BASIC LIFE SUPPORT

Objectives

To understand:

- The risks to the rescuer during resuscitation
- How to perform BLS
- The differences between “layperson” and “in-hospital” BLS

Risks to the rescuer

- Eliminate or minimise risk
- Manual Handling
- Beware of environmental danger:
  - traffic
  - electricity
  - gas
  - water

Risks to the rescuer: poisoning

- Hydrogen cyanide or hydrogen sulphide gas
  - mask and non-return
- Corrosive chemicals
  - absorbed through skin and respiratory tract
  - protective clothing

Risks to the rescuer: infection

- 15 documented cases of CPR related infection - mainly *Neisseria meningitidis*
- Tuberculosis
- Not hepatitis B or C, or CMV
- 3 cases of HIV transmission from high-risk cutaneous exposure

Risks to the rescuer: precautions against infection

- Gloves and eye protection
- Sharps box
- Face-mask with one-way valves
- Manikins
  - clean regularly

Assessment

Ensure safety of rescuer and victim

Shake and Shout

Is the victim responsive?

YES

- Check for injuries
- Reassess
- Get help

Is the victim responsive?

NO

- Shout for help
- Open their airway
- Check for breathing

Opening the airway

- Head tilt
- Chin lift
- If cervical spine injury suspected:
  - jaw thrust

Assess Breathing

- Look for chest movement
- Listen for breath sounds
- Feel for expired air
- Assess for 10 seconds before deciding breathing is absent

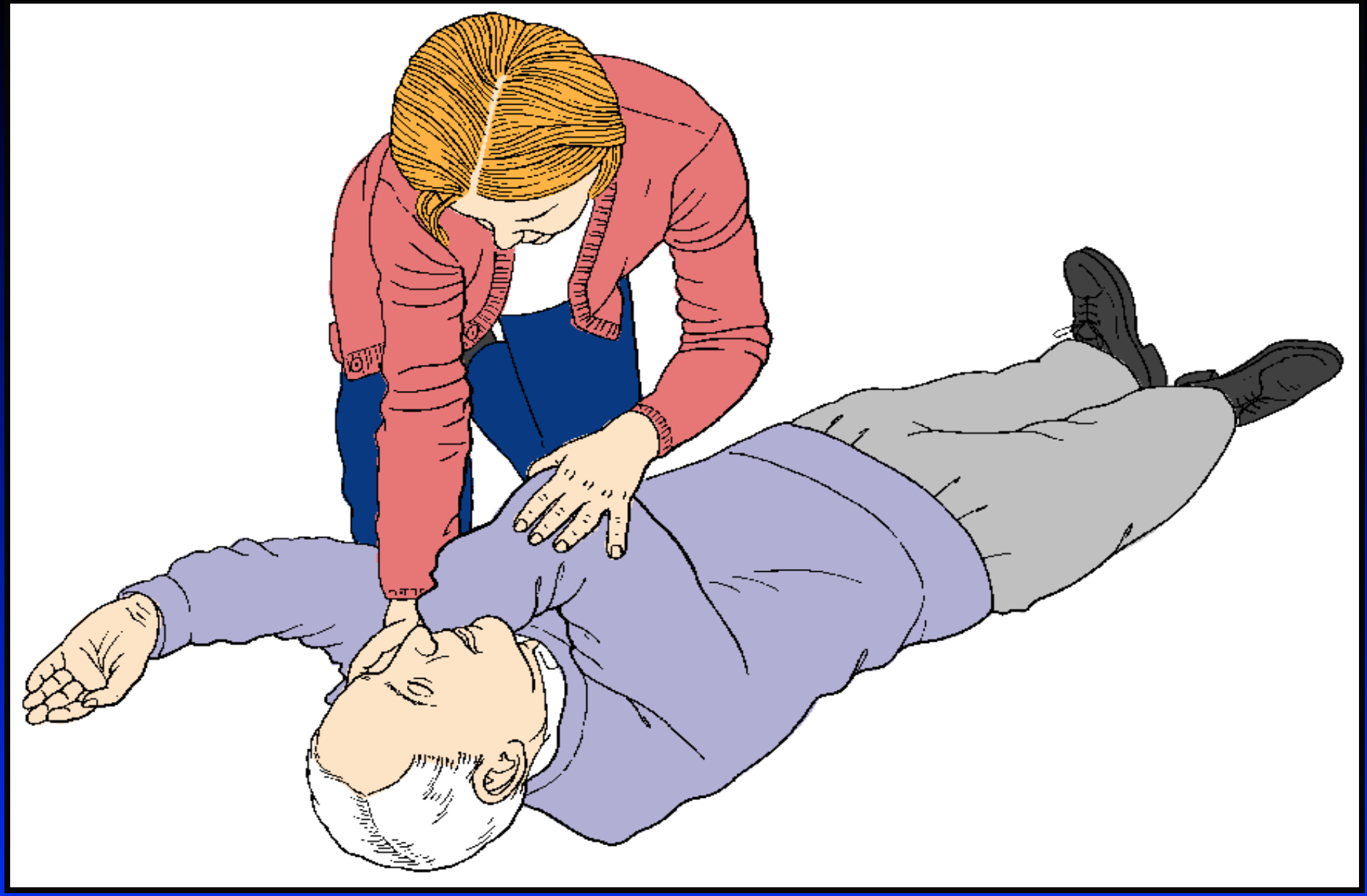
Is the victim breathing?

