Bart's City Life Saver

Adult Basic Life Support

& Automated External Defibrillator

Training Course

Objectives

By the end of this session you will be able to:

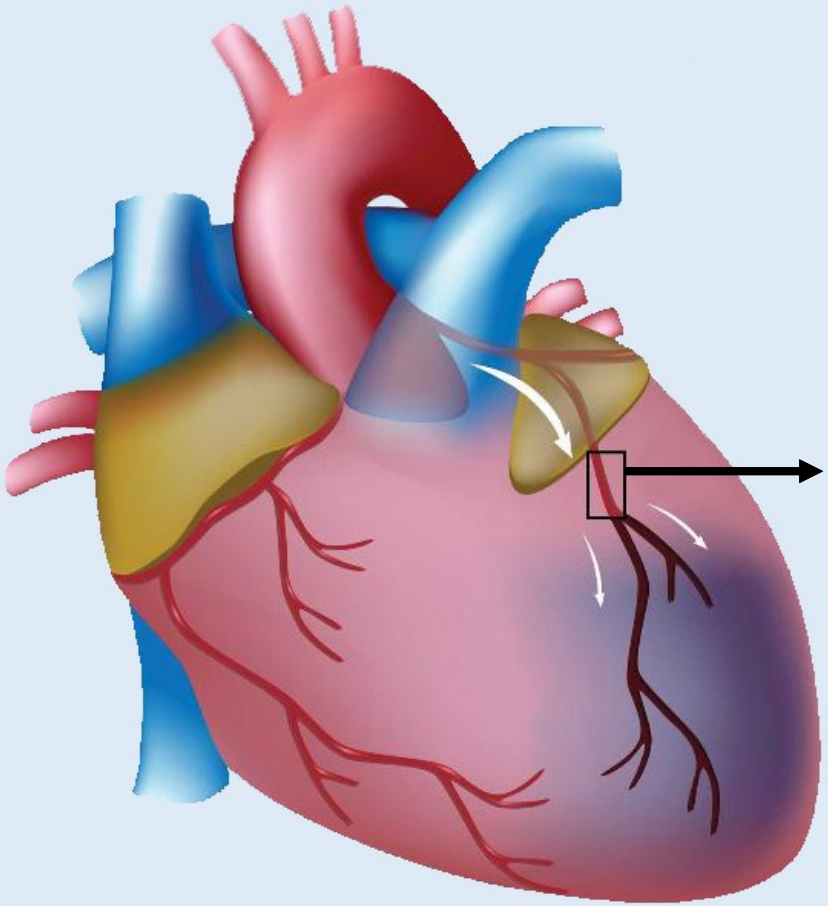
- Explain the cause, signs, symptoms and treatment for a heart attack
- Understand how to turn an unconscious casualty who is breathing normally into the recovery position
- Understand how to perform effective basic life support (BLS)
- Recognise and understand the safe use of an automated external defibrillator (AED) and acknowledge its role in cardiac arrest

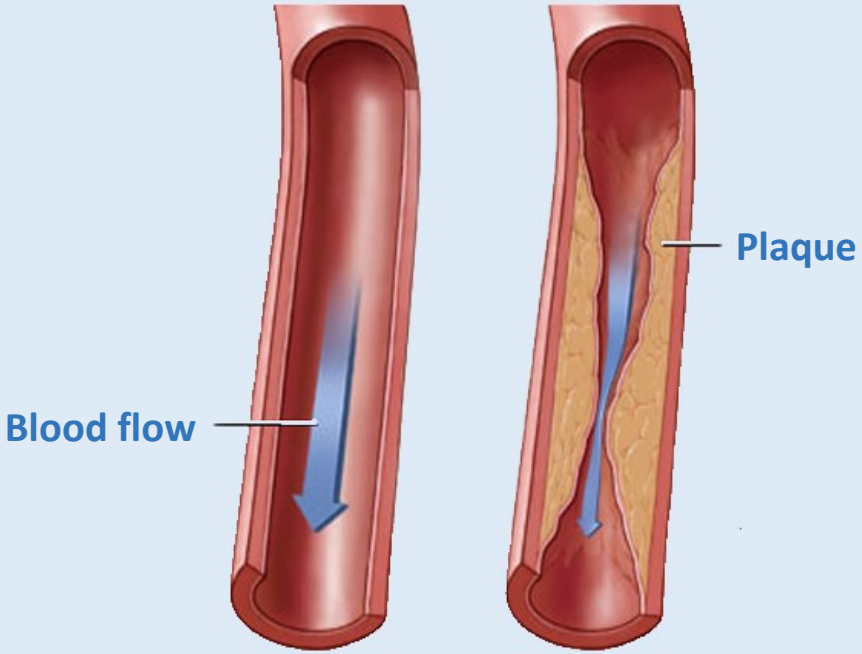
Background

- Around one person every three minutes has a heart attack in the UK [1]
- If untreated, cardiac arrest occurs in one third to a quarter of people who suffer a heart attack
- Immediate bystander resuscitation can double, or even quadruple, survival from cardiac arrest [2]
- Early defibrillation can produce survival rates as high as 50-70%[3]

