CLINICAL PRACTICE GUIDELINES

CFR

CARDIAC FIRST RESPONDER - ADVANCED

2021 Edition

Pre-Hospital Emergency Care Council

PHECC Clinical Practice Guidelines

First Edition, 2001

Second Edition, 2004

Third Edition, 2009

Third Edition, Version 2, 2011

Fourth Edition, April 2012

Fifth Edition, July 2014

Sixth Edition, March 2017 (Updated February 2018)

Seventh Edition, August v2 2021

Published by:

Pre-Hospital Emergency Care Council

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ISBN 978-1-9168716-1-8

Pre-Hospital Emergency Care Council

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CLINICAL PRACTICE GUIDELINES

Pre-Hospital Emergency Care Council

FOREWORD

This Handbook comprises the 2021 Edition Clinical Practice Guidelines (CPGs). These guidelines outline patient assessments and pre-hospital management for responders at:

RESPONDER LEVEL

- Cardiac First Responder
- First Aid Responder
- Emergency First Responder

REGISTERED PRACTITIONER

- Emergency Medical Technician
- Paramedic
- Advanced Paramedic

I am delighted that there are now 357 CPGs in total to guide integrated care across the six pre-hospital emergency care clinical levels. These CPGs ensure that responders and practitioners are practicing to best international standards and support PHECC's vision that people in Ireland receive excellent pre-hospital emergency care.

I would like to acknowledge the hard work and commitment the members of the Medical Advisory Committee have shown during the development of this publication, guided by Dr David Menzies (Chair). A special word of thanks goes to Dr Brian Power who retired in 2020 and has made an enormous contribution to the advancement of pre-hospital emergency care in Ireland. I want to acknowledge the PHECC Executive, for their continued support in researching and compiling these CPGs and paving the way for the future development of the pre-hospital emergency care continuum.

I recognise the contribution made by many responders and practitioners, whose feedback has assisted PHECC in the continual improvement and development of CPGs and welcome these guidelines as an important contribution to best practice in pre-hospital emergency care.

Jacqueline Burke

Dr Jacqueline Burke, Chairperson
Pre-Hospital Emergency Care Council

ACKNOWLEDGEMENTS

The process of developing CPGs has been long and detailed. The quality of the finished product is due to the painstaking work of many people, who through their expertise and review of the literature, ensured a world-class publication.

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ACKNOWLEDGEMENTS

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PHECC would like to thank and acknowledge all of the experts who contributed to the creation of these Clinical Practice Guidelines.

SPECIAL THANKS

An extra special thanks to all the PHECC team who were involved in this project, especially Margaret Bracken, Aisling Ryan and Ashling Weldon for their painstaking recording of details and organisational skills.

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EXTERNAL QUALITY REVIEW

Dr Jack Collins

INTRODUCTION

Welcome to the 2021 edition of the PHECC Clinical Practice Guidelines. This edition has been a long time in development and reflects the significant effort and contribution to the new CPGs by so many people.

As ever, a robust development and review process has been applied to the new and revised CPGs, including a detailed and comprehensive quality assurance process.

Pre-Hospital Care in Ireland has evolved significantly since the first editions of the CPGs. The suite of care the CPGs now enable is progressive and transformative across all levels of responder and practitioner.

The impact of Covid-19 has influenced these CPGs, both in posing challenges in continuing the regular Medical Advisory Committee meetings and discussions, while also giving rise to a specific suite of vaccination CPGs that enable PHECC practitioners to support the national Covid-19 vaccination programme.

For the first time, we have CPGs that enable practitioners to not convey patients to hospital as a matter of default. The non-conveyance CPGs are a step towards more alternative care pathways for our patients, in recognition that the traditional hospital-centric model for emergency care is not always appropriate or feasible. This suite of non-conveyance CPGs will be a key area for expansion and development in the next term of the Medical Advisory Committee.

Further developments include the designation of certain CPGs and elements of other CPGs as 'non-core'. This non-core element replaces the previous process of 'exemptions' accommodated for certain CPGs and recognises that not all Licenced CPG Providers need to implement every single CPG.

I would like to express my sincere thanks to all who contributed to this edition of the CPGs including the members of the Medical Advisory Committee, those who submitted queries for consideration, speciality groups and clinical programmes who provided expert external advice and feedback.

In particular, I would like to thank Dr Brian Power who retired from PHECC in 2020. Brian created the first edition of the PHECC CPGs and has managed the process of CPG development since then, including the majority of the development work for this suite of CPGs. Brian's contribution to the advancement of pre-hospital emergency care in Ireland has been significant and is the framework that supports responders and practitioners still. Since Brian's retirement, Ricky Ellis kindly and ably stepped into the gap, continuing to support MAC in the finalisation of the CPGs before handing over to Ray Carney, PHECC's new Clinical Programme Manager. Thank you both.

Finally, thanks to you, the responders and practitioners who implement these CPGs. I believe these CPGs will enable you to continue to provide expert compassionate pre-hospital care to patients every day of the year. PHECC greatly values your work and also your feedback.

Dr David Menzies, Chair Medical Advisory Committee

Clinical Practice Guidelines (CPGs) and the responder

CPGs are guidelines for best practice and are not intended as a substitute for good clinical judgment. Unusual patient presentations make it impossible to develop a CPG to match every possible clinical situation. The responder decides if a CPG should be applied based on patient assessment and the clinical impression. The responder must work in the best interest of the patient within the scope of practice for his/her clinical level. Consultation with fellow responders and/or practitioners in challenging clinical situations is strongly advised.

The CPGs herein may be implemented provided:

1. The responder maintains current certification as outlined in PHECC's Education & Training Standard.
2. The responder is authorised, by the organisation on whose behalf he/ she is acting, to implement the specific CPG.
3. The responder has received training on, and is competent in, the skills and medications specified in the CPG being utilised.

The medication dose specified on the relevant CPG shall be the definitive dose in relation to responder administration of medications. The onus rests on the responder to ensure that he/she is using the latest version of CPGs, which are available on the PHECC website www.phecc.ie

Definitions

Adult	A patient of 16 years or greater, unless specified on the CPG
Child	A patient between 1 and less than or equal to (≤) 15 years old, unless specified on the CPG
Infant	A patient between 4 weeks and less than 1 year old, unless specified on the CPG
Neonate	A patient less than 4 weeks old, unless specified on the CPG
Paediatric patient	Any child, infant or neonate

Completing an ACR/CFRR for each patient is paramount in the risk management process and users of the CPGs must commit to this process.

Minor injuries

Responders must adhere to their individual organisational protocols for treat and discharge/referral of patients with minor injuries.

The aim of pre-hospital emergency care is to provide a comprehensive and coordinated approach to patient care management, thus providing each patient with the most appropriate care in the most efficient time frame.

In Ireland today, the provision of emergency care comes from a range of disciplines and includes responders (Cardiac First Responders, First Aid Responders and Emergency First Responders) and practitioners (Emergency Medical Technicians, Paramedics, Advanced Paramedics, Nurses and Doctors) from the statutory, private, auxiliary and voluntary services.

CPGs set a consistent standard of clinical practice within the field of pre-hospital emergency care. By reinforcing the role of the responder, in the continuum of patient care, the chain of survival and the golden hour are supported in medical and traumatic emergencies respectively.

CPGs guide the responder in presenting to a practitioner a patient who has been supported in the very early phase of injury/illness and in whom the danger of deterioration has lessened by early appropriate clinical care interventions.

The CPGs presume no intervention has been applied, nor medication administered, prior to the arrival of the responder. In the event of another practitioner or responder initiating care during an acute episode, the responder must be cognisant of interventions applied and medication doses already administered and act accordingly.

In this care continuum, the duty of care is shared among all responders/practitioners of whom each is accountable for his/her own actions. The most qualified responder/practitioner on the scene shall take the role of clinical lead. Explicit handover between responders/practitioners is essential and will eliminate confusion regarding the responsibility for care.

Classification of CPGs

The Taxonomy for Pre-Hospital Emergency Care CPGs has changed to a new method for configuring PHECC CPGs. There are now seventeen categories developed to group common themes and categories together.

