

# ***Airway + Breathing disorders, CPR notes***

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## *Basic Vital signs:*

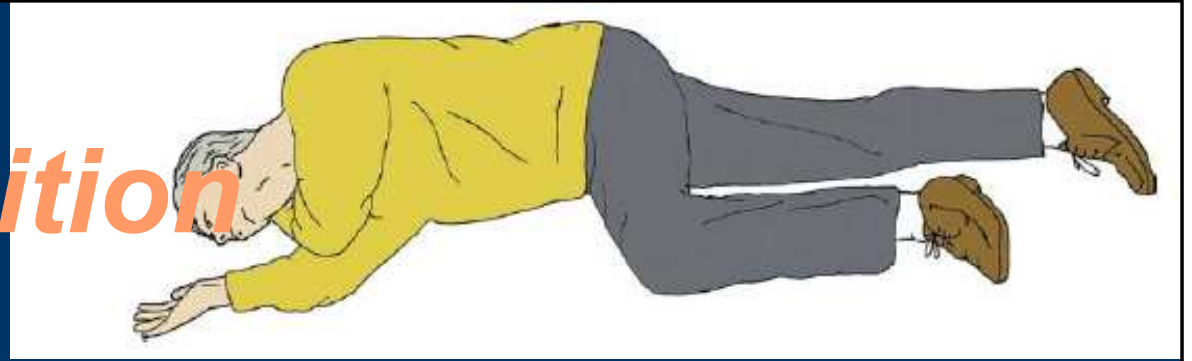
- RESPOND = consciousness
- A+B breathing
- C circulation

Primary Survey = 20s

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# *Recovery position*



- several variations
- stable, near a true lateral position with the head dependent,
- with no pressure on the chest to impair breathing

