EUROPEAN RESUSCITATION COUNCIL

American Heart Association®

CNR

Cardio-Pulmonary Rresuscitation (CPR)

First Aid

Basic Life Support

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COURSE OBJECTIVE

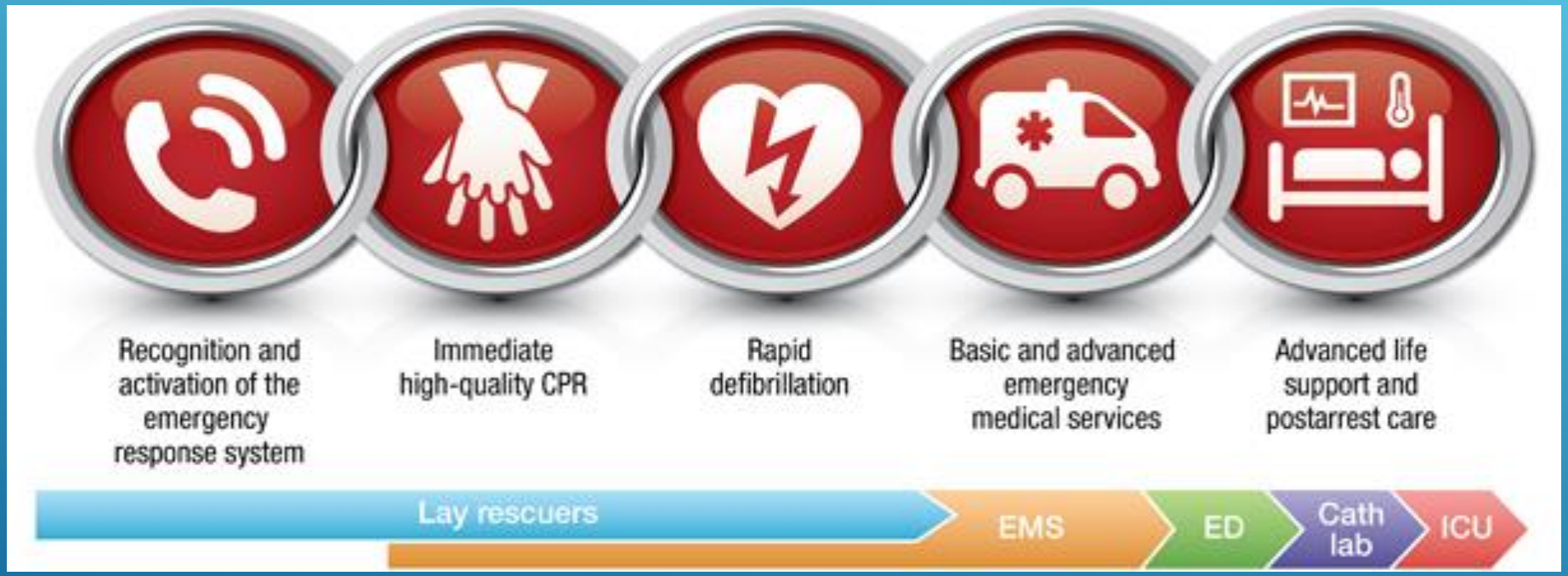
Students should be able to demonstrate:

- How to evaluate an unconscious victim
- How to make chest compressions and rescue breaths
- How to position an unconscious breathing victim (safety position)
- How to rescue a chocking victim (Heimlich manoeuvre)

STATISTICĂ

- In Europe there are approximative 38 resuscitations to 100,000 people yearly
- The survival rate (the patient is discharge from hospital) is only abut ***5-10%*** after a successful *resuscitation*
- Successful rate is double or triple if is started by bystanders before resuscitation team arrives
- Early resuscitation coupled with defibrillation in the first 2 minutes increases survival rate to more then 60%

CHAIN OF SURVAIVAL

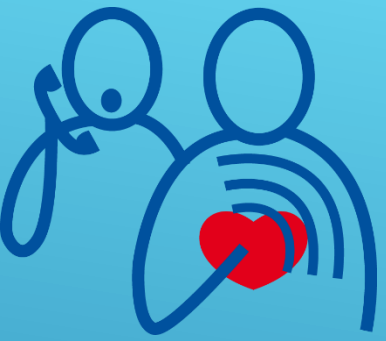


Basic Life Support

All the procedures made with the intention of restarting brain perfusion with oxygenated blood after a sudden cardiac or respiratory arrest

Chest compressions and pulmonary ventilations made by anyone who knows how to do them, anywhere, immediately and without any equipment

(you may have protection equipment)



