



Medical education



Hot Topics

URGENT CARE COURSE

Acute general practice for both In and Out of Hours care

By: Simon Curtis MRCP FRCGP, Robert Walker MRCGP,
Mark Hadden MRCGP ALS APLS ATLS BASICS PHEC

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2019/2020



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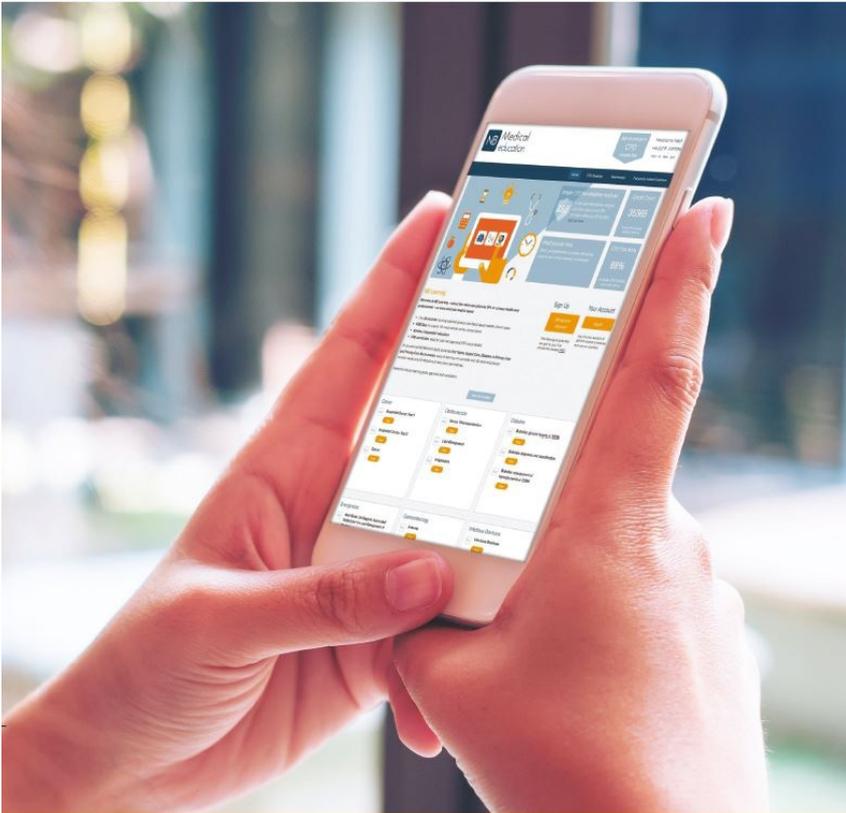
Hot Topics Urgent Care 2019/2020

Course Presenters: Simon Curtis, Neal Tucker, Stephanie de Giorgio, Zoe Norris, Siobhan Becker, Lucy Hamilton, Kate Digby, Ahmed Rashid, Sarah Davies, Duncan Hill, Mark Hadden & Will Duffin

PROGRAMME

08.30 – 09.30	Registration, Tea and Coffee
09.30 – 11.10	Session One
11.10 – 11.30	Refreshment Break
11.30 – 13.00	Session Two
13.00 – 13.45	Lunch
13.45 – 15.00	Session Three
15.00 – 15.25	Refreshment Break
15.25 – 17.00	Session Four
17:00	Close

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Hello and welcome to NB Medical's Urgent Care Course

Working out of hours (OOH) and in urgent care environments is hard work, challenging and often higher risk compared to usual 'day time' General Practice. We see a different range of conditions and challenges with less background information on the patient. This creates a unique set of learning needs, on which this course is based.

Your feedback is incredibly important to us and has helped shape the changes we have made on the Urgent Care Course - initially an Out of hours course, we re-branded it in 2015 to make it accessible to all clinicians working in Urgent Care environments in the community, both in and out of hours. In 2017, we introduced our work to secondary care and so this course is now accessible for all practitioners seeing ambulatory urgent care patients, in or out of hours, in primary or secondary care.