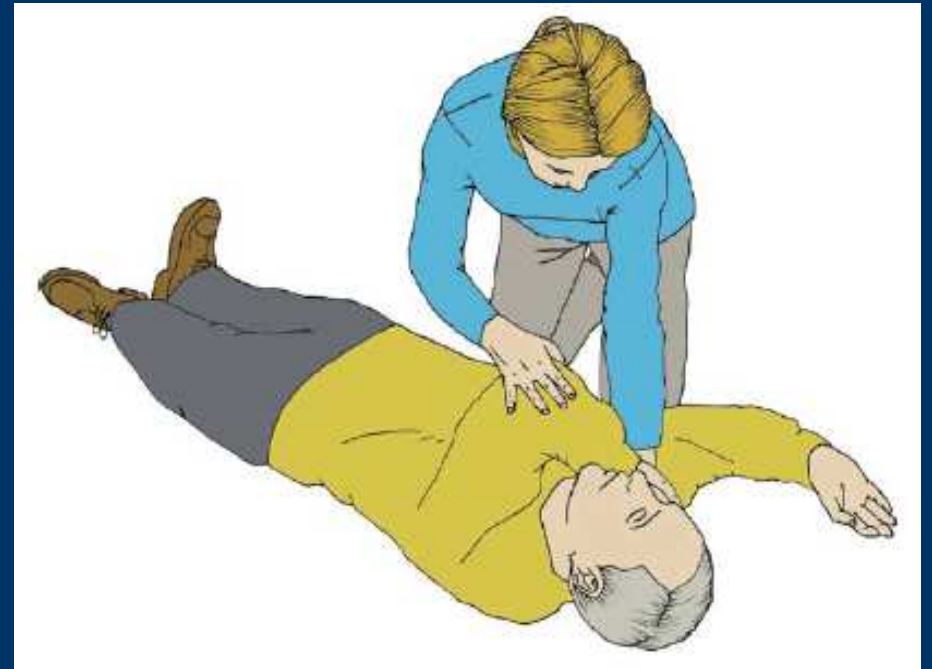
I: coma + spontaneous breathing

KI: back injury

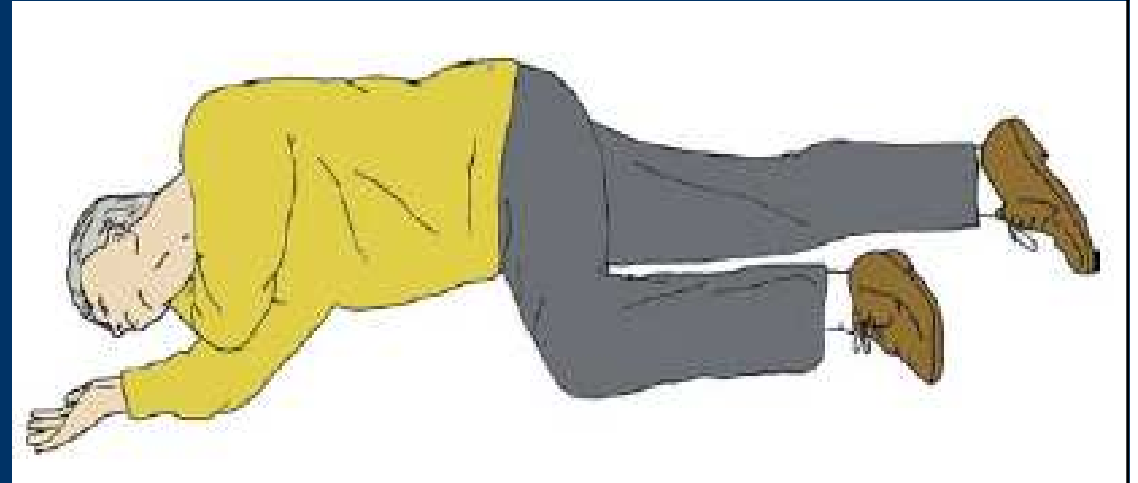
**KEY: check for breathing**

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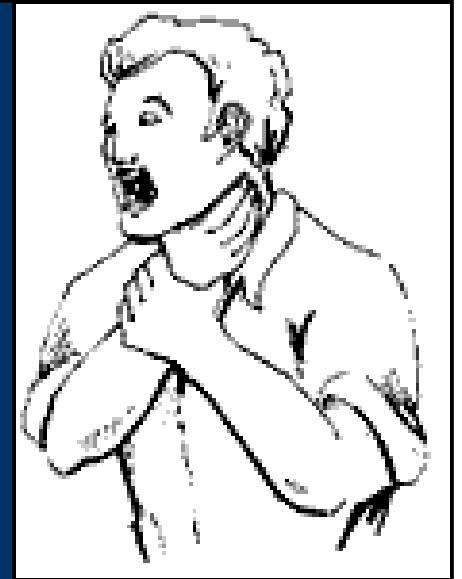


- Remove the victim's spectacles.
  - Kneel beside the victim and make sure that both legs are straight.
  - Place the arm nearest to you out at right angles to the body, elbow bent with the hand palm uppermost
  - Bring the far arm across the chest, and hold the back of the hand against the victim's cheek nearest to you
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- With your other hand, grasp the far leg just above the knee and pull it up, keeping the foot on the ground.
  - Keeping his hand pressed against his cheek, pull on the far leg to roll the victim towards you onto his side.
  - Adjust the upper leg so that both hip and knee are bent at right angles.
  - Tilt the head back to make sure the airway remains open.
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# *Choking Conscious Adult*



- uncommon but potentially treatable
- less than 1% of these incidents are fatal

When?

- while eating
- while playing (coins, toys)

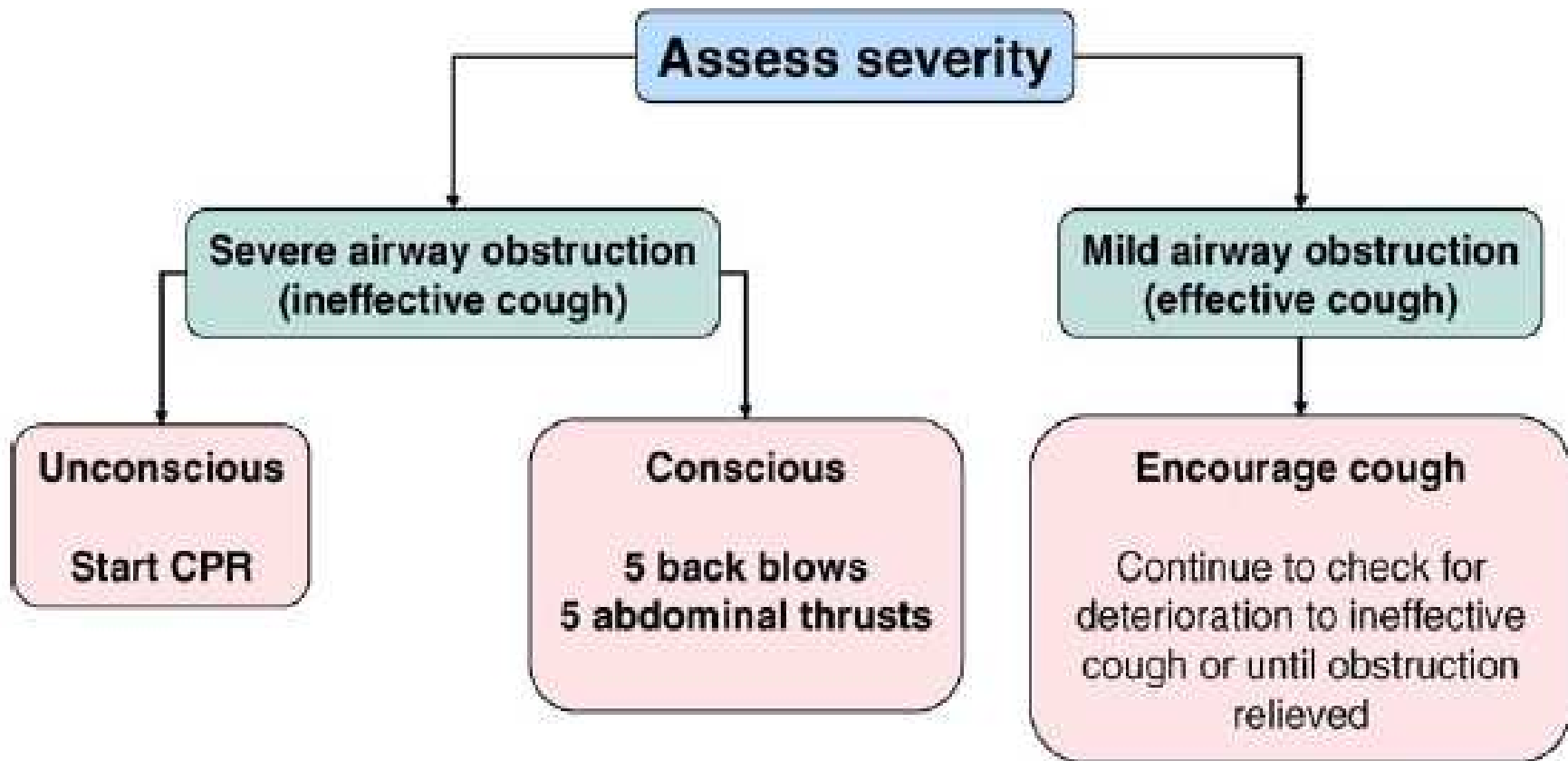
NOTE: narrowest place of airway:  
glottis / subglottic space