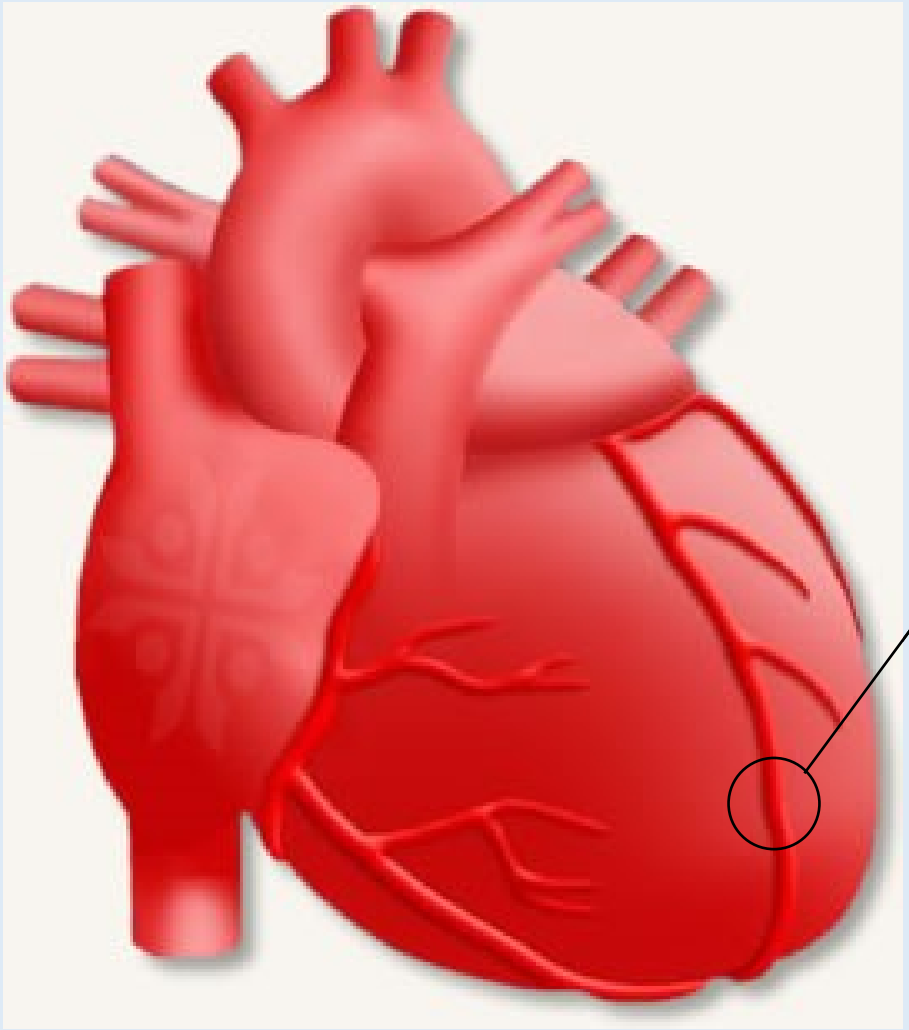
1. British Heart Foundation (2015). British Heart Foundation Headline Statistics. Available at: https://www.bhf.org.uk/research/heart-statistics. [Accessed: 19/11/15].
2. Sasson, C. Rogers, M, Dahl, J. Kellerman, A (2010). Predictors of survival from out-of-hospital cardiac arrest: a systematic review and meta- analysis. Circ Cardiovasc Qual Outcomes. 3, 63-81
3. Valenzuela, T, Roe, D, Nicol, G, Clark, L, Spaite, D, Hardman, R (2000). Outcomes of rapid defibrillation by security officers after cardiac arrest in casinos. New Eng J Med. 343, 1206-1209

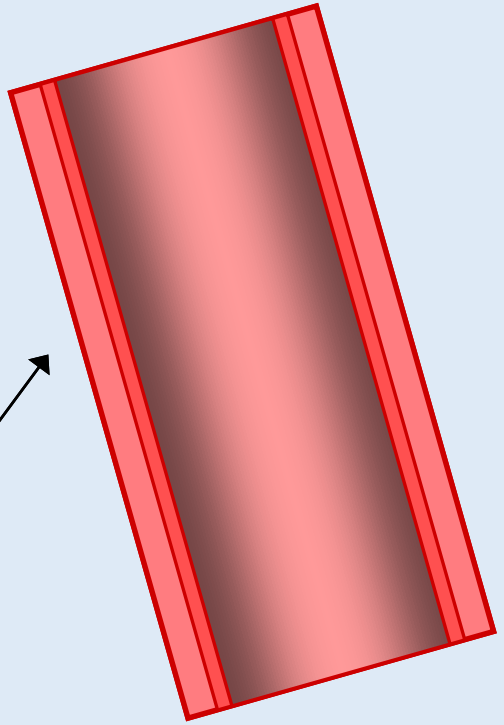
The Cause of a Heart Attack





The Cause of a Heart Attack





Signs & Symptoms



View video at:
https://youtu.be/Z8aMN0oy8Qs

Signs & Symptoms

Pale or grey in colour

Feeling or being sick

Heavy sweating causing clammy skin

Impending sense of doom



Crushing central chest pain often radiating into the arms, neck, jaw or back

Difficulty in breathing

Collapse without warning

Action to be taken



Send for an ambulance (999/112)

