

Service Standards for Resuscitation in Sexual and Reproductive Healthcare Services

Published by the Clinical Standards Committee

Faculty of Sexual & Reproductive Healthcare
of the Royal College of Obstetricians and Gynaecologists

Committee Members:

Mike Passfield (Chair)

Dr Diana Mansour (Ex-Officio)

Dr Vivian Iguyowwe (Speciality Representative)

Dr Emma Pearce (Speciality Representative)

Dr Catherine Bateman (Speciality Representative)

Dr Anagha (Sandhya) Nadgir (Speciality Representative)

Dr Minhal Bakhai (Primary Care Representative)

Dr Claire Searle (Primary Care Representative)

Dr Tony Feltbower (Revalidation Representative)

Dr Madeleine Crow (Trainee Representative)

Dr Eric Chen (CEU Representative)

Rosemary Gordon (Nursing Representative)

Non-committee External Experts:

Dr David Gabbott, Resuscitation Council (UK) Representative

Dr Paul Greig, Resuscitation Council (UK) Representative

First Published: July 2006

Review dates: October 2010, January 2013, August 2016 and September 2021

Next review date: September 2024

Contents

| | |
|--|----------|
| | 1 |
| Service Standards for Resuscitation in Sexual and Reproductive Healthcare Services | 1 |
| 2021 FSRH | 1 |
| | 1 |
| SERVICE STANDARDS FOR RESUSCITATION IN SEXUAL & REPRODUCTIVE HEALTHCARE SERVICES | 1 |
| Changes introduced since review..... | 1 |
| Introduction | 1 |
| 1. Standard Statement on Medical Risk Assessment in Sexual & Reproductive Health Service Provision | 2 |
| 2. Standard Statement on Training in Resuscitation | 3 |
| 3. Standard Statement on Emergency Drugs | 4 |
| 4. Standard Statement on Emergency Equipment | 5 |
| 5. Standard Statement on Co-ordination | 6 |
| 6. Standard Statement on Risk Management | 7 |
| RECOGNITION AND EMERGENCY TREATMENT OF VASOVAGAL SYNCOPE / BRADYCARDIA | 8 |
| Symptoms and signs of vasovagal syncope | 8 |
| Treatment..... | 9 |
| A – Airway..... | 9 |
| B – Breathing | 9 |
| C – Circulation..... | 9 |
| D – Disability | 11 |
| E – Exposure..... | 11 |
| Resuscitation Council UK Adult Basic Life Support (BLS) Guidelines (2021) (with permission) | 12 |
| Resuscitation Council UK Emergency Treatment of Anaphylactic reactions – guidelines for healthcare providers (2021) (with permission)..... | 13 |

SERVICE STANDARDS FOR RESUSCITATION IN SEXUAL & REPRODUCTIVE HEALTHCARE SERVICES

Changes introduced since review

- ▶ Updated Resuscitation Council Guidance 2021
- ▶ Updated Resuscitation Council BLS Algorithm 2021
- ▶ Updated Resuscitation Council Anaphylaxis Algorithm 2021
- ▶ FSRH CEU Guidance on contraceptive choices for women with cardiac disease
- ▶ Flexibility of atropine dosage in view of some difficulties services have had in sourcing 500mcg dose

Introduction

This document provides standards for resuscitation in sexual and reproductive health service settings.

Resuscitation may be required in a number of clinical situations:

- ▶ Collapse during or following a clinical procedure e.g. vasovagal syncope
- ▶ Anaphylaxis to administered medication or as a result of contact with another provoking agent, e.g. latex gloves
- ▶ Collapse unrelated to a clinical procedure but related to an underlying medical condition e.g. diabetes, epilepsy, cardiac or pulmonary problems

This document should be used in conjunction with national guidelines from other relevant professional bodies and locally agreed policies and procedures. It is important that each service identifies the level of equipment and training needed to deal with common emergencies on the basis of a local risk assessment. ¹

¹ Care Quality Commission, 2010. *Essential Standards of Quality and Safety*

1. Standard Statement on Medical Risk Assessment in Sexual & Reproductive Health Service Provision

All patients should have a documented clinical risk assessment before treatment or practical procedures

