

Title: **DEFIBRILLATION**

Ref No: 0386 Version: 5

Classification: Protocol

Directorate: Trustwide

Due for Review: 08/04/18

Responsible for review: Megan Clemence, Resuscitation/ECSEL Lead

[Document Control](#)

Ratified by: Dr Nick Mathieu, ED Consultant, Deputy Chair Resuscitation Committee
Jane Viner, Director of Nursing, Professional Practice and People's Experience
Dr David Sinclair, Deputy Medical Director
Darren Russell, Medical Electronics Care and Clinical Policies Committee

Applicability: All clinical staff with patient contact.

Contents

| | | |
|-----|---|-----|
| 1. | Purpose | 1 |
| 2. | Introduction | 2 |
| 3. | Roles and Responsibilities | 2 |
| 4. | Defibrillation | 2-3 |
| 5. | Training and supervision | 3 |
| 6. | Monitoring and Auditing | 3 |
| 7. | References | 3 |
| 8. | Equality and Diversity | 3 |
| 9. | Further Information | 3 |
| 10. | Appendices | 4-6 |
| 11. | Document Control Information | 7-8 |
| 12. | Mental Capacity Act and Infection Control Statement | 9 |
| 13. | Quality Impact Assessment (QIA) | 10 |

1 Purpose

- 1.1 This policy aims to ensure the appropriate and safe use of defibrillation which may be required during cardiac arrest or cardioversion.

2 Introduction

- 2.1 Defibrillation is the delivery of electrical energy through the chest wall to the heart muscle to terminate a life-threatening cardiac arrhythmia in ventricular fibrillation or pulseless ventricular tachycardia.

The Resuscitation Council UK (RCUK) recommends that defibrillation should be delivered within three minutes following in-hospital cardiac arrest when the underlying rhythm is shockable, that is ventricular fibrillation or pulseless ventricular tachycardia.

3. Roles and Responsibilities

3.1 Role of Line Managers:

All line managers must ensure:

- Clinical staff are aware of this policy
- Clinical staff are released to attend annual updates in the use of automated external defibrillation (AED)
- Equipment checks are performed at the correct time and by the appropriate staff
- Defibrillators are ready and available for use in AED mode
- Any adverse incidents are reported within Trust guidelines.

3.2 Role of Resuscitation Committee:

The role of the Resuscitation Committee is to:

- Oversee policy and guideline development
- Advise the Trusts on defibrillation process and equipment in line with the RCUK guidelines
- Review equipment and procedures for resuscitation and ratify changes
- Receive reports on training compliance
- Identify risks and advise as appropriate.

3.3 Role of Resuscitation Officers:

The Resuscitation Officers are responsible for:

- Ensuring sufficient AED training sessions to meet demand and to deliver them to RCUK standards
- Ensuring standardisation of equipment and training across Trusts
- Auditing equipment checks quarterly and sending results to department managers and Resuscitation Committee
- Raising concerns with defibrillators and/or defibrillation as necessary

3.4 Role of clinical staff:

Staff with direct patient contact should ensure that if there is a defibrillator with AED mode in their place of work:

- they attend annual updates in how to use it with basic life support training
- they are able to perform daily checks of any defibrillation device and report problems to medical electronics.

All clinical staff with patient contact should be trained to defibrillate patients using automated external defibrillation (AED) mode. Please refer to Resuscitation Training Policy ref [0961](#).

4. Aims of protocol

4.1 The aim of this protocol is to ensure prompt and safe defibrillation for the cardiac-arrested individual with a shockable rhythm by acute and community staff.

4.2 This document sets out general principles around defibrillation and two defibrillation methods, AED and manual.

4.2.1 General Principles in Defibrillation

- Throughout the resuscitation process there should be emphasis on sustained, good quality chest compressions
- Defibrillation pads should be attached as soon as possible after cardiac arrest has been confirmed with minimal interruption to chest compressions
- The usual positioning of defibrillation pads are, Pad 1 – Upper right chest below clavicle, Pad 2 – Lower left chest over apex of heart. Other positions include – anterior/posterior and lateral placement

- Pads should not be placed over metal jewellery such as body piercings or over implanted pacemaker wires.
- Hairy chests may need a brief shave to ensure adhesion of pads.
- Oxygen should be removed from the patient and placed at least 1m away during defibrillation
- If the patient is wet, dry the victim's chest so that the adhesive pads will stick. Responders need to take particular care that they are not touching the patient.
- The person delivering the shock is responsible for the safety of the team and should check that no-one is contact with the patient before delivering the shock.
- The cardiac arrest team or paramedics must be called.
- RCUK Guidelines must be adhered to.