For this new Urgent Care Course for 2019/2020:

- Based on your feedback we have made some changes to the layout of the Urgent Care Course book:
 - You requested **more focus on 'emergencies'** so we have a totally **new section at the beginning of the book with 28 new and adapted chapters** on the most serious presentations we are likely to see in urgent care (the '3%')
 - Whilst we have this new section on emergencies the majority of the book and the course is about the conditions that we see every day in all Urgent Care environments (the '97%'), what may be considered as 'same day primary care'
 - Many of the chapters throughout the book have been modified into a simpler format, which we hope will be easier to navigate in consultations, based on the **BAM mnemonic (Background, Assessment, Management)**
- Knowing which topics to keep in an 'urgent care' book can be tricky, as many conditions will have a spectrum of severity, but we have used the principle that if you were to phone triage a problem/condition and think it might need an **'on the day' assessment it goes in the body of the book**, but if it is a presentation that you think **'I might need an ambulance here'** it has gone in the **'emergencies'** section; we have removed a number of chapters that in the most part would be dealt with in routine GP appointments
- Some material we have taken and adapted from our regular Hot Topics GP Update Course, other material is entirely new and unique to this course

We want you to enjoy the day

- You have a stressful job but today you can relax. We've done all the hard work and will bring you the most up to date evidence for urgent care.
- As we go through the day, when you come across ideas you may want to take away and use then scribble them down in the takeaway pages at the back of the book
- You will be emailed instruction on how to log in so that you can access and download the electronic version and PDF version of the book, and we hope you will use this on a daily basis whilst you are seeing patients so that you can utilise the multiple links and resources it contains
- You can also use the NB Dashboard which includes a CPD Tracker which will easily track your learning for you and will simply summarise it all for you at the end of your appraisal year into a simple PDF document you can easily upload into your appraisal toolkit
- You can now use the NB Medical app to view the book and book your next course!
- We hope you will attend the course every year (we ensure the presented topics are all changed every 12 months) but if are not able to attend in person you can now get each course in a 'webcast' format, which includes all the supporting material.

INTRODUCTION

We have three principal objectives today and hope that by the end of the course

- You will have been updated with some of the most common and important-not-to miss clinical conditions seen in Urgent Care
- You will feel that your skill-set to overcome the challenges in Urgent Care has been enhanced
- You will have the tools to be able to rapidly find an evidence-based answer to clinical problems seen in Urgent Care

We would like to say a big thank you to Gail Allsopp who started this Urgent Care course 5 years ago for NB Medical Education. She has been an inspirational leader of the course and a passionate advocate of Urgent Care. She has now moved on to new challenges and adventures and we wish her all the very best. We have appointed a new Urgent Care lead Mark Hadden who will be starting in November 2018 and leading and developing the course moving forward.

We hope you enjoy the course! Please let us know what you think and do keep in touch.

Mark, Rob and Simon

Dr Mark Hadden MRCP

ALS, ATLS, BASICS, APLS

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Twitter: [@GPHotTopics](#)

Presenters and Acknowledgements

Mark Hadden is our new Urgent Care lead (replacing Gail Allsopp, who founded the course 5 years ago) and joins the team in November 2018. He has a huge amount of general, acute and emergency medicine experience. He is currently a GP partner in Dollar, Scotland and also works in a variety of Urgent Care environments including A&E emergency medicine and GP out of hours. He has ALS (Advanced Life Support), ATLS (Advanced Trauma Life support), BASICS (pre-hospital emergency care) and APLS (Advanced Paediatric Life Support) qualifications. He also has extensive teaching experience and has designed and delivered a new course at Stirling University for allied health professionals working in primary care. A keen sportsman, he loves the great outdoors and is kept busy with a young family.

Simon Curtis Simon is a GP in a city centre training practice in Oxford and an Honorary Senior Clinical Lecturer in General Practice at Oxford University. Passionate about General practice and the need for GP to GP education he co-founded the Hot Topics course in 1998 and has taught on the course and led its development ever since. He trained in London qualifying in 1988. He keeps sane listening to music and riding his road bike, trying to keep up with...

Neal Tucker Neal is a GP in Oxford and the e-learning lead of NB Medical. He has developed the 'Hot Topics' material as interactive learning modules on our CPD site www.NB-learning.com and our NB Dashboard. He trained at Southampton, qualifying in 2003. Often elbow deep in nappies he escapes on his bike although SC slows him down...

Siobhan Becker Siobhan is a GP in Oxford and an Honorary Senior Clinical Lecturer at Oxford University. She leads our new Hot Topics for Primary Care Nurses course. She qualified in London in 1995. Passionate about General Practice, she brings many years of teaching and clinical experience to the team. Outside of work she runs, surfs, skis and is never still!