- 1.1 Any patient could have a medical emergency during a clinical procedure.
- 1.2 A medical and drug history will enable the sexual health practitioner to identify patients at particular risk and take measures to minimise the risk of a problem arising.
- 1.3 Modifying the planned treatment, liaison with the patient's general practitioner, or referral to hospital may be appropriate for some procedures in selected patients.
- 1.4 Sexual health practitioners should routinely assess patients using a risk stratification scoring system. Whichever system is used, it should identify patients with a higher risk of medical emergencies occurring during treatment. Referral to hospital for treatment when a certain level of risk is attained is then appropriate.
- 1.5 Patients specifically 'at risk' include those with a previous history of adverse events, known allergies to any of the treatments planned, poorly controlled epilepsy and those with significant cardiac disease.
- 1.6 Further guidance for the management of those patients with heart disorders is available in the CEU document 'Contraceptive Choices in Women with Cardiac Disease'²

² FSRH Clinical Effectiveness Unit, 2014. *Contraceptive Choices for Women with Cardiac Disease [pdf]* Available at: <http://www.fsrh.org/documents/ceu-guidance-contraceptive-choices-for-women-with-cardiac/> [Accessed 09 September 2021].

2. Standard Statement on Training in Resuscitation

Evidence of training and regular updates in resuscitation is essential for all staff dealing with emergencies arising during the provision of sexual and reproductive health services.

- 2.1 All staff providing sexual and reproductive health services should receive appropriate training in 'Basic Life Support' (BLS) according to the current Resuscitation Council (UK) Guidelines (see Annex 2). Use of a pocket mask is encouraged and training may also include insertion of an oropharyngeal airway if appropriate.³
- 2.2 All new members of staff should have resuscitation training as part of their induction programme.³
- 2.3 All staff should know how to summon emergency assistance and when to provide BLS.³
- 2.4 All staff should be updated annually in BLS.^{3,4}
- 2.5 All registered healthcare staff should be trained to recognise and treat a vasovagal or syncopal episode and anaphylaxis.⁵

³ Resuscitation Council UK, 2020. *Quality Standards for Cardiopulmonary Resuscitation and Training* [online] Available at: <https://www.resus.org.uk/library/quality-standards-cpr> [Accessed 09 September 2021].

⁴ Resuscitation Council UK, 2021. *Adult Basic Life Support Guidelines*. Available at: <https://www.resus.org.uk/library/2021-resuscitation-guidelines/adult-basic-life-support-guidelines> [Accessed 09 September 2021].

⁵ Resuscitation Council UK, 2021. *Emergency treatment of anaphylactic reactions. Guidelines for healthcare providers* [pdf] Available at: <https://www.resus.org.uk/library/additional-guidance/guidance-anaphylaxis/emergency-treatment> [Accessed 09 September 2021].

3. Standard Statement on Emergency Drugs

Drugs required for resuscitation must be available, accessible, clearly labelled, adequately maintained and their location known to all staff.

3.1 Recommended drugs required for resuscitation are:

- ▶ Oxygen
- ▶ Atropine 500 or 600 micrograms IV/IM (2 doses) for the treatment of prolonged symptomatic bradycardia.⁶
- ▶ Adrenaline 0.5 mg IM (0.5ml of 1:1000 injection) for the treatment of anaphylaxis.⁴

3.2 Emergency drugs should be labelled with the recommended dosage regimes.

3.3 Drugs should be available before any planned clinical session is commenced

3.4 Monthly checks (as a minimum) of emergency drugs should also be undertaken to ensure that they are not past their expiry date.

3.5 All staff must know the precise location of emergency drugs/equipment.

3.6 Emergency drugs should be stored in tamperproof containers, which once opened should be replaced.

3.7 Oxygen must be available when intra-uterine instrumentation is planned. For more minor procedures oxygen availability is desirable.

3.8 Oxygen may be supplied by a wall/pipeline or by a cylinder. Oxygen cylinders should be of sufficient size to be easily portable but also allow for adequate flow rates, e.g. 10-15 litres per minute, until the arrival of an ambulance or the patient fully recovers (up to 30 minutes).

3.9 Oxygen cylinders should be bracketed to the wall or securely attached to an oxygen trolley when stored.

⁶ Resuscitation Council UK, 2021. Bradycardia Algorithm. Available at: <https://www.resus.org.uk/sites/default/files/2021-04/Bradycardia%20Algorithm%202021.pdf> [Accessed 09 September 2021].

4. Standard Statement on Emergency Equipment

Essential resuscitation equipment should be available, accessible, maintained and its location known to all staff.

