.
- The assessment for normal breathing should take no more than 10 seconds, 2 to 3 breaths if the breathing rate is normal. A hypothermic casualty may be breathing below normal rates.
- If trained and able chest compressions should be combined with rescue breaths, otherwise provide compression-only CPR.
- Integrate the use of an AED into BLS training, if possible.
- The compression rate should be 100 120 per minute, to a depth of 5 6 cm.
- Interruptions to chest compressions should be minimised when giving rescue breaths, attaching AED pads or after a shock has been delivered.
- Keep it simple. Don't add complexity or additional steps, such as; a check for obstructions in the airway in the initial assessment.
- A pocket mask can improve the quality of CPR. It also makes over the head CPR possible in a confined space. Pocket masks should be demonstrated on RYA First Aid Courses.
- Do not stop CPR unless certain that the victim has recovered and is breathing normally, or until someone else takes over, or too exhausted to continue, or if directed by a health professional. Recovery from CPR alone is rare.
- Emphasise the importance of achieving the correct depth of compression, accurate hand placement and of allowing full recoil of the chest after each compression.
- Manikins that provide feedback or other prompt devices, such as metronomes or the British Heart Foundation app "Pocket CPR", can be very useful during CPR training.
- Each rescue breath should be no longer than 1 second and make the chest rise as in normal breathing. Rapid or forceful breaths should be avoided.

### Resuscitation of a victim of drowning.

The slight modification to basic CPR for a victim of drowning should be taught on RYA First Aid Courses. It exists because the casualty has suffered a respiratory arrest, depleting the blood of oxygen, prior to the cardiac arrest.

- Give 5 initial breaths before starting normal 30:2 CPR.
- If alone give 1 minute of CPR before going for help.

## Resuscitation of children

The full paediatric BLS is aimed at healthcare professionals who have a duty to respond to paediatric emergencies and usually work in a team of two or more. First aiders should use the same protocol as as for an adult, but starting with 5 initial breaths and if alone giving 1 minute of CPR before going for help. The chest of a child should be compressed by one-third, approximately 4cm for an infant under 1 year and 5cm for an older child. Use two fingers to compress the chest of an infant and one or two hands for a child.



#### General First Aid Guidelines issued by the ERC.

The ERC has issued guidelines for first aid, as well as BLS, in section 9 of their paper.

http://www.cprguidelines.eu/assets/downloads/guidelines/S0300-9572(15)00343-3 main.pdf

Many of their recommendations and suggestions are common practice already, but note: 11, 12, 13, and 15.

### First Aid for medical emergencies:

- 1. An unresponsive patient who is breathing normally should be placed in the recovery position unless injuries prevent this. After 30 minutes they should be turned onto the other side.
- 2. A casualty in shock should be positioned on their back. Raising their legs, if there is no evidence of trauma, may provide a brief improvement in their vital signs.
- 3. There is no direct indication for the use of supplemental oxygen by first aid providers.
- 4. Asthmatics with breathing difficulties should be assisted with their bronchodilaor. Training in the different methods of administration should be given on first aid courses.
- 5. A stoke assessment system, such as FAST, should be taught to assist in early recognition. Early treatment at a specialist stroke centre greatly improves outcomes.
- 6. A 150 300mg chewable aspirin should be given early to an adult with chest pain if a heart attack is suspected. There is a relatively low risk of complications, but an aspirin should not be given if the cause of the pain is unclear or if the patient is allergic.
- 7. A second intramuscular dose of adrenaline via an auto-injector should be given if anaphylaxis is not relieved within 5 15 minutes of the initial dose, or if the symptoms reoccur.
- 8. A conscious hypoglycaemic patient should be given glucose tablets equivilant to 15 20 g, or other sugary food or drink. That is approximately 200ml of a sugary drink or 4 sugar lumps.
- 9. Oral rehydration drinks or isotonic sports drinks are more effective than water for rehydration after exercise. Alternatives include water, coconut water, semi-skimmed milk or tea.
- 10. In the case of an eye injury due to a chemical spash irrigate immediately with continuous large volumes of clean water while protecting the other eye.

## First Aid for trauma emergencies:

11. Apply direct pressure to control bleeding, with or without a dressing. Do not try to control a major bleed using pressure points or limb elevation. Instructors should consider demonstating trauma, or compression military dressings.



12. Use a haemostatic dressing when direct pressure cannot control catastrophic external bleeding or the wound is in a position where direct pressure is not possible. These dressings are impregnated with a substance that assists in blood clotting, but <u>training is required to</u> ensure the safe and effective use of these dressings.



- 13. Use a tourniquet when direct wound pressure cannot control catastrophic external bleeding in a limb. <u>Training is required to ensure the safe and effective application of a touriquet.</u>
- 14. Do not straighten an angulated long bone fracture. Protect the injured limb by splinting in the position found.
- 15. An open chest wound should be left exposed without a dressing or covered with a <u>non-airtight</u> dressing if necessary. Control bleeding with direct pressure.
- 16. The routine application of a cervical collar by first aiders is not recommended. If a cervical spine injury is suspected the head should be supported manually to avoid movement.
- 17. Assessment of a casualty with suspected concussion should be done by a health care professional.
- 18. Thermal burns should be actively cooled as soon as possible for a minimum of 10 minutes, then covered loosely with a sterile dressing.
- 19. If a tooth cannot immediately be re-implanted it should be stored in egg white, coconut water, whole milk or the casualty's own saliva. Refer to a dentist as soon as possible.