Rescuer safety

Consciousness assessment

Shout for help

Open airways

Check breathing

Call 112

30 chest compressions

2 rescue breaths

RESCUER SAFETY

environment

Rescuer

Victim

Other persons

Rescuer safety

Consciousness assessment

Shout for help

Open airways

Check breathing

Call 112

2 rescue breaths

European Resuscitation Council

European Resuscitation Council

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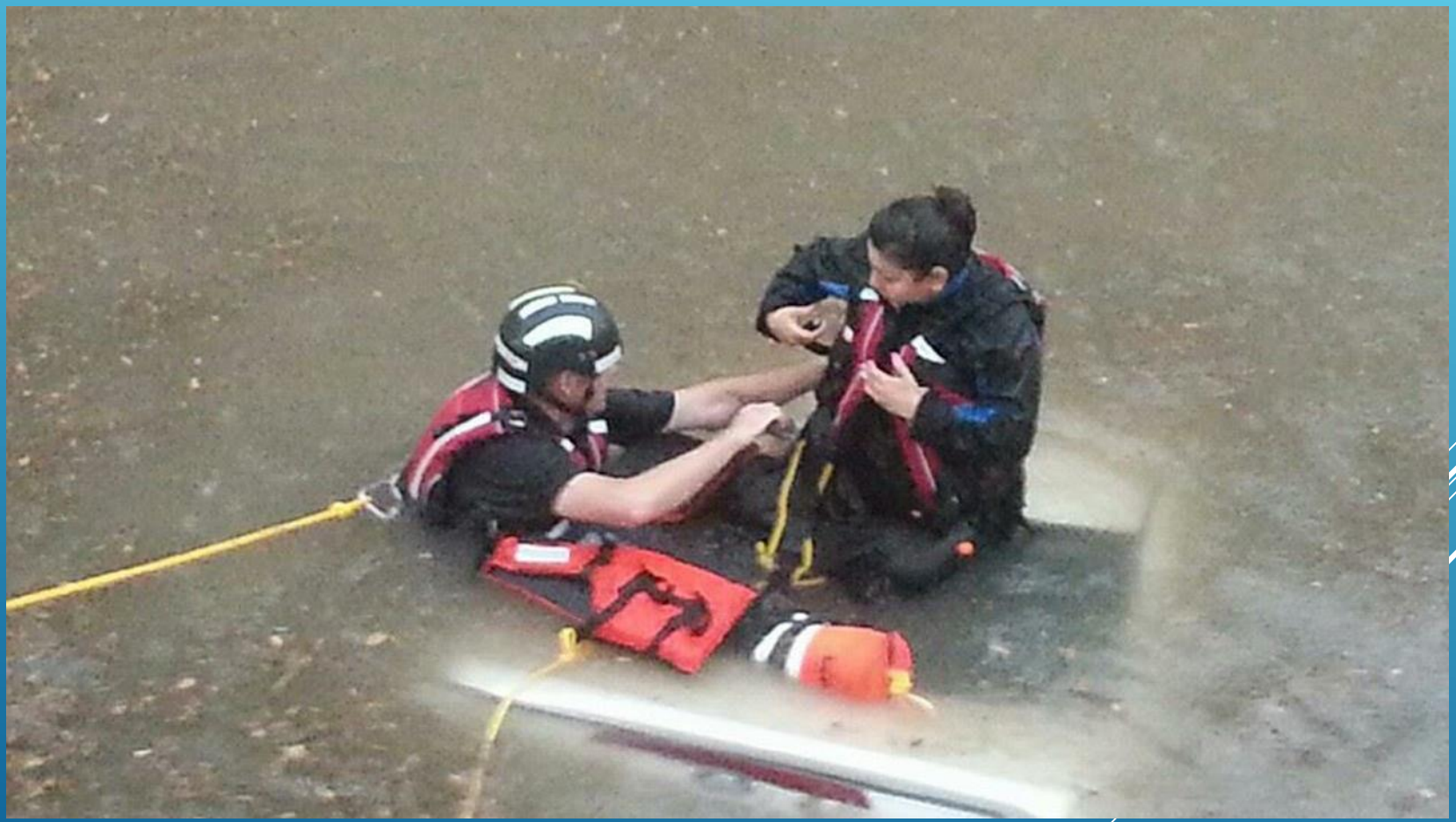


European Resuscitation Council

CONSCIOUSNESS ASSESSMENT

- Rescuer safety
- **Consciousness assessment**
- Shout for help
- Open airways
- Check breathing
- Call 112
-
- 2 rescue breaths

CONSCIOUSNESS ASSESSMENT

Shake gently and ask:

"Are you alright?";

If answered back then:

- don't mobilize.
- find what happened.
- periodic assessments.

Shout for help

- Rescuer safety
- Consciousness assessment
- **Shout for help**
- Open airways
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths

OPEN AIRWAYS

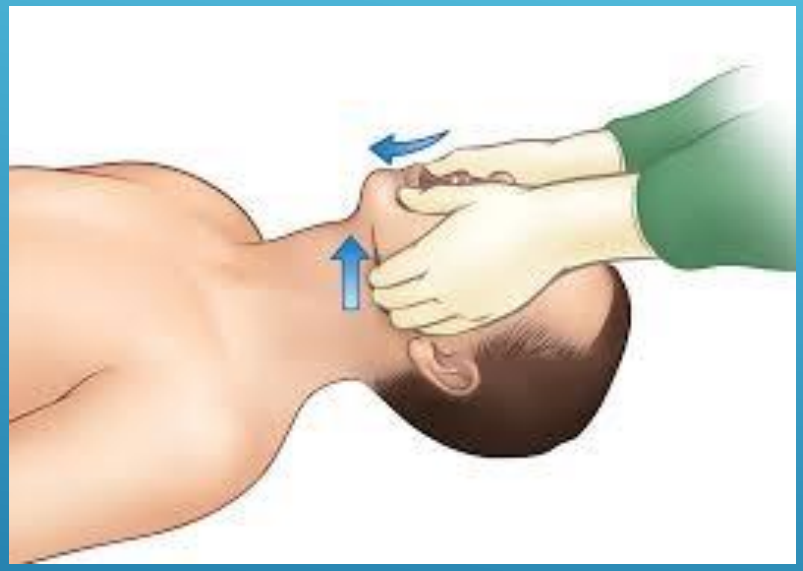
- Rescuer safety
- Consciousness assessment
- Shout for help
- **Open airways**
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths

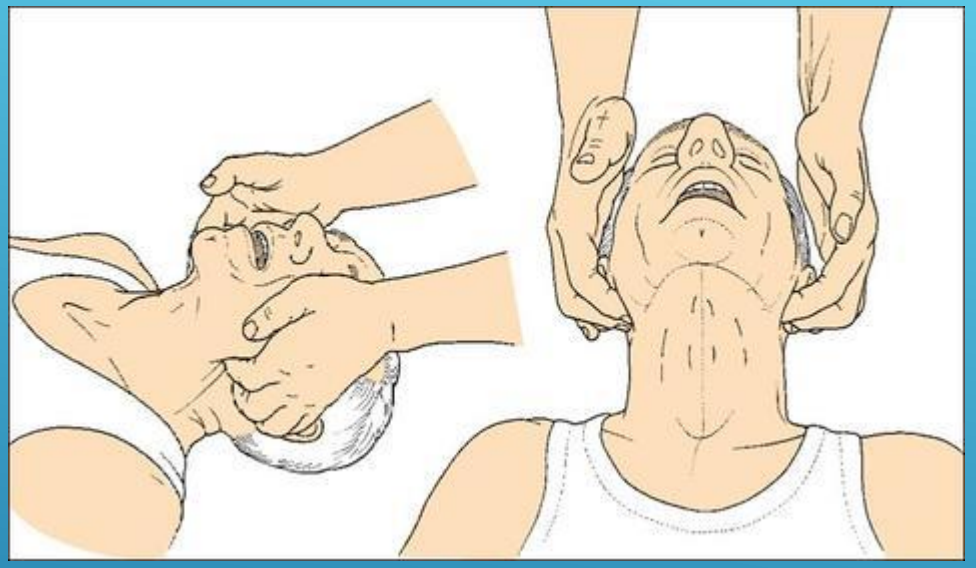
HOW TO OPEN THE AIRWAYS

Head tilt , chin lift maneuver

- **can be performed by anybody**
- has to be done with prudence when cervical spinal lesions are suspected (then anterior luxation of the chin is preferred).
- !!! – Airways are more important to be opened than a possible cervical lesion!!!.-Treat first what kills first