Kate Digby Kate is a GP in Gloucestershire and immersed in the world of GP Education and Training. She's a GP Training Programme Director for the Severn Deanery and also teaches at Bristol University. She is our GP Training lead, has developed our new Trainee Course, and is our Cancer lead. She leads our new Hot Topics in Cancer course. She's also a Tough Mudder!

Zoe Norris Zoe is a GP in East Yorkshire. As well as medical education, she is also passionate about GP politics and well-being and is a great flag bearer for our profession! She represents sessional GPs nationally as chair of the sessional subcommittee of the BMA. She is a superb writer and commentator on contemporary GP and NHS issues, with [GP blog on the Huffington Post](#) and a monthly column in [Pulse](#) and she has a big social media presence @dr_zo.

Ahmed Rashid Ahmed is an NHS GP in Hertfordshire and a Senior Clinical Teaching Fellow at UCL Medical School. He combined his clinical training in general practice with an academic clinical fellowship, working at the University of Cambridge. In 2014, he was selected to be a national leadership fellow and spent 12 months working at the National Institute of Health and Care Excellence. He writes for a variety of medical journals and has a monthly column 'Yonder' in the British Journal of General Practice. @Dr_A_Rashid

Rob Walker Rob is a GP in a training practice in Amazingstoke...sorry, Basingstoke. He trained in Oxford and qualified in 2001. He has recently finished a stint as education and research lead at North Hampshire CCG and continues to provide the GPs of North Hampshire with updates on the latest guidelines and EBM. He joins our team as a researcher and writer. When not elbow deep in BMJs or NICE guidelines he can be found running in the Hampshire countryside or playing the ancient game of Real Tennis in Oxford, well away from the bikes of SC and NT...

INTRODUCTION

Stephanie de Giorgio Stephanie trained in London at Kings and qualified in 2000. She is a GP in Kent. She originally trained in Obstetrics and Gynaecology before moving into GP. She has continued her interest in Women's Health, and she leads our new **Women's Health** course. She has significant experience in education having worked as a VTS programme director, trainer and appraiser. The issue of GP peer support and preventing burnout is of key importance to her and she co-founded the hugely successful Resilient GP with colleagues to support the profession and has developed our own **Resilience** course with Zoe. She has a big social media presence (@DrSdeG). She lives by the seaside with husband, two children and two cats.

Sarah Davies is a GP in Wales, and as well as a Hot Topics presenter she is our new **Diabetes** lead. She qualified in Cardiff and initially trained in hospital medicine, especially diabetes, before making the excellent move into GP! She has continued her interest in diabetes completing the postgraduate diploma, and regularly presents at national meetings. She is a Diabetes UK Clinical Champion. Outside of work she is surrounded by ballet costumes and football boots and loves walking her dog in the countryside.

Duncan Hill is a GP in Manchester. He has a special interest in MSK and minor surgery and has built extensive national experience as a presenter on minor surgery and joint injection courses. He is passionate about trying to bridge the gap between primary and secondary care and works as part of the Frailty service at Manchester University foundation trust. When not working he will be found running in the hills or spending time with his young family.

Will Duffin is a Locum and Urgent Care GP in Bristol with a diverse portfolio career. He has a passion for education and adventure. He previously worked in Emergency Medicine in Australia before training as a GP in Cornwall, including an additional leadership year setting up a teledermatology service. His other roles are the Education Lead and Conference Director for World Extreme Medicine and as a Teaching Associate for Bristol University. He has provided medical cover for dozens of overseas expeditions from commercial high altitude treks, to working with UNICEF in Myanmar, through to reality TV in remote Pacific islands. He enjoys connecting with his audience and involving them in his sessions.

Acknowledgements: with many thanks to the following researchers and academics for their willingness to kindly advise us (and help clarify!) regarding their research and papers discussed in this course:

Andrea Cipriani, Willie Hamilton, Catherine Millington-Sanders, Rory Collins, Julia Hippisley-Cox, Andrew Moore, Peter Rothwell, Richard Hobbs, Scott Murray, Sir Mike Richards, Susan Smith, John Robson, Bernard Prendergast, Richard Haynes, Paul Glasziou, Ahmed Rashid, Liliana Risi, Adrian Baker, Jonathan Hill, Matt Hoghton, Chris Clarke, Karl Gaffney, Rachel Pryke, Francine Toyne, Sarah Purdy, Brian Johnson, Bianca Hemmingsen, Roman Romero-Ortuno, Louisa Griffiths and any others we may have forgotten to mention. Thank you!