Position the casualty comfortably

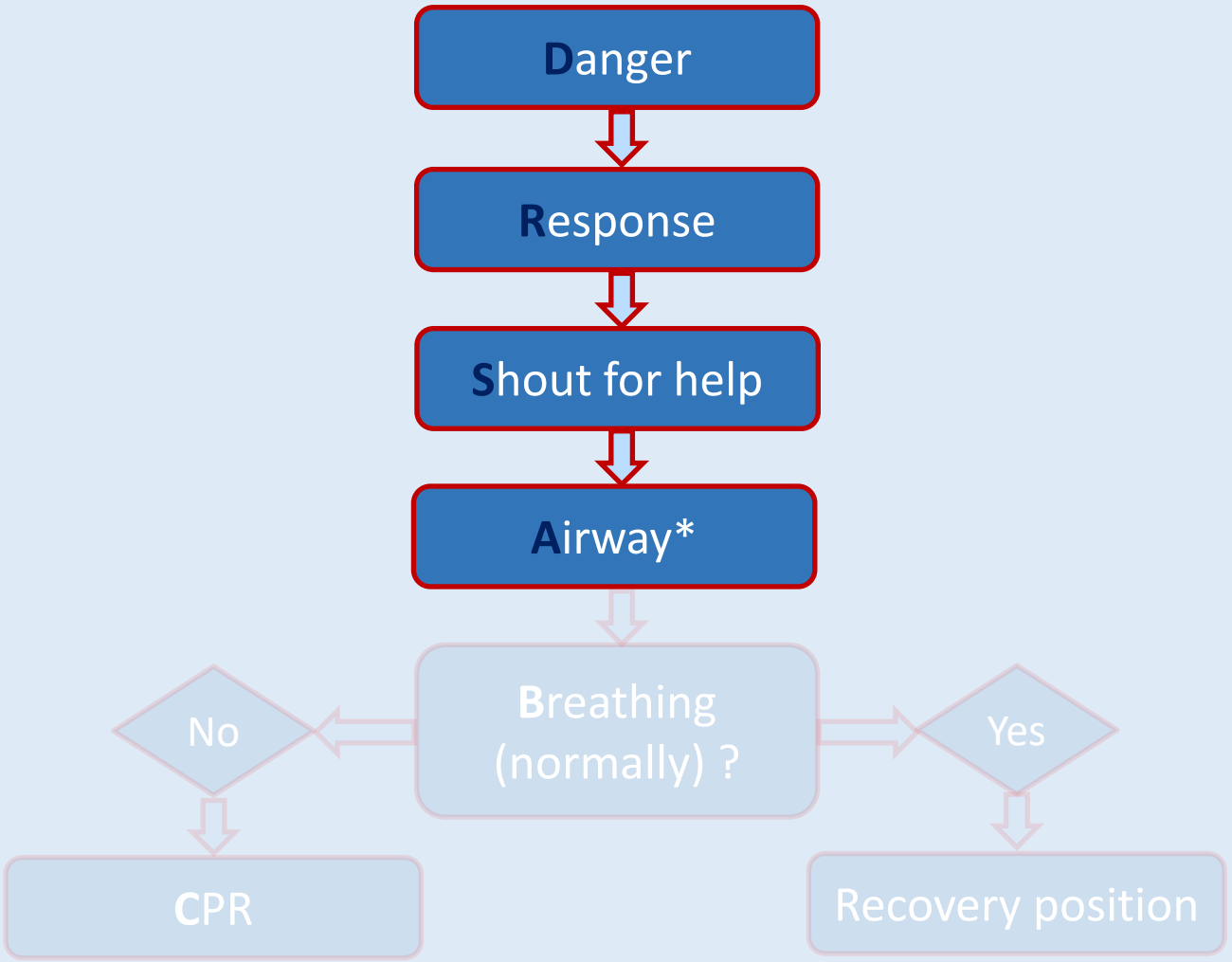
Loosen tight clothing

Monitor & reassure

Offer aspirin

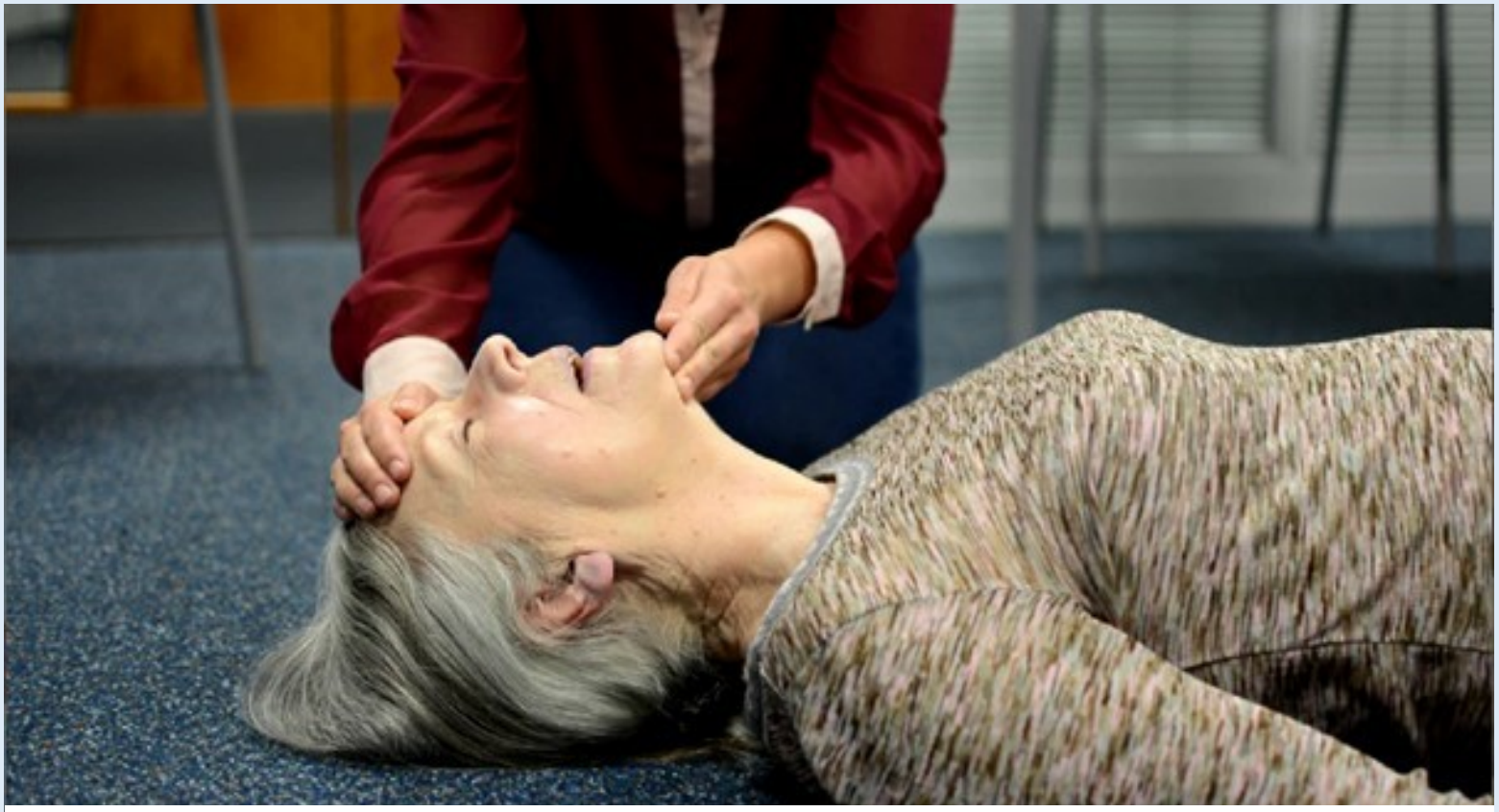
Send for AED

Collapsed Casualty…



Opening the Airway

Head tilt & chin lift to open up the airway



View video at:
https://youtu.be/DZgJLJTKNB8

Collapsed Casualty…



Recovery Position

Turn the casualty into the recovery position

Continue monitoring for further deterioration

Call for an ambulance when it is safe and appropriate



Steps of the Recovery Position