4.3 Defibrillation using an Automated External Defibrillator (AED) or a manual defibrillator in AED mode can be used by all staff trained in AED. Clinical staff should ensure that they update these skills annually. AEDs should be checked daily or whenever the clinical area is in use. The AEDs in use deliver a 150J shock.

4.4 Staff may only perform **manual** defibrillation if they have received the appropriate training through the RCUK ALS or equivalent and are competent to do so within their area of practice. If the skill is not used in practice regularly, more frequent training should be sought. Manual defibrillators should be checked daily or whenever the clinical area is in use.

4.5 Defibrillation can be used for cardioversion and pacing in the acute Trust. If this is required, the appropriate defibrillator should be used with the functions available. At present these defibrillators are situated in ICU, CCU, ED, EAU4 and Radiology East. Cardioversion and pacing should only be carried out by suitably trained staff. Defibrillation pads and 3-lead ECG electrodes should be used. There will be a delay in the shock being delivered to allow synchronisation.

5 Training and Supervision

5.1 All staff with clinical contact and where AEDs are available, should attend annual, mandatory updates on the use of AED.

6. Monitoring and Auditing

6.1 All defibrillators should be checked daily or when department is used. The regular checks will be audited on a quarterly basis by the Resuscitation team.

7. References

7.1 Resuscitation Council UK - www.resus.org.uk

8. Equality and Diversity

8.1 This document complies with the Torbay and South Devon NHS Foundation Trust Equality and Diversity statements.

9. Further Information

9.1 Links to policies.

[0350](#) Resuscitation

[0961](#) Resuscitation Training

[0086](#) Peri-arrest arrhythmias

10. Appendices

Appendix 1 – [Adult Advanced Life Support](#)

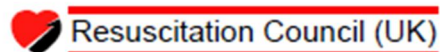
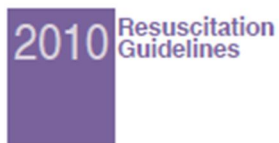
Appendix 2 – [AED Algorithm](#)

11. Document Control Information

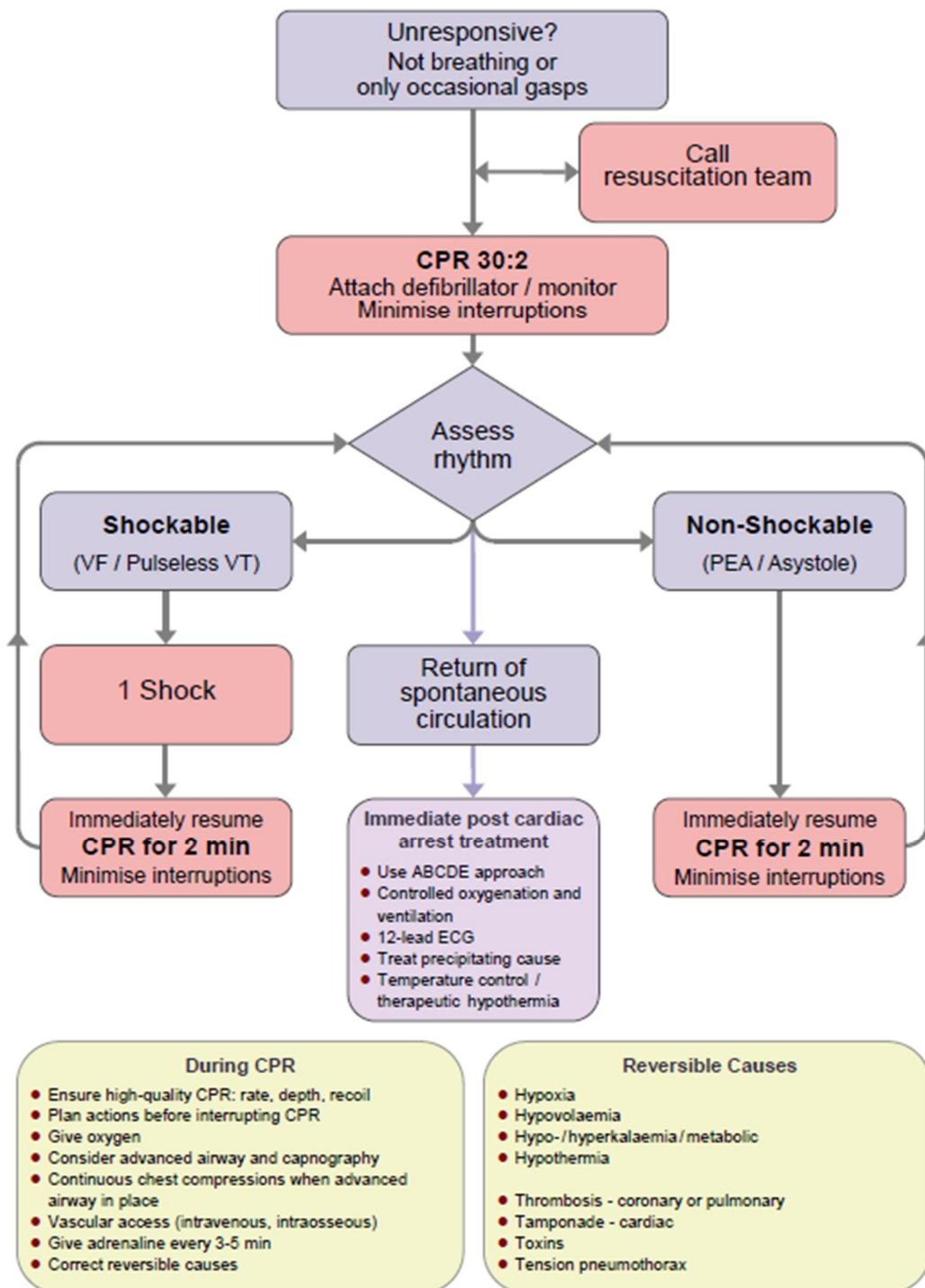
12. Mental Capacity Act and Infection Control Statement