Many thanks to our GP friends in the **Republic of Ireland** Drs Shane McKeogh and Darach O'Ciardha from GPBuddy.ie for their invaluable advice on issues in the Republic.

And finally thanks to our great team, who make it all happen: Dr Phil Nichols (management) and Janette, Alyson, Craig, Susan, Linda, Julie, Daniel, Georgia, Louise & Paul – thanks guys!

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Instructions explaining how to set up your account with a unique username and password will be emailed to you shortly after the course, (log-in details are the same for both the App and Dashboard). Any problems with access see our website www.nbmedical.com, talk to our staff during the breaks or email or call our office.

We hope you find the NB App and Dashboard useful in day-to-day practice. We will be adding to it over the next year so keep a look out for further updates. And do let us know what you think!

ANAPHYLAXIS

[Resuscitation Council UK 2008](#) [CKS 2018](#)

Background:

- Anaphylaxis is a severe, life-threatening, generalised or systemic hypersensitivity reaction that is characterised by rapidly developing airway and/or breathing and/or circulation problems usually associated with skin and mucosal changes
- Triggers - broad range, and many cases idiopathic; most common community triggers are foods (esp. nuts), drugs (esp. penicillins, cephalosporins, NSAIDs, aspirin) and venom including stings

Assessment:

- Assess airway, breathing, circulation and skin/mucosal changes
- Anaphylaxis is likely when all 3 of the following criteria are met:
 - Sudden onset and rapid progression of symptoms (typically over minutes)
 - Life-threatening problems with
 - Airway (e.g. swelling, hoarse voice, stridor) and/or
 - Breathing (e.g. SOB, wheeze, cyanosis) and/or
 - Circulation (e.g. pale, clammy, tachycardic, hypotensive)
 - Skin and/or mucosal changes (flushing, urticaria, angioedema)
- Patients will feel and look unwell, are usually anxious and may experience a “sense of impending doom”
- Be aware that skin and mucosal changes can be subtle or absent in up to 20% of reactions and that there can also be GI symptoms (e.g. vomiting, abdominal pain, incontinence)

Management:

- **Call ambulance and call for help**
- Start CPR if appropriate
- Lie patient flat and with legs raised if hypotensive. Those with airway or breathing difficulties will be more comfortable sitting upright.
- **Give IM adrenaline (doses below) ASAP**
 - Adrenaline is the most important drug for the treatment of anaphylactic reaction and should be given as early as possible to alleviate symptoms
 - Repeat dose after 5 minutes if inadequate response.
 - Do NOT give IV adrenaline in primary care
- Remove trigger if possible e.g. sting
- Monitor pulse, BP and oxygen saturations
- Where skills/equipment available:
 - High flow oxygen
 - IV fluid challenge - 500-1000ml in adult; 20ml/kg in child
- **Give IV or IM chlorphenamine and IV or IM hydrocortisone once initial resus complete**
- Admit all patients receiving adrenaline due to the risk of a biphasic reaction (a life-threatening recurrence of symptoms after initial presentation without re-exposure to trigger)

EMERGENCIES AND RESUSCITATION

DRUG	ADULT AND CHILD >12	6-12 YRS	6 MONTHS - 6 YRS	<6 MONTHS
Adrenaline 1:1000 (1mg/ml) IM - Repeat after 5 minutes if no improvement	500mcg (0.5ml)	300mcg (0.3ml)	150mcg (0.15ml)	150mcg (0.15ml)
ONCE INITIAL RESUS IS COMPLETE:				
Chlorphenamine IM/IV	10mg	5mg	2.5mg	250mcg/kg - max 2.5mg
Hydrocortisone IM/IV	200mg	100mg	50mg	25mg
Consider bronchodilators if wheezy or asthmatic				

ADULT BLS and AED

[Resuscitation Council UK 2015](#)

Background:

- Survival from out of hospital cardiac arrest in the UK is 7-8%. In some countries, it is 25-30%.
- What are these countries doing differently and how can we do better?
- Countries with the best outcomes have embedded the **Chain of survival** in their emergency response pathways. Crucially they have also raised cardiac arrest awareness and education across their society. Simply put, more bystanders can deliver effective CPR. In the UK only 30-40% of out of hospital cardiac arrests receive bystander CPR
- **Chain of survival** - 4 key steps that are inter-related to improve survival from cardiac arrest
 - Early recognition of cardiac arrest and call for help
 - Early CPR
 - Early defibrillation
 - Standardised post resuscitation care
- At an individual level there are two key elements we can deliver at a cardiac arrest that improve survival:
 - **Early high-quality cardiac compressions.** Evidence determines the rate, depth and recoil of cardiac compressions. Deviating from these parameters directly reduces survival.
 - Rate 100-120/min
 - Depth 5-6cm
 - Recoil - allow the chest to recoil fully
 - Interruptions - avoid
 - **Early Defibrillation.** For every minute defibrillation is delayed survival falls by 10%

Management:

- Aim to deliver high-quality BLS. Evidence shows there is no survival benefit in using ALS versus BLS in an out of hospital setting. [Acad Emerg Med 2017;24\(9\):1100](#). There is a current knowledge gap regarding which interventions in the ALS sequence improve outcome and which do not.
- The mnemonic ABC is synonymous with resuscitation but it no longer provides a useful framework for adult BLS. In adults, 75-85% of events are caused by a primary cardiac pathology. The chain of survival introduced the concept of delivering cardiac compressions much earlier than previous algorithms.
- **CAB** - Compressions, Airway, Breathing is a useful mnemonic to guide intervention