YES

- If safe, use recovery position
- Telephone for help
- Reassess at intervals

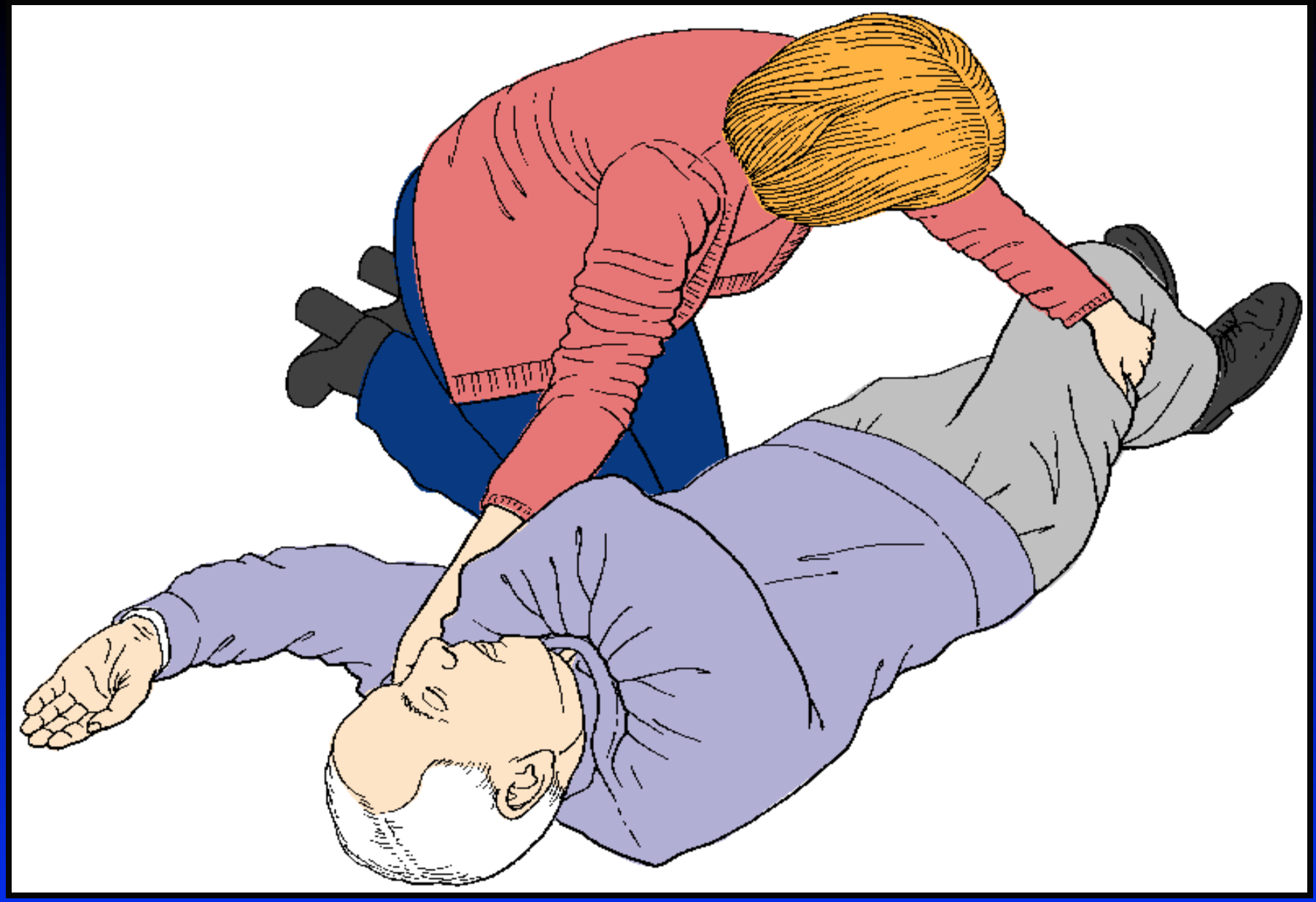
C14

Recovery Position 1st Stage



C15

Recovery Position 2nd Stage



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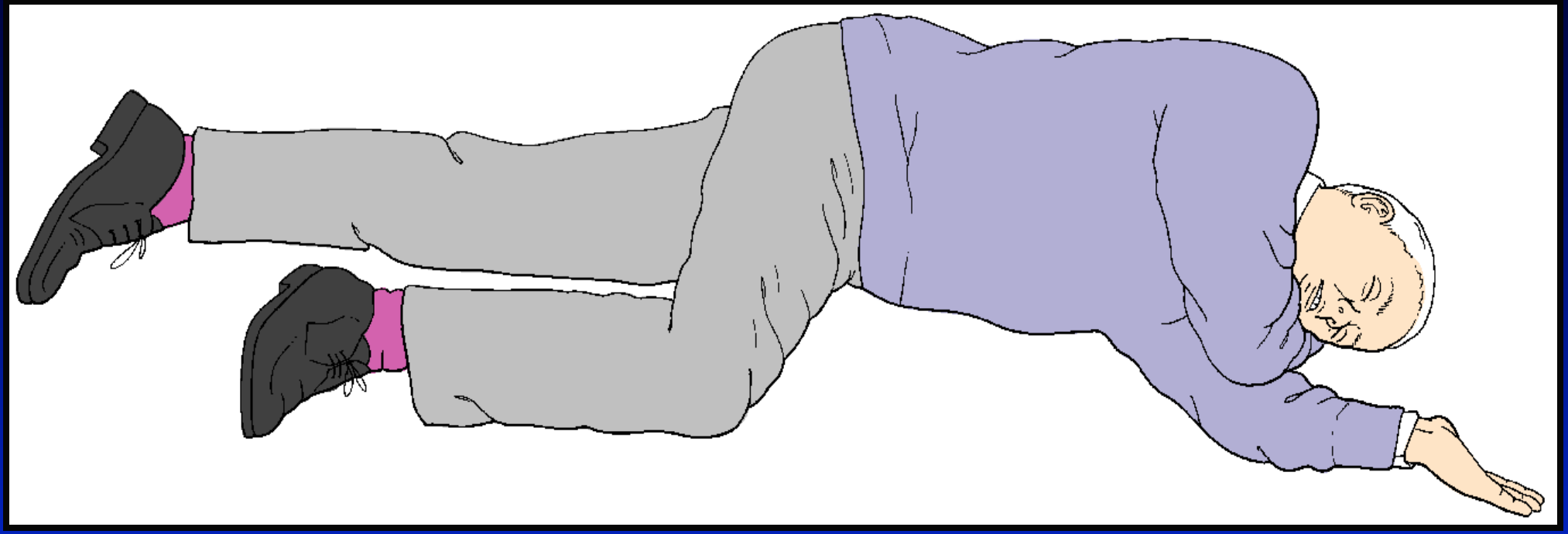
Recovery Position 3rd Stage