1



2



Steps of the Recovery Position

3





4



Collapsed Casualty…



Normal Breathing Absent

Cardiac arrest may be associated with:

- Agonal breathing [40% of patients]
- No breathing at all
- Involuntary muscle twitching that may resemble a seizure

Normal Breathing Absent



View video at:
https://youtu.be/A2wWou7RTjU

Automated External Defibrillators









CardioPulmonary Resuscitation





Performing rescue breaths



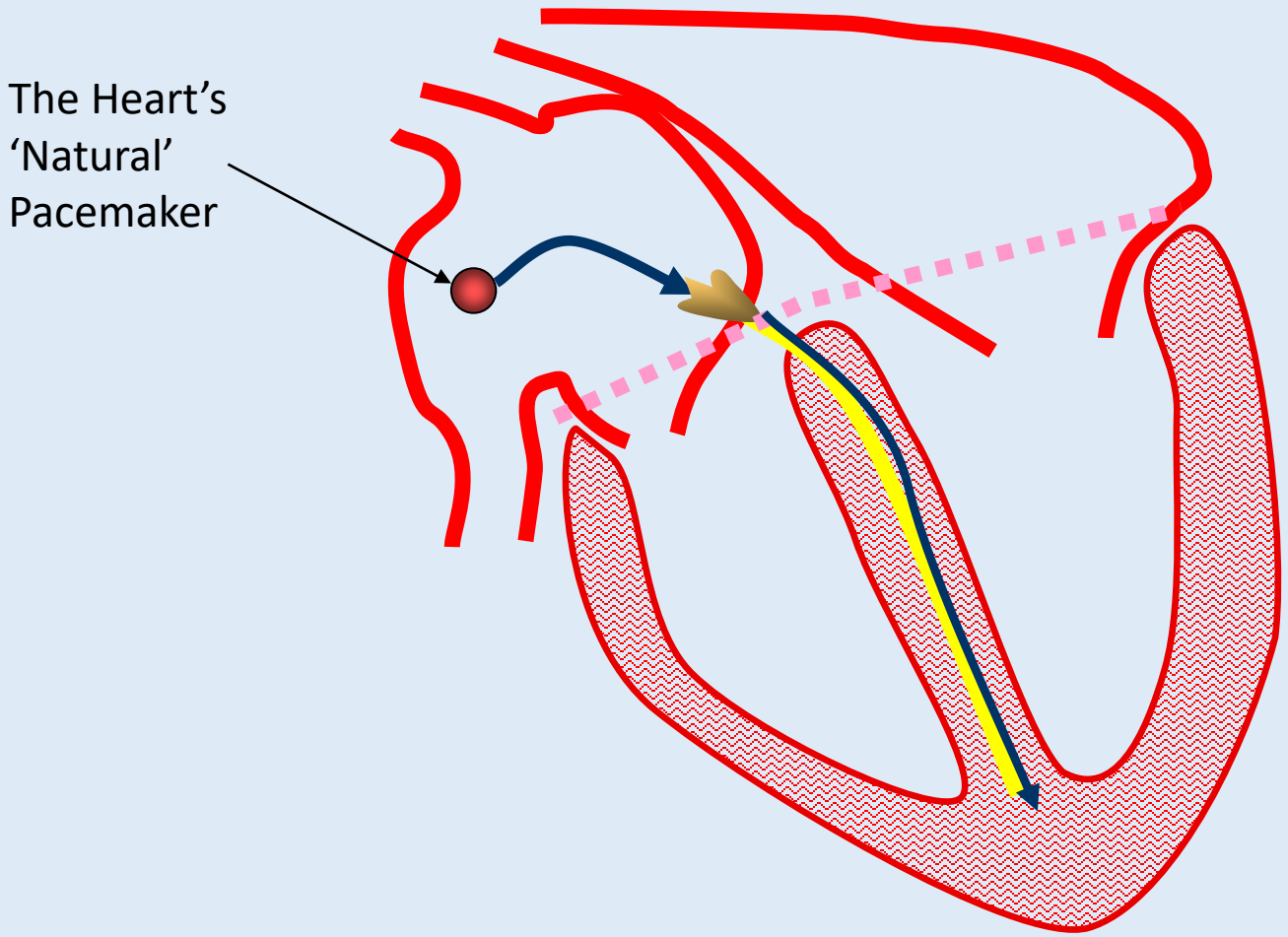
View video at:
https://youtu.be/PaZtxbV-9wk

