Resuscitation Council UK

Adult basic life support Guidelines

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References

European Resuscitation Council Guidelines 2025 Adult Basic Life Support. Resuscitation 2025;215 (Suppl 1):110771. https://doi.org/10.1016/j.resuscitation.2025.110771

ERC Authors: Smyth MA, van Goor S, Hansen CM, Fijačko N, Nakagawa NK, Raffay V, Ristagno G, Rogers J, Scquizzato T, Smith CM, Spartinou A, Wolfgang K, Perkins GD, on behalf of the ERC Adult Basic Life Support Collaborators.

Key points

- Everyone can learn how to perform cardiopulmonary resuscitation (CPR).
- Train ambulance service call handlers in cardiac arrest recognition and telephone-CPR.
- Recognition of cardiac arrest can be challenging.

- If a person is found unresponsive, call 999 as soon as possible. Ideally, this should be carried out by a bystander, but if no one else is available you should make the call yourself before assessing whether breathing is normal.

- The ambulance service call handler will be able to assist you if you are uncertain.
- If a person is unresponsive with abnormal breathing, assume they are in cardiac arrest.
- Start chest compressions as soon as possible.
- Compress the chest at a rate of 100-120 min^{-1}.
- Compress to a depth of at least 5 cm, but not more than 6 cm.
- If providing rescue breaths, deliver just enough air to make the chest start to rise; avoid excessive ventilation.
- If you are unable to ventilate the chest, consider a foreign body airway obstruction.
- Anyone can use an Automated External Defibrillator (AED).
- AEDs should be widely available.
- Locations of AEDs should be prominently sign-posted with clear signage.
- AED signage should include a statement that no training is needed to use an AED.
- AEDs should be housed in unlocked cabinets.
- AEDs should be accessible 24 hours a day, 7 days a week.
- The risk of harm from CPR is low. Rescuers should not be concerned that they will cause serious injury if the person is not in cardiac arrest.

There are the following changes to the 2025 Adult Basic Life Support guidelines:

- Call 999 for any unresponsive person. Rescuers no longer need to confirm abnormal breathing before calling. Initiate the call first, then assess breathing while waiting for the call to be answered. The ambulance service call handler will be able to assist you in identifying abnormal breathing, if needed.
- Exercise is a common precipitant of cardiac arrest. The 2021 guidelines emphasised descriptions of slow or laboured breathing as indicators of abnormal breathing. For 2025, we recognise that early after the onset of cardiac arrest, athletes may display a near-normal or panting breathing pattern.

The following has been added to the 2025 Adult Basic Life Support guidelines:

- Details of the role of the ambulance service call handler: The role of the ambulance service call handler is critical to early recognition of cardiac arrest and initiation of CPR.
- There is increasing evidence that finding a person in cardiac arrest and attempting resuscitation is a potentially traumatic experience for many lay rescuers. The 2025 guideline now recognises that lay rescuers and bystanders may benefit from support.

Introduction

Guidelines 2025 continues to prioritise supporting members of our communities to have the confidence, knowledge and skills to act when someone sustains an out-of-hospital cardiac arrest. The principles of CPR remain the same, and there is an increased emphasis on the difficulty in recognising cardiac arrest and the role that the ambulance service call handlers can play in facilitating this.

The 2025 guidelines still emphasise that it is more important that people feel able to do something to help than become focused on small details or concerned about causing harm. No greater harm can occur than failing to act when someone requires CPR and defibrillation.

The community response to cardiac arrest remains critical to saving lives. Bystander CPR and use of an AED increase the chances of survival by two to four-fold and are a critical part of the UK government's strategies to improving survival from out-of-hospital cardiac arrest.

These guidelines are intended to support members of our communities who may be called upon to act in an emergency and to help save someone's life. This includes members of the public (including those activated by a smartphone app), children and family members, first responders, and those with a duty to respond (e.g. lifeguards, first aiders). They complement the Resuscitation Council UK Quality Standards for Cardiopulmonary Resuscitation and Automated External Defibrillation Training in the Community, which describe that when a cardiac arrest occurs, systems and education should be in place to ensure that:

- Cardiac arrest is recognised early.
- Help is sought – shout for nearby help and call 999.

- CPR is promptly started according to current guidelines.
- An AED is located, retrieved and used as early as possible.

Guidelines

If you encounter someone who appears to be unresponsive, follow the **3 steps to save a life**:

1. **Check**

- Is it safe to approach?
- Is the person conscious?