- With the exception of visible foreign objects in the mouth do not blindly sweep with the fingers to find them





Heed tilt + chin lift + anterior subluxation of the mandible

Check breathing

- Rescuer safety
- Consciousness assessment
- Shout for help
- Open airways
- **Check breathing**
- Call 112
- 30 chest compressions
- 2 rescue breaths

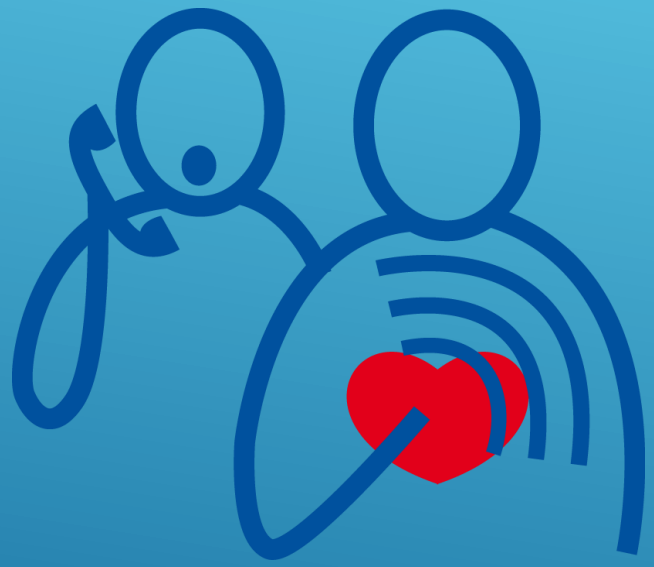
Check breathing

- Look, Listen, Feel if the victim is breathing normally
- Do not confuse normal breathing with agonal breathing

Agonal breathing

- Immediately after cardiac arrest in 40% of cases
- Described as a shallow, difficult, or noisy breathing(thirsty for air)
- It is recognized as a cardiac arrest

  if is not immediately recognized then it may delay the recue maneuvers
- https://youtu.be/88uCTEmuuGI
- https://www.youtube.com/watch?v=88uCTEmuuGI