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# First aid:

## Adult FBAO Treatment

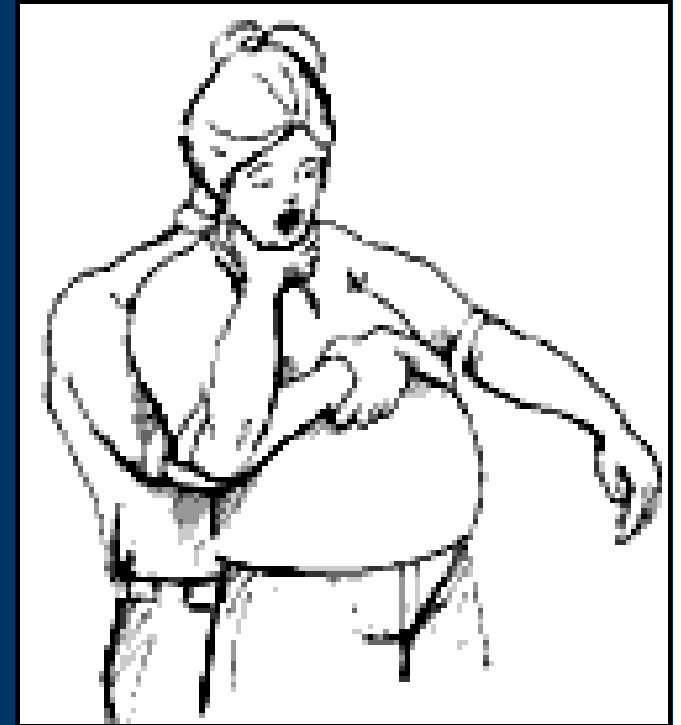


# *Forein-Body Airway Obstruction*

- relief FBAO = life saving procedure
  - safe, effective, simple
  - Cough and bend forwards
  - Back blows/slaps
  - Abdominal thrusts = (Heimlich Maneuver)
  - Chest thrusts
  - often you will need more than 1 procedure to clean airway
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# *Heimlich man. = abdomen thrust*



chest thrust may be used for markedly obese persons or in late stages of pregnancy

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# *Back blows*

bend forwards

- Stand to the side and slightly behind the victim.
  - Support the chest with one hand and lean the victim well **forwards** so that when the obstructing object is dislodged it comes out of the mouth rather than goes further down the airway.
  - Give up to five sharp blows between the shoulder blades with the heel of your other hand
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## *Following successful treatment:*

Victims with a persistent cough, difficulty swallowing or the sensation of an object being still stuck in the throat should be examined

- Abdominal thrusts can cause serious internal injuries
  - all victims treated with abdominal thrusts should be examined for injury by a doctor
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# *Clear airway if necessary during coma*

- with the casualty supported on the side, tilt the head backwards and slightly down.
  - Open the mouth and clear any foreign object. Only remove dentures if loose or broken.
  - Use your 2 fingers only - if you see solid material in the mouth
  - Do not push fingers where you can not see
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# *Guedel airway* *Oro-Pharyngeal Airway*



I: unconsciousness  
+ airway obstruction with tongue

Correct size OPA:  
• distance angle of mouth --- ear

Risk in mild unconsciousness:  
• vomitus + aspiration



# *Naso-Pharyngeal Airway (trumpet)*



Correct size of NPA:

- distance nostril --- ear

Risk:

