European Resuscitation Council

Basic Life Support & Automated External Defibrillation Course

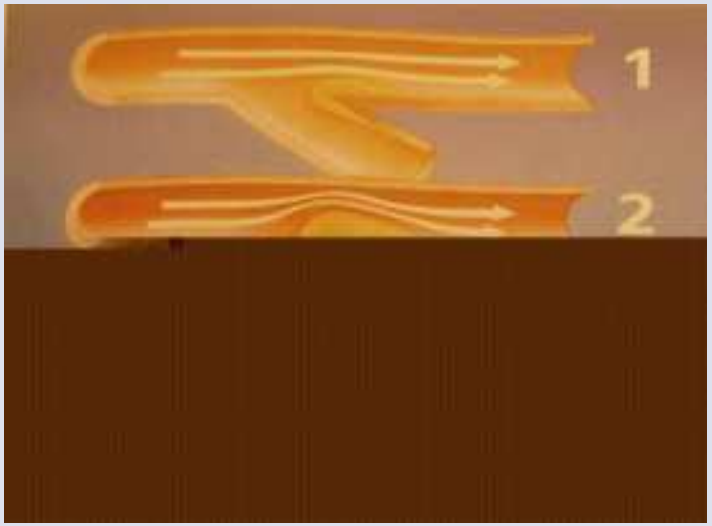
OBJECTIVES

- At the end of the winter term participants should be able to demonstrate:
  - How to assess the collapsed victim.
  - How to perform chest compression and rescue breathing.
  - How to place an unconscious breathing victim in the recovery position.

European Resuscitation Council

European Resuscitation Council

MOST FREQUENT CAUSES OF CARDIAC ARREST

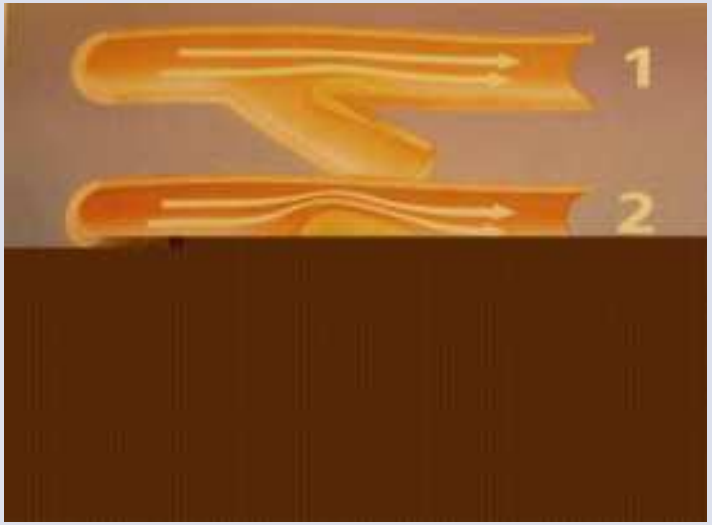


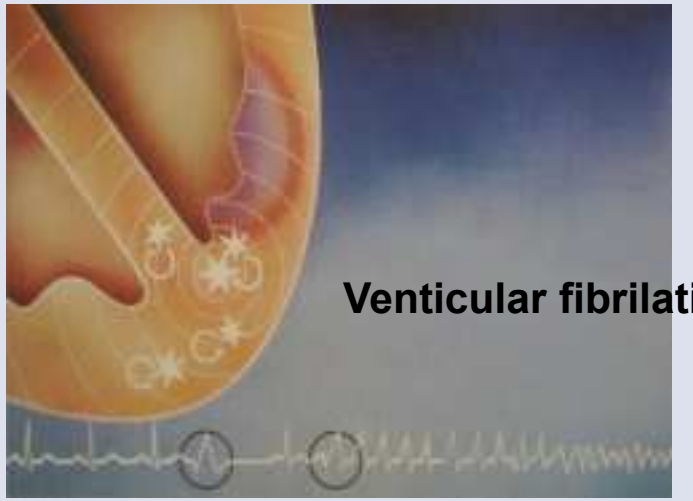


Most common causes of cardiac arrest

European Resuscitation Council

- 1. place
  IHD...Myocardial infarct,
- Trauma
- Poisoning
- Drowning
- Hypotermia...