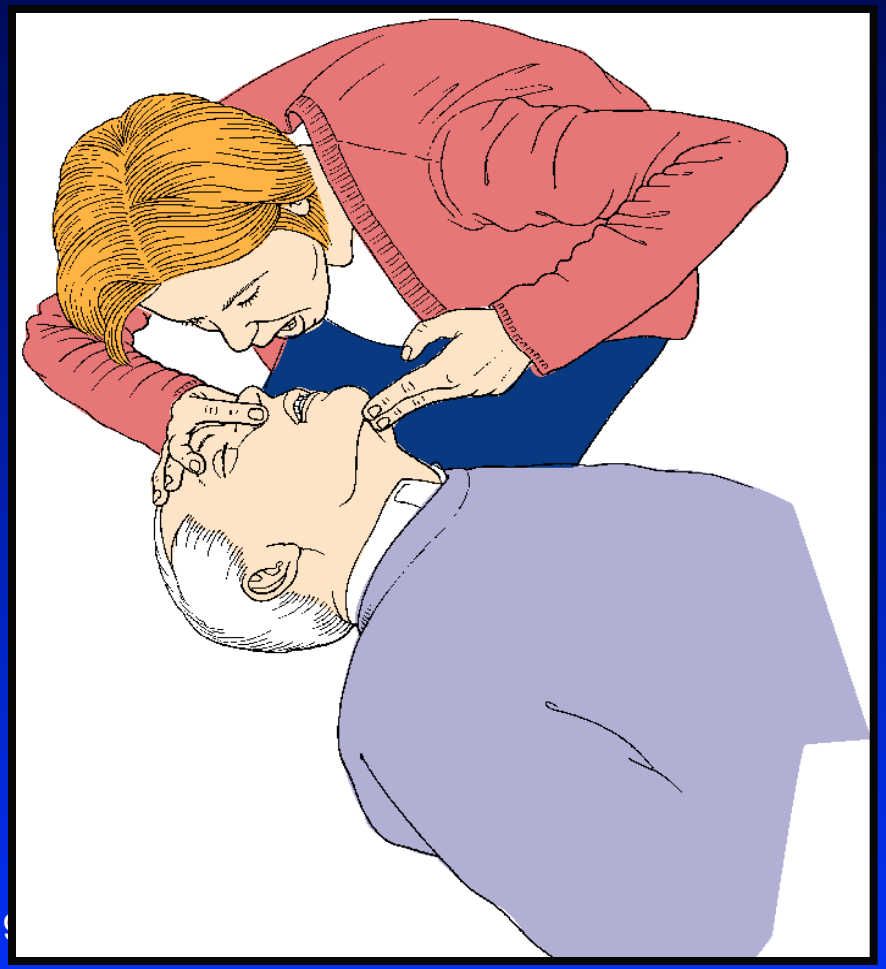
Recovery Position 4th Stage

Is the victim breathing?

NO

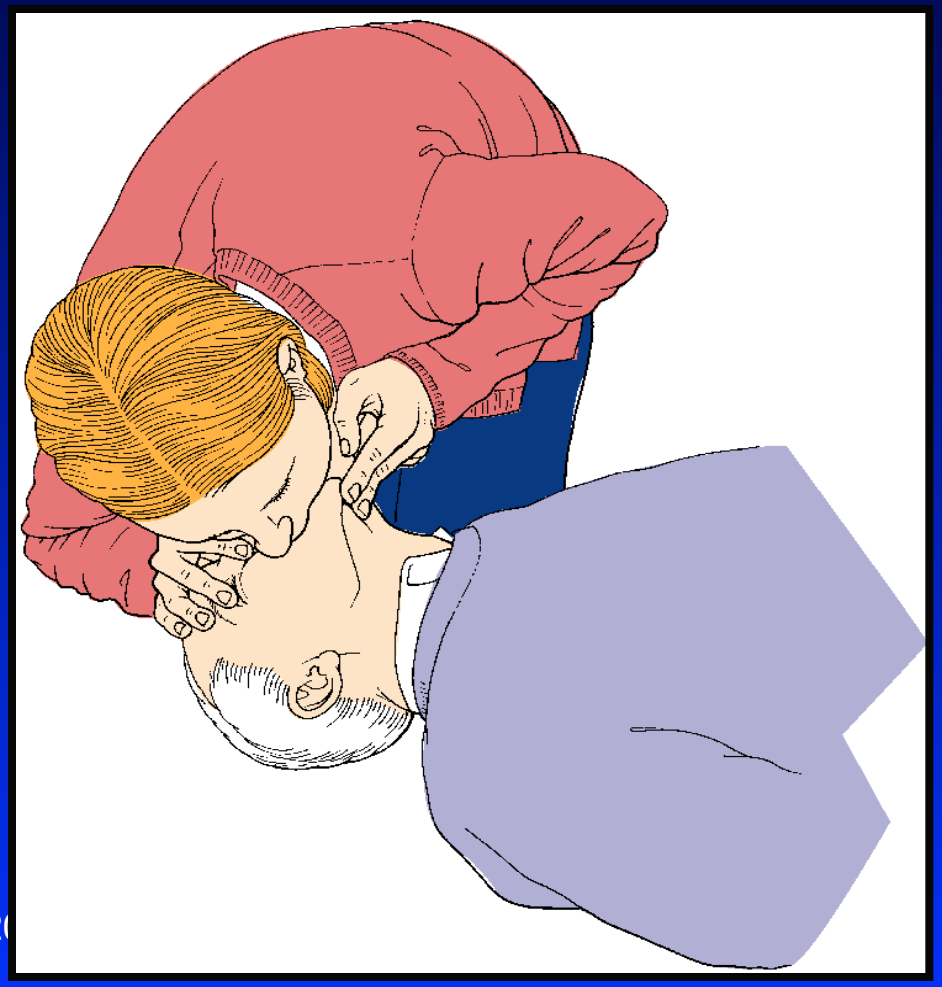
- Telephone for help
- Give two slow effective rescue breaths
- Make up to 5 attempts