2. **Call** 999 immediately if they are unresponsive.

- Assess breathing.
- If you are unsure, the ambulance service call handler will assist you.

3. **CPR**: Start CPR immediately if they are **unresponsive with abnormal breathing**.

- As soon as an AED is available, attach it and follow the AED instructions.
- If you are unsure, the ambulance service call handler will assist you.

Recognising cardiac arrest

- Suspect cardiac arrest in any person who is unresponsive.
- Call 999 without delay.
- Assess their breathing while you wait for the call to be answered.
- Slow, laboured breathing, as well as other abnormal patterns such as agonal gasping or panting, must be recognised as signs of cardiac arrest.
- A short period of seizure-like activity may occur at the onset of cardiac arrest. Once the seizure stops, assess breathing.
- If any person is unresponsive with abnormal breathing, cardiac arrest should be assumed.
- If you are uncertain, the ambulance service call handler will assist you.
- If there is any doubt, assume cardiac arrest and start CPR.

Alerting the ambulance service

- If you have a mobile phone, activate the speaker function and call 999 without delay.
- Assess breathing while you wait for the call to be answered.
- If you are alone and do not have a mobile phone, or there is no mobile phone network/satellite connection, you can shout for help and then continue to assess breathing.
- If you think no one will come to help, then you will have to leave the person and call 999. Do this as quickly as possible.
- If they remain unresponsive and are not breathing normally when you return from summoning help, immediately start CPR.

Role of ambulance service 999 call handlers

- Emergency ambulance service call handlers should use standardised protocols to facilitate recognition of cardiac arrest.
- Once cardiac arrest is recognised, ambulance service call handlers should provide CPR instructions to all callers.
- The ambulance service call handler should assume the caller does not know how to perform CPR and provide chest-compression-only instructions. If the caller subsequently states they know how to perform rescue breaths, then the ambulance service call handler should facilitate 30:2 CPR.
- Once CPR is underway, the ambulance service call handler should ask if there is an “AED” or “defibrillator” at the scene.
- If no AED is available at the scene, and more than one bystander is present, the ambulance service call handlers should guide bystanders to the nearest AED.
- As soon as an AED is available at the scene, the ambulance service call handler should instruct the bystander to activate the AED and to follow the AED instructions.
- Ambulance service dispatch systems should integrate with a volunteer first-responder system to activate registered volunteer first-responders to the incident and to retrieve a nearby AED.

High-quality chest compressions

- Start chest compressions as soon as possible.

- Place the heel of one hand on the lower half of the sternum (“in the centre of the chest”).
- If you are unable to adequately visualise the sternum due to clothing, it is reasonable to displace or remove such garments so you can identify the correct anatomic landmark.
- Place the heel of your other hand on top of the first hand.
- Interlock your fingers of the hands to ensure that pressure is not applied over the ribs.
- Keep your arms straight.
- Position your shoulders vertically above the person’s chest.
- Compress to a depth of at least 5 cm, but not more than 6 cm.
- Compress the chest at a rate of 100–120 min^{-1} with as few interruptions as possible.
- Allow the chest to recoil completely after each compression; avoid leaning on the chest.
- CPR is most effective when performed on a firm surface. However, rescuers should not move a person from a ‘soft’ surface, e.g. a bed, to the floor. Start CPR on the bed and, if needed, compress the chest deeper to compensate for the soft mattress.

Rescue breaths

- If you have been trained to provide rescue breaths, alternate 30 chest compressions with 2 rescue breaths.
- When providing rescue breaths, deliver just enough air to make the chest start to rise; avoid excessive ventilation.
- If you are unable to ventilate the chest after two attempts, consider foreign body airway obstruction - see Guideline 2025: First Aid.
- If you are not trained to provide rescue breaths, perform continuous chest compressions without interruptions.