Venticular fibrilation

European Resuscitation Council

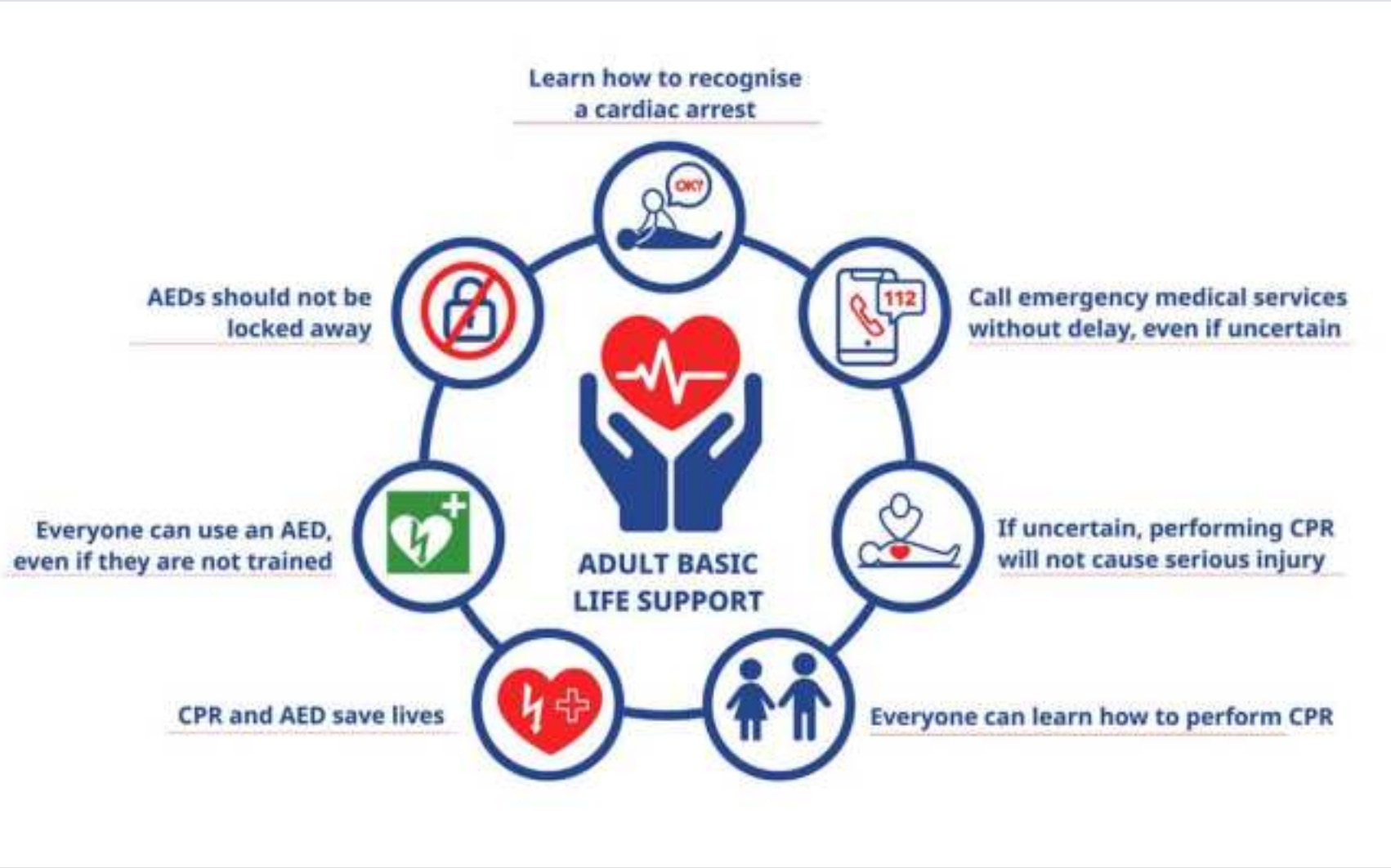
- Basic life support
- Advanced life support