Rescuer safety

Consciousness assessment

Shout for help

Open airways

Check breathing

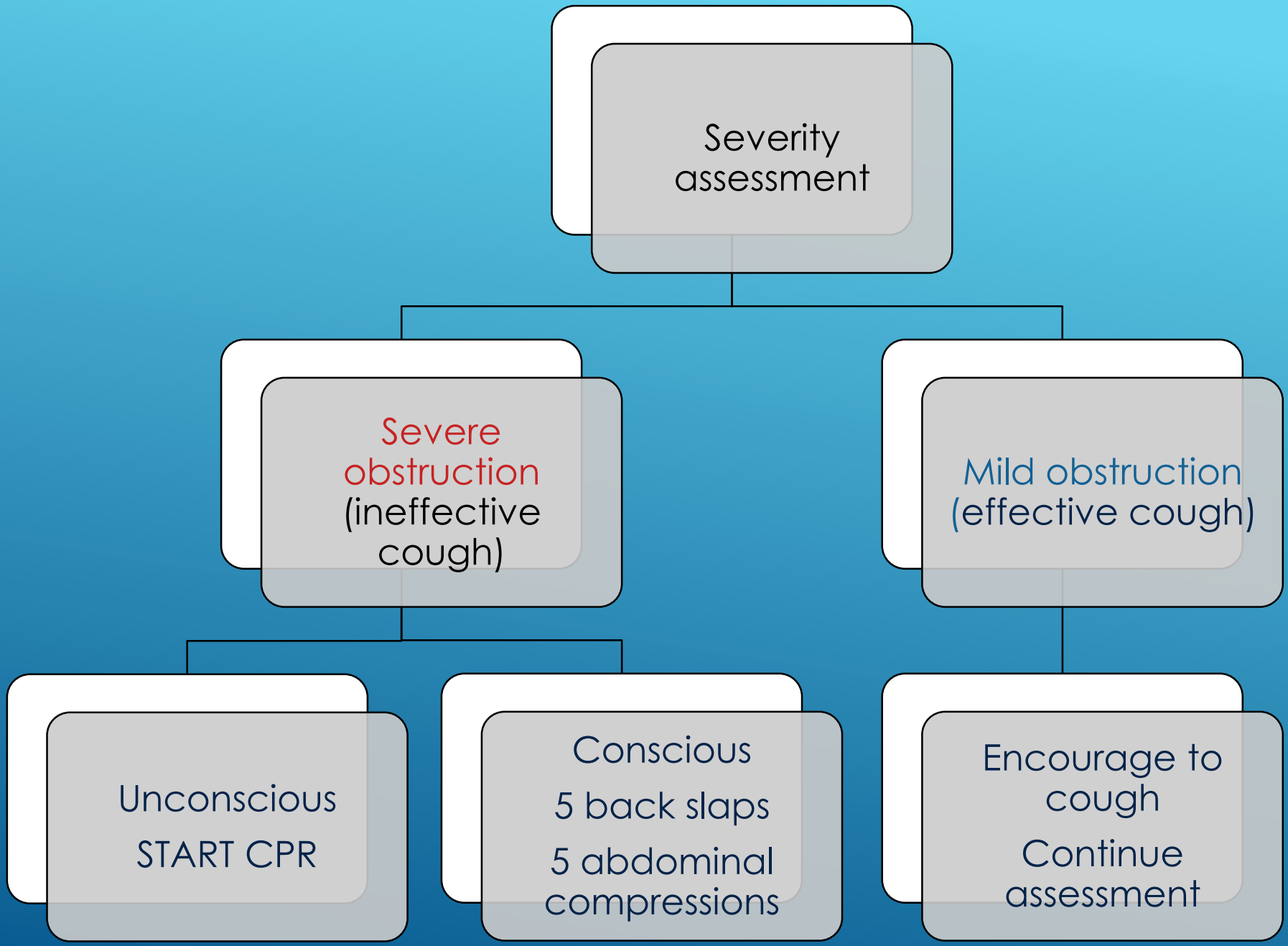
Call 112

30 chest compressions

2 rescue breaths

Airway obstructions by foreign objects

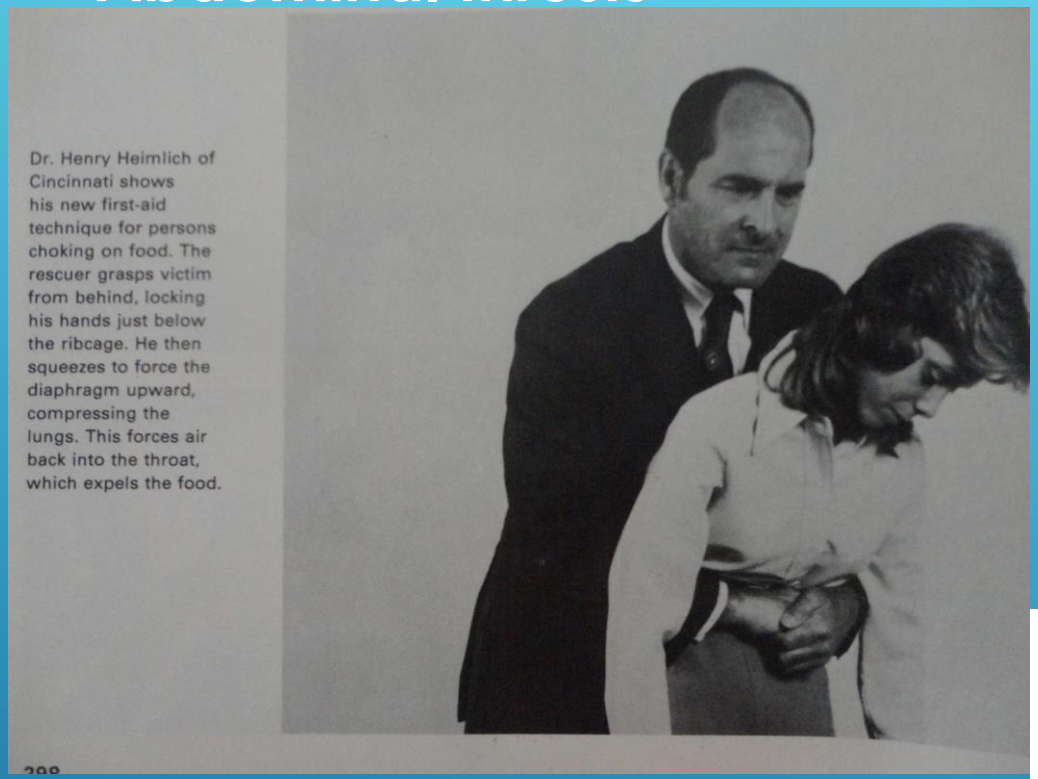
symptoms	**Mild obstruction**	**Severe obstruction**
“do you choke?”	“YES”	Can not answer, but nods
Other symptoms	Speaks, cough, breathing	Can not take breaths or only wheezing silent coughs / unconsciousness


Severity assessment
Severe obstruction (ineffective cough)
Mild obstruction (effective cough)
Unconscious
START CPR
Conscious
5 back slaps
5 abdominal compressions
Encourage to cough
Continue assessment

Back slaps

Abdominal thrusts (Heimlich)

Abdominal thrusts



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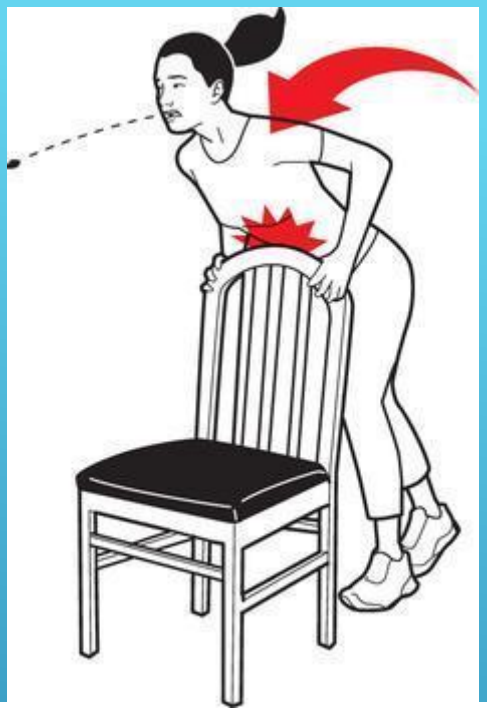

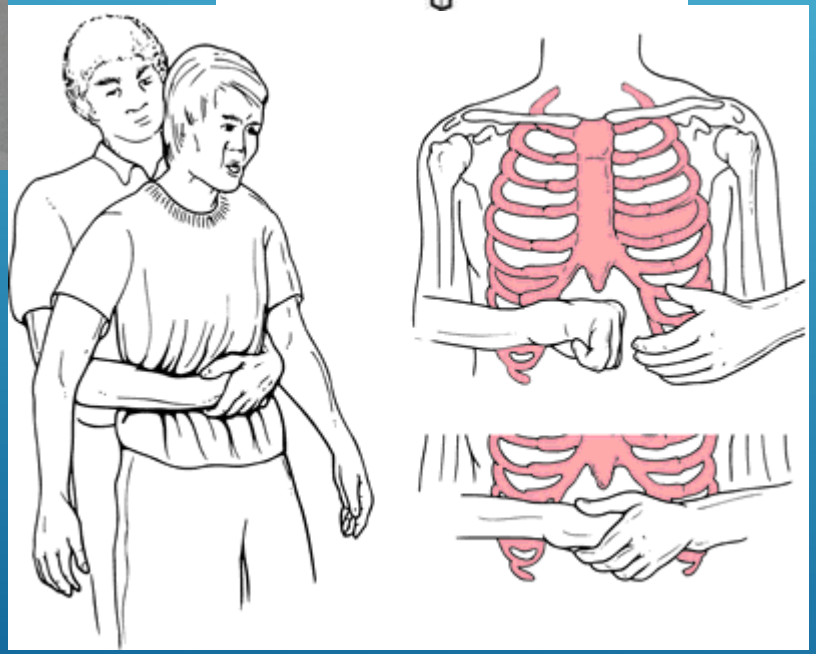

Airway unblocking maneuvers for babies


Geez, Bob, can't you tell a decoy from the real thing?!
CARTOONSTOCK.com
Search ID: rmen483


IF SEEN
CHOAKING
PLACE
HANDS
HERE
AND
SQUEEZE


How to Properly Perform the Heimlich Maneuver
iDidaFunny.com

CHECK FOR PULSE

Check pulse at carotid artery for < 10 seconds

if no pulse

Start high-quality cardiopulmonary resuscitation (CPR) at a compressions-to-breaths ratio of 30:2