Basic Life Support – ILCOR 2020

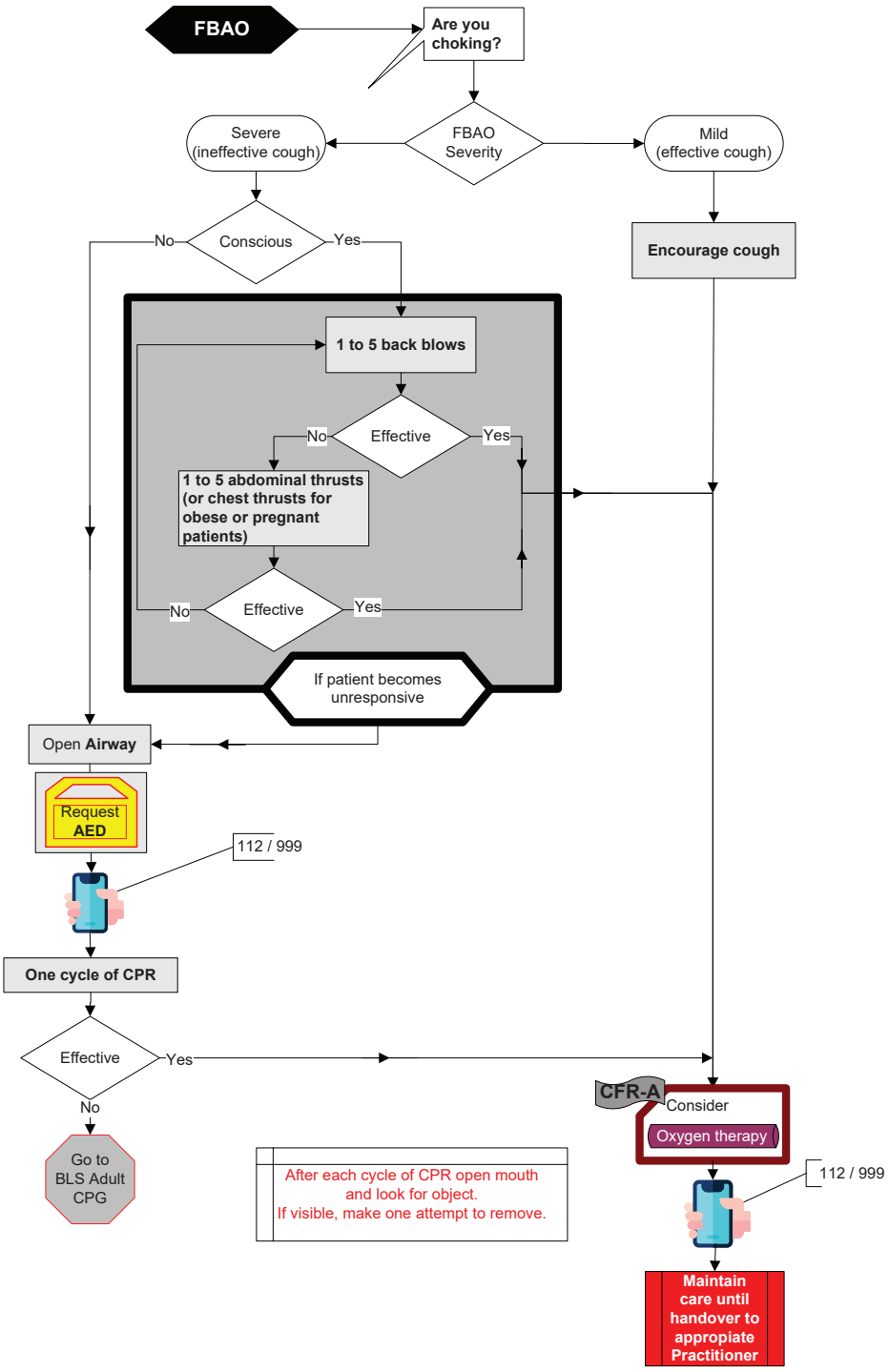
Basic life support CPGs contained within this publication are in accordance with International Liaison Committee on Resuscitation (ILCOR) guidelines 2020.