13. Quality Impact Assessment (QIA)

14. Rapid Equality Impact Assessment

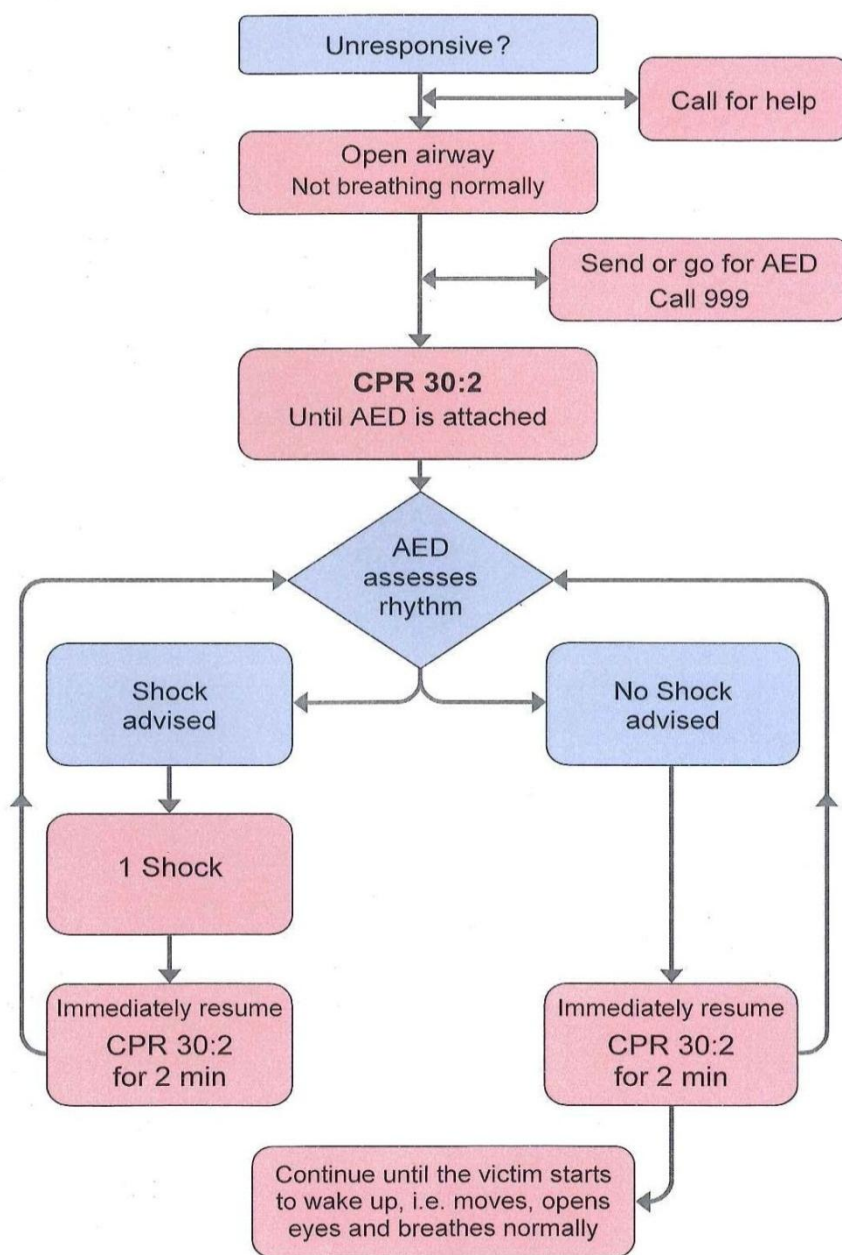


Adult Advanced Life Support





AED Algorithm



11. Document Control Information

This is a controlled document and should not be altered in any way without the express permission of the author or their representative.

Please note this document is only valid from the date approved below, and checks should be made that it is the most up to date version available.

If printed, this document is only valid for the day of printing.

| | | | |
|---|---|--------------------------|------------------|
| Ref No: | 0386 | | |
| Document title: | Defibrillation | | |
| Purpose of document: | This policy aims to ensure the appropriate and safe use of defibrillation which may be required during cardiac arrest or cardioversion | | |
| Date of issue: | 8 April 2016 | Next review date: | 8 April 2018 |
| Version: | 5 | Last review date: | 12 December 2014 |
| Author: | Megan Clemence, Resuscitation / ECSEL Lead | | |
| Directorate: | Trustwide and Community Trusts | | |
| Equality Impact: | The guidance contained in this document is intended to be inclusive for all patients within the clinical group specified, regardless of age, disability, gender, gender identity, sexual orientation, race and ethnicity & religion or belief | | |
| Committee(s) approving the document: | Dr Nick Mathieu, Vice Chair, Resuscitation Committee Jane Viner, Director of Nursing, Professional Practice and People's Experience Dr David Sinclair, Deputy Medical Director Darren Russell, Medical Electronics Care and Clinical Policies Committee | | |
| Date approved: | 18 November 2015 | | |