Using an Automated External Defibrillator (AED)

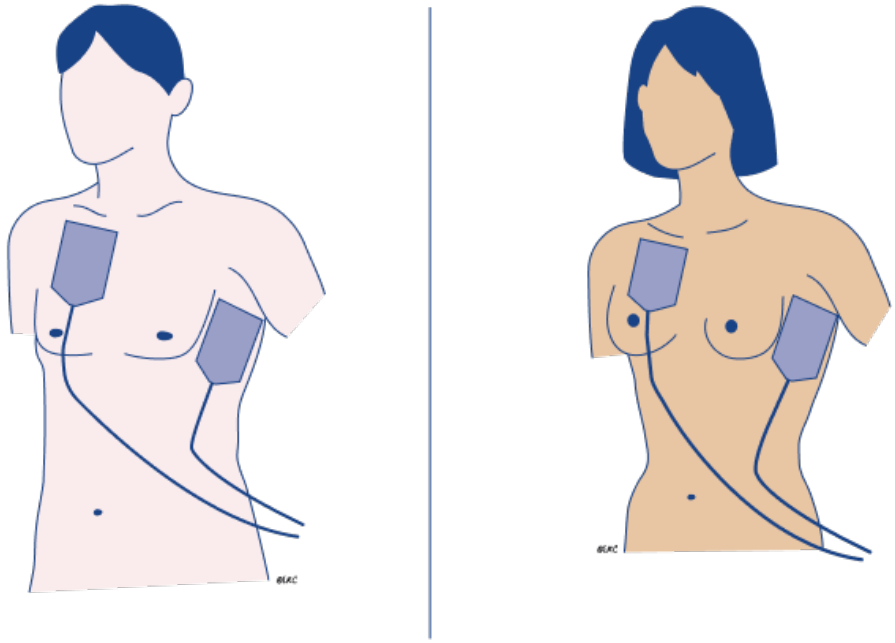
- Anyone can use an Automated External Defibrillator (AED).

How to find an AED

- Ensure that AED locations are indicated by clear signage.
- Signage should state that AEDs can be used by anyone and that no training is needed.
- AED locations may also be identified using electronic mapping systems available on some mobile phones and computer applications.
- The ambulance service should be able to direct callers to the nearest accessible AED during the 999 call. In the UK, this is facilitated by The Circuit, a national database of the location and availability of public-access AEDs. Circuit-registered AEDs local to your area can be located on Defib Finder.

When and how to use an AED

- Use an AED as soon as it is available.
- Open the AED case (if present). Some AEDs automatically turn on when opened. If not, identify the power button and turn it on.
- Follow the audio/visual prompts from the AED.
- Attach the electrode pads to the person’s bare chest according to the position shown on the AED (or AED pads).



- Removing a bra before defibrillation: Rescuers should prioritise correct pad placement and contact with bare skin. If this can be quickly achieved without removing the bra, then it is acceptable to keep the bra in place. If the bra interferes with correctly locating the pad position, then the bra should be removed. Rescuers should not be concerned about exposing the person's chest to apply the pads and should prioritise life-saving interventions.
- If more than one rescuer is present, continue CPR while the pads are being attached.
- Ensure that nobody touches the person whilst the AED is analysing the heart rhythm.
- If a shock is indicated, ensure that nobody is touching the person.
- Some AEDs (fully automatic AEDs) will deliver a shock automatically, while others (semi-automatic AEDs) will require the rescuer to press the shock button to deliver the shock.
- After the shock has been delivered, immediately restart chest compressions.
- If no shock is indicated, immediately restart chest compressions.
- Continue to follow the AED instructions.
- Usually, the AED will instruct the rescuer to perform CPR, then, after a set time interval, the AED will instruct the rescuer to pause CPR to undertake rhythm analysis.

Where to place AEDs

- AEDs should be placed in clear sight.
- AED cabinets should be unlocked and readily accessible 24 hours a day, 7 days a week, 365 days per year.
- Locations with a high population flow, such as airports, shopping centres and railway stations, should have on-site AEDs that are readily accessible for public use.
- Communities are encouraged to deploy AEDs in public spaces, particularly those with a higher incidence of cardiac arrest.
- AEDs should be registered with The Circuit, so that their location and availability information are available to the ambulance service during a 999 call.

Safety

- Ensure the safety of yourself, the person in cardiac arrest, and any bystanders.
- Lay people should start CPR for presumed cardiac arrest without concerns about harm to people not in cardiac arrest.
- The risk of infection to rescuers performing CPR is low.
- The risk of harm to rescuers from accidental shock during AED use is low.
- The risk of physical injury to the rescuer from performing CPR is low.
- Consider the wellbeing of laypeople and bystanders; offer them support. Resuscitation Council UK has a dedicated support page for anyone affected by cardiac arrest.

Downloads
Adult community BLS algorithm 2025 28.46 KB
Adult in hospital algorithm 2025 37 KB
Adult choking algorithm 2025 48.79 KB