Rescue breathing (Expired air ventilation)

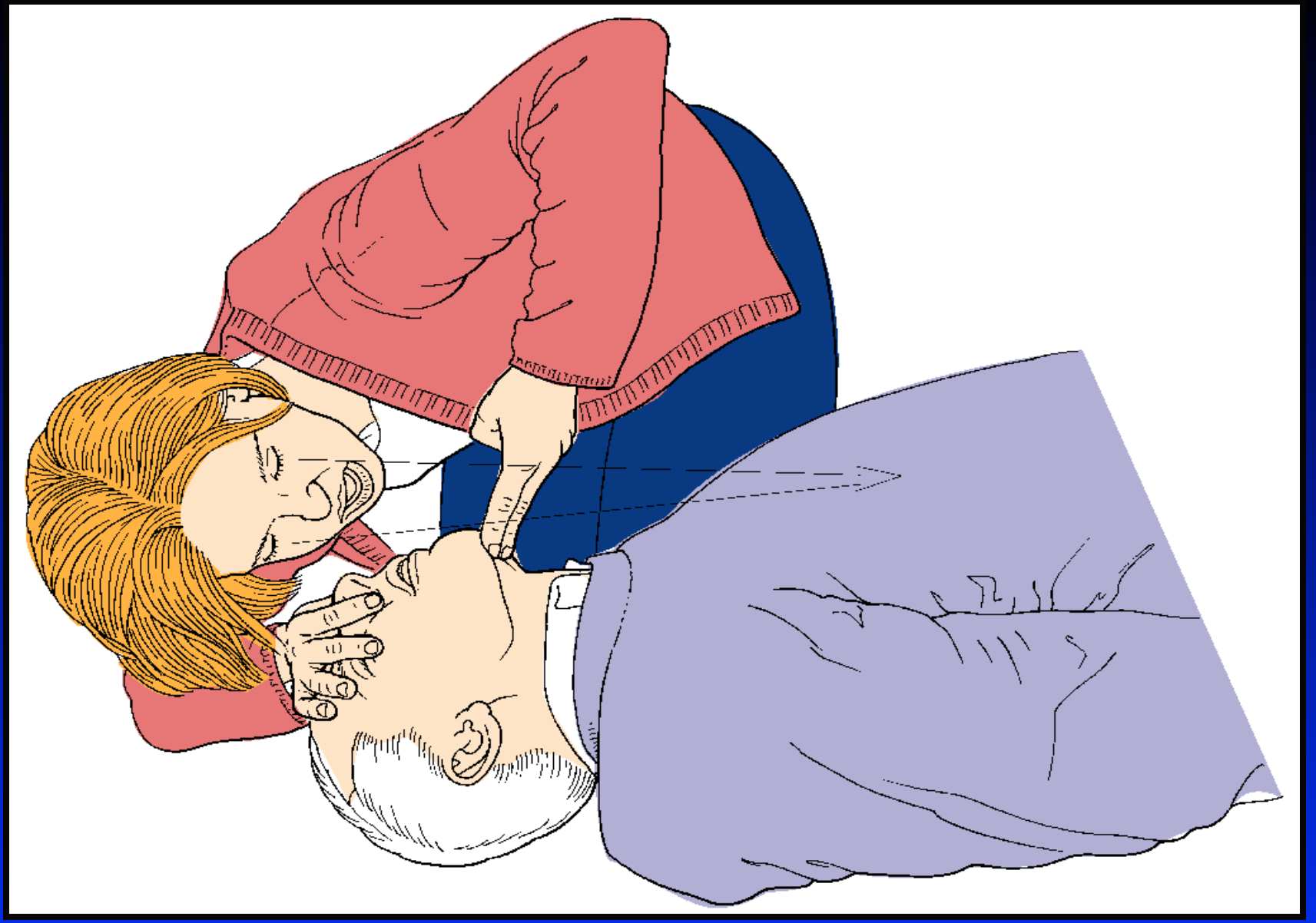


- Occlude victim’s nose
- Maintain chin lift
- Take a deep breath
- Ensure a good mouth-to-mouth seal