| Links or overlaps with other policies: | All TSDFT Trust Strategies, policies and procedure documents | | |

| | <i>Please select</i> | |
|---|--------------------------|--------------------------|
| | <i>Yes</i> | <i>No</i> |
| Does this document have training implications? <i>If yes please state:</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does this document have financial implications? <i>If yes please state:</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is this document a direct replacement for another? <i>If yes please state which documents are being replaced:</i> | <input type="checkbox"/> | <input type="checkbox"/> |

Document Amendment History

| Date | Version no. | Amendment summary | Ratified by: |
|------------|-------------|-------------------|---|
| 1 May 1998 | 1 | New | Director of Nursing Medical Director |
| 1 May 2000 | 2 | Revised | Director of Nursing Medical Director |

| | | | |
|-------------------|---|------------------------|--|
| 8 January 2009 | 3 | Revised | Director of Nursing and Quality Medical Director Paul Foster, Clinical Director of Pharmacy |
| 3 December 2009 | 3 | Document History added | |
| 12 September 2012 | 4 | Revised | Director of Nursing and Quality Medical Director Resuscitation Committee Chair |
| 12 December 2014 | 4 | Review date extended | Megan Clemence, Senior Resuscitation Officer / ESCEL Team Lead |
| 8 April 2016 | 5 | Revised | Dr Nick Mathieu, Vice Chair, Resuscitation Committee Jane Viner, Director of Nursing, Professional Practice and People's Experience Dr David Sinclair, Deputy Medical Director Darren Russell, Medical Electronics Care and Clinical Policies Committee |

12.

