



Australian Resuscitation Advisory Network

BLS Guideline 5 – RESUSCITATION (CPR)

Scope

Who does this guideline apply to?

This guideline applies to all persons who are unresponsive to pain and present with absent or abnormal breathing.

Who is the audience for this guideline?

This guideline is for use by BLS first responders, including bystanders, first aiders, and health professionals away from a clinical setting.

Age Classifications for Resuscitation

For the purposes of resuscitation:

- **Adult** is defined as a person > 8 years of age i.e. 9 or above or a person who physically appears to be that age e.g. an 8 year old child that weighs 70kg would be classified an adult because of physical appearance.
- **Child** is defined as a person between the ages > 12 months and ≤ 8 years old or a person who physically appears to be that age.
- **Infant** is defined as a person between the ages of 0 and ≤ 12 months or a person who physically appears to be that age e.g. a premature infant of 15 months of age, may be a similar size and weight to an 11 months old infant and therefore this person would be classified an infant.

Recommendations

The Australian Resuscitation Advisory Network (ARAN) makes the following recommendations:

1. Rescuers should start resuscitation if the person is unresponsive to pain and not breathing normally.
2. Bystander resuscitation should be actively encouraged.
3. Compression –only CPR is an effective response for rescuers who are unable or unwilling to ventilate patients. Compression-only CPR is the preferred response for first responders in cases of SCA as it provides adequate passive ventilation.
4. If active ventilations are performed, the compression-to-ventilation ratio should be in the order of 30:2 for all ages, although a ratio of 15:2 for children/infants may act to reverse hypoxia more quickly.
5. Chest compressions should be performed at a rate of ≤ 120 /min for all age groups.

Disclaimer – The recommendations in this guideline are compiled by ARAN from advice available at the time. As ARAN cannot control the manner in which these recommendations are implemented, ARAN and its members accept no responsibility for injury or death resulting from the use or non-use of this guideline.

Acknowledgement - The material in this guideline is based on original work by the Australian Resuscitation Council.

- Rescuers should aim to minimise interruptions to chest compressions.

General Principles

As most cardiac arrests occur in adults and are Sudden Cardiac Arrests (SCAs), the response of first responder rescuers should focus on the steps that will improve outcome for these more common situations prior to emergency services arrive to take over treatment.

In SCA after seeking help, the two most important measures that will improve outcome are the implementation of fast deep compressions and the prompt use of a defibrillator. The indications and management of the airway is details in (Guideline 1- Airway) and the ventilation process is detailed in (Guideline 2 – Ventilation).

ARAN recommends the BLS –CPR Flowchart (Figure 1) as the approach for first responder rescuers. Considerable delay in the response to cardiac arrest by rescuers is due to the “need” to enact a series of steps and procedures with every person, regardless of the cause, circumstances of the cardiac arrest and the assistance available (if any).

Method

To check for response i.e. consciousness (and subsequent actions), should only be based on the persons response to pain. A response may include a flinch, withdrawal, a moan or groan and indicates that the person must have, brain, heart and lung function and does not need resuscitation. Previous “soft” methods of voice and “gentle touch” are insufficient to determine further actions.

Effective and safe pain response techniques include:

- Sternal rubs (rubbing the knuckles of one hand up and down the sternum)
- Pinching of the earlobe
- Pressing a pen-like object or the thumb nail across the nail bed of a finger at a point called the *eponychium* (see Figure 2)
- Pulling on the hairs of the person's arms or legs

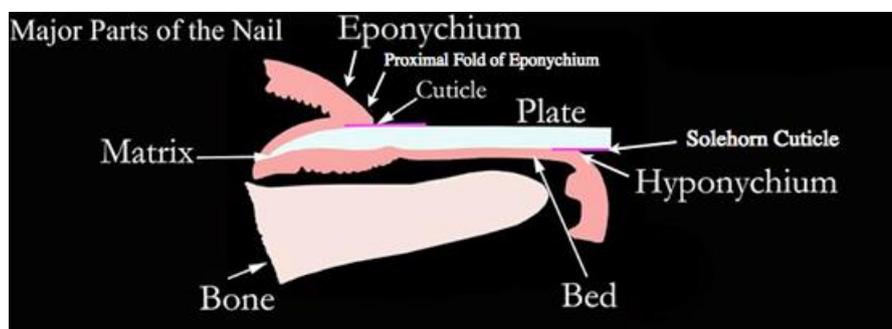


Figure 2 – Pain stimulus point on finger



Duration and Non-Commencement of CPR

There are specific circumstances where CPR should not be commenced and/or discontinued.