- 4.1 Services should ensure that equipment required for resuscitation or other medical emergencies is available and accessible for use as quickly as possible¹
- 4.2 All staff must know the precise location of emergency equipment/drugs.
- 4.3 Basic resuscitation equipment for managing the airway and administering drugs should be available and accessible in clinics³
- 4.4 Recommended Emergency Equipment³
In addition to standard equipment, i.e. sphygmomanometer, stethoscope, sharps box, non-latex gloves, scissors and tape, the following should be immediately available and accessible:
 - ▶ Pocket mask with one-way valve
 - ▶ Oxygen face mask with reservoir and tubing
 - ▶ Oropharyngeal airways (sizes 2,3 and 4) – for those trained in their use
 - ▶ Portable suction (optional)
 - ▶ Adjustable couch with pillow that allows patient to lie flat – ideally head down tilt
 - ▶ Appropriate selection of needles and syringes/cannulae (optional as both atropine and adrenaline can be administered IM)
- 4.5 A pulse oximeter should be available. The device will help detect the pulse rate and also allow the oxygen saturation levels to be measured.
- 4.6 Emergency equipment should be single use and latex free where possible³

5. Standard Statement on Co-ordination

A named individual should be responsible locally for the overall co-ordination of resuscitation services.

- 5.1 A named individual should be responsible for maintaining all emergency equipment and drugs.
- 5.2 A named individual should be responsible for coordinating training in resuscitation.
- 5.3 The resuscitation training of all staff should be recorded in a central database.
- 5.4 Local protocols for the treatment and referral of medical emergencies should be clearly displayed in all clinical areas.
- 5.5 All staff should know how to access emergency services.
- 5.6 Emergency telephone numbers should be clearly displayed.
- 5.7 The Human Medicines Act 2012 permits nurses to give certain drugs without prescription for the purpose of saving a life in an emergency (<http://www.legislation.gov.uk/uksi/2012/1916/contents/made>). A local protocol for the use of these drugs should be in place.

6. Standard Statement on Risk Management

Locally agreed risk management policies for the treatment of emergencies should be in place and take into account national recommendations.

- 6.1 A risk assessment should be performed in all clinical situations, including situations where healthcare staff work in isolation. The risk assessment should also include the location, including geographical access by emergency services, access to a telephone and physical access to the room where procedures may take place i.e. availability of a lift, ease of access for the ambulance trolley/stretchers.⁷
- 6.2 All emergencies should be recorded for the purposes of audit and reported to a local co-ordinator who should maintain a database of such events. The true incidence of sexual health related adverse clinical events is unknown. Data collection of this nature is essential in order to quantify any risk analysis for future standards.
- 6.3 Significant events should be discussed with the individual(s) involved and there should be a process for the whole team to learn from them⁷.
- 6.4 An appropriately trained assistant should be present during cervical instrumentation procedures. This person may be required to call for additional assistance, monitor the condition of the patient or perform Basic Life Support⁸.

Annex 1

⁷ FSRH Clinical Standards Committee, 2021. *Service Standards for Risk Management in Sexual and Reproductive Health Services*. [pdf] Available at:]

RECOGNITION AND EMERGENCY TREATMENT OF VASOVAGAL SYNCOPE / BRADYCARDIA

Inadequate oxygenation and blood flow to the brain results in loss of consciousness. This may occur with a low blood pressure caused by vagal over activity (a vasovagal attack, simple faint, or syncope) which slows the heart rate significantly (bradycardia). This can follow emotional stress, pain or specifically after cervical dilatation, instrumentation of the uterus or vasectomy procedures. Some patients are more prone to this and have a history of repeated faints.

Loss of consciousness associated with inadequate cerebral perfusion can be associated with a transient period of twitching or a brief seizure. This is invariably self-limiting and resolves as the bradycardia resolves. Such seizures are not epilepsy and should not be treated as such.

Bradycardia is defined as a heart rate of less than 60 per minute. Most people do not get symptoms until the heart rate is less than 40 per minute.

Symptoms and signs of vasovagal syncope

- ▶ Patient complains of feeling faint / dizzy / light headed.
- ▶ Slow pulse rate / bradycardia (feel for pulse in neck or groin if exposed or look/listen to the pulse oximeter if attached).
- ▶ Low blood pressure
- ▶ Pallor and sweating
- ▶ Nausea and vomiting
- ▶ Loss of consciousness

Treatment

Use **ABCDE** approach (**A**irway, **B**reathing, **C**irculation, **D**isability, **E**xposure)

- ▶ Stop further manipulation / dilatation of cervix / instrumentation of the uterus
- ▶ Call for help
- ▶ Assess the patient

A – Airway

Check responsiveness – if unresponsive – shake and shout “Are you OK?”