- bleeding from nasal cavity
  
- Use of lubricant is essential

# Face mask ventilation



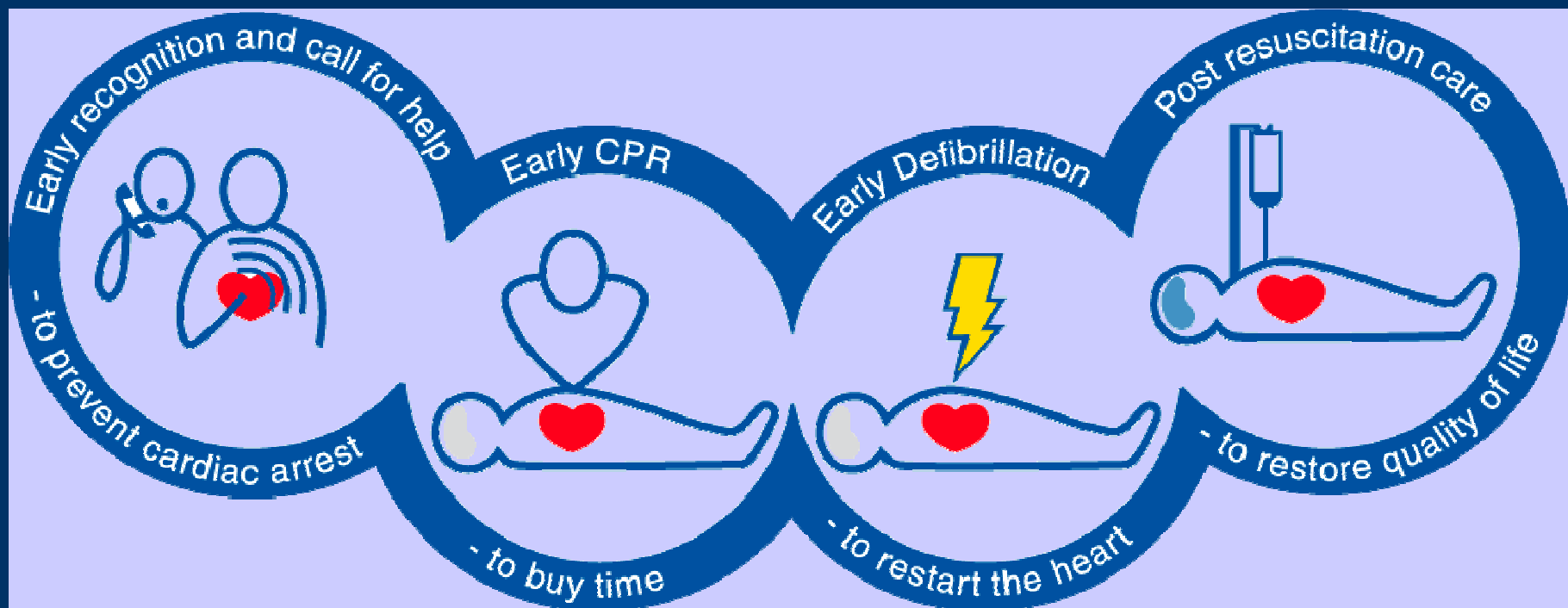
Positive pressure ventilation by bag-valve mask

- correct volume = movement of chest
- f 10/min
- 100% O<sub>2</sub>
- 1 hand hold:
  - inch + index f.
  - 3 ff. - chin
- 2 hands



# Chain of survival

- to improve outcome after cardiac arrest





# BLS

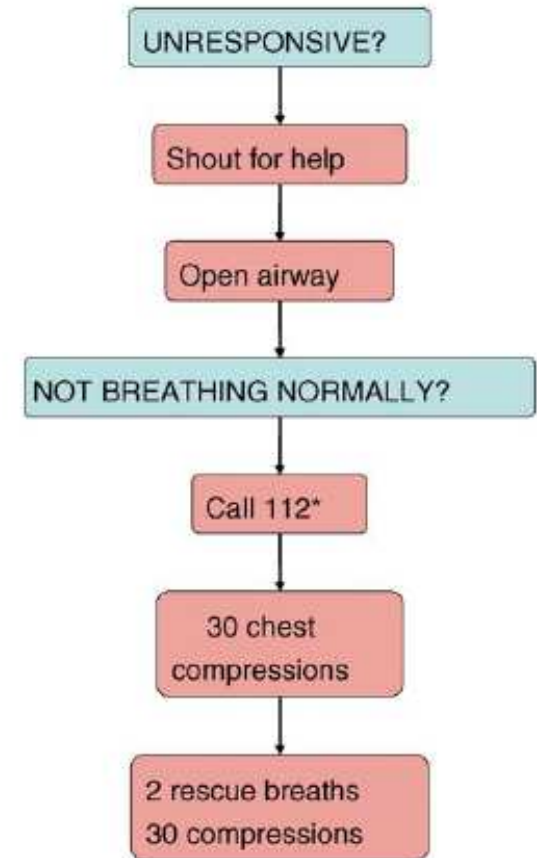
## When to start BLS:

- always when victim is unconsciousness, no breath, no circulation

## When not to start:

- end stage disease, no prognosis
- trauma with no hope for life (decapitation)
- signs (indication) of death (patch)
- time factor (15 – 30 minutes from stop of circulation)

### Adult basic life support



# *When ...*

When stop CPR:

- restoring vital functions
- ER takes care of victim
- no power to continue with CPR
- new danger