Compression Only Life Support



Whilst 30:2 is the ‘Gold Standard’ approach, it is acceptable to not perform rescue breaths if you are uncomfortable

Electricity in the Heart

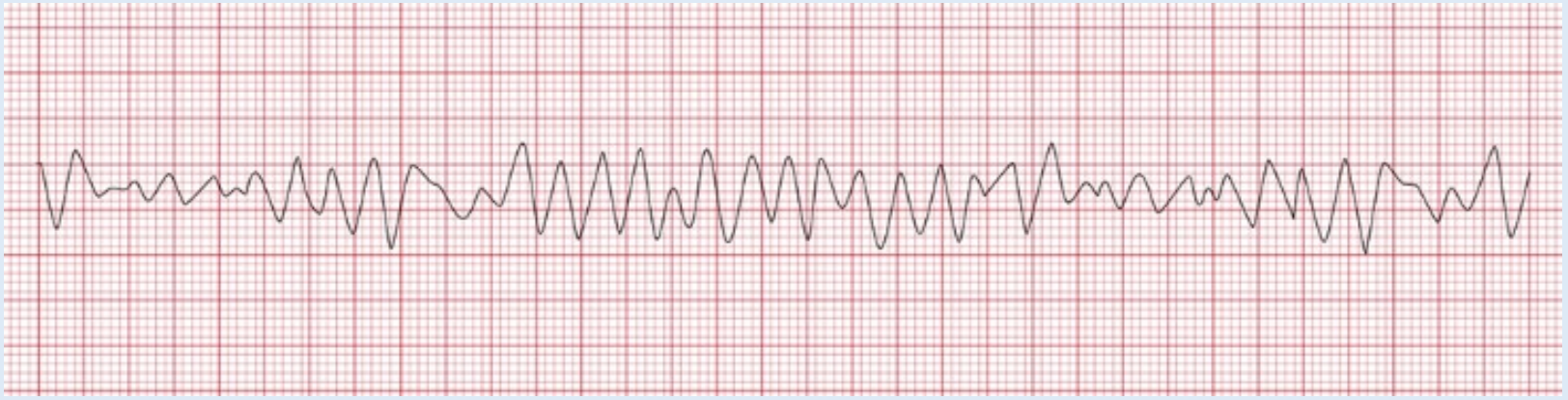


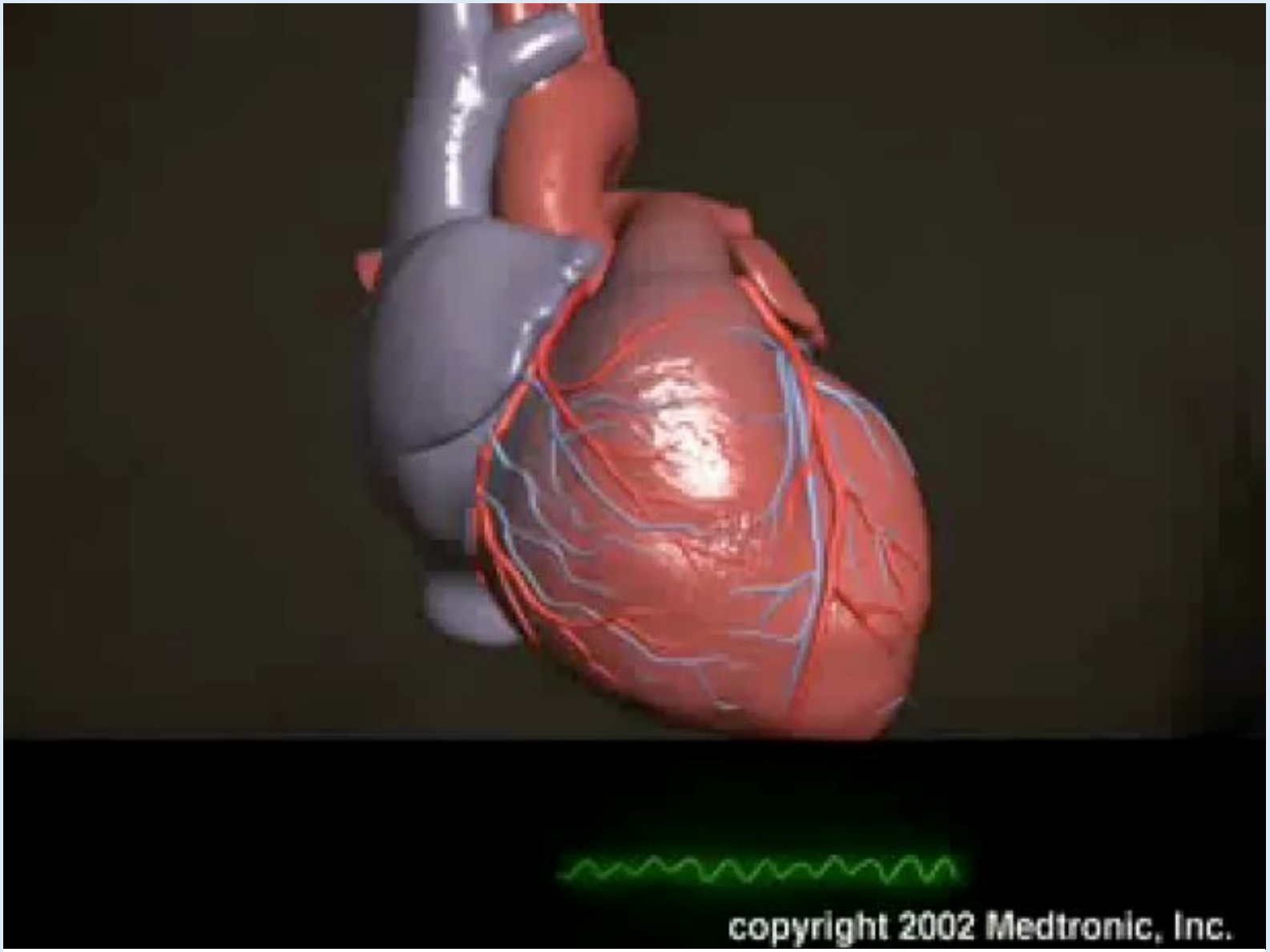
Electrical Pattern of the Heart

‘Normal’ Heart Rhythm



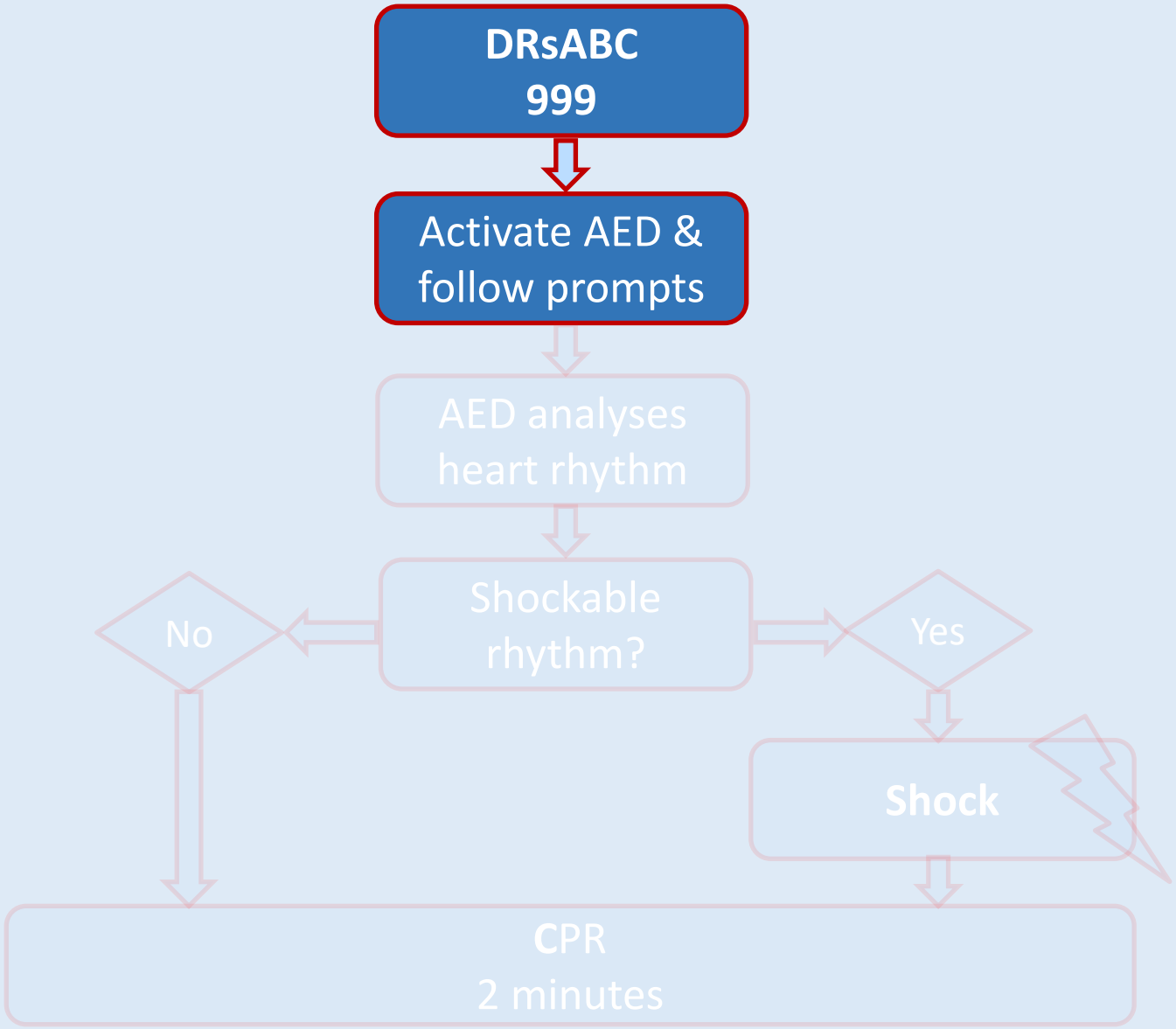
Ventricular Fibrillation (VF)





View video at:
https://youtu.be/K290iIkF908

Cardiac Arrest



Preparing for Defibrillation

- Ensure there are no environmental hazards
  - metals and water
  - flammable gases
- Expose the chest fully (cut clothing and move jewellery)
- Dry the skin
- Shave excess hair
- Remove medication patches