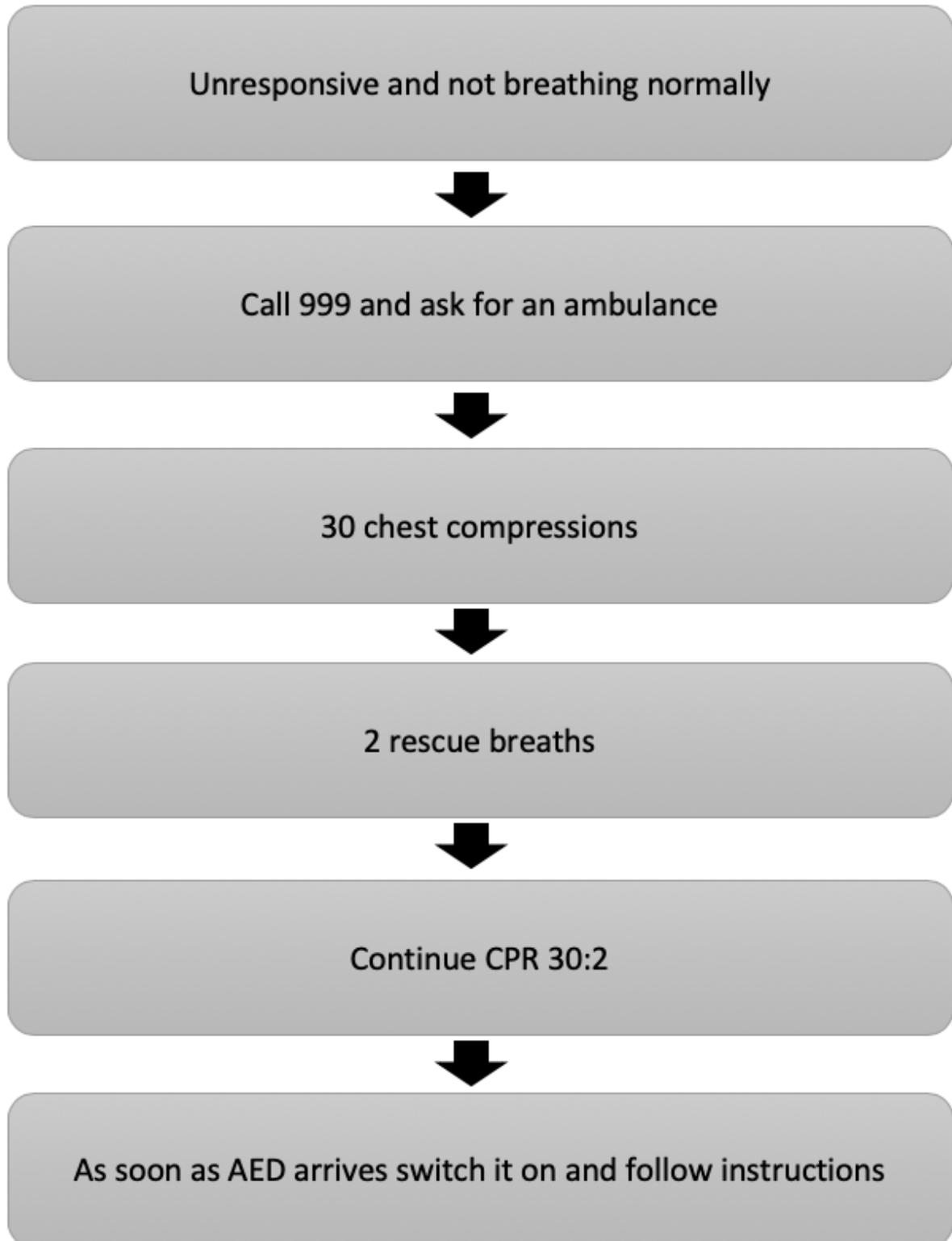
Summary of adult BLS algorithm

- **Safety:**
 - Make sure you, the victim and any bystanders are safe
- **Response:**
 - Check the victim for a response - gently shake shoulders and ask loudly: "Are you all right?"
 - If the patient responds leave in the position in which you find the patient, provided there is no further danger; try to find out what is wrong and get help if needed; reassess regularly
- **Assess Airway:**
 - Turn onto their back
 - Head tilt and chin lift

EMERGENCIES AND RESUSCITATION

- **Assess Breathing:**
 - Look, listen and feel for normal breathing for no more than 10 seconds
 - If there is any doubt whether breathing is normal, act as if they are not breathing normally and prepare to start CPR
- **If unresponsive and not breathing:**
 - **Call 999** and call for help - stay with the victim if possible and activate speaker function on your phone to enable communication whilst starting CPR
 - **Send for an AED**
- **Circulation:**
 - Start chest compressions x 30:
 - In the centre of the chest
 - Straight arms
 - 5-6 cm depth (Do not lean on the chest, allow it to recoil)
 - 100-120bpm
 - Change CPR provider every 2 minutes to prevent fatigue
- **Give 2 rescue breaths:**
 - Steady and normal breath into the patient's mouth (or nose or tracheostomy) over 1 second
 - Do not interrupt chest compressions for more than 10 seconds
 - If you are untrained in rescue breaths, continue chest compressions only
- **When AED arrives:**
 - Switch on and follow instructions but minimise the interruptions to CPR
 - Attach electrodes onto bare chest
 - If more than one rescuer, continue CPR whilst pads are attached
 - Follow instructions, ensuring no one is touching the patient when the shock is delivered
- **Continue CPR 30 chest compressions:2 rescue breaths until help arrives**
 - Do not stop CPR unless:
 - You are certain they have recovered and are breathing normally. Place into the recovery position ensuring glasses are removed
 - You are exhausted