The Mental Capacity Act 2005

The Mental Capacity Act provides a statutory framework for people who lack capacity to make decisions for themselves, or who have capacity and want to make preparations for a time when they lack capacity in the future. It sets out who can take decisions, in which situations, and how they should go about this. It covers a wide range of decision making from health and welfare decisions to finance and property decisions

Enshrined in the Mental Capacity Act is the principle that people must be assumed to have capacity unless it is established that they do not. This is an important aspect of law that all health and social care practitioners must implement when proposing to undertake any act in connection with care and treatment that requires consent. In circumstances where there is an element of doubt about a person's ability to make a decision due to 'an impairment of or disturbance in the functioning of the mind or brain' the practitioner must implement the Mental Capacity Act.

The legal framework provided by the Mental Capacity Act 2005 is supported by a Code of Practice, which provides guidance and information about how the Act works in practice. The Code of Practice has statutory force which means that health and social care practitioners have a legal duty to have regard to it when working with or caring for adults who may lack capacity to make decisions for themselves.

“The Act is intended to assist and support people who may lack capacity and to discourage anyone who is involved in caring for someone who lacks capacity from being overly restrictive or controlling. It aims to balance an individual's right to make decisions for themselves with their right to be protected from harm if they lack the capacity to make decisions to protect themselves”. (3)

All Trust workers can access the Code of Practice, Mental Capacity Act 2005 Policy, Mental Capacity Act 2005 Practice Guidance, information booklets and all assessment, checklists and Independent Mental Capacity Advocate referral forms on iCare

http://icare/Operations/mental_capacity_act/Pages/default.aspx

Infection Control

All staff will have access to Infection Control Policies and comply with the standards within them in the work place. All staff will attend Infection Control Training annually as part of their mandatory training programme.

13.

Quality Impact Assessment (QIA)

| Who may be affected by this document? | Please select | | | |
|---------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| | Patient / Service Users | <input checked="" type="checkbox"/> | Visitors / Relatives | <input type="checkbox"/> |
| General Public | <input type="checkbox"/> | Voluntary / Community Groups | <input type="checkbox"/> | |
| Trade Unions | <input type="checkbox"/> | GPs | <input type="checkbox"/> | |
| NHS Organisations | <input type="checkbox"/> | Police | <input type="checkbox"/> | |
| Councils | <input type="checkbox"/> | Carers | <input type="checkbox"/> | |
| Staff | <input checked="" type="checkbox"/> | Other Statutory Agencies | <input type="checkbox"/> | |
| Others (please state): | | | | |

| | |
|--|--------------------------|
| Does this document require a service redesign, or substantial amendments to an existing process? | <input type="checkbox"/> |
|--|--------------------------|

If you answer yes to this question, please complete a full Quality Impact Assessment.

| | | | | |
|--|-------------------------|--------------------------|---|--------------------------|
| Are there concerns that the document could adversely impact on people and aspects of the Trust under one of the nine strands of diversity? | Age | <input type="checkbox"/> | Disability | <input type="checkbox"/> |
| | Gender re-assignment | <input type="checkbox"/> | Marriage and Civil Partnership | <input type="checkbox"/> |
| | Pregnancy and maternity | <input type="checkbox"/> | Race, including nationality and ethnicity | <input type="checkbox"/> |
| | Religion or Belief | <input type="checkbox"/> | Sex | <input type="checkbox"/> |
| | Sexual orientation | <input type="checkbox"/> | | |

If you answer yes to any of these strands, please complete a full Quality Impact Assessment.

| | |
|---|--|
| If applicable, what action has been taken to mitigate any concerns? | |
|---|--|

| | | | | |
|--|--------------------------|-------------------------------------|------------------------------|--------------------------|
| Who have you consulted with in the creation of this document? <i>Note - It may not be sufficient to just speak to other health & social care professionals.</i> | Patients / Service Users | <input type="checkbox"/> | Visitors / Relatives | <input type="checkbox"/> |
| | General Public | <input type="checkbox"/> | Voluntary / Community Groups | <input type="checkbox"/> |
| | Trade Unions | <input type="checkbox"/> | GPs | <input type="checkbox"/> |
| | NHS Organisations | <input type="checkbox"/> | Police | <input type="checkbox"/> |
| | Councils | <input checked="" type="checkbox"/> | Carers | <input type="checkbox"/> |
| | Staff | <input checked="" type="checkbox"/> | Other Statutory Agencies | <input type="checkbox"/> |
| | Details (please state): | | | |