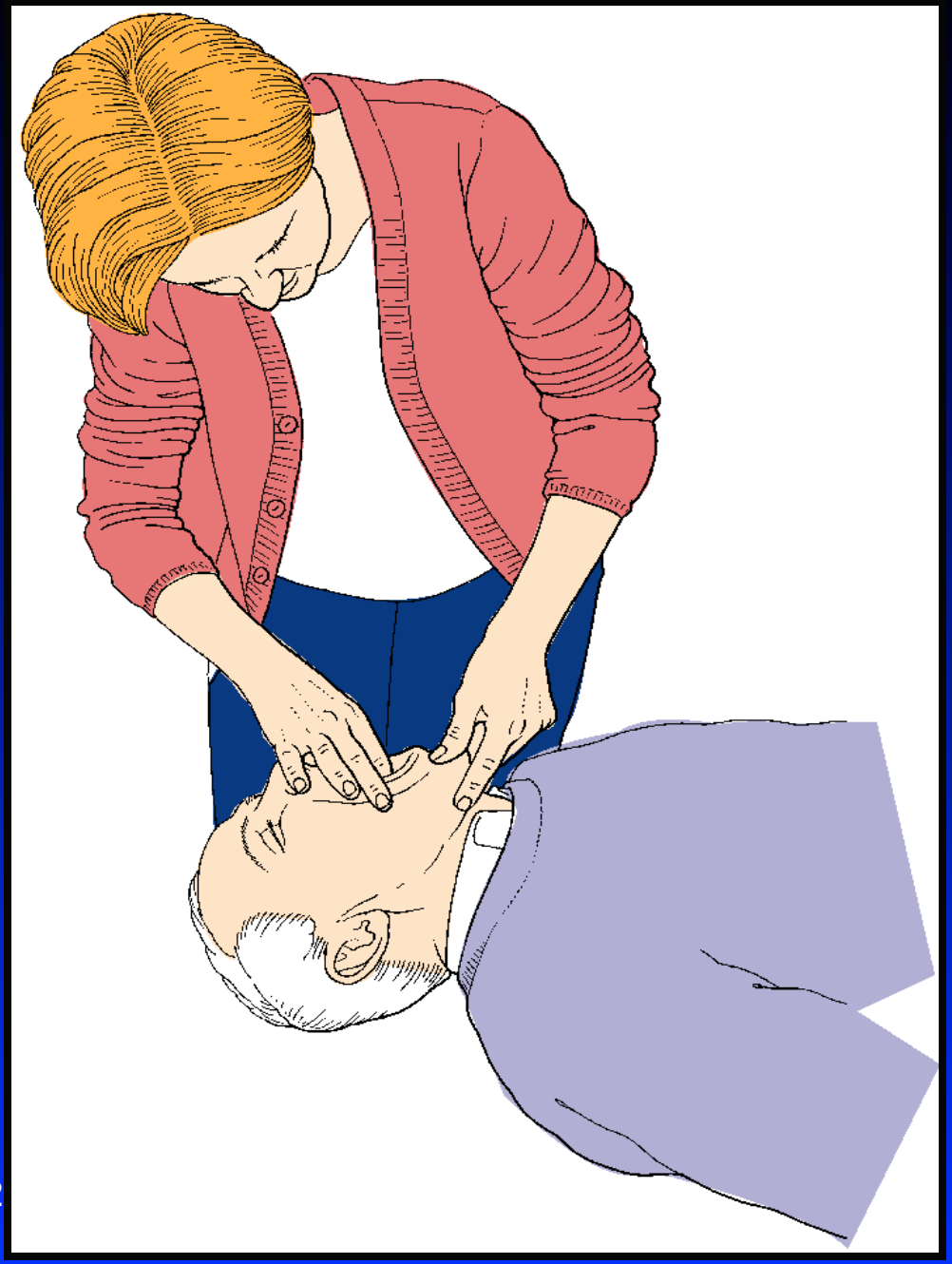
Rescue breathing (Expired air ventilation)



- Blow steadily (2 sec) into victim's mouth
- Watch for chest rise
- Maintain chin lift, remove mouth
- Watch chest fall



Watch for chest fall



Finger sweep

Assess Circulation

- Look, listen and feel for normal breathing, coughing, or movement by the victim
- Take no more than 10 seconds

Is a circulation present?