Reasons not to commence CPR:

- Obvious injury or condition incompatible with life e.g. decapitation, decomposition or rigor (stiff joints) as these indicate the person has been deceased for some time.
- Where there are dangers to the rescuer that cannot be made safe by either moving the danger or moving the person.
- Duration of resuscitation >30minutes and person is not hypothermic (low body temperature caused by immersion in very cold water).
- The sighting of a current Advanced Care Directive stating no resuscitation.

Reasons to stop CPR:

The rescuer should continue CPR until any one of the following conditions have been met:

- The person responds or begins breathing normally.
- It is impossible to continue (e.g. exhaustion).
- A health care professional arrives and takes over resuscitation.
- A qualified health care professional directs that CPR be ceased.



Basic Life Support

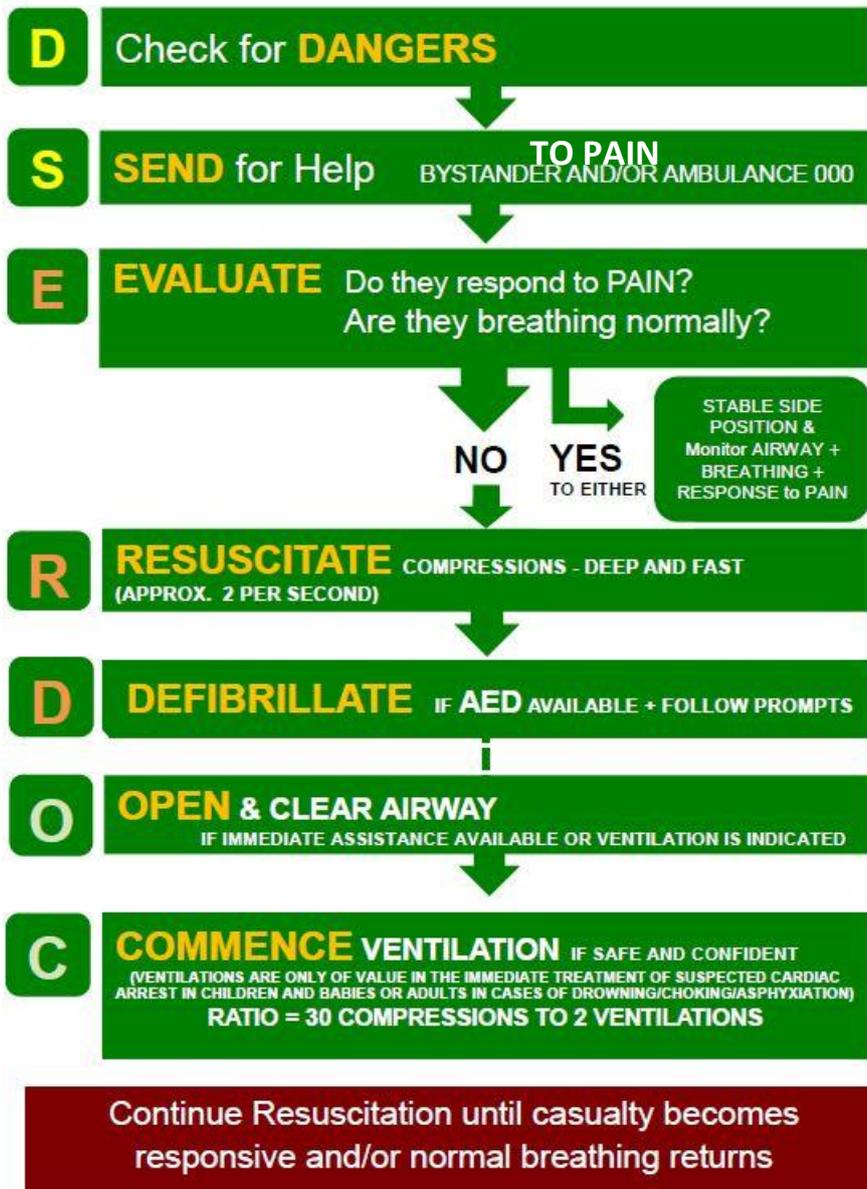


Figure 1 – BLS CPR Flowchart