1961: Peter Safar

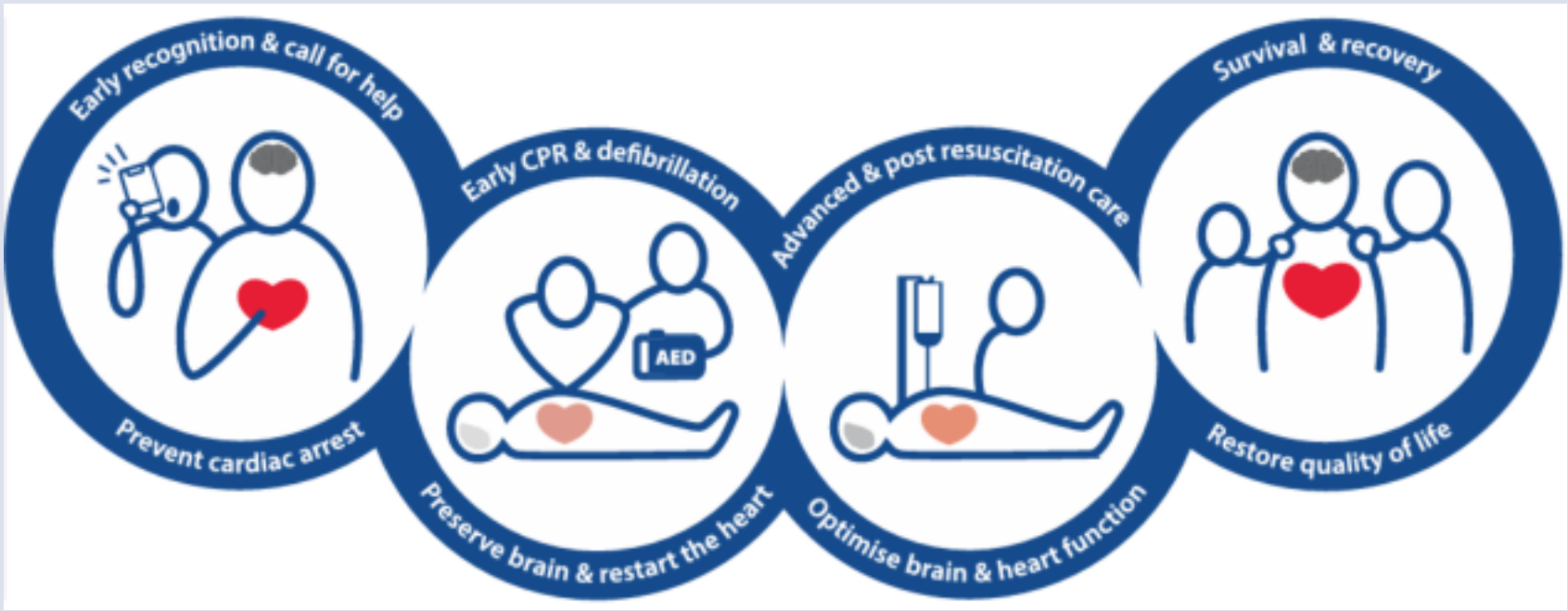
European Resuscitation Council

Key message



European Resuscitation Council

CHAIN OF SURVIVAL



European Resuscitation Council

Approach safely

Check response

Shout for help and call 112

Open airway

Check breathing

30 chest compressions

2 rescue breaths



APPROACH SAFELY!

