



Acacium Group

**Automated External Defibrillator
(Adult and Child)**

Procedure Reference | SOP RESUS 06

Version | V4.1

Procedure Name	Automated External Defibrillator (Adult and Child)
Purpose of Document	To ensure that the correct procedure and outcome are achieved by undertaking an effective AED procedure for adults and children
Target Audience	All appropriately trained healthcare professionals
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Equality Impact Assessment (EIA) Form	Acacium Group is committed to Equality, Diversity and Inclusion and in line with our values, we strive to ensure that everyone that is part of the Acacium community is not disadvantaged or discriminated against given their individual need or characteristics. To support this, an Equality Impact Assessment has been undertaken on this policy/procedure. This information is held centrally and can be requested from the Clinical Governance Team.
About Acacium Group	Details of all Acacium Group trading companies that this policy applies to are detailed within Appendix A

Document History			
Version	Date	Changes made/comments	By whom
V1	Dec 2016	Implementation of document history page	KNF/SJ
V1	Feb 2017	Annual review	KNF/SJ
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V2.3	Jan 2021	Rebrand 2	CC
V2.4	Apr 2021	Added CHS Brand	CC
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V3	Apr 2022	Annual Review	Clinical Advisory Group
V3.1	Mar 2023	Annual Review	Clinical Advisory Group
V4	Jan 2024	Rebrand	Clinical Advisory Group
V4.1	Mar 2024	Reviewed and updated	Clinical Advisory Group

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1. Introduction

An Automated External Defibrillator (AED) is a portable electronic device that automatically recognizes and treats life threatening cardiac arrhythmias through the application of electrical therapy, allowing the heart to re-establish an effective rhythm.

Defibrillation is the use of a defibrillator to deliver an electric shock to a shockable rhythm and allows the normal, organised, electrical rhythm of the heart to restart. This can allow the pumping action of the heart to return. (Resus Council "A Guide to AEDs Dec 2019")

Research shows that the chance of survival following the onset of a cardiac arrest decreases by 7–10% for every minute of delay in commencing treatment⁴. Lack of blood circulation for even a few minutes may lead to irreversible organ damage, including brain damage.

It's crucial for survival that the interval between collapse and the use of the AED is as short as possible. Therefore, AED's are readily available in healthcare settings and in many public areas.

AED's are easy to use, compact, portable, and very effective. There are many different models available, and the machine guides the user with clear spoken instructions. The AED will assess the heart's electrical rhythm and if it detects a rhythm likely to respond to a shock, it will charge itself ready to deliver this shock. They are safe, and a shock will only be given if the heart's rhythm requires it.

You can use an AED on children over one year old and adults.

2. Aim

To provide guidance in the safe and effective use of an AED.

3. Who needs to be aware of this procedure

All Acacium Group workers are trained in the use of an AED for information purposes only as competency assessment is not appropriate. The Resus Council state that AEDs can be used safely and successfully by people with no specific training, however Acacium Group provide training to all workers in this element of life support.

4. Hazards / complications

Most modern AED's are extremely unlikely to do any harm to a client / person who has collapsed with suspected cardiac arrest, as long as instructions from the device are followed correctly.

5. Consent

Please now ensure you understand the CLN 06 Consent Policy.

In an emergency situation, care may be given if it is in the client's best interests, as long as it has not been refused in advance in a valid and applicable advance decision/DNARCP/respect documentation.

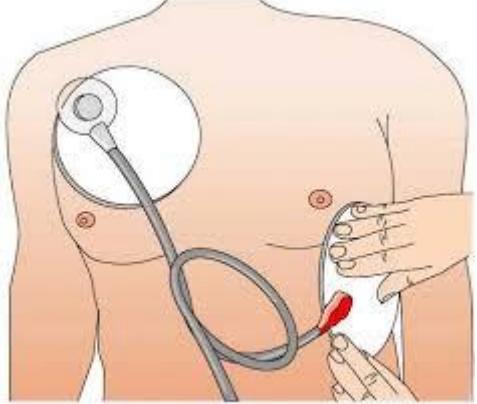
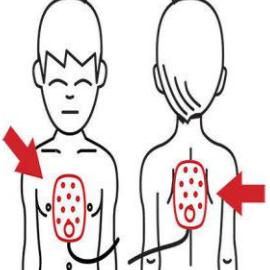
6. Use of AED

- AED – the pads will be with the AED. There are various types of AED to look out for, below are a few examples of an AED.



1. Pad Placement

It is important for the pads to be placed correctly; the AED machine gives you instructions for pad placement. The table below gives examples for adults, children and infants.