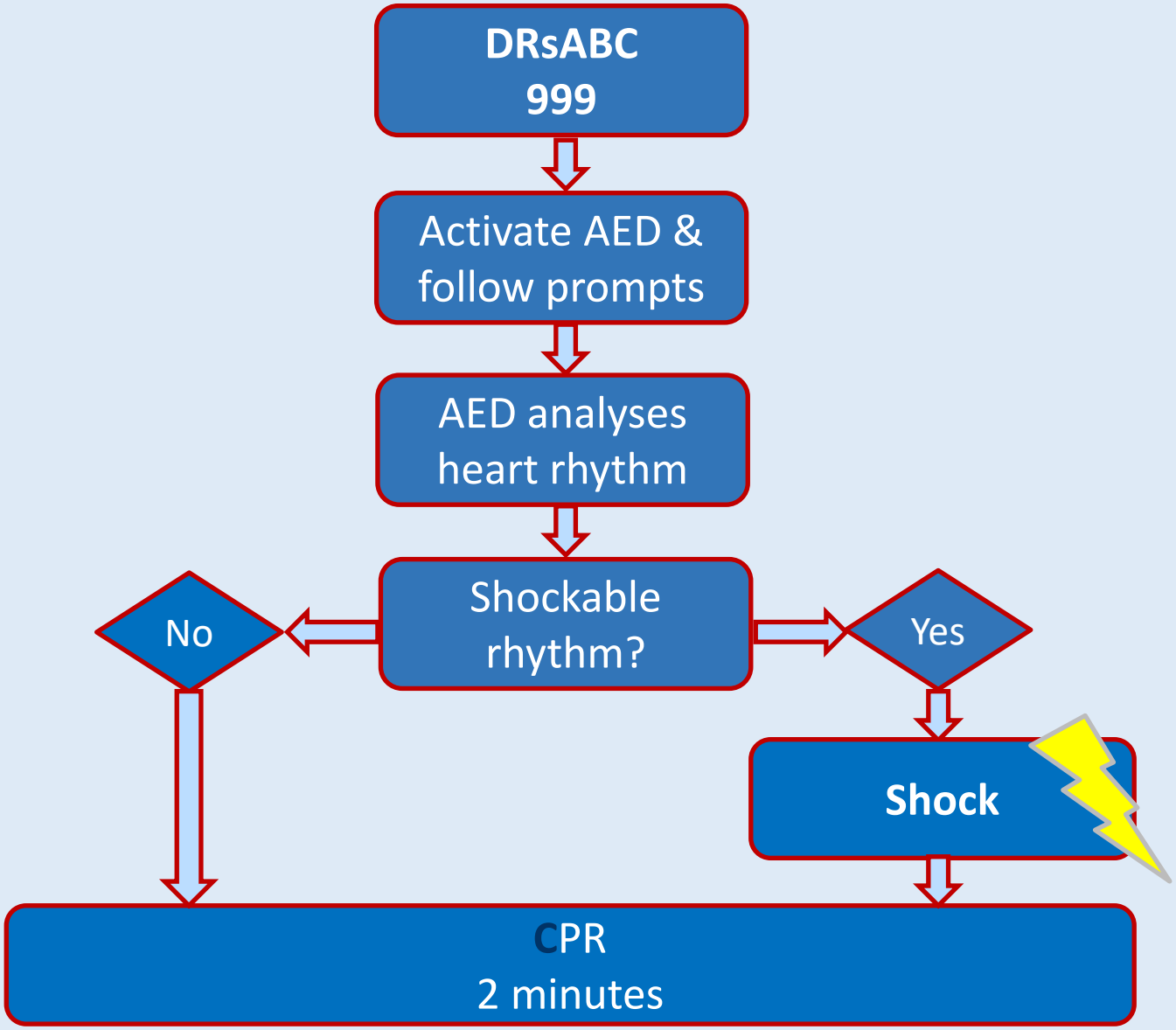
Placing the AED Pads

- Place one pad to the right of the breastbone in line with the middle of the collar bone

- Place the second pad vertically in line with the armpit away from the breast tissue



Cardiac Arrest…



Non-technical Skills

Watch this short video clip, reflect on the following points and then discuss with your trainer…

- The technical skills of the responders:
  - Did they assess the situation and the casualty appropriately?
  - Were their interventions appropriate?

- The non-technical skills of the responders:
  - What did you notice about their communication?
  - Were they effective as a team?