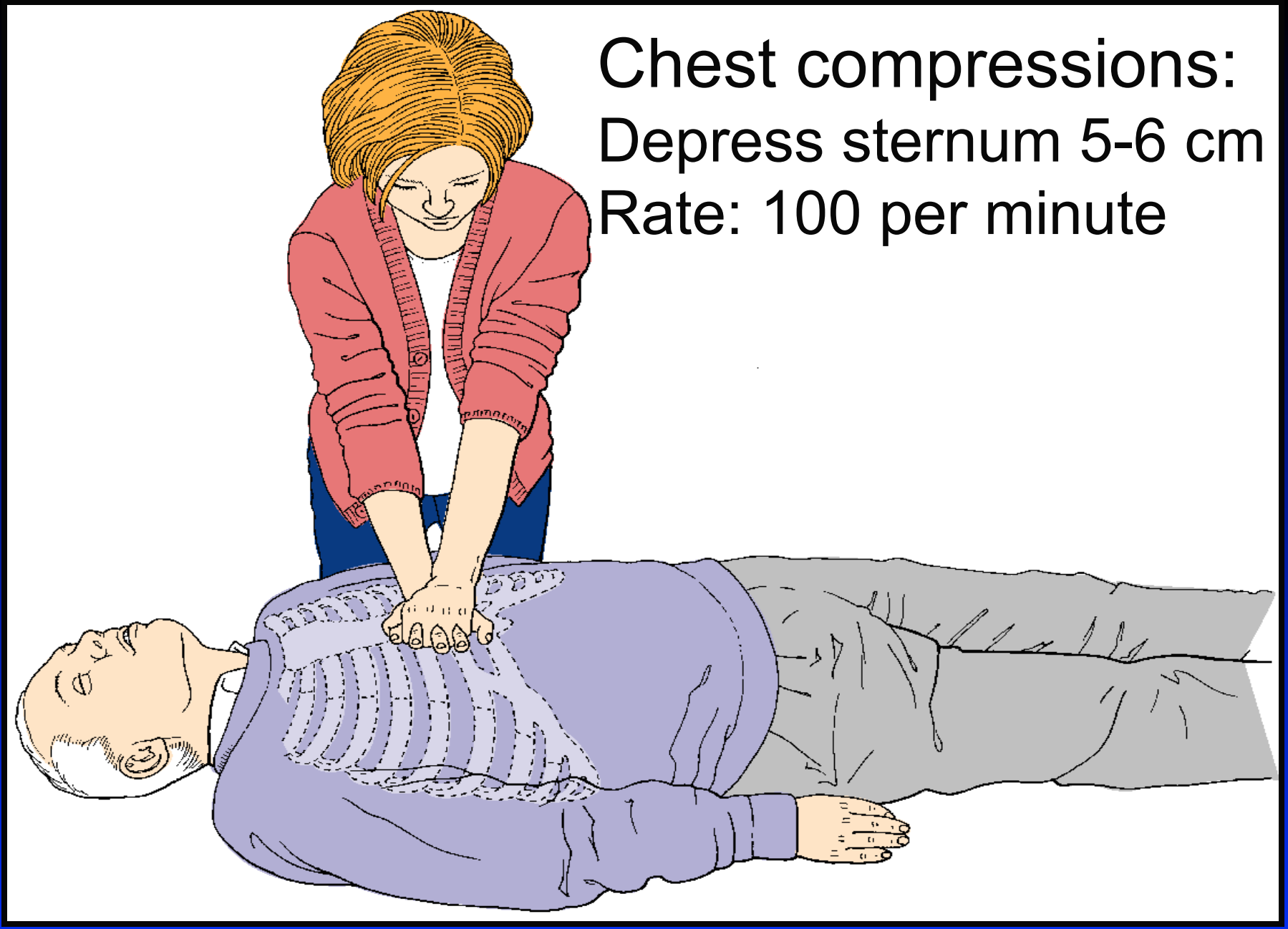
YES

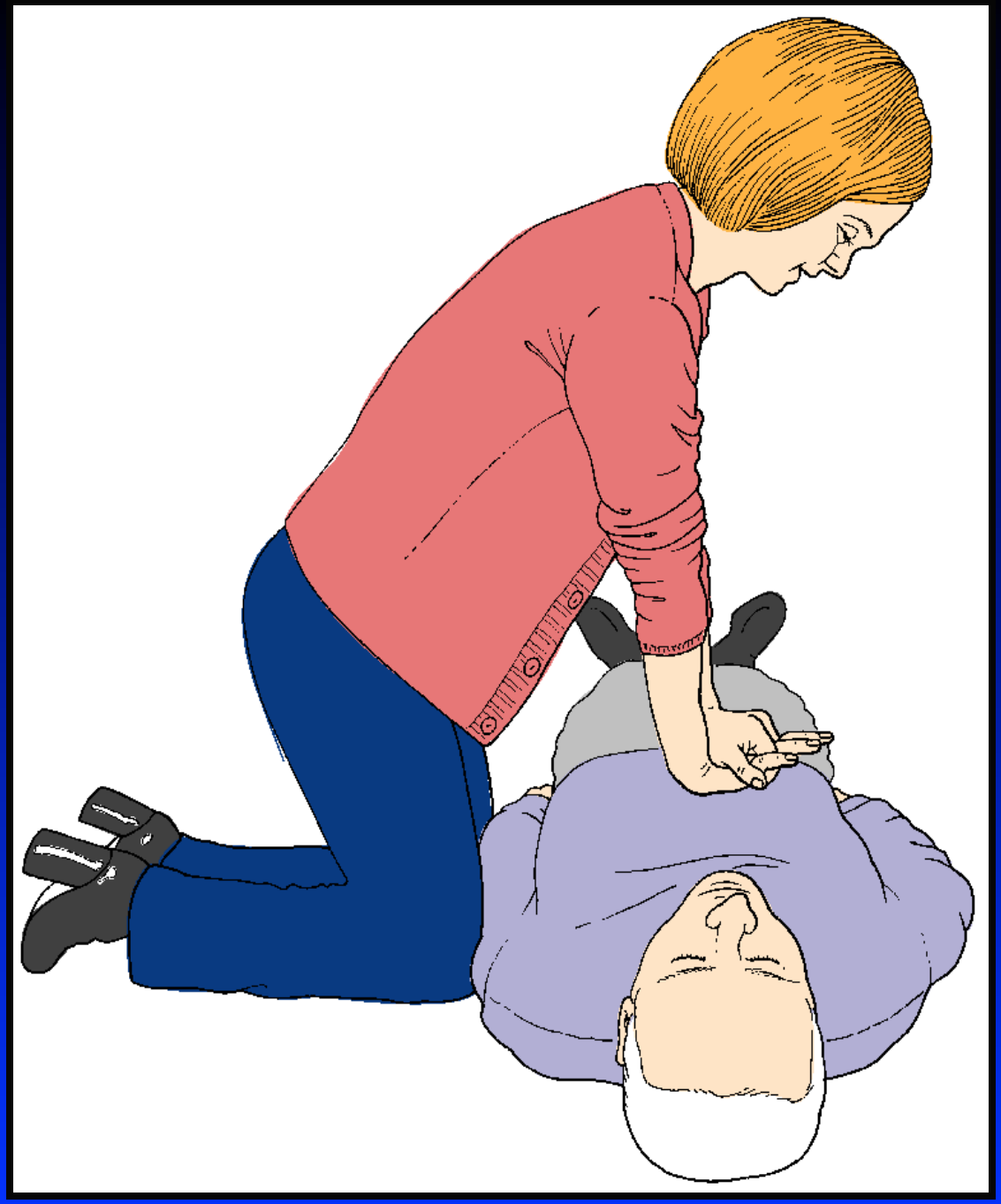
- Continue with rescue breathing
- Reassess for signs of a circulation about every minute

Is a circulation present?