INDEX – CARDIAC FIRST RESPONDER – ADVANCED CPGS

Foreign Body Airway Obstruction - Adult

1/2/3.2.1
Version 5, 04/2021

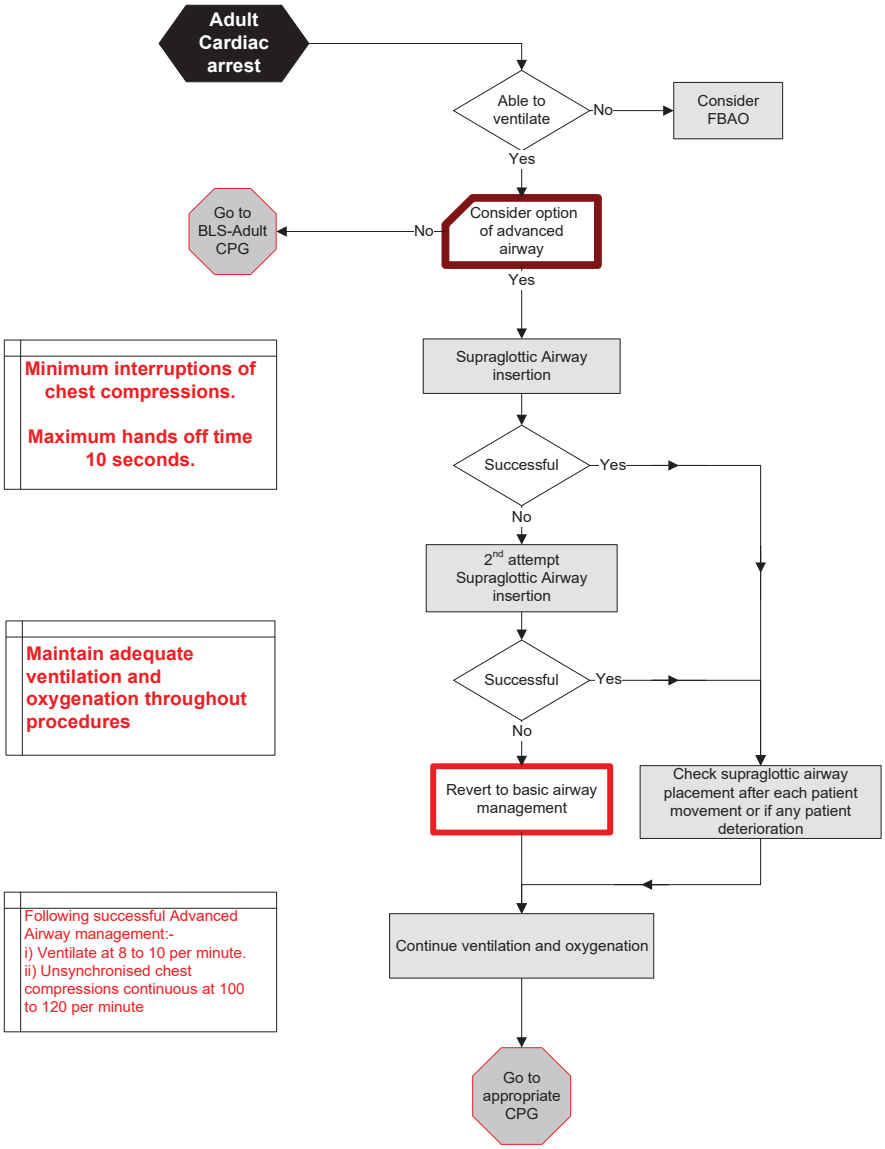
CFR FAR EFR CFR-A



Advanced Airway Management – Adult

1/3.2.2T
Version 5, 12/2020

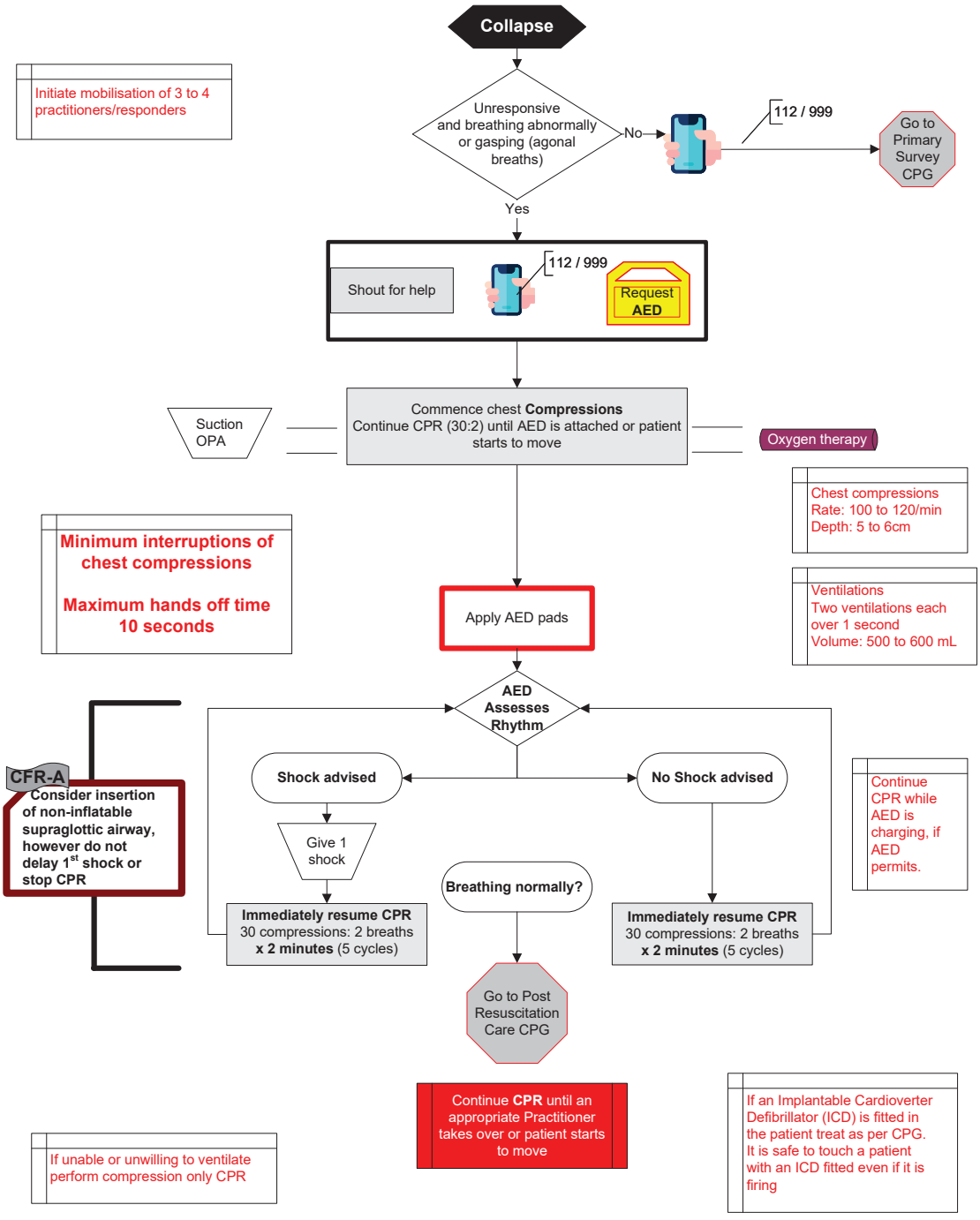
CFR-A EFR BTEC



Basic Life Support – Adult

1/3.14.1
Version 6, 03/2021

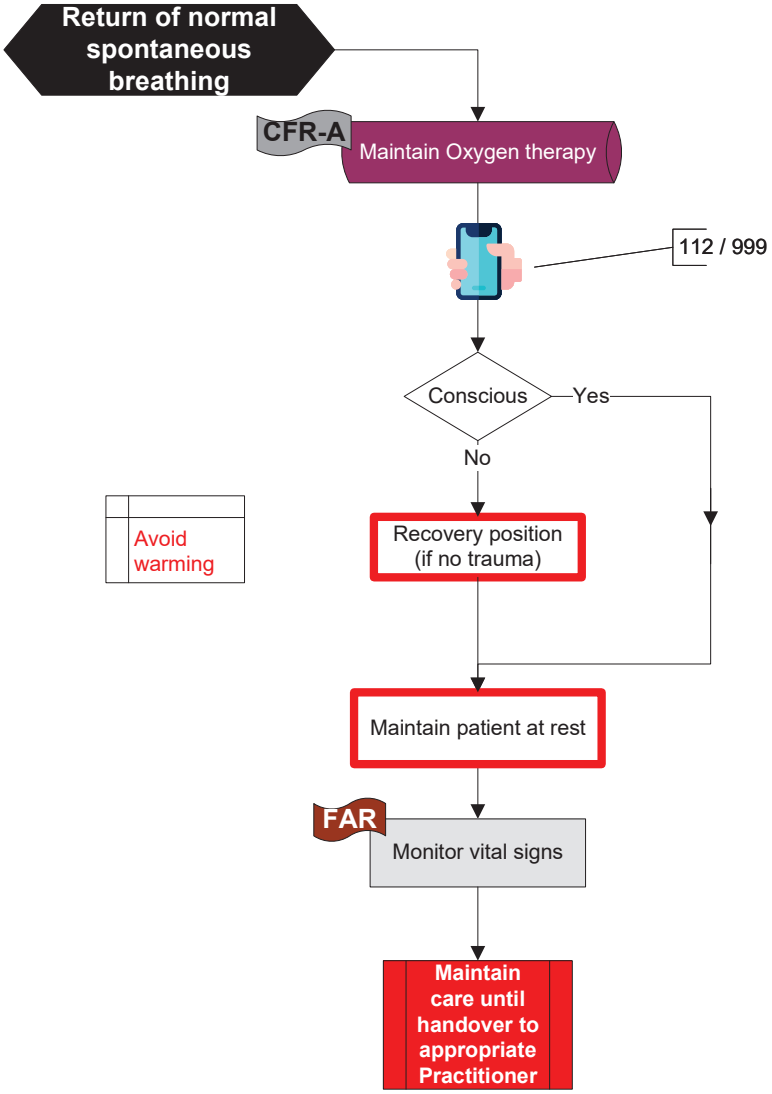
CFR-A EFR



Post-Resuscitation Care – Adult

1/2/3.14.6
Version 5, 03/2021

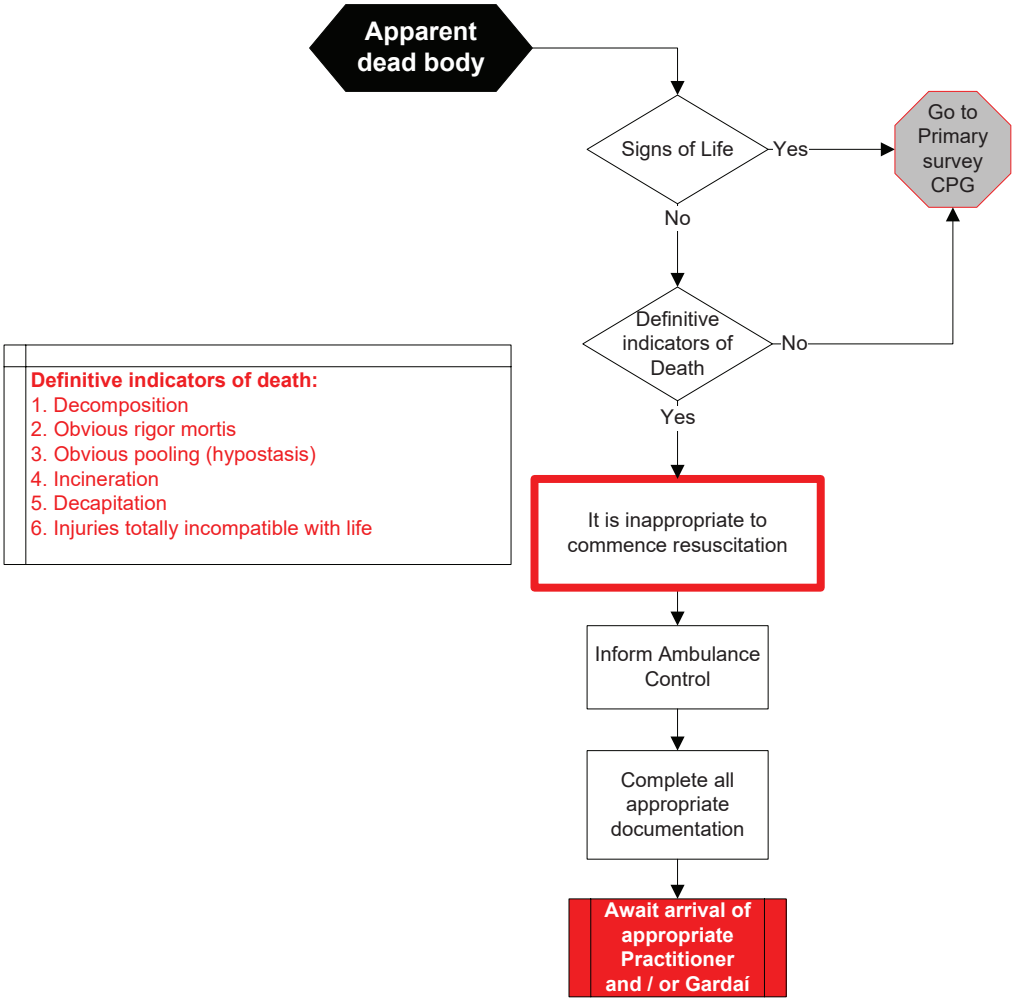
CFR FAR EFR CFR-A



Recognition of Death – Resuscitation not Indicated

4.14.7
Version 2, 12/2020

CFR-A EMT



Team Resuscitation

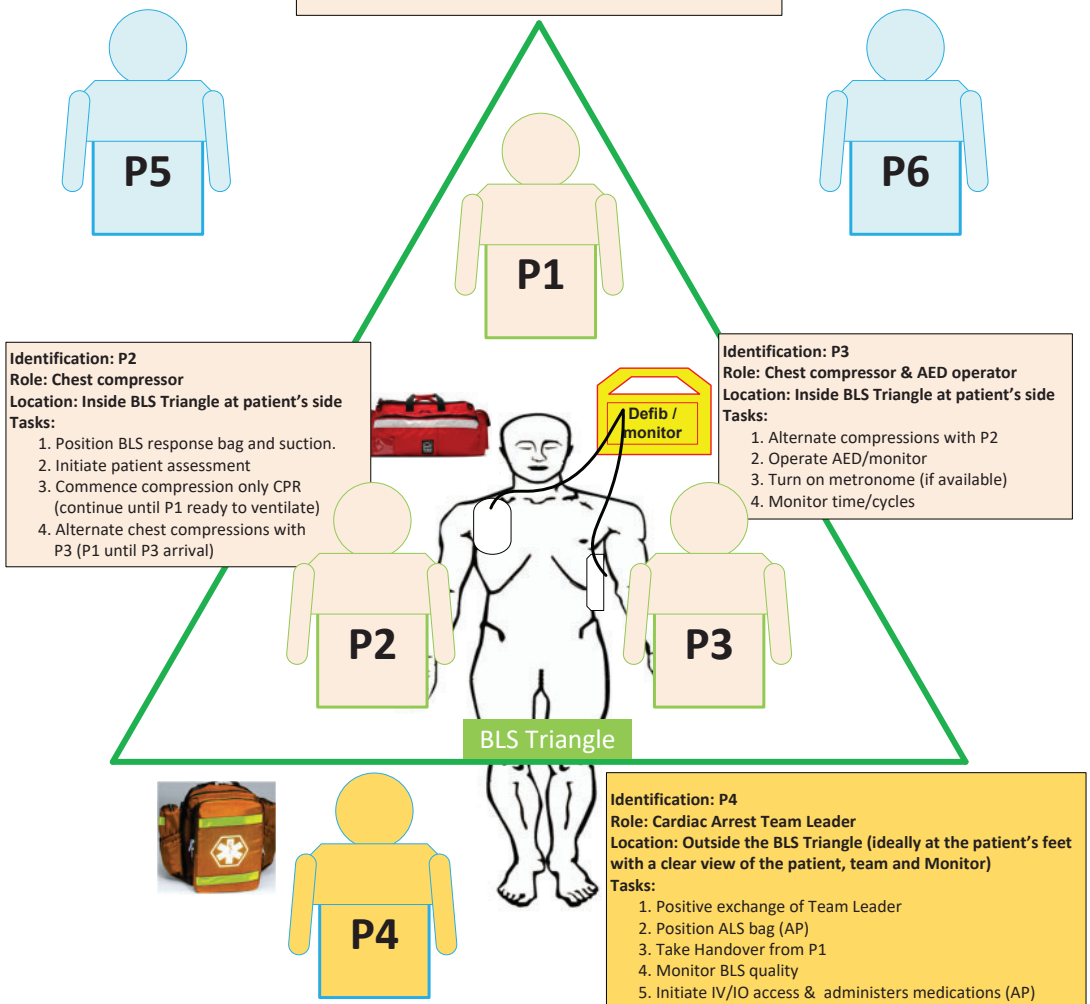
1/2/3.14.8
Version 2, 12/2020

CFR-A EMT P AP

Identification: P5
Role: Family & Team Support
Position: Outside the BLS triangle
1. Family Liaison
2. Patient Hx/meds
3. Manage Equipment
4. Plan removal (if transporting)

Identification: P1
Role: Airway and ventilatory support & initial team leader
Location: Inside BLS Triangle at patient's head
Tasks:
1. Position defibrillator
2. Attach defib pads and operate defibrillator (If awaiting arrival of P3)
3. Basic airway management (manoeuvre, suction & adjunct)
4. Assemble ventilation equipment and ventilate
5. Team leader (until P4 assigned)

Identification: P6
Role: Team Support
Location: Outside BLS Triangle
Tasks:
1. Support P1 with airway and ventilation