- ▶ Check airway patency, talk to the patient, reassure if conscious, listen for sounds of airway obstruction (stridor, grunting).
- ▶ If conscious level deteriorating and/or signs of airway obstruction provide airway opening manoeuvres – head tilt, chin lift
- ▶ If patient is not responsive airway obstruction is likely to occur. Provide airway opening manoeuvres and insert an oropharyngeal airway if trained to do so

B – Breathing

- ▶ Check patient is breathing
- ▶ Listen for breath sounds
- ▶ Give oxygen (10-15 litres per minute) when available
- ▶ Attach pulse oximeter if not already applied
- ▶ Loosen any tight clothing, especially around the neck
- ▶ If patient is not breathing (ignore occasional gasps) provide ventilation using a pocket mask and call 999

C – Circulation

- ▶ Look for signs of shock (pallor, sweating, feeling faint, nausea)
- ▶ Check pulse / heart rate by palpation of a central pulse (pulse oximeter reading may confirm)
- ▶ Check the blood pressure
- ▶ Lay the patient flat as **soon as possible** and raise the legs to improve venous return (if not already done)
- ▶ The vast majority of vasovagal syncopal attacks will resolve with the above measures. Observe the patient – keep them laying down until they feel better.

If the patient continues to show significant signs of shock, a reduced conscious level and the pulse (by palpation, auscultation or pulse oximeter reading) remains slow (bradycardia <60/min) then the use of atropine in this setting is warranted. The majority of patients will usually not manifest persistent, significant signs unless the heart rate remains 40/min or less.

Whenever possible commence treatment by initially following the Resuscitation Council (UK) Bradycardia Algorithm. For those trained in gaining rapid intravenous (IV) access (by whatever means), give IV atropine as a single dose of 500-600 micrograms (followed by a saline flush). The heart rate will usually increase within a few minutes. If there is no improvement in the patient's condition emergency assistance must be summoned and a further IV dose of 500-600 micrograms atropine given.

If the patient responds quickly and effectively to the initial dose of atropine the decision to call for further assistance e.g. emergency services will depend on the experience of the healthcare staff present. Many patients will be well enough to go home after a brief period of time under observation (determined by the healthcare provider). Those who remain symptomatic or unwell should have a further dose of atropine (as above) and the emergency assistance summoned. The ambulance responders will decide whether further treatment and or transfer to hospital is necessary.

For those staff unable (or not trained) to gain IV access the decision as to what to do with a shocked, semi-conscious/unconscious patient whilst awaiting emergency assistance is difficult and stressful. Although evidence for its use in this manner is minimal, a dose of atropine (500-600 micrograms) may be given intramuscularly (IM). This recommendation is NOT part of the Resuscitation Council (UK) Bradycardia Algorithm but it is a logical suggestion when there is no alternative except to monitor a seriously unwell patient until help arrives. This dose and route of administration is highly unlikely to cause any significant harm. The atropine should be given anterolaterally in the mid-thigh with a long enough needle to ensure correct intramuscular placement. The increase in heart rate following IM atropine is significantly slower than after IV atropine and can take many minutes. If the patient's condition continues to deteriorate (or there is no improvement within 10 minutes), a further dose of IM atropine (500-600 micrograms) can be given whilst awaiting the arrival of the emergency services.

If any patient becomes unresponsive, always check for 'signs of life' (breathing, circulation) and start CPR in the absence of signs of life or normal breathing (ignore occasional gasps). Call 999.

If 'signs of life' are present i.e. the patient is breathing normally but remains unconscious, then ensure that they are in the full recovery position. Call 999.

A 12 lead ECG is not immediately necessary to diagnose and treat a clinically 'symptomatic' bradycardia. The Resuscitation Council (UK) Advanced Life Support advice is to *record* a 12 lead ECG at the earliest opportunity when possible. This will help identify the precise rhythm, either before treatment or retrospectively. If the paramedical services are summoned then they will always record an ECG.

D – Disability

Make a rapid initial assessment of the patient's conscious level using the **AVPU** method: **A**lert, responds to **V**ocal stimuli, responds to **P**ainful stimuli or **U**nresponsive to all stimuli.