NO

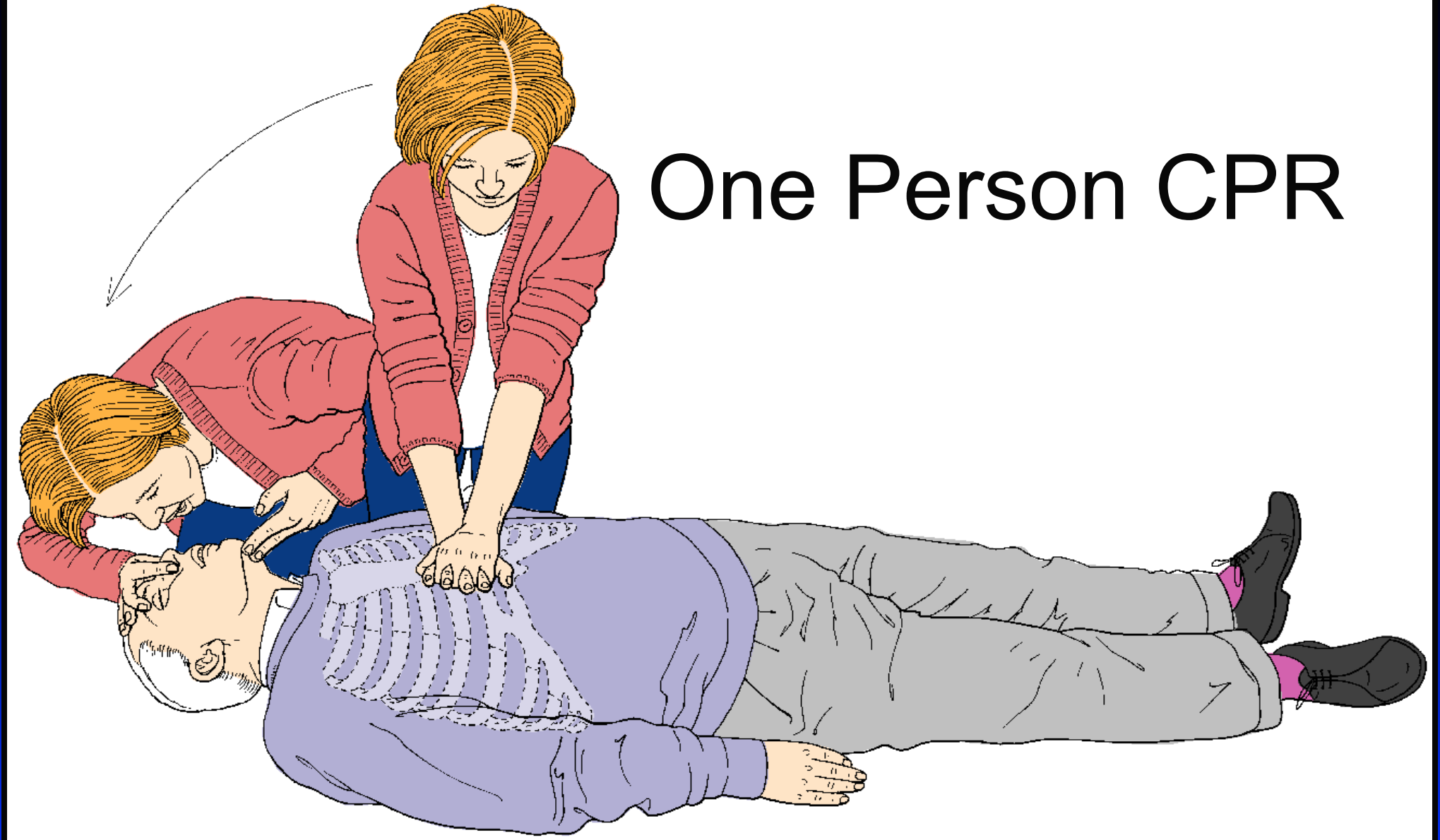
- Start chest compressions
- Continue with rescue breathing


Chest compressions:
Depress sternum 5-6 cm
Rate: 100 per minute



Chest compressions

One Person CPR



Chest compression: breath ratio

- 30 compressions : 2 breaths for
  - 1-person CPR
  - 2-person CPR

Continue resuscitation until:

- Qualified help arrives and takes over
- The victim shows signs of life
- You become exhausted

Mouth-to-nose ventilation

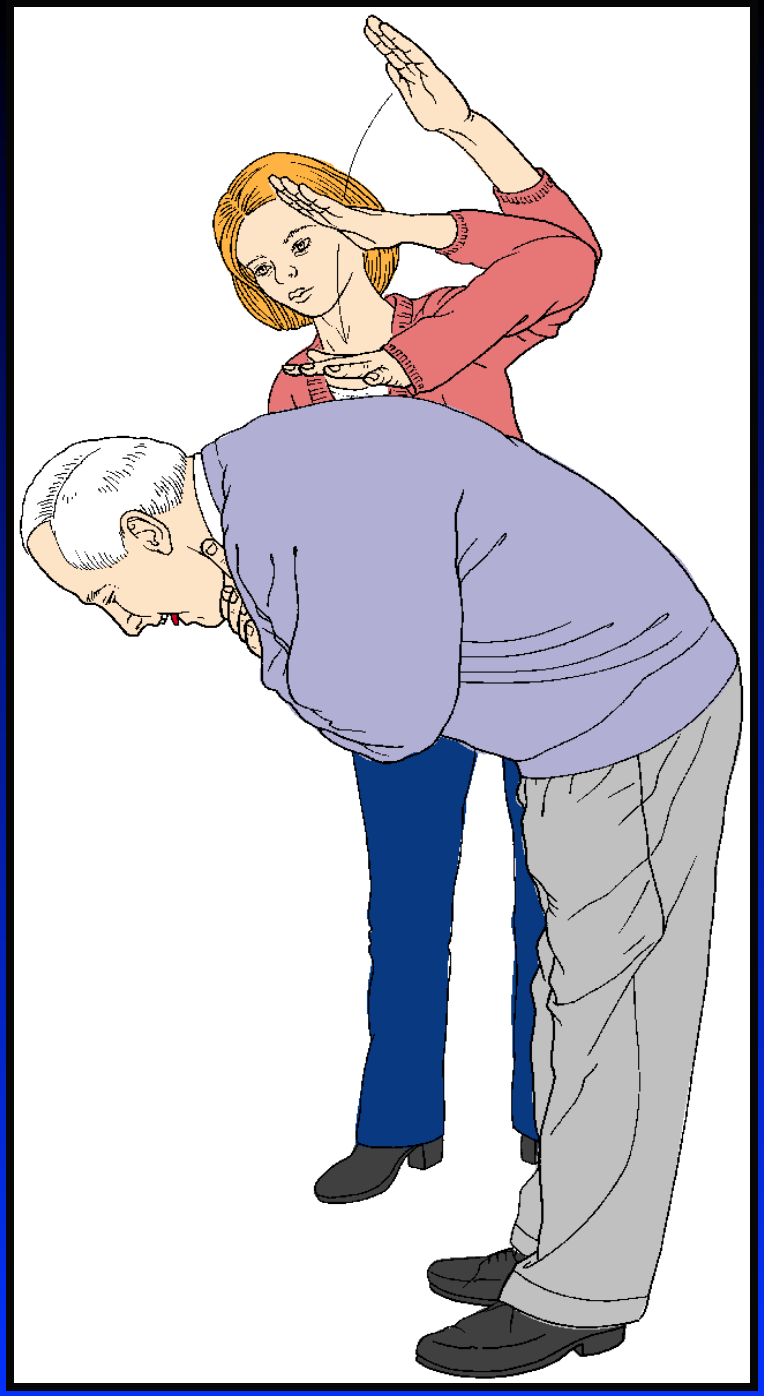
- If mouth-to-mouth technically difficult
- If mouth seriously injured
- Rescue from water
- Resuscitation carried out by a child
- Aesthetic reasons