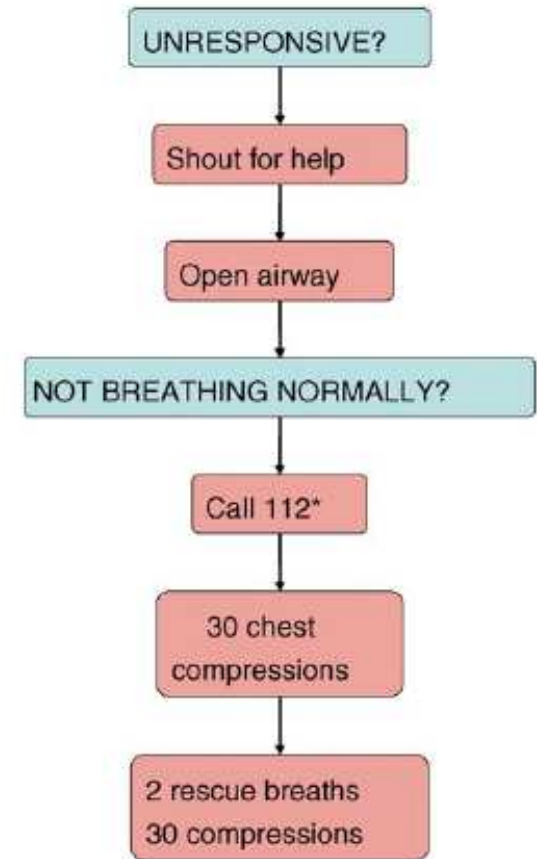


# *Precordial thump*

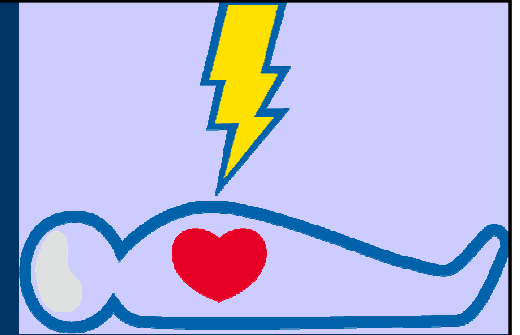
Not part of BLS  
reserved :

- witnessed cardiac arrest when no defibrillator is immediately available
- if done in first 20s  
25% regain cardiac function