2. Support P2/P3 with chest compressions and defibrillation
3. Documentation
4. Support tasks assigned by P4



Identification: P2
Role: Chest compressor
Location: Inside BLS Triangle at patient's side
Tasks:
1. Position BLS response bag and suction.
2. Initiate patient assessment
3. Commence compression only CPR (continue until P1 ready to ventilate)
4. Alternate chest compressions with P3 (P1 until P3 arrival)

Identification: P3
Role: Chest compressor & AED operator
Location: Inside BLS Triangle at patient's side
Tasks:
1. Alternate compressions with P2
2. Operate AED/monitor
3. Turn on metronome (if available)
4. Monitor time/cycles

Identification: P4
Role: Cardiac Arrest Team Leader
Location: Outside the BLS Triangle (ideally at the patient's feet with a clear view of the patient, team and Monitor)
Tasks:
1. Positive exchange of Team Leader
2. Position ALS bag (AP)
3. Take Handover from P1
4. Monitor BLS quality
5. Initiate IV/IO access & administers medications (AP)
6. Intubate if clinically warranted (AP)
7. Communicate with family/Family Liaison
8. Identify and treat reversible causes (H's + T's)
9. Provide clinical leadership
10. Conduct post event debrief

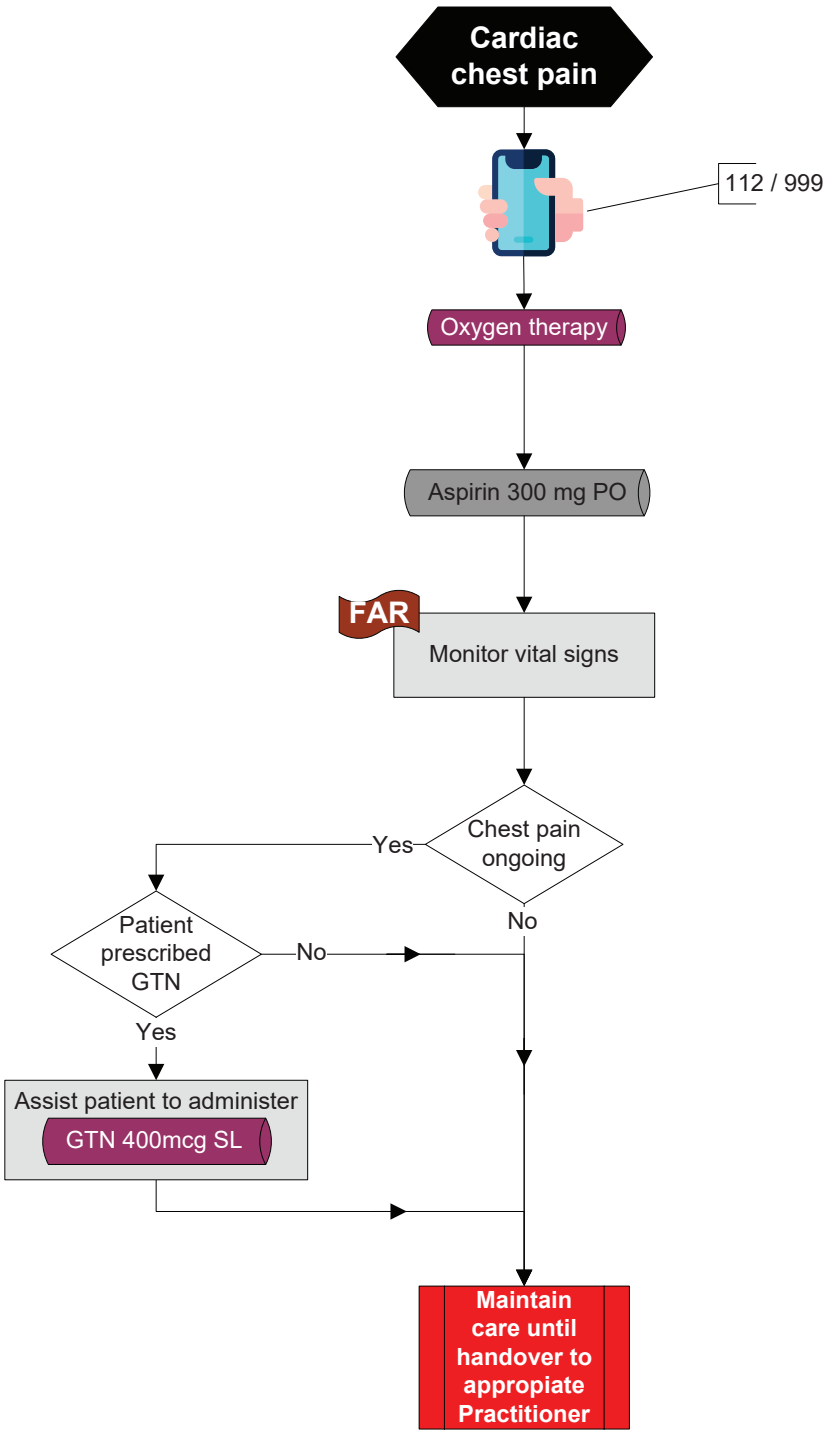
Positions and roles are as laid out, however a practitioner may change position thus taking on the role of that position.

If ALS are first on scene they perform BLS until sufficient BLS personnel are on scene