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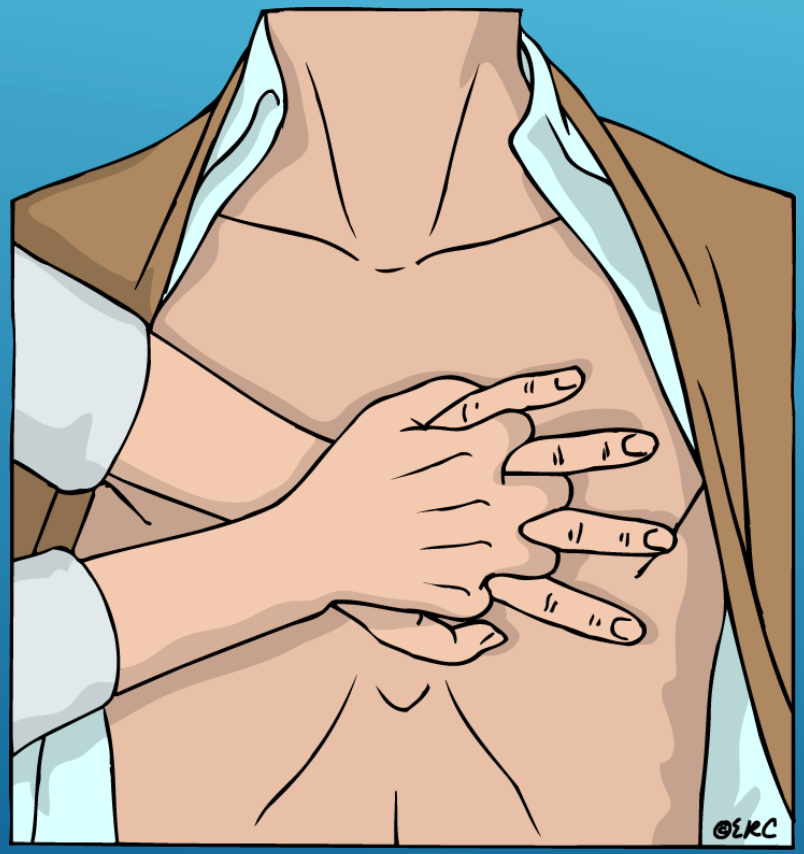
30 CHEST COMPRESSIONS

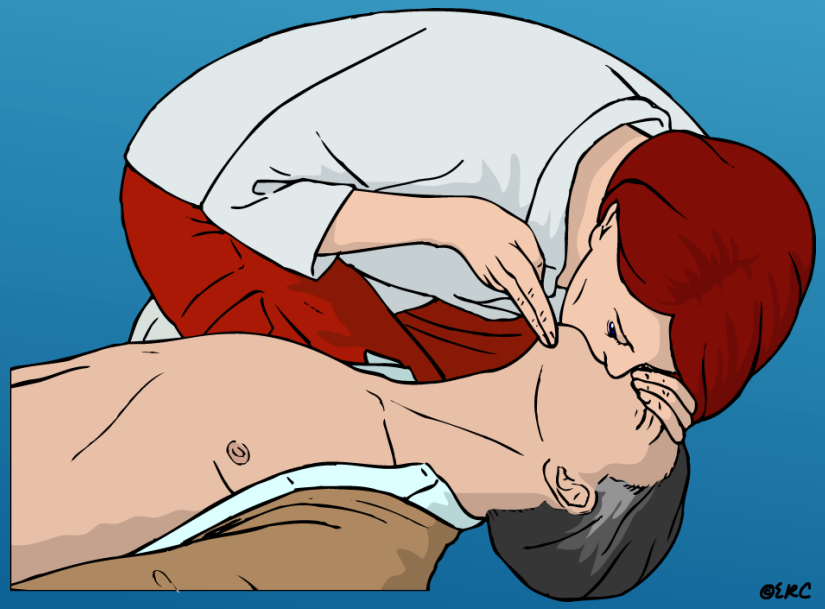
- Rescuer safety
- Consciousness assessment
- Shout for help
- Open airways
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths

CHEST COMPRESSIONS



- Place your palm in the middle of the chest (Lower half of sternum between the nipples)
- Place the other hand on top of the first
- ± interlock fingers
- Compress the chest
  - Ferecvency 100-120 min^{-1}
  - Depth: at least 5 cm(1/2-1/3 diam ant-post in children)
  - Allow complete chest recoil after each compression
  - Minimize interruptions in compressions to < 10 seconds
  - When is possible rotate compressor every 2 minutes

RESCUE BREATHS



- Rescuer safety
- Consciousness assessment
- Shout for help
- Open airways
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths

ASIGURAREA RESPIRAȚIILOR SALVATOARE

- Compress nostrils
- Take a normal breath
- Put your mouth on top of the victim's mouth (seal it)

  (cover also the nose for infants)
- Exhale until you see chest rising
- Duration aprox. 1 sec.
- Alow chest to deflate
- Do it one more time

RESCUE BREATHS

pocket mask with unidirectional valve

<u>recommendations</u>:

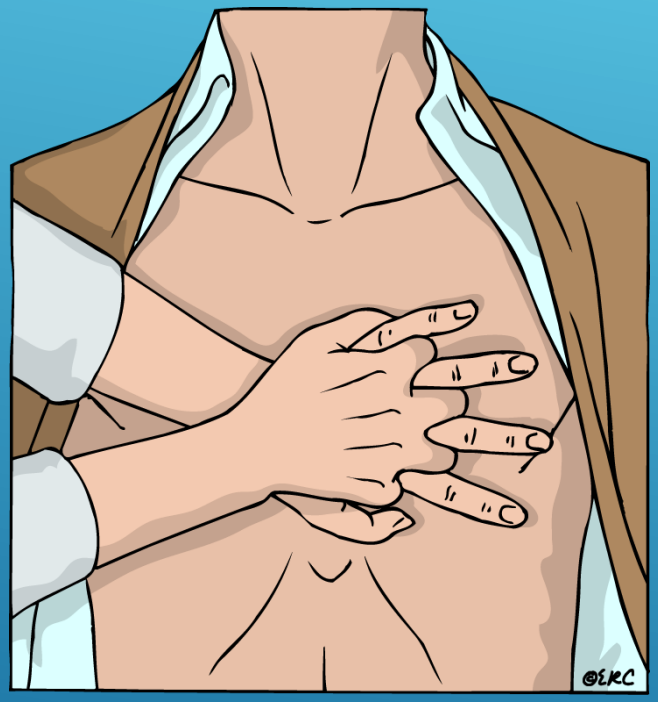
- **respiratory air volume**
  500 – 600 ml
- **respiratory rate**