## Adult basic life support



# Defibrillation

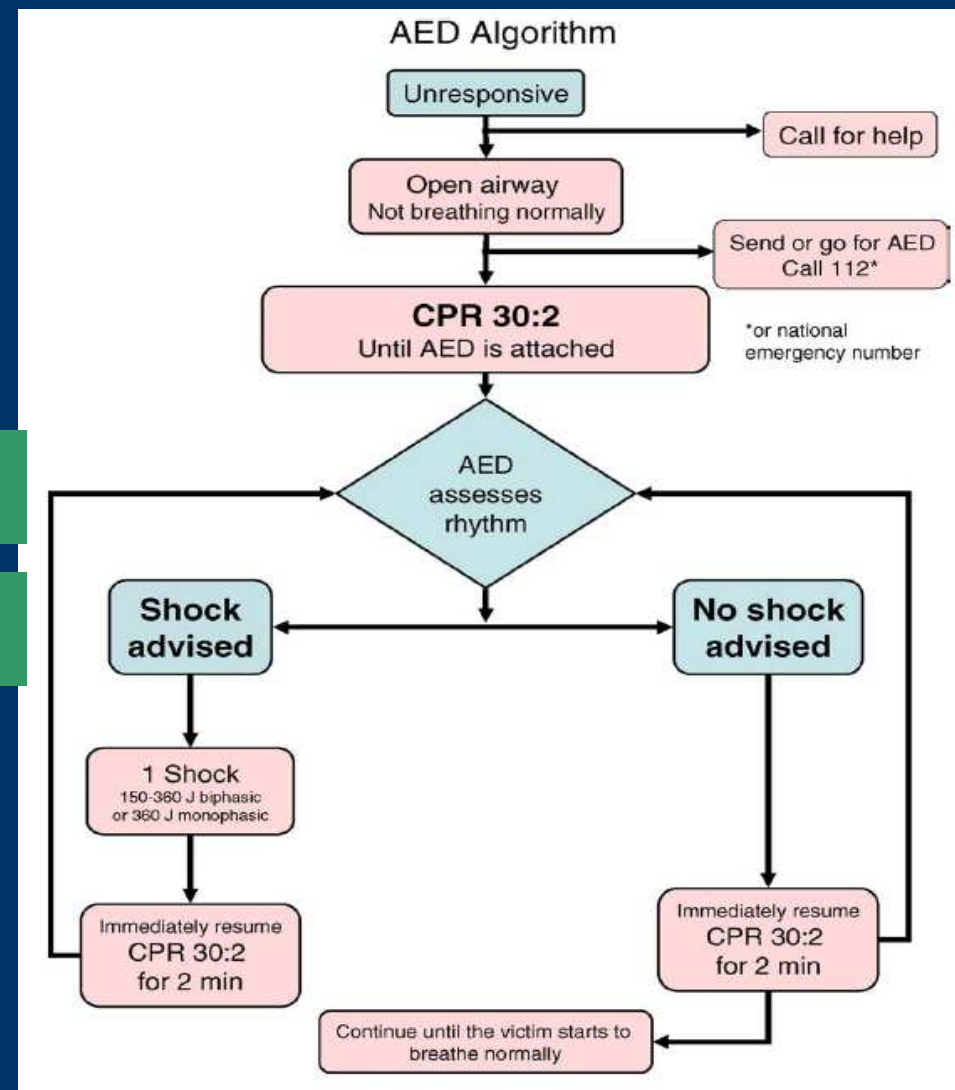


in Czech provided by ER

- continue with CPR

**Attach AED**

**Follow voice prompts**



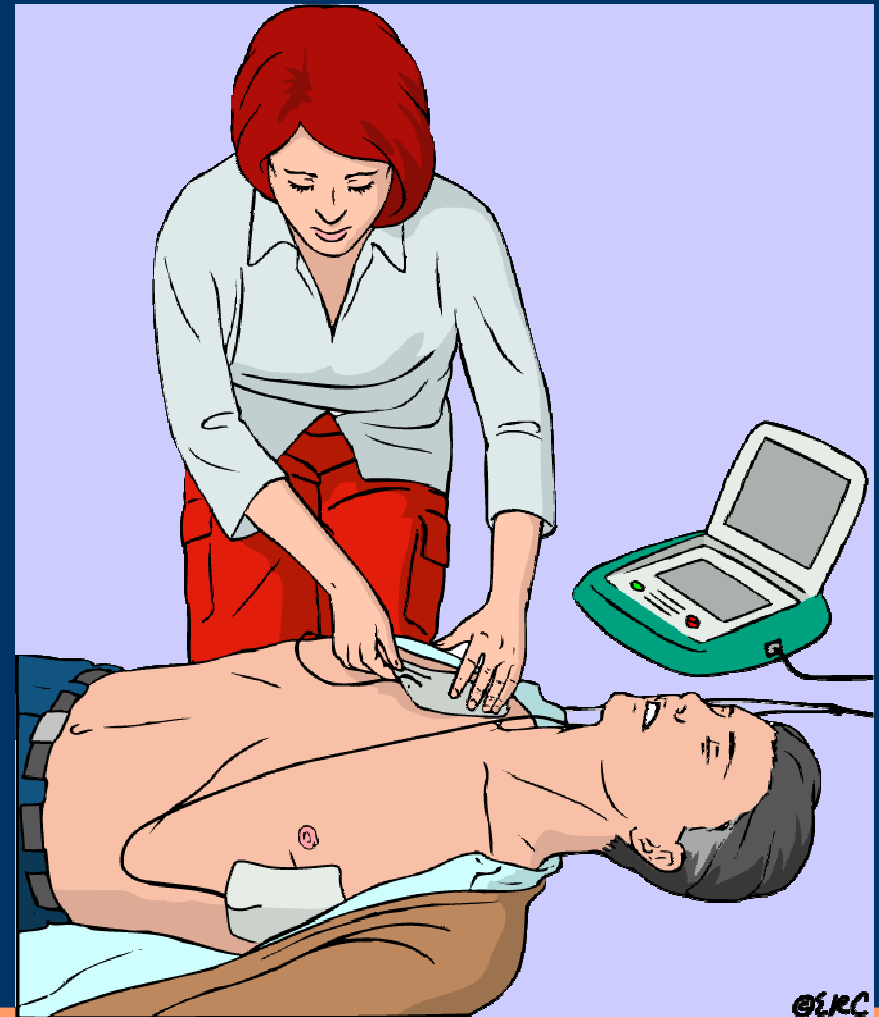
# *Start of AED*

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



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# ATTACH PADS TO CASUALTY'S BARE CHEST