Compression-only CPR

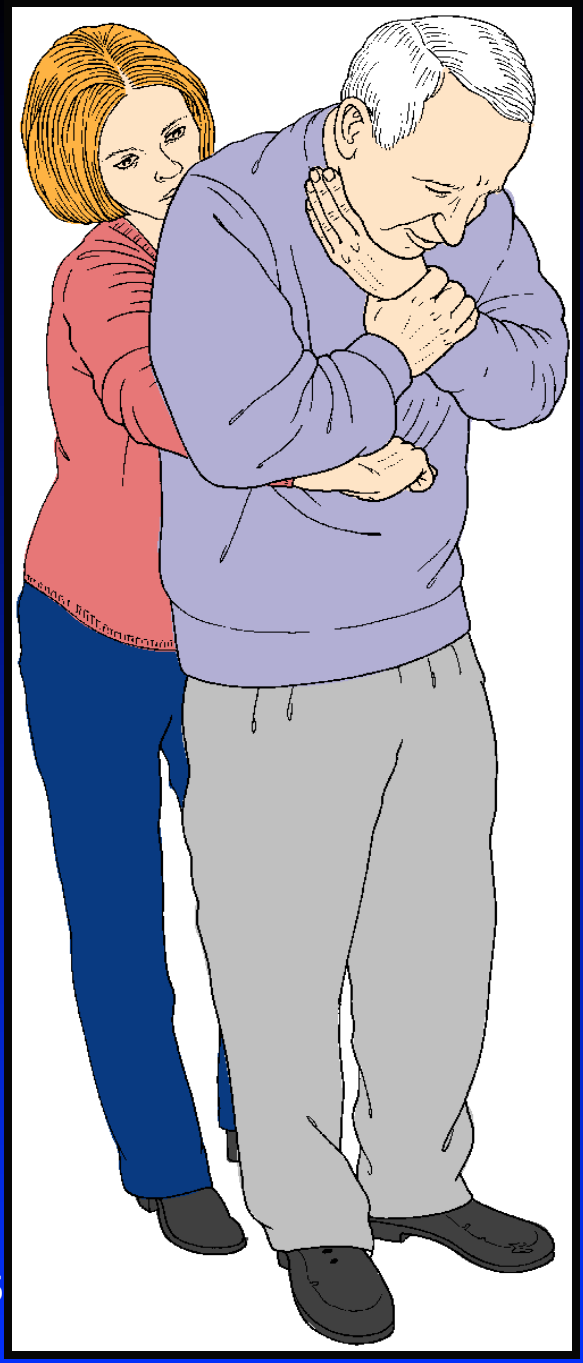
- Reluctance to perform mouth-to-mouth ventilation
- Chest compression alone better than no CPR
- If possible combine with head tilt
- Appropriate for telephone-CPR

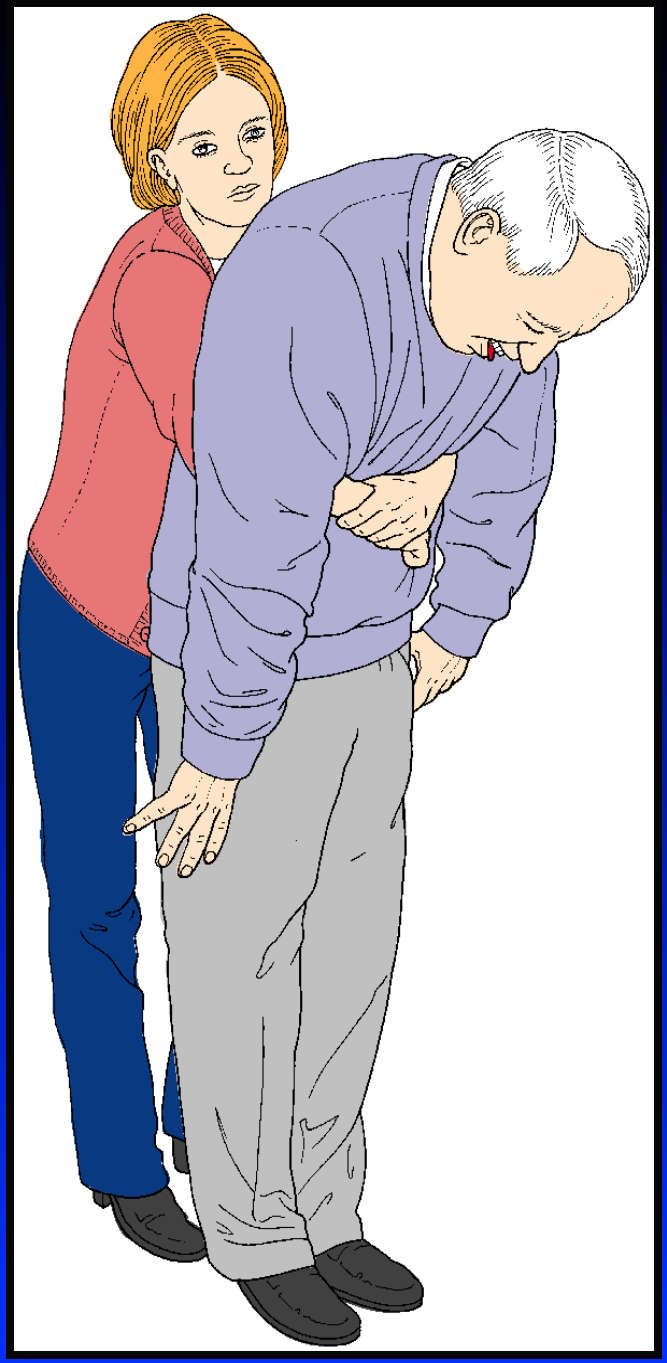
Cervical spine injury?

- If possible, maintain alignment of head, neck and chest
- Minimum head tilt only
- Jaw thrust preferable
- Assistance often required



Choking:
Back Blows





Abdominal Thrusts

Any Questions?