European Resuscitation Council

	Approach safely
Scene	**Check response**
Rescuer	**Shout for help and call 112**
Victim	**Open airway**
	Check breathing
Bystanders	**30 chest compressions**
	2 rescue breaths

European Resuscitation Council

CHECK RESPONSE



- Approach safely
- **Check response**
- Shout for help and call 112
- Open airway
- Check breathing
- 30 chest compressions
- 2 rescue breaths

European Resuscitation Council

CHECK RESPONSE



Shake shoulders gently

Ask “Are you all right?”

If he responds

- Leave as you find him.
- Find out what is wrong.
- Reassess regularly.

European Resuscitation Council

SHOUT FOR HELP





Approach safely

Check response

Shout for help and call 112

Open airway

Check breathing

30 chest compressions

2 rescue breaths

European Resuscitation Council

OPEN AIRWAY



Approach safely

Check response

Shout for help and call 112

Open airway

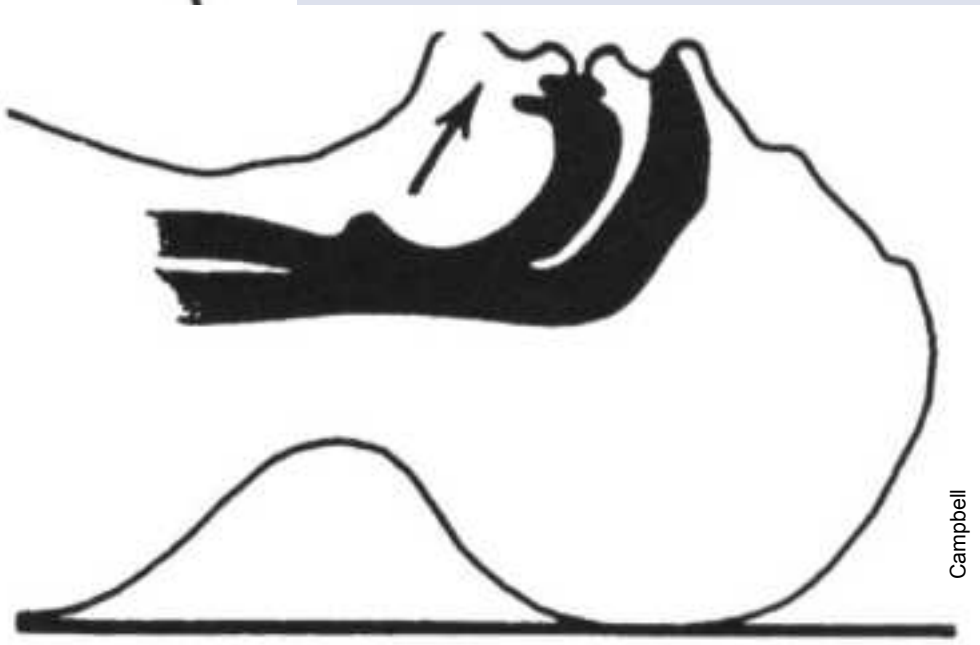
Check breathing

30 chest compressions

2 rescue breaths

AIRWAY OPENING BY
NECK EXTENSION





Campbell

CERVICAL SPINE INJURY

- **Jaw thrust (no for lay rescuer) for open airway**





European Resuscitation Council

European Resuscitation Council

CHECK BREATHING



- Approach safely
- Check response
- Shout for help and call 112
- Open airway
- **Check breathing**
- 30 chest compressions
- 2 rescue breaths

European Resuscitation Council

CHECK BREATHING



- **Look, listen and feel** for NORMAL breathing
- Do not confuse agonal breathing with NORMAL breathing

AGONAL BREATHING

- Occurs shortly after the heart stops in up to 40% of cardiac arrests
- Described as barely, heavy, noisy or gasping breathing
- Recognise as a sign of cardiac arrest

European Resuscitation Council

European Resuscitation Council

30 CHEST COMPRESSIONS



- Approach safely
- Check response
- Shout for help and call 112
- Open airway
- Check breathing
- **30 chest compressions**
- 2 rescue breaths