<p>Adults:</p> <p>Attach the pads to their chest. Place the first pad on the upper right side, just below their collarbone. The second pad needs to be placed on their left side, just below their breast tissue</p>	
<p>Child: up to 8 years and under 25kgs</p> <p>Attach the paediatric pads to their chest. Place the first pad on the upper right side, just below their collarbone. The second pad needs positioning on their left side just below their armpit – slightly more to the front than on an adult.</p>	
<p>12 months+ and small child:</p> <p>Attach the pads to their chest. Place the first pad on the front side of their chest, and the second pad on their back.</p>	

7. Procedure

Action		Rationale
1.	Prior to the start of a shift: always check if there are any reasons why an AED should not be used on the patients you are caring for i.e. an advanced directive, terminal illness, ReSPECT or DNARCP order and caution is required on patient/clients with an ICD - implantable cardioverter defibrillator	To comply with legal requirements. N.B. If unsure or unclear – always resuscitate
2.	Upon discovering a collapsed patient, call for help, check for danger and if safe approach. If an AED isn't immediately available start cardiopulmonary resuscitation (CPR) (see Acacium Group Resuscitation SOP) until someone can bring you an AED. In a public place on calling 999 the ambulance service will advise of the location of the nearest AED, ensure someone fetches this.	Starting resuscitation as soon as possible is likely to improve outcome in line with the chain of survival
3.	Once you have the AED, switch on. It will immediately give you instructions and advise you what you need to do. Follow these prompts. Where other rescuers are present, ensure CPR is continued	Follow prompts to ensure patient receives the best possible care
4.	Remove clothing and piercings and ensure the chest and patient/person is thoroughly dry, as there could be blood, water etc	To ensure pads stick to chest effectively and to prevent harm to caregiver and patient/client at discharge of the AED
5.	Take the pads out of the packet and remove the backing paper	
6.	Attach the pads to their chest. Please check the table above for pad placement for adults, children and infants. Ensure the pad has good contact with the skin (if needed use the initial pad to remove chest hair and then apply a new one) N.B – if there is more than one member of staff present, CPR should be continued while pads are being attached to the chest.	To ensure the shock will be delivered correctly and effectively
7.	Once step 6 has been completed the AED will assess the heart rhythm. Ensure that no-one is touching the patient at this point	To ensure that the patient is treated correctly
8	If a shock is required, deliver shock if the AED advises to do so: <ul style="list-style-type: none"> ensure that nobody is touching the patient, or any surface or object the patient is in contact with Remove any oxygen away from the patient push the shock button as directed/this may also be automated and not require any pushing of buttons. 	To improve the chance of sustaining life and ensure that the patient/client is receiving the best possible care and outcome

	<ul style="list-style-type: none"> immediately restart CPR at a ratio 30:2 (if paediatric BLS trained 15.2) Continue as directed by the prompts <p>If no shock is required, continue CPR:</p> <ul style="list-style-type: none"> immediately resume CPR - Regularly rotating chest compression delivery between rescuers where possible to prevent fatigue. <p>continue as directed by the prompts</p>	
9.	<p>Continue to follow the instructions from the AED until</p> <ul style="list-style-type: none"> crash team / senior staff / doctor / paramedics / ALS trained staff arrive to assist you <p>patient starts to show signs of regaining consciousness, such as coughing, opening his / her eyes, speaking or moving AND starts to breathe normally or you become exhausted.</p>	To ensure that the patient receives the best possible care
10.	Document all events and actions as soon as practical to do so	To ensure contemporaneous record keeping

8. Associated Policies / SOPs

Policies

CLIN 06 Consent Policy

CLIN 19 Resuscitation Policy

CLIN 40 Do Not Attempt Resuscitation Policy

SOPs

SOP RESUS 01 Basic Life Support - Adult

SOP RESUS 01-1 Basic Life Support - Adult (ROI)

SOP RESUS 02 Basic Life Support - Paediatric

SOP RESUS 02-1 Paediatric Basic Life Support (ROI)

9. References

- Resuscitation Council – A guide to AEDs – Updated December 2019 - <https://www.resus.org.uk/>
- <https://www.resus.org.uk/library/additional-guidance/guidance-defibrillators>
- British Heart Foundation - <https://www.bhf.org.uk/>
- St Johns Ambulance – <https://www.sja.org.uk/get-advice/first-aid-advice/how-to/how-to-use-a-defibrillator/>
- Department of Education: AED a guide for schools – Updated October 2019 - <https://www.gov.uk/government/publications/automated-external-defibrillators-aeds-in-schools>
- [Adult basic life support Guidelines | Resuscitation Council UK](#) – 2021
- Source: Deakin, Shewry, Gray, 'Public access defibrillation remains out of reach for most victims of out-of-hospital sudden cardiac arrest', Heart, 100 (2014), 619–623: <http://heart.bmjjournals.org/content/100/8/619.full?sid=bbc35314-f031-4b10-957d-8568b70345>

Appendix A: About Acacium Group

Acacium Group consists of a number of trading companies, each providing services within core niche areas of the health and social care industries. Therefore, as this document is a Group Policy, the Policy herein applies to all trading companies detailed below:

 Part of Acacium Group	 Part of Acacium Group	 Proclinical Part of Acacium Group
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