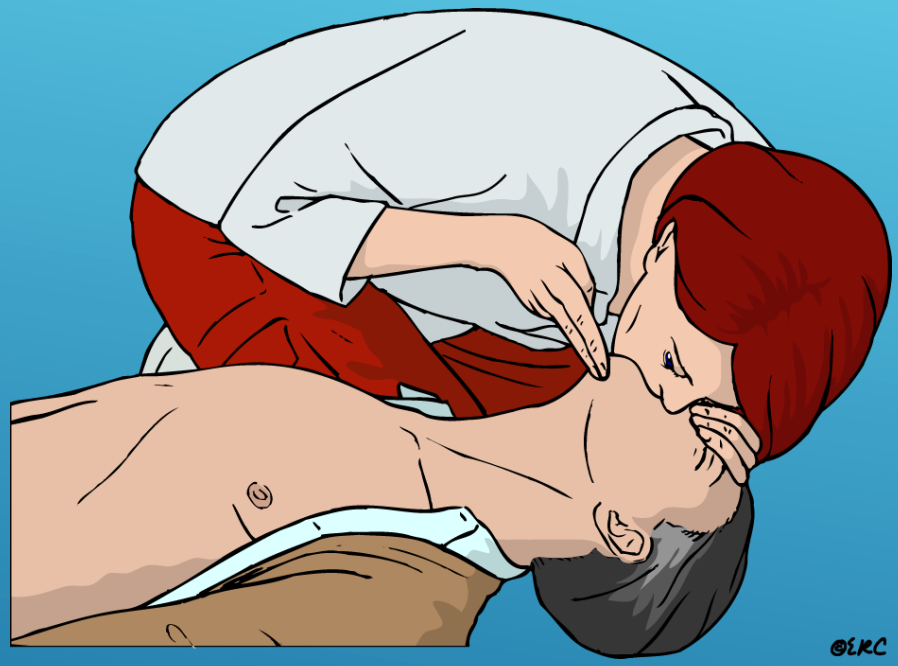
- Deliver at about 1 second/breath
- Watch for visible chest rise

.

! If the arrest is only respiratory (has a pulse) then assure a rescue breath every 5-6 seconds (**10-12 per minute)** without chest compressions