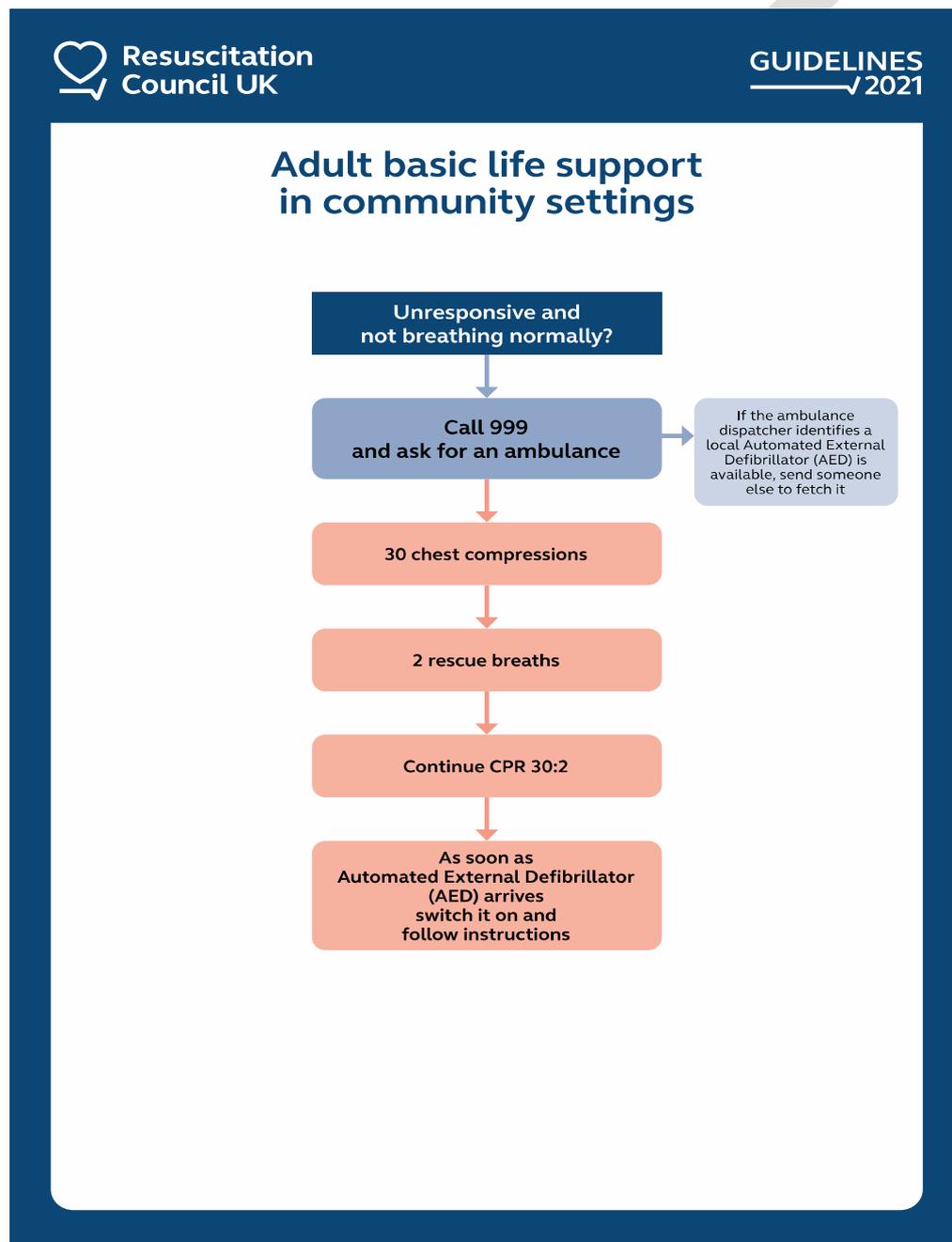
E – Exposure

To assess and treat the patient properly loosening or removal of some of the patient's clothes will be necessary. Respect the patient's dignity and minimise heat loss. This will allow you to see any rashes (e.g. anaphylaxis) or perform procedures (e.g. IV access, IM injection, listening to the chest, heart).

DRAFT

Annex 2
Resuscitation Council UK Adult Basic Life Support (BLS) Guidelines (2021) (with permission)

(Chest compressions - depth of 5-6cm and rate of 100-120 min⁻¹).
 (Rescue breaths should be given using a pocket mask, oropharyngeal airway and oxygen if available).



Annex 3
Resuscitation Council UK Emergency Treatment of Anaphylactic reactions – guidelines for healthcare providers (2021) (with permission)