European Resuscitation Council

CHEST COMPRESSIONS



- Place the heel of one hand in the centre of the chest (lower half of sternum)
- Place other hand on top
- Interlock fingers
- Compress the chest
  - Rate 100 -120 min^{-1}
  - Depth 5-6 cm
  - Equal compression : relaxation
- When possible change CPR operator every 2 min

European Resuscitation Council

30 : 2

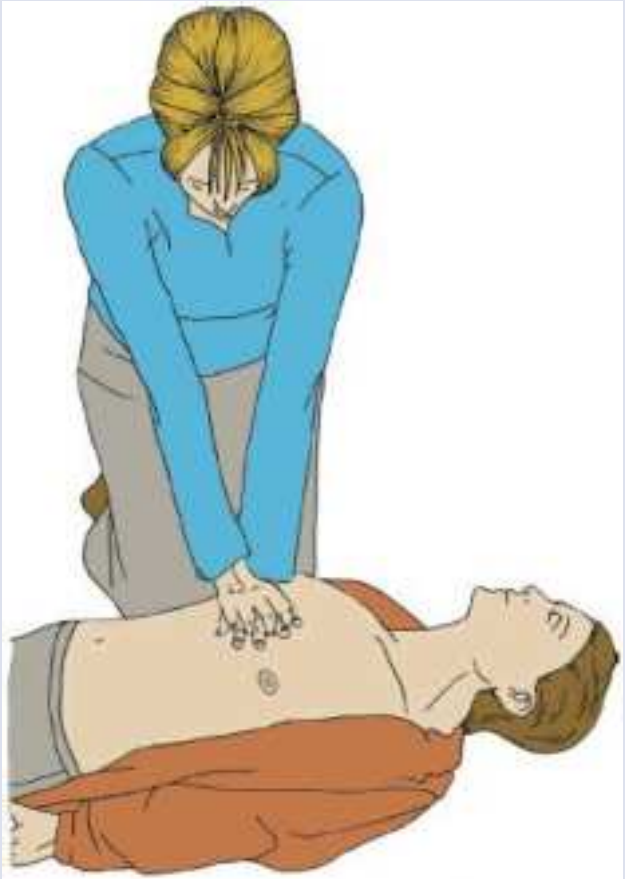


Figure 2.10 Interlock the fingers of your hands. © 2005 European Resuscitation Council.



Figure 2.11 Press down on the sternum 4–5 cm. © 2005 European Resuscitation Council.

Handley A.J., Koster R., Monsieurs K., Perkins G.D., Davies S., Bossaert L.: European Resuscitation Council Guidelines for Resuscitation 2005. Section 2. Adult basic life support and use of automated external defibrillators Resuscitation (2005) 67S1, S7—S23

RESCUE BREATHS



- Approach safely
- Check response
- Shout for help and call 112
- Open airway
- Check breathing
- 30 chest compressions
- **2 rescue breaths**