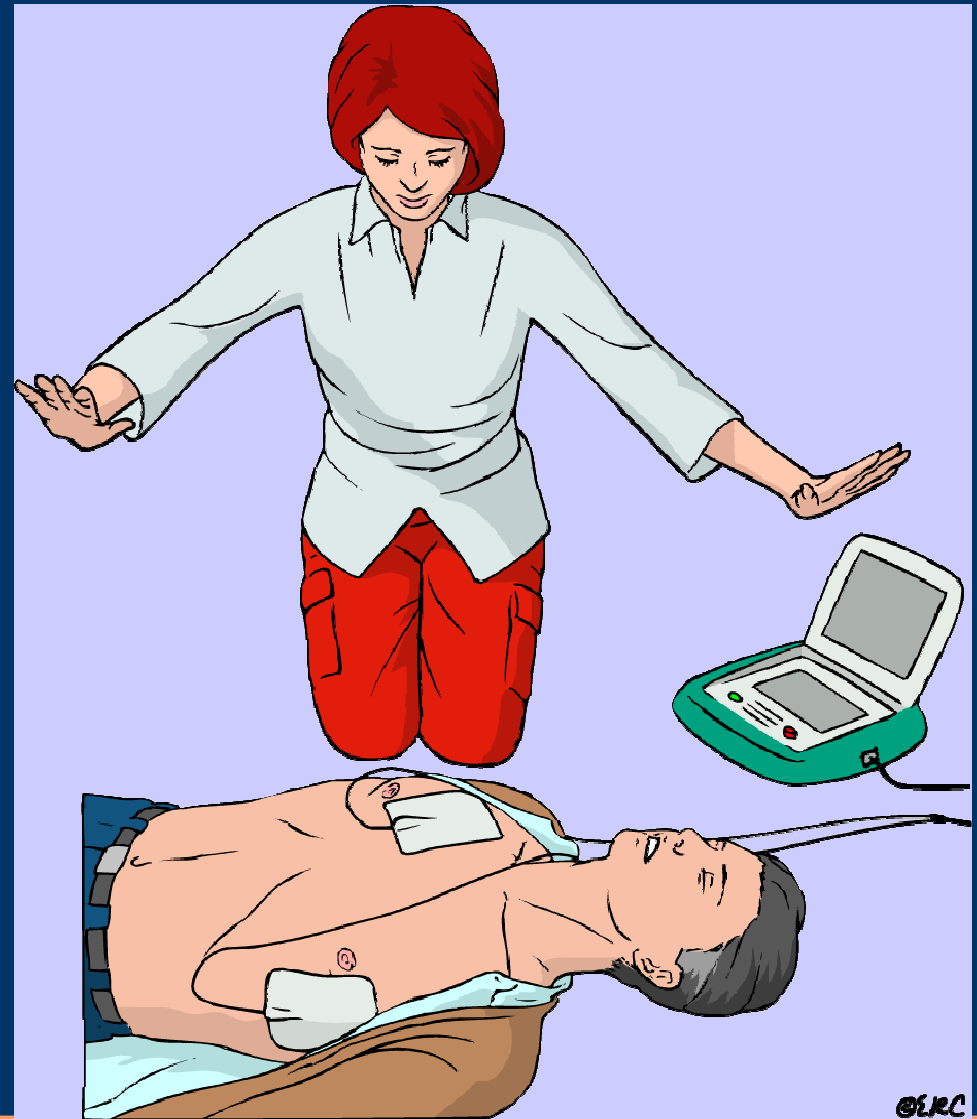


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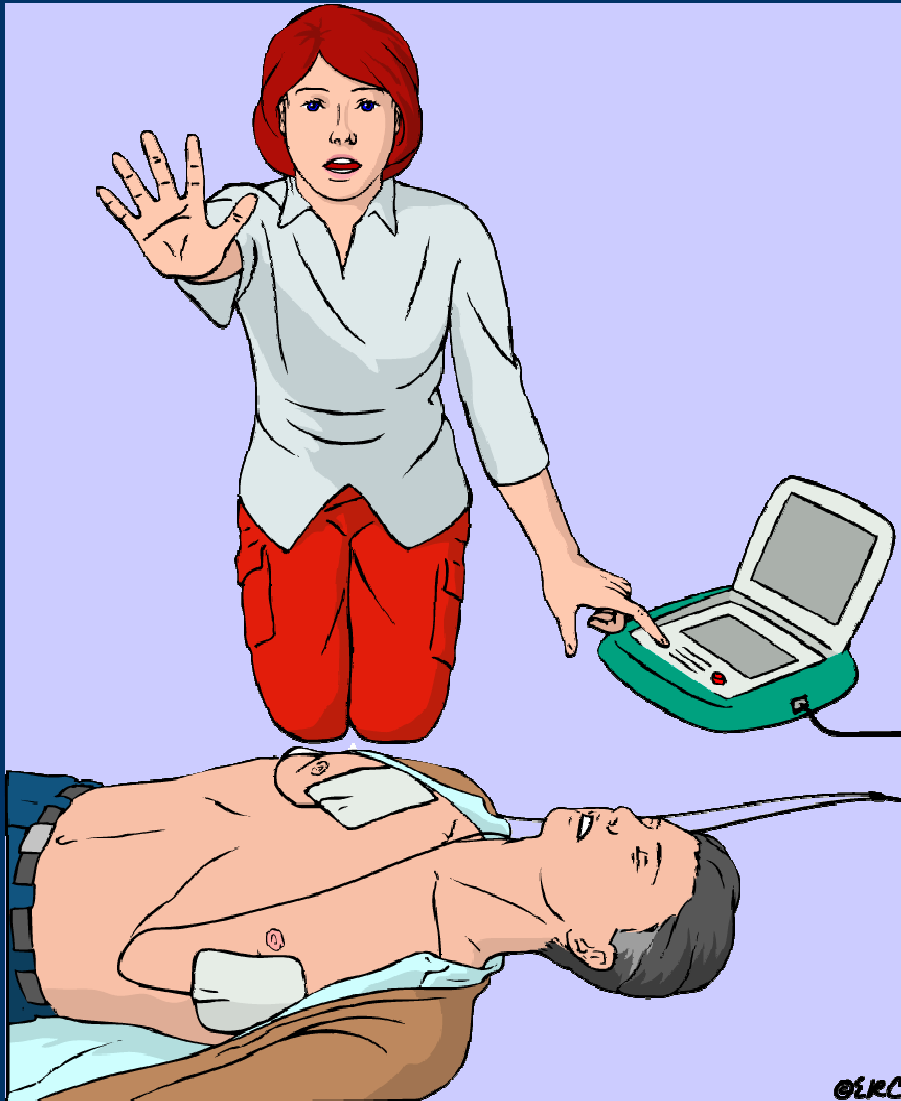
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# *ANALYSING RHYTHM*