Cardiac Chest Pain – Acute Coronary Syndrome

1/2/3.3.1
Version 4, 03/2021

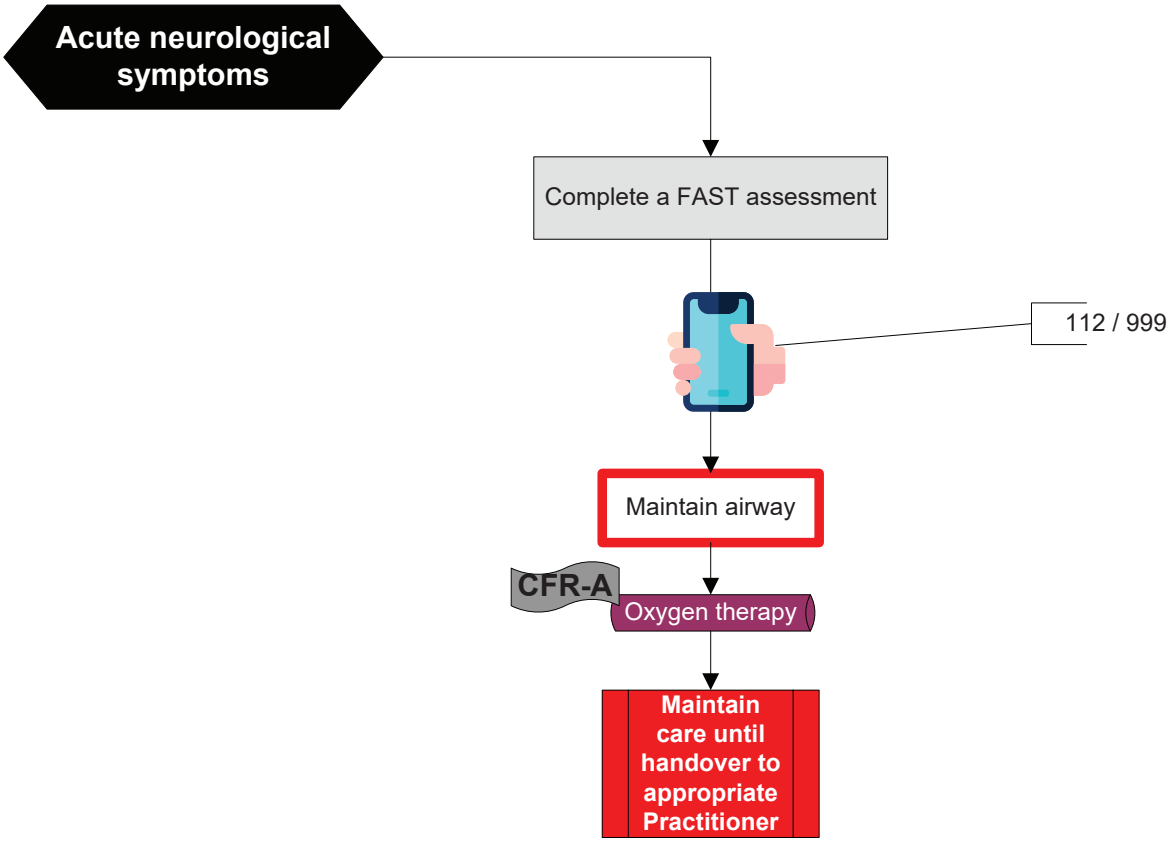
CFR EFR FAR CFR-A



Stroke

1/2/3.6.4
Version 3, 01/2021

CFR EFR FAR CFR-A

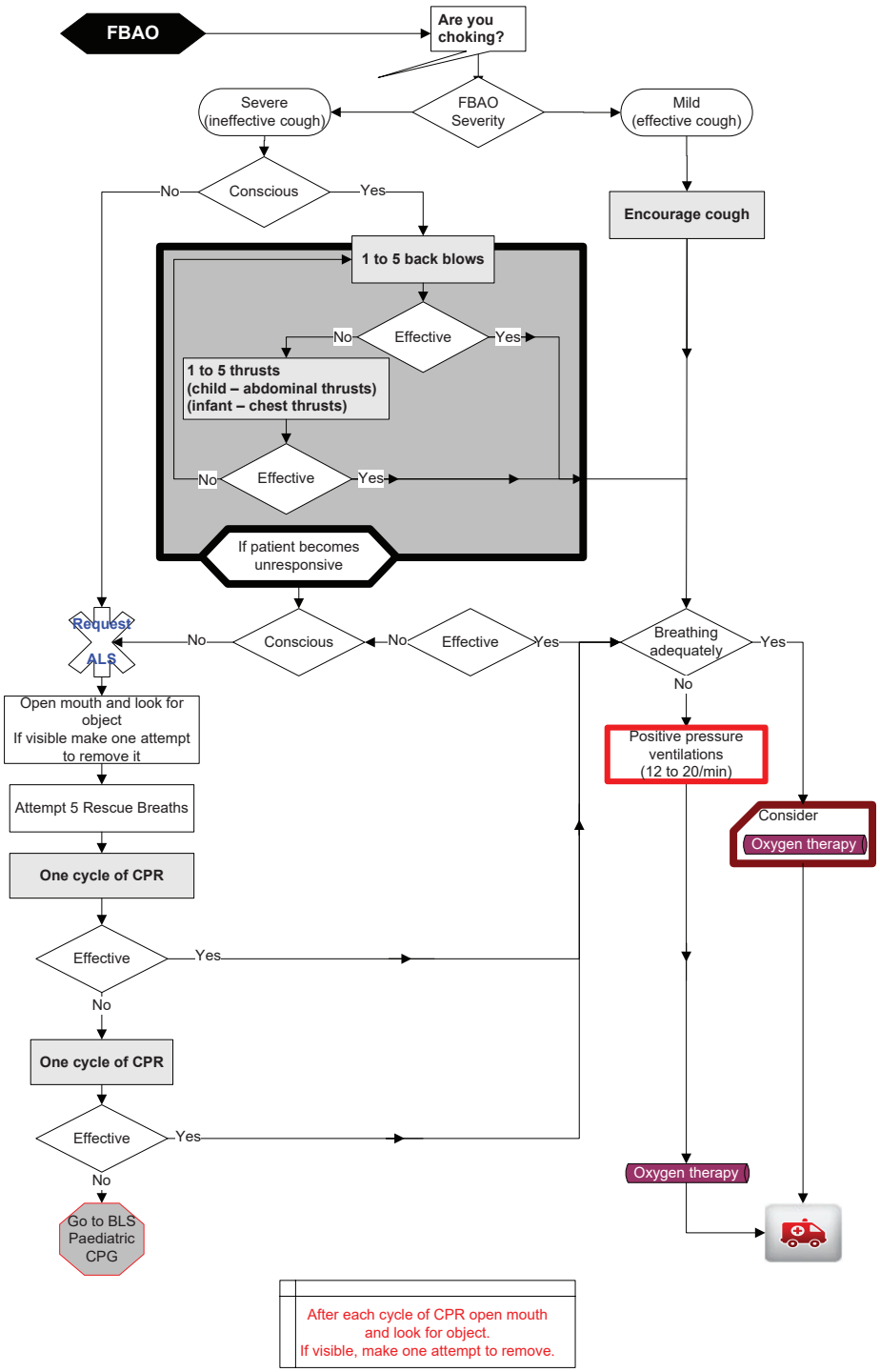


F – facial weakness
Can the patient smile? Has their mouth or eye drooped? Which side?
A – arm weakness
Can the patient raise both arms and maintain for 5 seconds?
S – speech problems
Can the patient speak clearly and understand what you say?
T – time to call 112 if FAST positive