European Resuscitation Council

European Resuscitation Council

RESCUE BREATHS

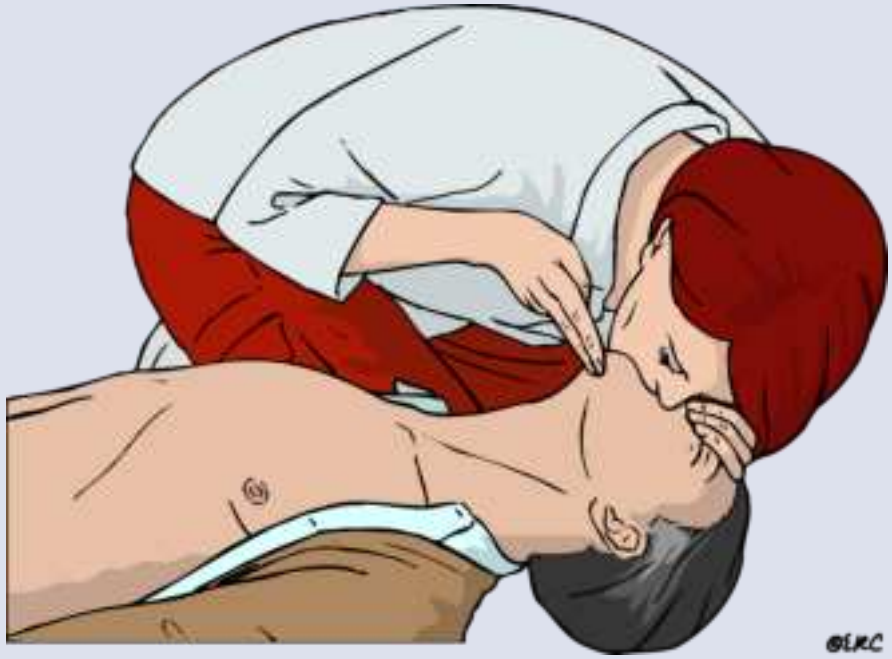


- Pinch the nose
- Take a normal breath
- Place lips over mouth
- Blow until the chest rises
- Take about 1 second
- Allow chest to fall
- Repeat

CONTINUE CPR



30



2

European Resuscitation Council

European Resuscitation Council

If initial rescue breath does not make the chest rise:

- Check the victim mouth and remove any visisble obstruction
- Recheck that there is adequate head tilt and chin lift

Go on combining 30 chest compressions with 2 rescue breaths.

Only stop when:

- Professional help takes over
- You are exhausted
- The victim starts breathing normally

European Resuscitation Council

Continous chest compressions - only



European Resuscitation Council

The use of protective devices is recommended





CONTINUOUS CHEST COMPRESSIONS

- If you are **not able** or you are **unwilling** to give rescue breaths,
give chest compressions only
(rate 100-120 min^{-1}, depth 5-6 cm).

European Resuscitation Council

European Resuscitation Council

IF VICTIM STARTS TO BREATHE NORMALLY PLACE IN RECOVERY POSITION



- It ensures the tongue is held in forward position
- It reduces the chance of inhalation of any expelled gastric contents

European Resuscitation Council









CHOKING FOREIGN BODY AIRWAY OBSTRUCTION

- **Mild airway obstruction**
  (effective cough, breathe, conscious, speak)



Encourage continued coughing, observing for relief of the obstruction

European Resuscitation Council

European Resuscitation Council

CHOKING FOREIGN BODY AIRWAY OBSTRUCTION

Severe airway obstruction – conscious (unable to speak, to breathe, to cough)

5 back blows
5 abdominal thrust



CHOKING FOREIGN BODY AIRWAY OBSTRUCTION

Severe airway obstruction – unconscious

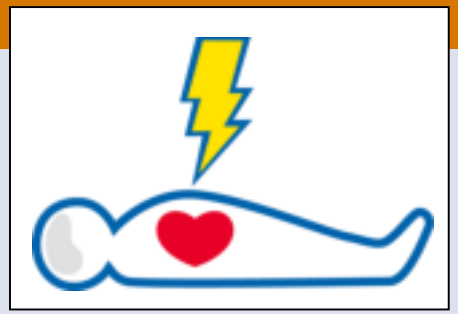
Start CPR
(even if the puls is present)



European Resuscitation Council

European Resuscitation Council





Approach safely	Approach safely
Check response	Check response
Shout for help and call 112	Shout for help and call 112
Open airway	Open airway
Check breathing	Check breathing
30 chest compressions	Attach AED
2 rescue breaths	Follow voice prompts