Use of an AED



View video at:
https://youtu.be/0C7LBx_M_vI

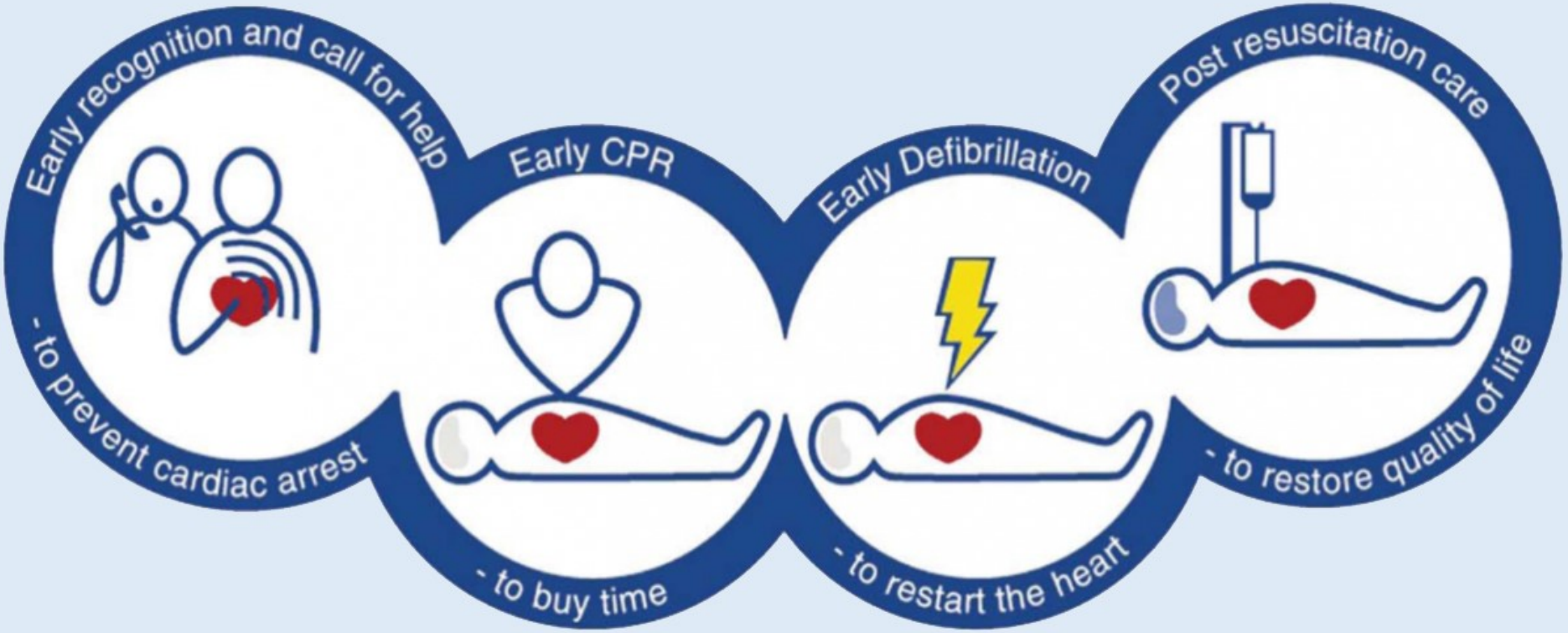
The Aftermath

In the aftermath of the event consider the following:

- Any documentation that is required (work environment)
- The replenishing of equipment
- Consider AED software download (contact the manufacturer)
- Wash your hands with soap and water or disinfect with alcohol-based gel after a resuscitation attempt.

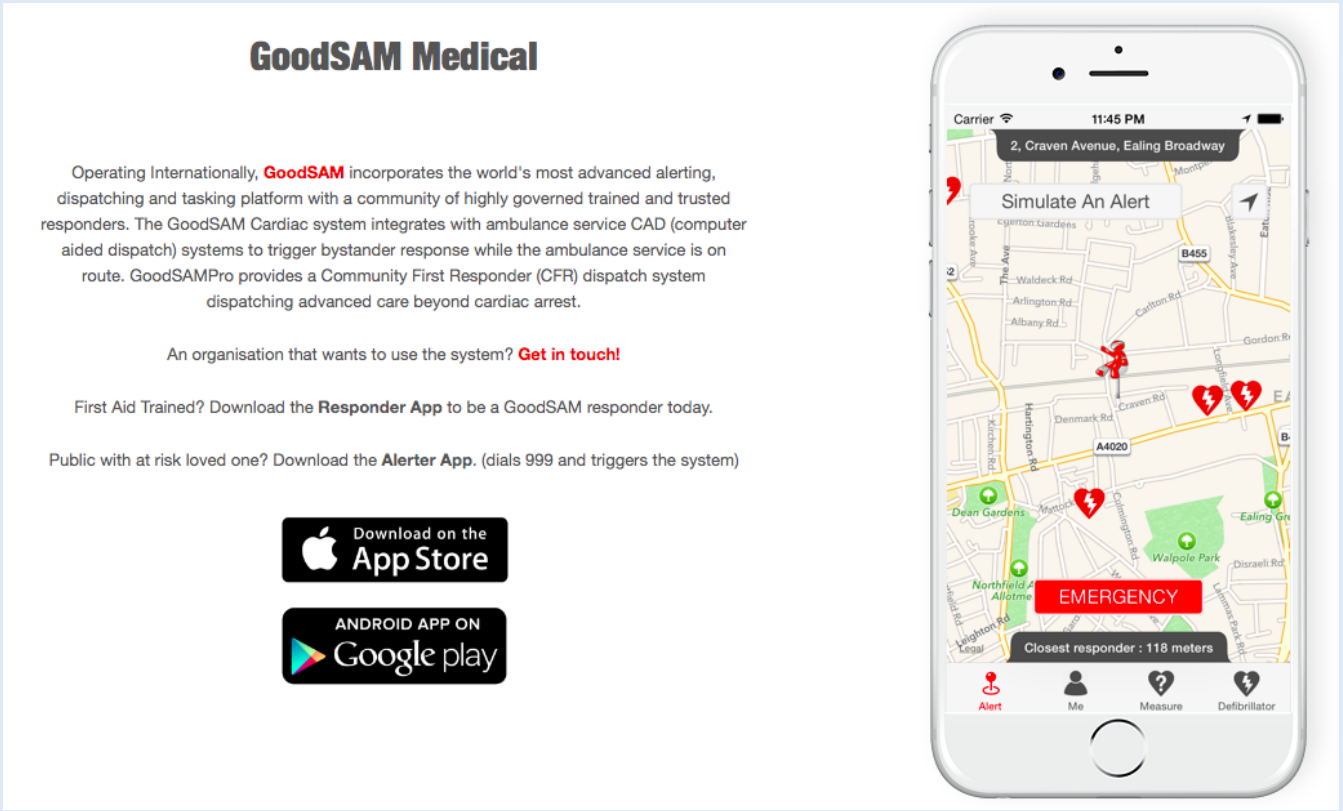
Take some time to reflect on the situation, take care of yourself and talk to somebody if you need to…

Chain of Survival



GoodSAM

- You may wish to download the GoodSAM Responder App
- www.goodsamapp.org/home





Summary

You are now able to:

- Explain the cause, signs, symptoms and treatment for a heart attack
- Understand how to turn an unconscious casualty who is breathing normally into the recovery position
- Understand how to perform effective basic life support
- Recognise and understand the safe use of an automated external defibrillator and acknowledge its role in cardiac arrest

Course Evaluation

Your opinion matters to us. Please use the links or QR codes below to complete our feedback form and leave us a review on Google.

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www.bartscitylifesaver.org/feedback-form

Google Reviews

https://g.page/r/CcEPAjCwBMB-EBI/review

(You will need to log in to your Google account)

Course Materials

A copy of this presentation is available on our website at www.bartscitylifesaver.org/course-materials

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