Foreign Body Airway Obstruction – Paediatric

4/5.13.5
Version 4, 03/2021

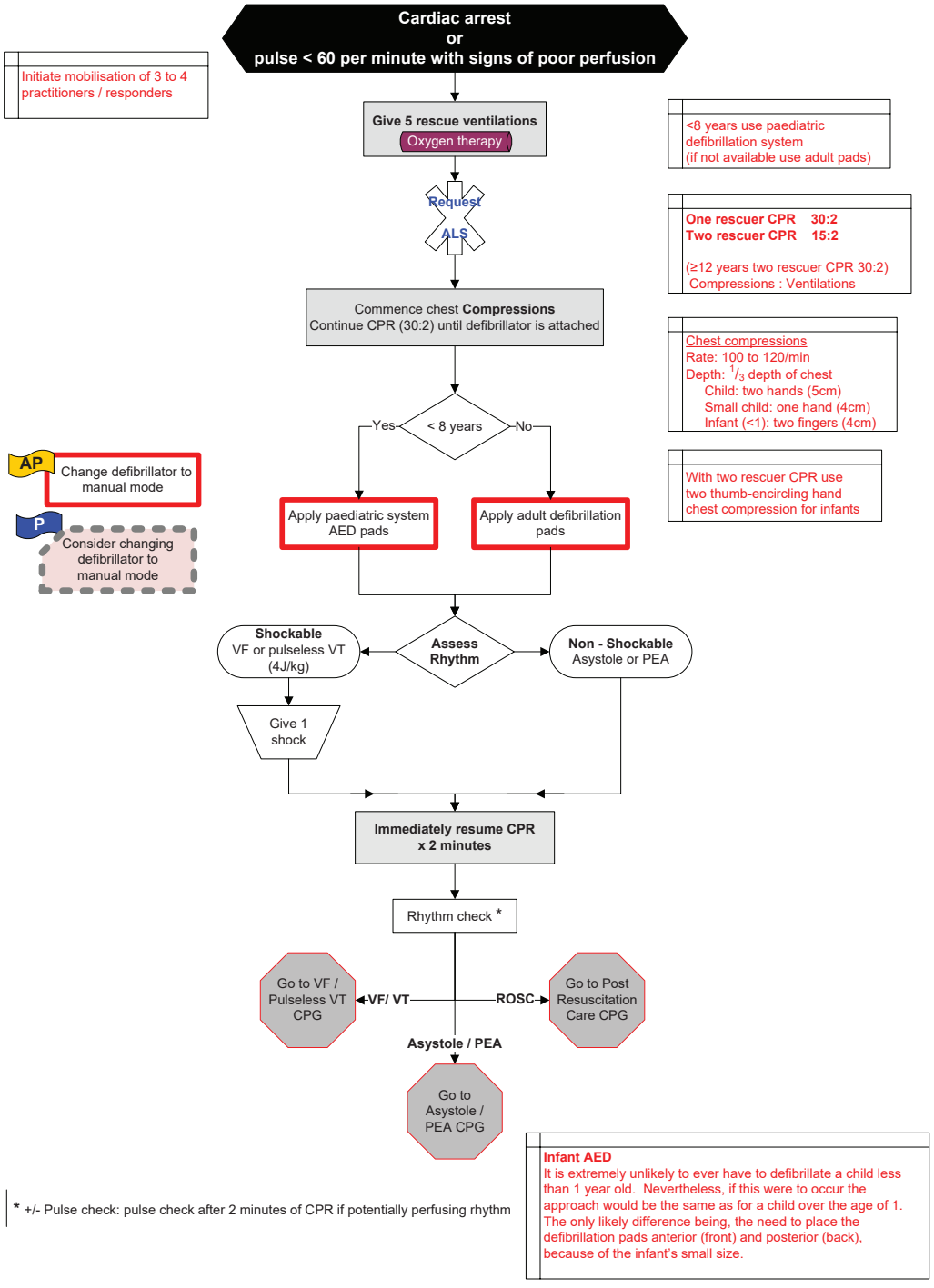
CFR-A EMT P



Basic Life Support – Paediatric

4/5/6.13.22
Version 4, 03/2021

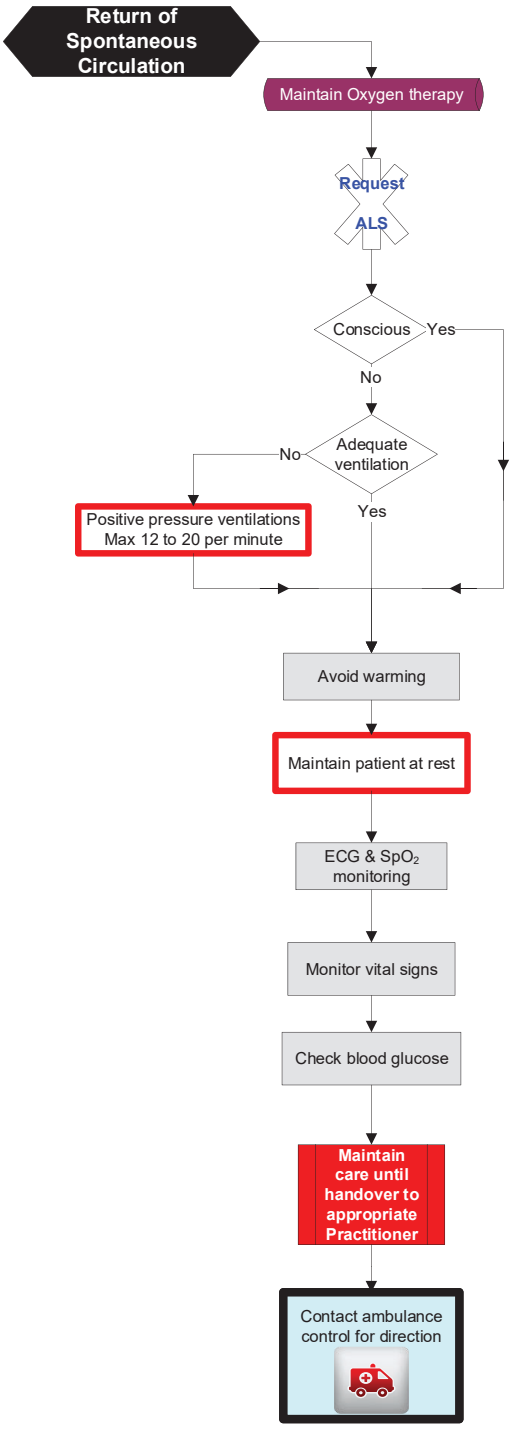
CFR-A EMT P AP



Post-Resuscitation Care – Paediatric

4.13.26
Version 4, 04/2021

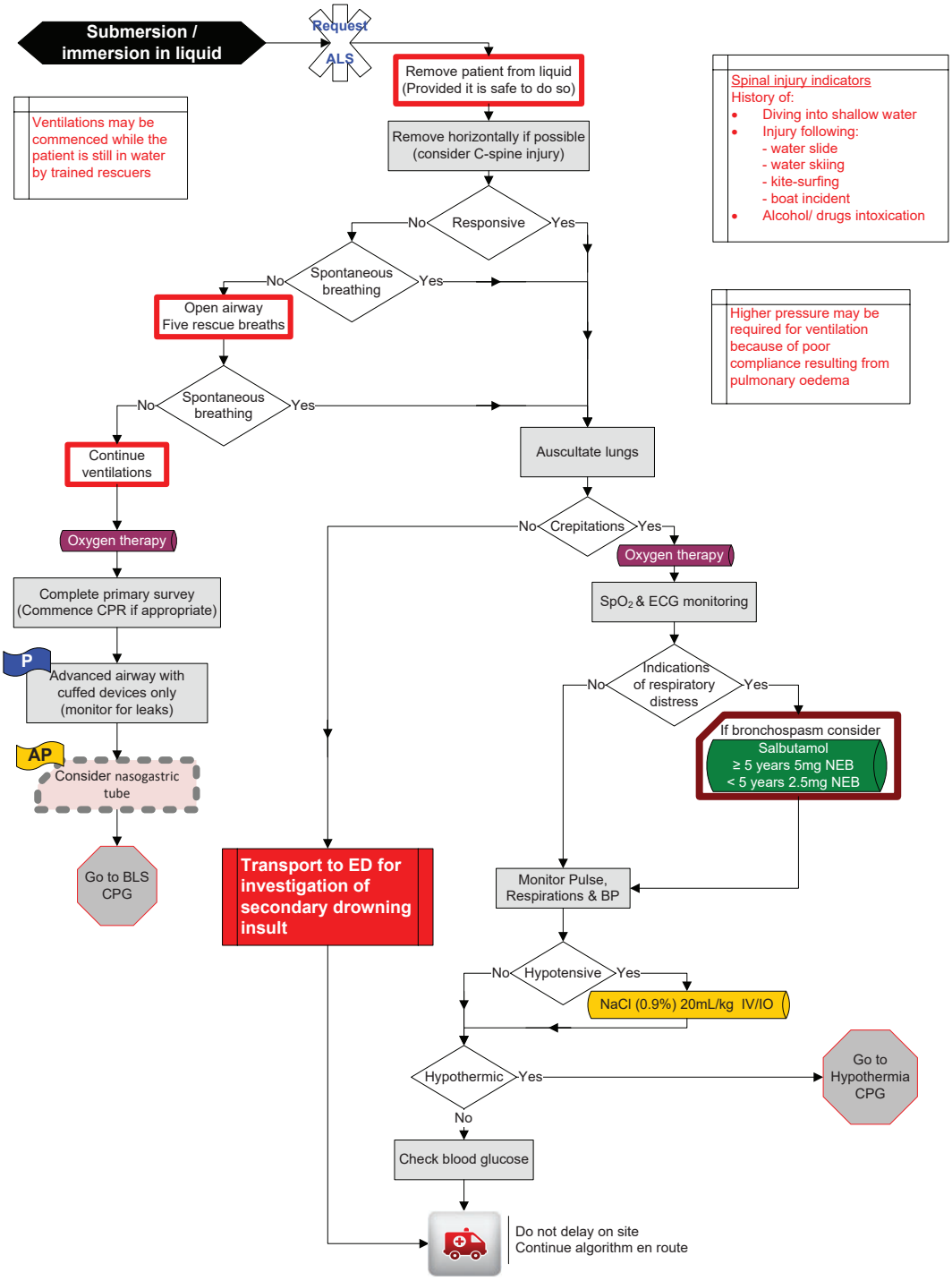
CFR-A EMT



Submersion/ Immersion Incident

4/5/6.8.9
Version 3, 03/2021

EMT P AP



Pre-Hospital Emergency Care Council

Medication Formulary for Cardiac First Responders - Advanced

The Medication Formulary is published by the Pre-Hospital Emergency Care Council (PHECC) to support Cardiac First Responders to be competent in the use of medications permitted under Clinical Practice Guidelines (CPGs).

The Medication Formulary is recommended by the Medical Advisory Committee (MAC) prior to publication by Council.

The medications herein may be administered provided:

1. The Cardiac First Responder complies with the CPGs published by PHECC.
2. The Cardiac First responder is privileged by the organisation on whose behalf he/she is acting, to administer the medications.
3. The Cardiac First Responder has received training on, and is competent in, the administration of the medication.

The context for administration of the medications listed here is outlined in the CPGs. Every effort has been made to ensure accuracy of the medication doses herein. The dose specified on the relevant CPG shall be the definitive dose in relation to Cardiac First Responder administration of medications. The principle of titrating the dose to the desired effect shall be applied.

The onus rests on the Cardiac First Responder to ensure that he/she is using the latest versions of CPGs which are available on the PHECC website www.phecc.ie

The route of administration should be as specified by the CPG.

Pregnancy caution:

Medications should be administered in pregnancy only if the expected benefit to the mother is thought to be greater than the risk to the foetus, and all medications should be avoided if possible during the first trimester.

Responders therefore should avoid using medications in early pregnancy unless absolutely essential, and where possible, medical oversight should be sought prior to administration.

This edition contains 2 medications for Cardiac First Responders Advanced

Please visit www.phecc.ie for the latest edition/version

Changes to Monographs

1. Class and Description headings have merged to one Classification heading in line with BNF drug descriptors
2. Long term side effects have been removed unless essential
3. Pharmacology/Action has been removed unless essential information

ASPIRIN		
Heading	Add	Delete
Classification	**Merge Class and Description to Classification:** Antithrombotic – Antiplatelet Drug which reduces clot formation.	Class. Description.
Description		Anti-inflammatory agent and an inhibitor of platelet function. Useful agent in the treatment of various thromboembolic diseases such as acute myocardial infarction.
Pharmacology/ Action		*Antithrombotic:* Inhibits the formation of thromboxane A2, which stimulates platelet aggregation and artery constriction. This reduces clot/ thrombus formation in an MI.
Long term side-effects		Generally mild and infrequent but incidence of gastro-intestinal irritation with slight asymptomatic blood loss, increased bleeding time, bronchospasm and skin reaction in hypersensitive patients.