CONTINUE CPR





- https://youtu.be/cosVBV96E2g

Resuscitation with AED

Rescuer security

Consciousness assessment

Call for help

Open airways

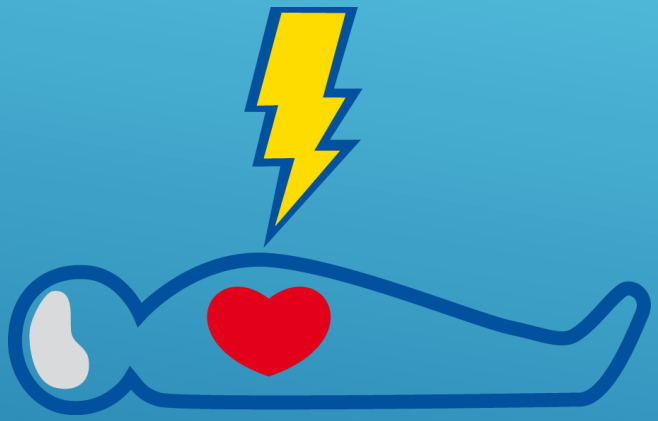
Check for breathing/pulse

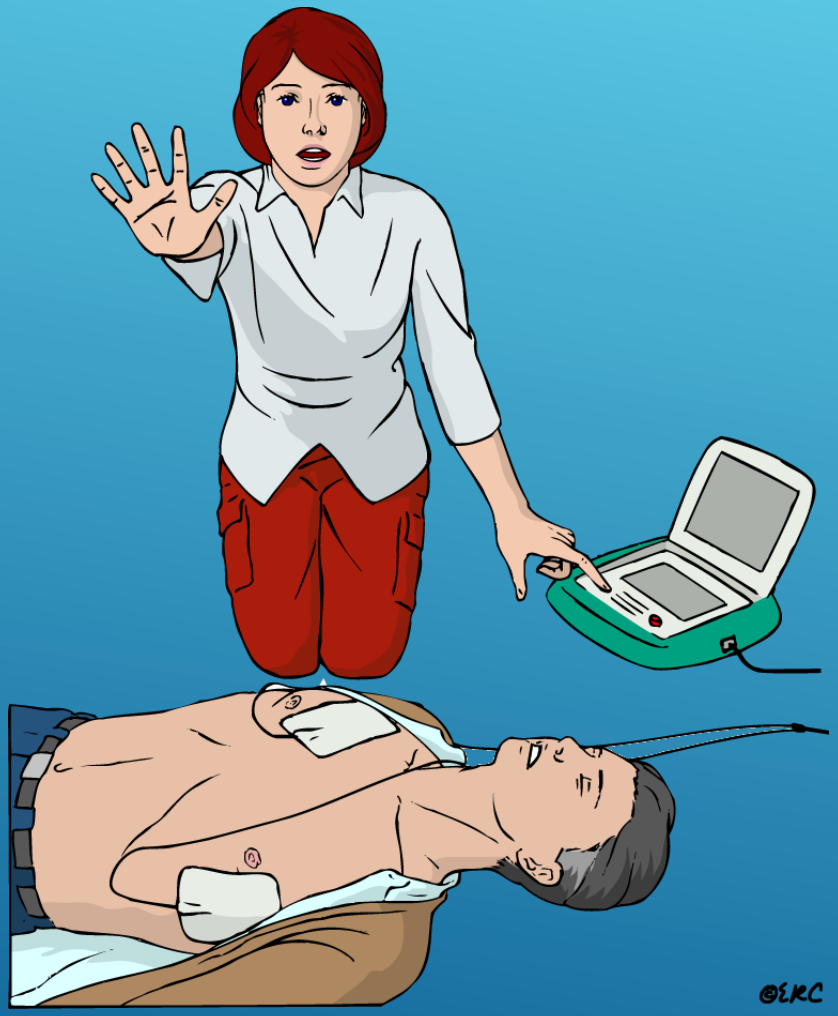
Call 112

Attach AED

Fallow AED commands

DEFIBRILATION

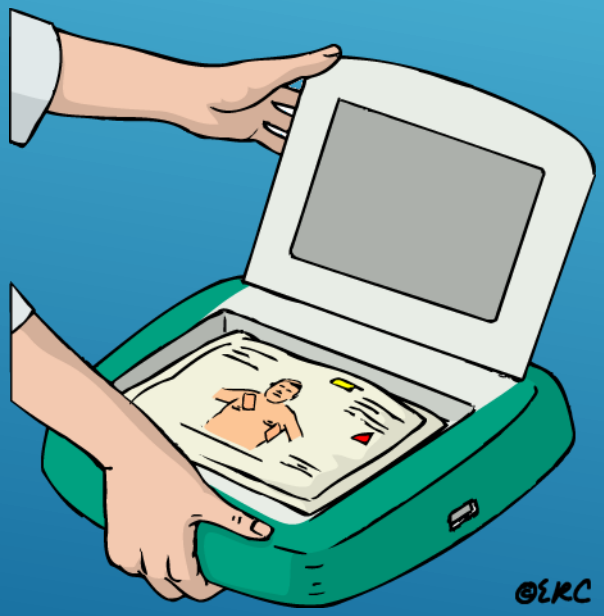




Why using AED:

- Often the arrest rhythm is ventricular fibrillation;
- the best treatment for fibrillation is electrical defibrillation;
- successful conversion is time sensitive;
- survival rate decreases with 7-10% per minute until defibrillation
- after 10-12 minutes survival rate is only 2-5%
- if resuscitation is successful in the first 6 minutes there is a highly chance of recovery without neurological impairment

AUTOMATIC EXTERNAL DEFIBRILLATION (AED)

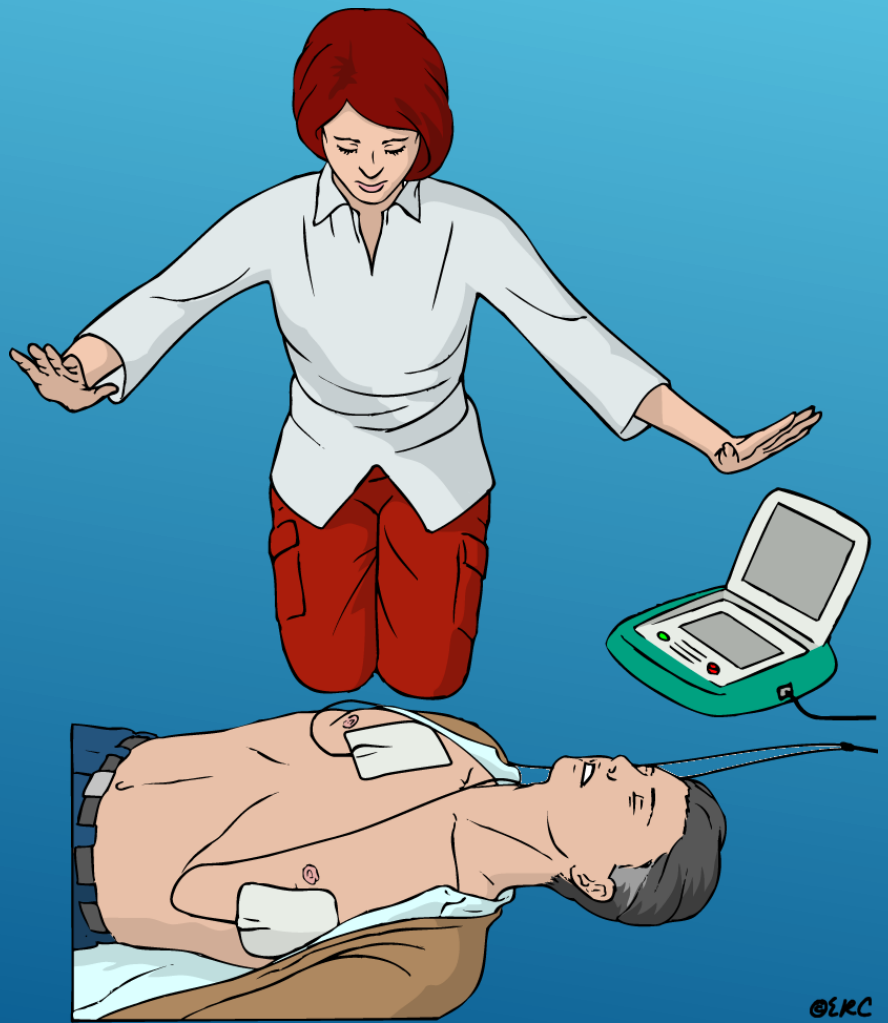


- Most of AED self activate when opened

ATTACH THE ADESSIVE PADS TO THE SKIN

“ANALYSING RHYTHM”

“DO NOT TOUCH THE VICTIM”



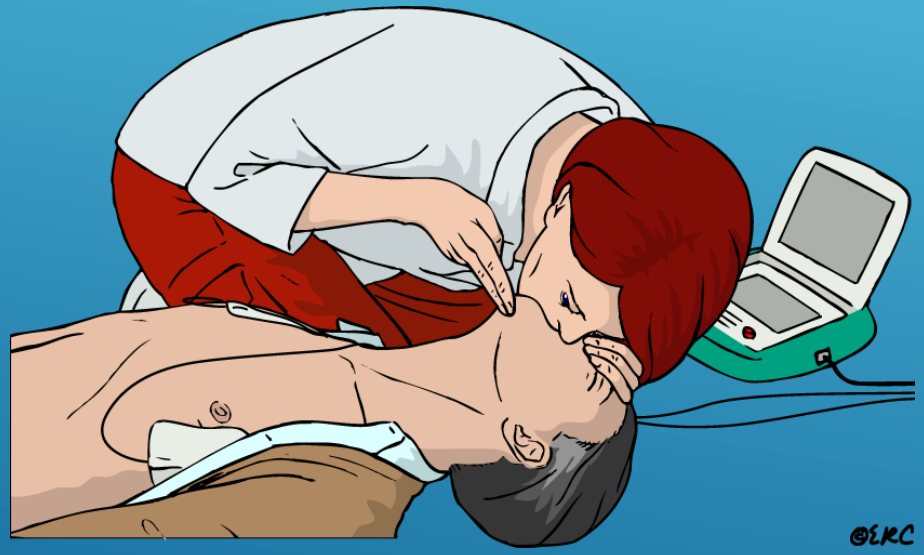
“SHOCK ADVISED”-

- “Stay away”
  “CLEAR”
- Be sure that nobody touches the victim
- Deliver electric shock