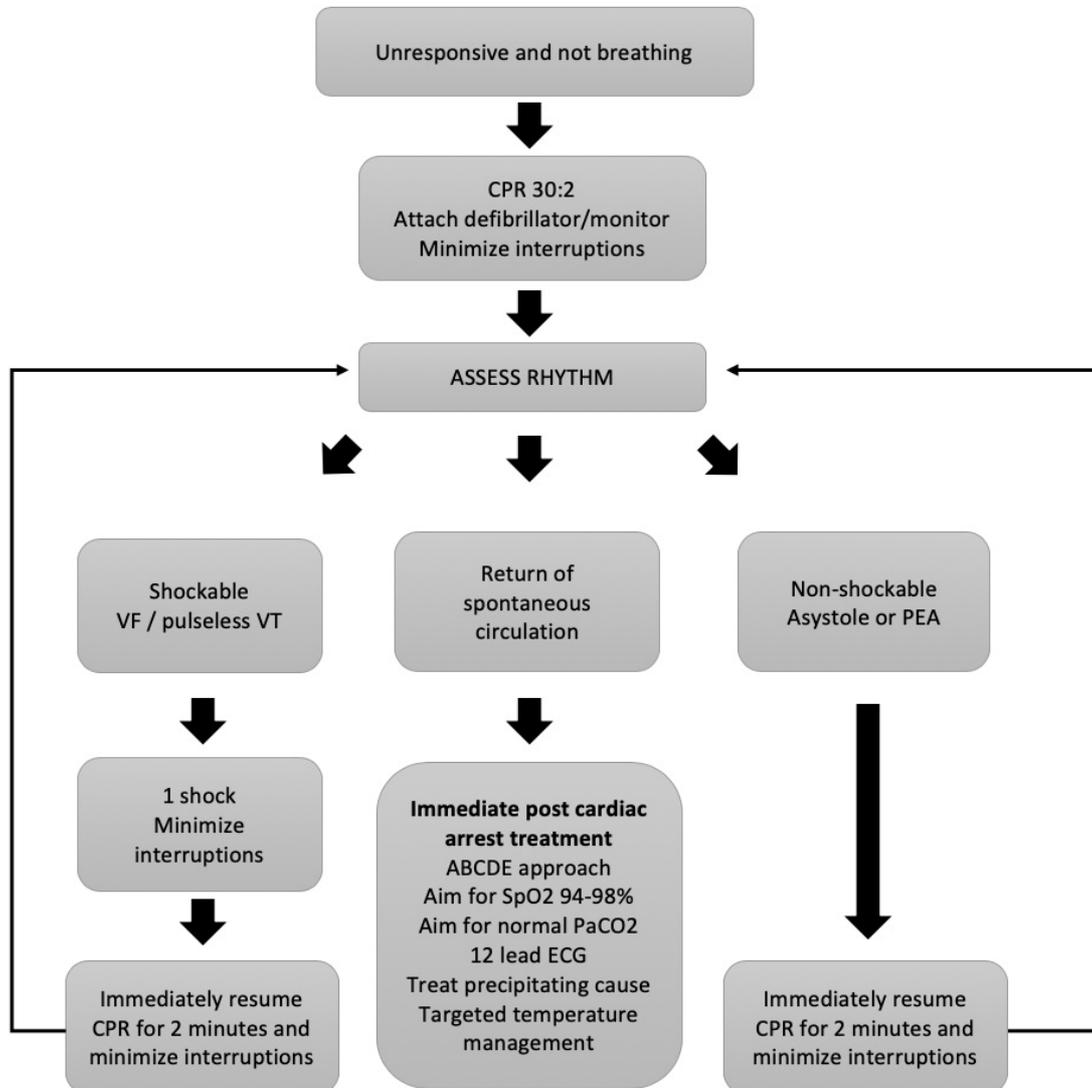
Visual summary of adult BLS algorithm



ADULT ALS and POST-RESUSCITATION CARE

[Resuscitation Council UK 2015](#)

Management - ALS:



■ **During CPR:**

- Ensure high quality chest compressions and minimise interruptions to compressions; continuous compressions when advanced airway in place
- Give oxygen and use waveform capnography
- IO or IV access:
 - Adrenaline every 2 minutes (first dose as soon as access is secured)
 - Amiodarone after every 3rd Shock