OXYGEN		
Heading	Add	Delete
Clinical Level		
Classification	Merged Class and description.	Class. Description.
Pharmacology/Action		Pharmacology/Action Oxygenation of tissue/organs.
Additional Information	Caution with emollients containing paraffin e.g. lip balms & moisturisers – may lead to skin burns.	

Clinical Level: CFR FAR EFR EMT P AP

MEDICATION	ASPIRIN
Classification	Antithrombotic – Antiplatelet Drug which reduces clot formation.
Presentation	300 mg dispersible tablet. 300 mg Enteric Coated (EC) tablet.
Administration	Orally (PO) - dispersed in water, or to be chewed if not dispersible form. (*CPG:* 5/6.3.1, 4.3.1, 1/2/3.3.1).
Indications	Cardiac chest pain or suspected myocardial infarction. Management of unstable angina and non ST-segment elevation myocardial infarction (NSTEMI). Management of ST-segment elevation myocardial infarction (STEMI).
Contra-Indications	Active symptomatic gastrointestinal (GI) ulcer/ Bleeding disorder (e.g. haemophilia)/ Known severe adverse reaction/ Patients < 16 years old (risk of Reye's Syndrome).
Usual Dosages	*Adult:* 300 mg Tablet. *Paediatric:* *Contraindicated.*
Side effects	Epigastric pain and discomfort/ Bronchospasm/ Gastrointestinal haemorrhage/ Increased bleeding times/ skin reactions in hypersensitive patients.
Additional information	Aspirin 300 mg is indicated for cardiac chest pain, regardless if patient is on an anti-coagulant or is already on Aspirin. If the patient has swallowed Aspirin EC (enteric coated) preparation without chewing, the patient should be regarded as not having taken any Aspirin; administer 300 mg PO.

Clinical Level: CFR-A FAR EFR EMT P AP

MEDICATION	OXYGEN
Classification	Gas.
Presentation	*Medical gas:* D, E or F cylinders, coloured black with white shoulders. (Please note: By 2025, all cylinders will be completely white with OXYGEN in black). *CD cylinder:* White cylinder.
Administration	*Inhalation via:* High concentration reservoir (non-rebreather) mask/ Simple face mask/ Venturi mask/ Tracheostomy mask/ Nasal cannulae/ CPAP device/ Bag Valve Mask. *(CPG:* Oxygen is used extensively throughout the CPGs).
Indications	Absent / Inadequate ventilation following an acute medical or traumatic event. SpO_2 < 94% adults and < 96% paediatrics. SpO_2 < 92% for patients with acute exacerbation of COPD. SpO_2 < 90% for patients with acute onset of Pulmonary Oedema.
Contra-Indications	Bleomycin lung injury.
Usual Dosages	*Adult:* Cardiac and respiratory arrest or sickle cell crisis; 100%. Life threats identified during primary survey; 100% until a reliable SpO_2 measurement obtained then titrate O_2 to achieve SpO_2 of 94% - 98%. For patients with acute exacerbation of COPD, administer O_2 titrate to achieve SpO_2 92% or as specified on COPD Oxygen Alert Card. All other acute medical and trauma titrate O_2 to achieve SpO_2 94% - 98%. *Paediatric:* Cardiac and respiratory arrest or sickle cell crisis; 100%. Life threats identified during primary survey; 100% until a reliable SpO_2 measurement obtained then titrate O_2 to achieve SpO_2 of 96% - 98%. Neonatal resuscitation (< 4 weeks) consider supplemental O_2 (≤ 30%). All other acute medical and trauma titrate O_2 to achieve SpO_2 of 96% - 98%.
Side effects	Prolonged use of O_2 with chronic COPD patients may lead to reduction in ventilation stimulus.
Additional information	Caution with emollients containing paraffin e.g. lip balms & moisurisers – may lead to skin burns. A written record must be made of what oxygen therapy is given to every patient. Documentation recording oximetry measurements should state whether the patient is breathing air or a specified dose of supplemental Oxygen. Consider humidifier if oxygen therapy for paediatric patients is > 30 minutes duration. Caution with paraquat poisoning, administer Oxygen if SpO_2 < 92%. Avoid naked flames, powerful oxidising agent.

APPENDIX 2 - Medication & Skills MATRIX

New Medications and Skills for 2021

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Activated Charcoal PO*					√	√	√
Adrenaline nebulised						√	√
Dexamethasone PO/IM						√	√
Lidocaine IO							√
Ketamine IM*							√
Uterine massage					√	√	√
Tourniquet application					√	√	√
Pressure points					√	√	√
Ketone measurement*					√	√	√
Tracheostomy management					√	√	√
Malpresentations in labour						√	√
Shoulder Dystocia management						√	√
Posterior ECG in ACS						√	√
Intubation of Stoma							√
Nasogastric Tube insertion*							√
Procedural Sedation*							√
Richmond Agitation-Sedation Scale (RASS)*							√

Care management including the administration of medications as per level of training and division on the PHECC Register and Responder levels.

Pre-Hospital Responders and Practitioners shall only provide care management including medication administration for which they have received specific training. Practitioners must be privileged by a licensed CPG provider to administer specific medications and perform specific clinical interventions.

√	Authorised under PHECC CPGs
URMPIO	Authorised under PHECC CPGs under registered medical practitioner's instructions only
APO	Authorised under PHECC CPGs to assist practitioners only (when applied to EMT to assist paramedic or higher clinical levels)
√ SA	Authorised subject to special authorisation as per CPG
BTEC	*Authorised subject to Basic Tactical Emergency Care rules*
*	Non-core specified element or action
√ *	Non-core specified element or action for identified clinical level

APPENDIX 2 - Medication & Skills MATRIX

Paramedic authorisation for IV continuation

Practitioners should note that PHECC registered paramedics are authorised to continue an established IV infusion in the absence of an advanced paramedic or doctor during transportation.

MEDICATIONS

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Aspirin PO	√	√	√	√	√	√	√
Oxygen INH		√		√	√	√	√
Glucose gel buccal				√	√	√	√
Glyceryl Trinitrate SL				√ SA	√	√	√
Adrenaline (1:1000) autoinjector				√ SA	√	√	√
Salbutamol MDI				√ SA	√	√	√
Activated Charcoal PO*					√	√	√
Adrenaline (1:1000) IM					√	√	√
Chlorphenamine PO/IM					√	√	√
Glucagon IM					√	√	√
Ibuprofen PO					√	√	√
Methoxyflurane INH					√	√	√
Naloxone IN					√	√	√
Nitrous Oxide and Oxygen INH					√	√	√
Paracetamol PO					√	√	√
Salbutamol nebulised					√	√	√
Adrenaline nebulised						√	√
Clopidogrel PO						√	√
Cyclizine IM						√	√
Dexamethasone PO/IM						√	√
Glucose 5% IV						√ SA	√
Glucose 10% IV						√ SA	√
Hydrocortisone IM						√	√
Ipratropium Bromide nebulised						√	√
Midazolam buccal/IM/IN						√	√

APPENDIX 2 - Medication & Skills MATRIX

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Naloxone IM/SC						√	√
Ondansetron IM						√	√
Oxytocin IM						√	√
Ticagrelor PO						√	√
Sodium Chloride 0.9% IV/IO						√ SA	√
Adenosine IV							√
Adrenaline (1:10,000) IV/IO							√
Amiodarone IV/IO							√
Atropine IV/IO							√
Ceftriaxone IV/IO/IM							√
Chlorphenamine IV							√
Cyclizine IV							√
Diazepam IV/PR							√
Fentanyl IN/IV							√
Furosemide IV							√
Glycopyrronium Bromide SC*							√
Haloperidol PO/SC*							√
Hydrocortisone IV							√
Hyoscine Butylbromide SC*							√
Ketamine IV/IM*							√
Lidocaine IV/IO							√
Lorazepam PO							√
Magnesium Sulphate IV							√
Midazolam IV							√
Morphine IV/PO/IM							√
Naloxone IV/IO							√
Ondansetron IV							√
Paracetamol IV/PR							√
Sodium Bicarbonate IV/IO							√
Tranexamic Acid IV							√

APPENDIX 2 - Medication & Skills MATRIX

AIRWAY & BREATHING MANAGEMENT

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
FBAO management	√	√	√	√	√	√	√
Head tilt chin lift	√	√	√	√	√	√	√
Pocket mask	√	√	√	√	√	√	√
Recovery position	√	√	√	√	√	√	√
Non-rebreather mask		√		√	√	√	√
Oropharyngeal airway		√		√	√	√	√
Oral suctioning		√		√	√	√	√
Venturi mask		√		√	√	√	√
Bag Valve Mask		√		√	√	√	√
Jaw thrust				√	√	√	√
Nasal cannula		√		√	√	√	√
Oxygen humidification				√	√	√	√
Nasopharyngeal airway				BTEC	BTEC	√	√
Supraglottic airway adult (uncuffed)		√			√	√	√
Supraglottic airway adult (cuffed)					√ SA	√	√
Tracheostomy management					√	√	√
Continuous Positive Airway Pressure						√	√
Non-Invasive ventilation device						√	√
Supraglottic airway paediatric						√	√
Endotracheal intubation							√
Intubation of stoma							√
Laryngoscopy / Magill forceps							√
Needle cricothyrotomy							√
Needle thoracocentesis							√