“SHOCK DELIVERED”
fallow AED instructions

continue CPR for 2 minute

30



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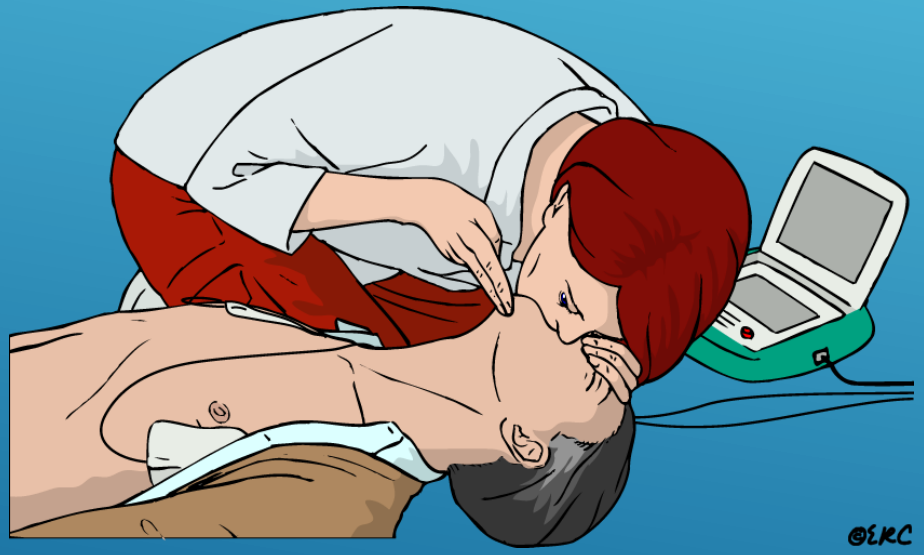
“NO SHOCK ADVISED”-

Continue CPR

30



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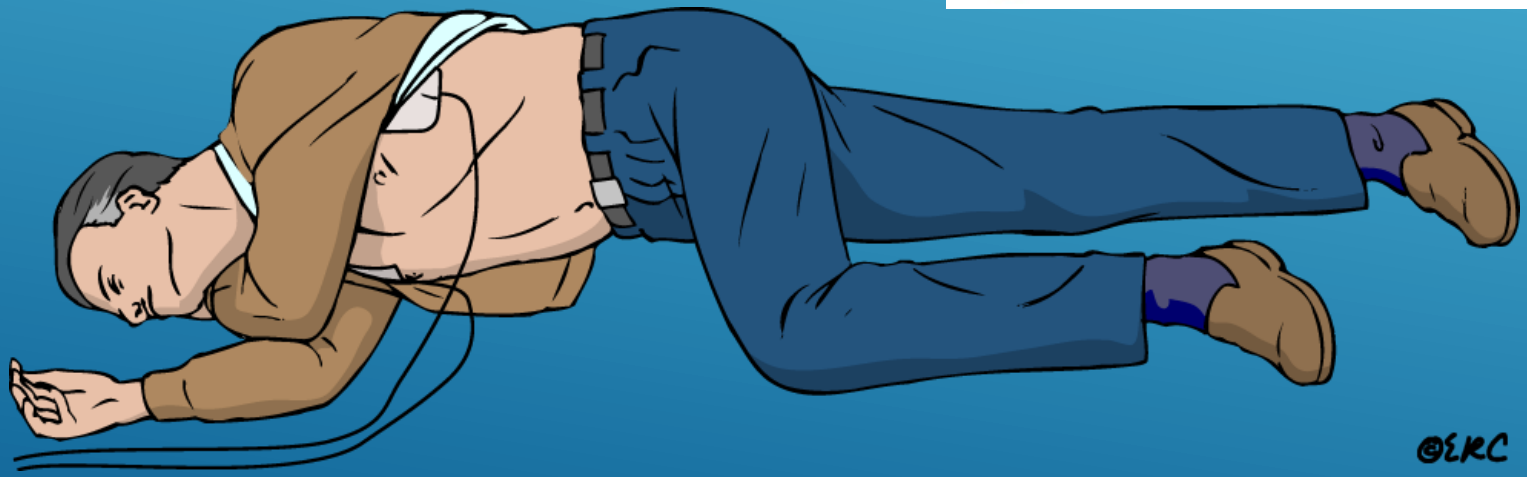
If the victim has a spontaneous breathing and pulse place the victim in the a safe position

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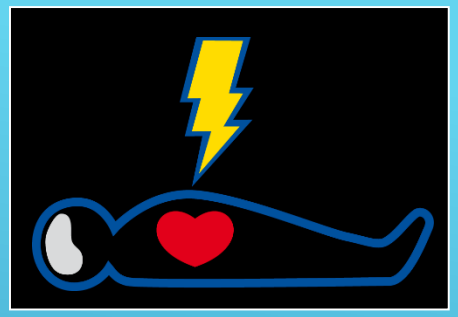
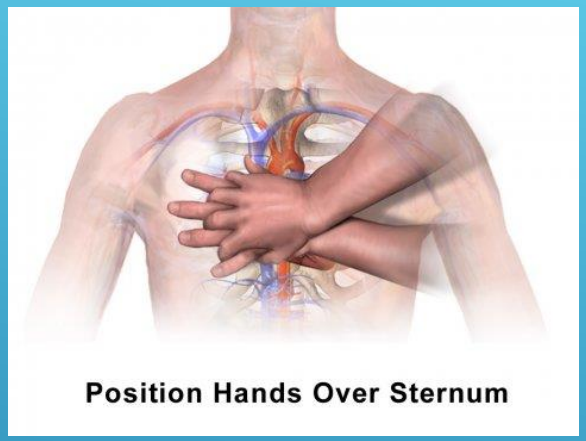


Rescuer safety	Rescuer security
Consciousness assessment	Consciousness assessment
Shout for help	Call for help
Open airways	Open airways
Check breathing/pulse	Check for breathing/pulse
Call 112	Call 112
30 chest compressions	Attach AED
2 rescue breaths	Fallow AED commands



Position Hands Over Sternum

Continue with CPR until:

- the victim returns to spontaneous signs of life
- Qualified rescue arrives
- extenuation of the rescuer