## *DO NOT TOUCH VICTIM*



# SHOCK INDICATED



- Stand clear
- Deliver shock

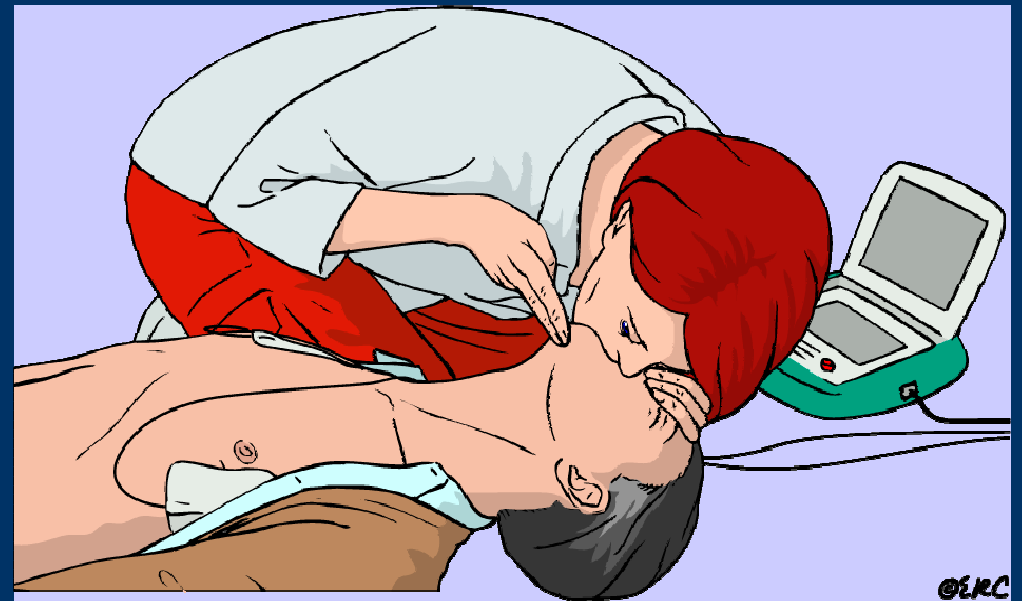


# SHOCK DELIVERED FOLLOW AED INSTRUCTIONS



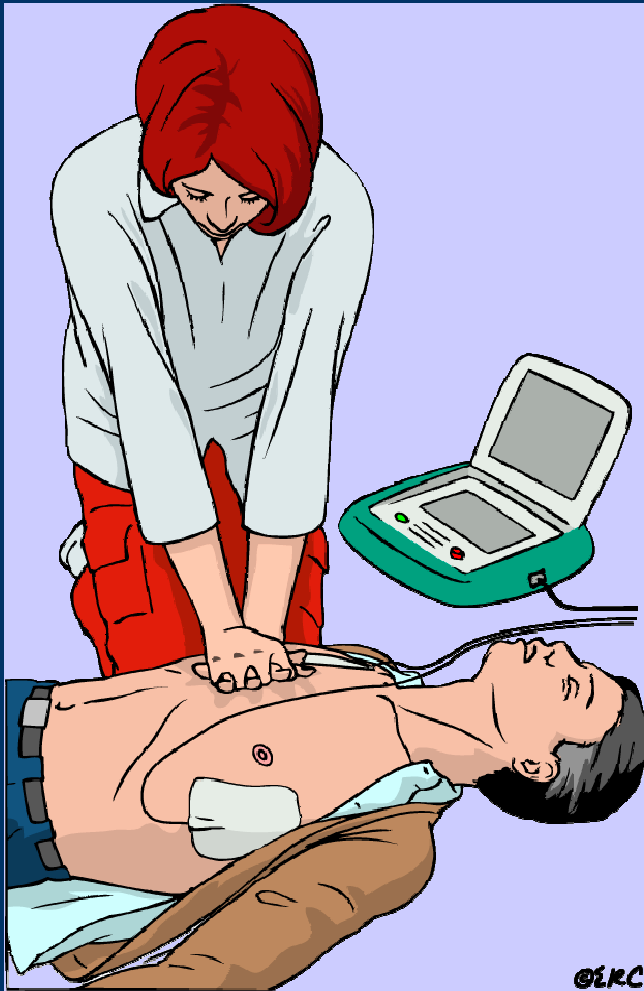
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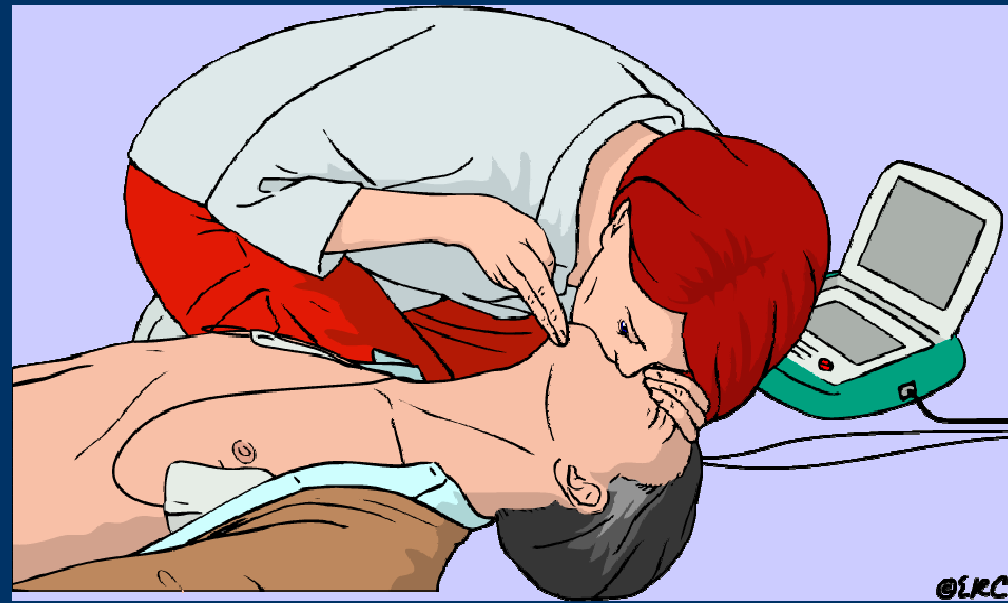
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# NO SHOCK ADVISED FOLLOW AED INSTRUCTIONS



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