APPENDIX 2 - Medication & Skills MATRIX

CARDIAC

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
AED adult & paediatric	√	√	√	√	√	√	√
CPR adult, child & infant	√	√	√	√	√	√	√
Recognise death and resuscitation not indicated	√	√	√	√	√	√	√
Neonate resuscitation					√	√	√
ECG monitoring					√	√	√
CPR mechanical assist device*					√	√	√
Cease resuscitation - adult					√ SA	√	√
12 lead ECG						√	√
Manual defibrillation						√ *	√
Right sided ECG in ACS						√	√
Posterior ECG in ACS						√	√

HAEMORRHAGE CONTROL

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Direct pressure			√	√	√	√	√
Nose bleed			√	√	√	√	√
Haemostatic agent				BTEC*	√ *	√	√
Tourniquet application				BTEC	√	√	√
Pressure points					√	√	√
Wound closure clips					BTEC	√ *	√ *
Nasal pack						√	√

APPENDIX 2 - Medication & Skills MATRIX

MEDICATION ADMINISTRATION

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Oral	√	√	√	√	√	√	√
Buccal				√	√	√	√
Metered dose inhaler				√ SA	√	√	√
Sublingual				√ SA	√	√	√
Intramuscular injection					√	√	√
Intranasal					√	√	√
Nebuliser					√	√	√
Subcutaneous injection					√	√	√
Infusion maintenance						√	√
Infusion calculations							√
Intraosseous injection/infusion							√
Intravenous injection/infusion							√
Per rectum							√

APPENDIX 2 - Medication & Skills MATRIX

TRAUMA

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Burns care			√	√	√	√	√
Application of a sling			√	√	√	√	√
Soft tissue injury			√	√	√	√	√
Active Spinal Motion Restriction			√	√	√	√	√
Hot packs for active rewarming (hypothermia)			√	√	√	√	√
Cervical collar application				√	√	√	√
Helmet stabilisation/removal				√	√	√	√
Splinting device application to upper limb				√	√	√	√
Splinting device application to lower limb				√	√	√	√
Log roll				APO	√	√	√
Move patient with a carrying sheet				APO	√	√	√
Extrication using a long board				√ SA	√	√	√
Rapid Extraction				√ SA	√	√	√
Secure and move a patient with an extrication device				√ SA	√	√	√
Move a patient with a split device (Orthopaedic stretcher)				√ SA	√	√	√
Passive Spinal Motion Restriction						√	√
Pelvic Splinting device				BTEC	√	√	√
Move and secure patient into a vacuum mattress				BTEC	√	√	√
Move and secure a patient to a paediatric board					√	√	√
Traction splint application					APO	√	√
Lateral dislocation of patella – reduction						√	√
Taser gun barb removal						√	√

APPENDIX 2 - Medication & Skills MATRIX

OTHER

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Use of Red Card	√	√	√	√	√	√	√
Assist normal delivery of a baby				APO	√	√	√
De-escalation and breakaway skills					√	√	√
ASHICE radio report					√	√	√
IMIST-AMBO handover					√	√	√
Uterine massage					√	√	√
Malpresentations in labour						√	√
Shoulder Dystocia management						√	√
Umbilical cord complications						√	√
Verification of Death						√	√
Intraosseous cannulation							√
Intravenous cannulation							√
Nasogastric tube insertion*							√
Procedural Sedation*							√
Urinary catheterisation*							√

PATIENT ASSESSMENT

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
Assess responsiveness	√	√	√	√	√	√	√
Check breathing	√	√	√	√	√	√	√
FAST assessment	√	√	√	√	√	√	√
Capillary refill			√	√	√	√	√
AVPU			√	√	√	√	√
Pulse check			√	√	√	√	√
Breathing / pulse rate		√ SA	√	√	√	√	√
Primary survey			√	√	√	√	√
SAMPLE history			√	√	√	√	√
Secondary survey			√	√	√	√	√

APPENDIX 2 - Medication & Skills MATRIX

CLINICAL LEVEL	CFR-C	CFR-A	FAR	EFR	EMT	P	AP
CSM assessment				√	√	√	√
Rule of Nines				√	√	√	√
Assess pupils				√	√	√	√
Blood pressure				√ SA	√	√	√
Capacity evaluation					√	√	√
Chest auscultation					√	√	√
Glucometery					√	√	√
Ketone measurement*					√	√	√
Paediatric Assessment Triangle					√	√	√
Pain assessment					√	√	√
Patient Clinical Status					√	√	√
Pulse oximetry					√	√	√
Temperature					√	√	√
Triage sieve					√	√	√
Broselow tape						√	√
Capnography						√	√
Glasgow Coma Scale (GCS)						√	√
Peak expiratory flow						√	√
Pre-hospital Early Warning Score						√	√
Treat and referral						√	√
Triage sort						√	√
Richmond Agitation-Sedation Scale (RASS) *							√

CRITICAL INCIDENT STRESS MANAGEMENT (CISM)

Your Psychological Well-Being

It is extremely important for your psychological well-being that you do not expect to save every critically ill or injured patient that you treat. For a patient who is not in hospital, whether they survive a cardiac arrest or multiple traumas depends on a number of factors including any other medical condition the patient has. Your aim should be to perform your interventions well and to administer the appropriate medications within your scope of practice. However, sometimes you may encounter a situation which is highly stressful for you, giving rise to Critical Incident Stress (CIS). A critical incident is an incident or event which may overwhelm or threaten to overwhelm our normal coping responses. As a result of this we can experience CIS.

When can I be adversely affected by a critical incident? Listed below are some common ways in which people react to incidents like this:

- Feeling of distress or sadness
- Strong feeling of anger
- Feeling of disillusionment
- Feeling of guilt
- Feeling of apprehension/anxiety/fear of:
  - Losing control/breaking down or
  - Something similar happening again
  - Not having done all I think I could have done
- Avoidance of the scene of incident/trauma
- Bad dreams, nightmares or startling easily
- Distressing memories or 'flashbacks' of the incident
- Feeling 'on edge', irritable, angry, under threat/ pressure
- Feeling emotionally fragile or emotionally numb
- Feeling cut off from your family or close friends – "I can't talk to them" or "I don't want to upset them"
- Feeling of needing to control everything

Some Do's and Don'ts

- **DO express your emotions:**
  - Talk about what happened
  - Talk about how you feel and how the event has impacted you
  - Be kind to yourself and to others.
- **DO** talk about what has happened as often as you need
- **DO** find opportunities to review the experience **DO** discuss what happened with colleagues **DO** ask friends and colleagues for support
- **DO** listen sympathetically if a colleague wants to talk
- **DO** advise colleagues about receiving appropriate help
- **DO** keep to daily routines
- **DO** drive more carefully
- **DO** be more careful around the home
- **DON'T** use alcohol, nicotine or drugs to hide your feelings **DON'T** simply stay away from work – seek help and support **DON'T** allow anger and irritability to mask your feelings **DON'T** bottle up feelings
- **DON'T** be afraid to ask for help
- **DON'T** think your feelings are a sign of weakness

When things get tough, pro-actively minding yourself is crucial. Control the things you can control. Get more sleep than you think you need. Eat fresh, healthy foods at regular times and avoid snacks. Get outdoor exercise at least three times a week. Have a meaningful conversation with someone you like at least once a day. Resolve what makes you sad or angry or otherwise let it go. Be kind.

Everyone may have these feelings. Experience has shown that they may vary in intensity according to circumstance. Nature heals through allowing these feelings to come out. This will not lead to loss of control but stopping these feelings may lead to other and possibly more complicated problems.

When to find help?

1. If you feel you cannot cope with your reactions or feelings.
2. If your stress reactions do not lessen in the two or three weeks following the event.
3. If you continue to have nightmares and poor sleep.
4. If you have no-one with whom to share your feelings when you want to do so.
5. If your relationships seem to be suffering badly, or sexual problems develop.
6. If you become clumsy or accident prone.
7. If, in order to cope after the event, you smoke, drink or take more medication, or other drugs.
8. If your work performance suffers.
9. If you are tired all the time.
10. If things get on top of you and you feel like giving up.
11. If you take it out on your family.
12. If your health deteriorates.

Experiencing signs of excessive stress?

If the range of physical, emotional and behavioural signs and symptoms already mentioned do not reduce over time (for example after two weeks), it is important that you seek support and help.

Where to find help?

Your own licensed CPGs provider will have a CISM support network or system.

We recommend that you contact them for help and advice (i.e. your peer support worker/ coordinator/staff support officer).

- For a self-help guide, please go to www.cismnetworkireland.ie
- The NAS CISM and CISM Network published a booklet called 'Critical Incident Stress Management for Emergency Personnel'.
- It can be purchased by emailing: info@cismnetworkireland.ie
- Consult your own GP or see a health professional who specialises in traumatic stress.
- In partnership with NAS CISM Committee, PHECC developed an eLearning CISM Stress Awareness Training (SAT) module. It can be accessed by the following personnel:
  - PHECC registered practitioners at all levels
  - National Ambulance Service-linked community first responders
  - NAS non-PHECC registered personnel
- Under the direction of CISM Network, bespoke CISM SAT modules are developed by Network member organisations.

Pre-Hospital
Emergency Care
Council

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