

Continued emphasis has been placed on high quality CPR and minimising interruptions.



GUIDELINES 2010

OVERVIEW OF CHANGES RELEVANT TO ACLS COURSES

This document gives a brief overview of the main changes which you should be aware of when conducting ACLS Training through the Irish Heart Foundation's CPR & ECC Training Programme.

The following points should be added into upcoming courses until more structured update information is provided.

This is not an exhaustive list of all the changes but a document to highlight the key changes. Please ensure you circulate this document to the Medical Director and Teaching Faculty prior to upcoming ACLS courses. You may also wish to provide a copy to course attendees.

Any additional information will be sent on to you following the next ACLS Council Meeting in late November. New ACLS teaching materials and course formats will become available in Spring 2011 (March – June). Please note that further information regarding Instructor Update Sessions will be forwarded to all Training Sites in due course.

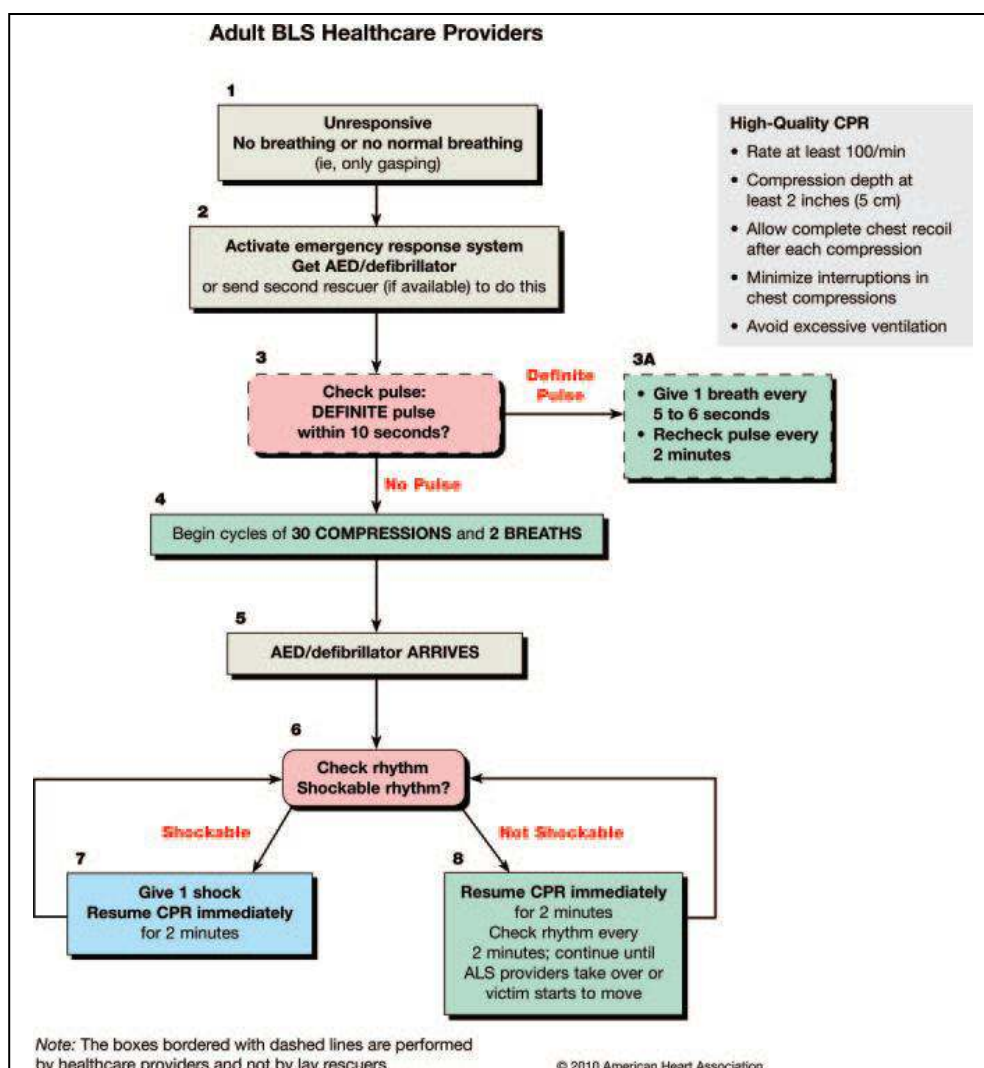
The complete set of the 2010 guidelines can be reviewed at www.heart.org/eccguidelines.

Any specific queries you may have regarding guidelines for ACLS Training should be forwarded to scain@irishheart.ie.