DEFIBRILLATION





European Resuscitation Council

European Resuscitation Council

Approach safely

Check response

Shout for help and call 112

Open airway

Check breathing

Attach AED

Follow voice prompts

SWITCH ON AED



- Some AEDs will automatically switch themselves on when the lid is opened

European Resuscitation Council

ATTACH PADS TO CASUALTY'S BARE CHEST



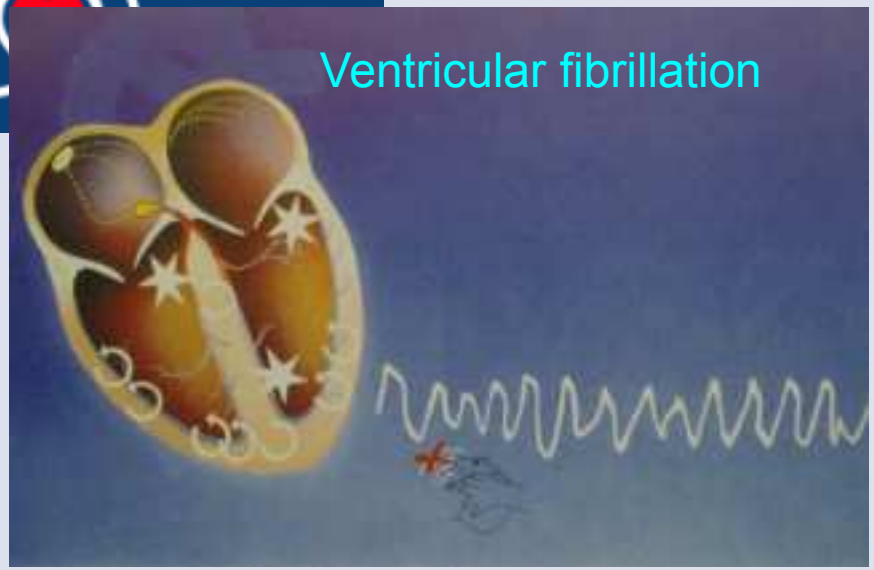


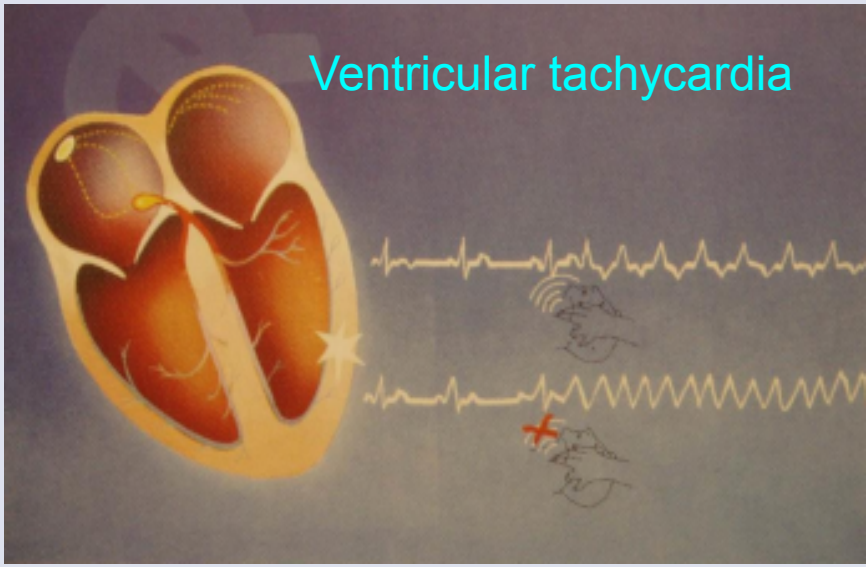
European Resuscitation Council

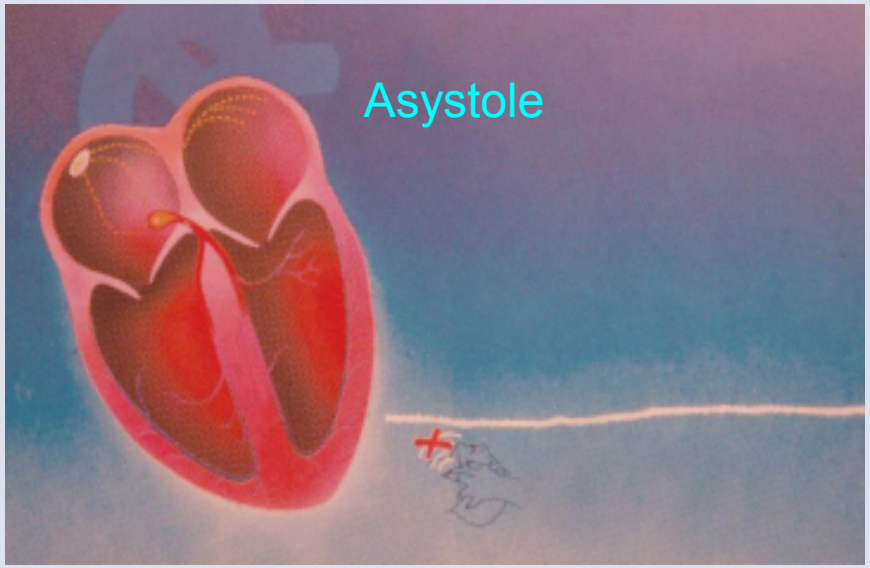
ANALYSING RHYTHM
DO NOT TOUCH VICTIM

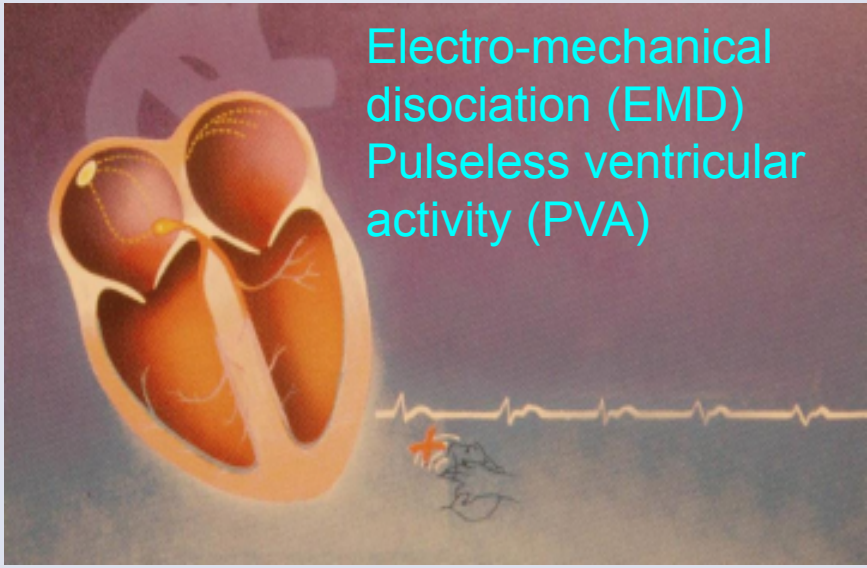


European Resuscitation Council









European Resuscitation Council

SHOCK INDICATED



- Stand clear
- Deliver shock (press shock button)

European Resuscitation Council

SHOCK DELIVERED
FOLLOW AED INSTRUCTIONS



30



2

European Resuscitation Council

NO SHOCK ADVISED
FOLLOW AED INSTRUCTIONS



30



2

SAFETY OF RESCURER

- Do not touch the victim during analysis, charging or delivery of a shock
- Use protective gloves

European Resuscitation Council

European Resuscitation Council

IF VICTIM STARTS TO BREATHE NORMALLY PLACE IN RECOVERY POSITION



NEWS

- Role of dispacher
- Psychological support for rescuers

European Resuscitation Council

European Resuscitation Council

- www.erc.edu
- http://www.lf.upjs.sk/kaim/pregradualne_vzdelavanie.html - first aid lectures
- **www.resus.org.uk**

ANY QUESTIONS?



European Resuscitation Council

Thank you !