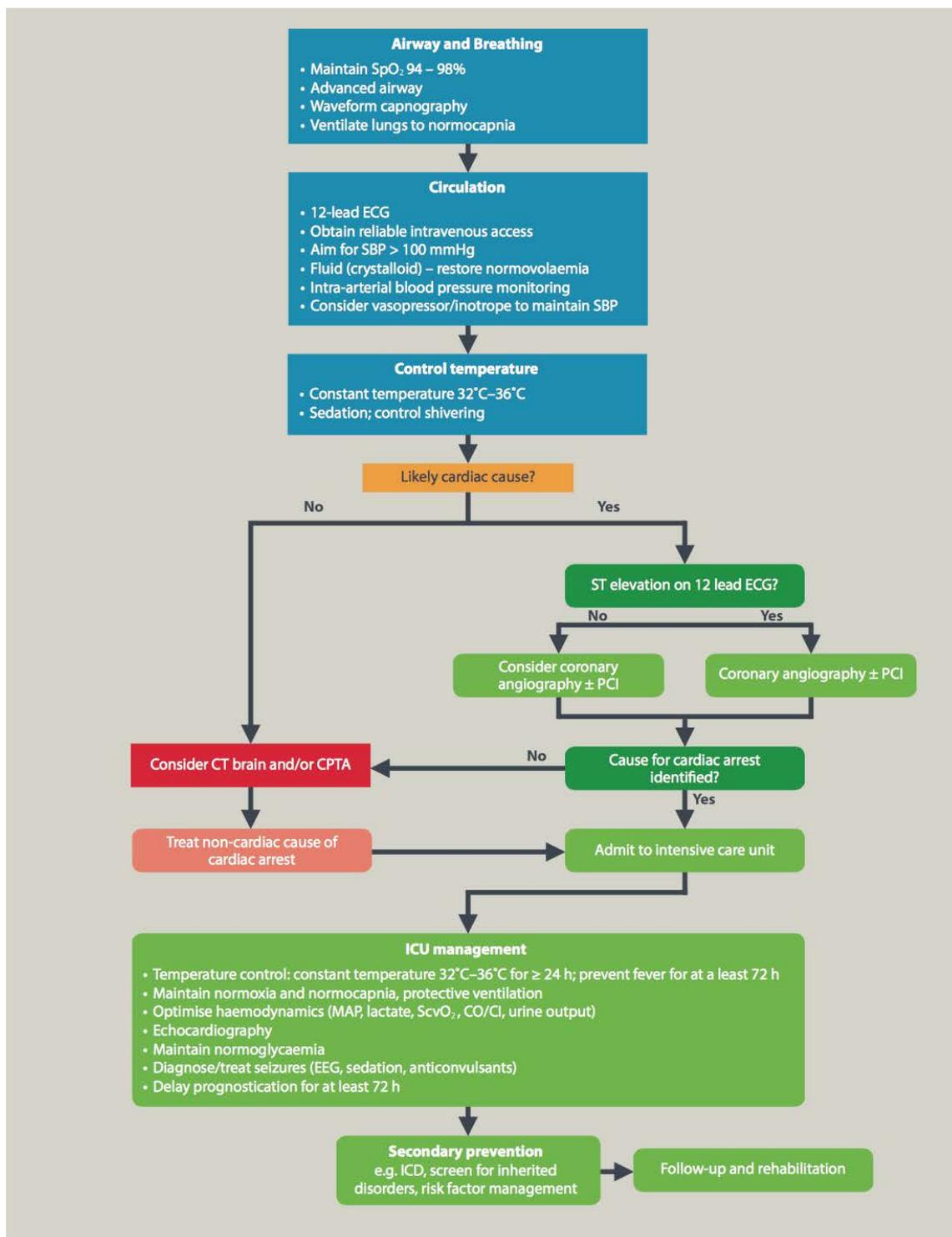
■ **Treat reversible causes:**

- **4 H's** - Hypoxia, hypovolaemia, hyper/hypokalaemia/metabolic changes, hypothermia
- **4 T's** - Thrombosis (coronary or pulmonary), tension pneumothorax, tamponade (cardiac), toxins

Management - Post-resuscitation care:

- The post-resuscitation phase starts at the location where return of spontaneous circulation is achieved
- Once stabilised transfer patient to the most appropriate high-care area (e.g. emergency room, cardiac catheterisation laboratory or intensive care unit (ICU)) for continued diagnosis, monitoring and treatment

Post resuscitation care algorithm (Resus council 2015)



CHOKING IN ADULTS

[Resuscitation Council UK 2015](#)

Background:

- Choking is an uncommon but potentially treatable cause of accidental death and is commonly witnessed
- Recognition is the key to a successful outcome

Management:

- **Encourage the victim to cough**
- If the cough becomes ineffective give up to **5 back blows**:
 - Stand to the side and slightly behind the victim
 - Support the chest with one hand and lean the victim well forwards
 - Give five sharp blows between the shoulder blades with the heel of your other hand
- If back blows are ineffective give up to **5 abdominal thrusts**:
 - Stand behind the victim and put both arms around the upper part of the abdomen
 - Lean the victim forwards
 - Clench your fist and place it between the umbilicus and the ribcage
 - Grasp this hand with your other hand and pull sharply inwards and upwards
 - Repeat up to five times
- If obstruction not relieved, continue **alternating five back blows with five abdominal thrusts**
- **Start CPR if the victim becomes unresponsive**