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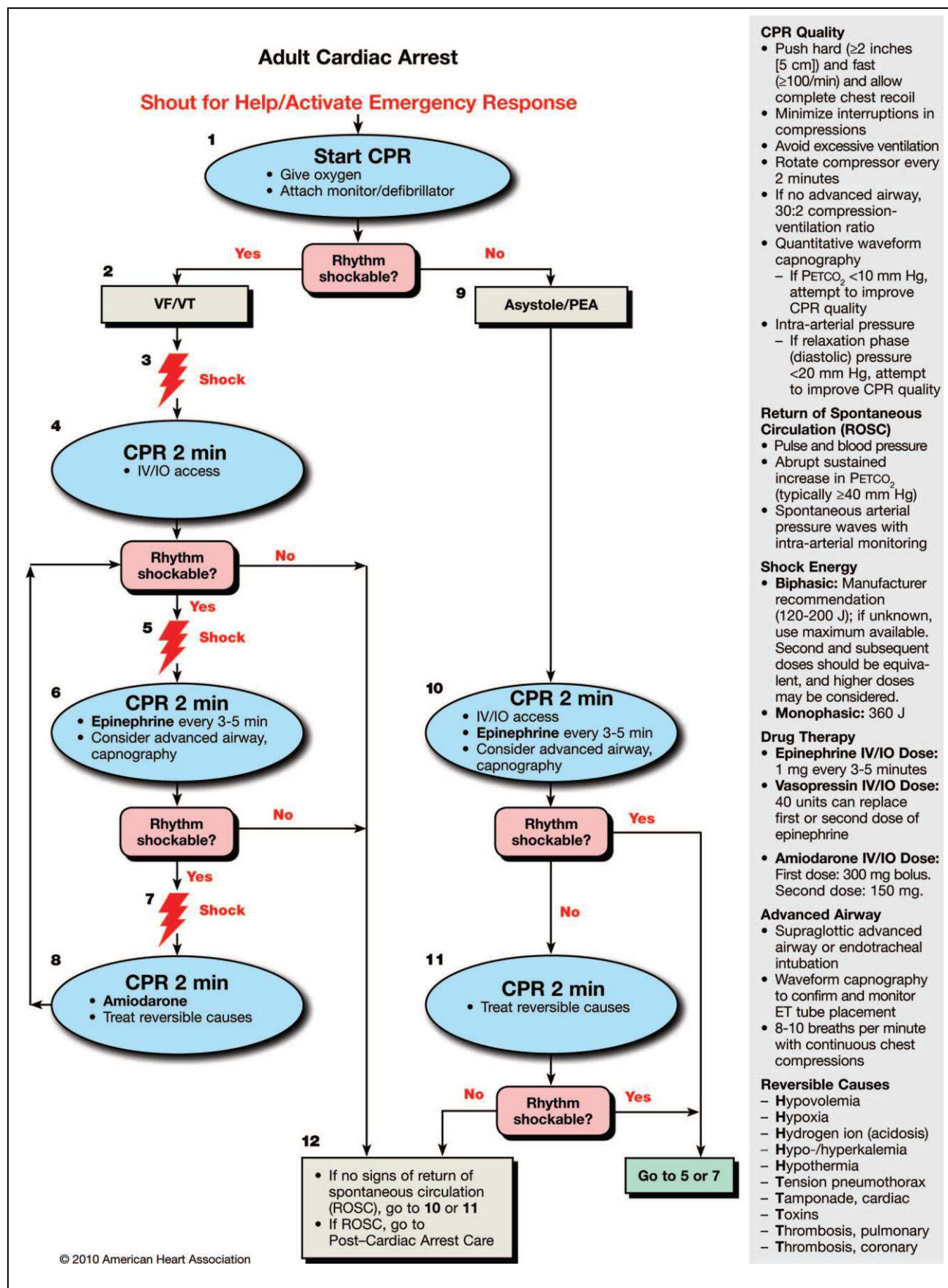
BASIC LIFE SUPPORT - HEALTHCARE PROVIDERS

- Change in sequence from 'ABC' to 'CAB'
 - Chest compressions should be initiated immediately & ventilations follow the completion of first cycle.
- "Look, Listen and Feel" is removed from algorithm.
- Pulse checks are deemphasised.
 - Whenever a pulse check is used, it should take no longer than 10sec.
- No difference between witnessed and unwitnessed cardiac arrest protocols
 - No longer delay to provide CPR prior to defibrillation for unwitnessed arrest (i.e. initiate CPR and use defib as soon as possible)
- Non trained bystanders should provide 'Hands-Only' CPR.
- Compression rate of at least 100 per min
- Compression depth of at least 5 cm (adults)
- Complete chest recoil after each compression
- Minimise interruptions in chest compressions
- Avoid excessive ventilation
- Chain of Survival includes an extra link for post cardiac arrest care
- Emphasis on team approach with multiple, simultaneous interventions



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ACLS CARDIAC ARREST ALGORITHM



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ELECTRICAL THERAPY

- Laypeople are encouraged to use an AED, even without training.
- Escalating energy levels can be used for second and subsequent shocks (device specific).
- Recommended initial biphasic energy dose for cardioversion of atrial fibrillation is 120-200J.
- Adult stable monomorphic VT responds well to monophasic or biphasic waveform cardioversion (synchronised) shocks of initial energies of 100J.

CPR DEVICES

- There is insufficient evidence to support the routine use of mechanical CPR or impedance threshold devices.

ACLS

- Routine use of Cricoid pressure is no longer recommended as it may impede ventilation.
- Continuous quantitative capnography is now recommended for intubated patients throughout the peri arrest period.
- ACLS cardiac arrest algorithm simplified to emphasise the importance of high quality CPR.
- Atropine is not recommended for routine use in the management of PEA/Asystole and has been removed from the algorithm.
- Adenosine is recommended in the initial diagnosis and treatment of stable, undifferentiated, regular monomorphic wide complex tachycardia (note it should not be used if the rhythm is irregular).
- With symptomatic and unstable Bradycardia, chronotropic drug infusions are recommended as an alternative to pacing.
- 15 specific cardiac arrest situations now have specific treatment recommendations. Team leaders are encouraged to adapt accordingly.

POST CARDIAC ARREST CARE

- Therapeutic hypothermia and percutaneous coronary interventions should be provided when indicated.
- Post arrest oxygen administration should be titrated to maintain arterial oxyhaemoglobin saturation greater than or equal to 94%.

ACUTE CORONARY SYNDROMES

- ACS patients without evidence of respiratory distress, cardiac failure, shock or oxyhaemoglobin saturation less than 94% should not receive supplemental oxygen.
- Morphine should be used with caution in patients with unstable angina/NSTEMI.