



# Maritime Health Trainings for Seafarers and Doctors

## «Training 8-Medical first aid application»

ERASMUS+ KA2 - Cooperation for Innovation and the Exchange of Good Practices  
KA202 - Strategic Partnerships for vocational education and training



REPUBLIC OF TURKEY  
MINISTRY OF HEALTH  
GENERAL DIRECTORATE OF HEALTH  
FOR BORDER AND COASTAL AREAS OF TURKEY



AP&A  
GROUP

✓ **Learning Objective;**

First aid is treatment aims to prevent death or further damage to health of an ill or injured person who is in a life treating condition. All crew members should join first aid training. The aim of this section is to provide seafarers general knowledge about first aid on board. Upon completion of this section, trainers will be able to:

- Familiarize the First Aid On Board
- Give information about ABC System
- Give information about Cardio-pulmonary resuscitation

# First Aid Onboard

- **STEP 1 Assess the situation: what do you think happened and is there still danger?**

- If giving first aid will expose you to danger, do not do it: call or go for help.
- If the person who need help are still in danger remove the person or danger before giving first aid.
- If bystanders are in danger, warn them.

- **STEP 2 If you are alone, shout for help.**

- **STEP 3 Choose the best place for first aid.**

- On the spot ?
  - ✓ Not if fire present.
  - ✓ Not if there are potentially dangerous gases in the atmosphere.
  - ✓ Not if there are other risks at the site of the accident.
- In the ship's infirmary (sick bay) or in a cabin?
  - ✓ Not if the delay in moving the person is dangerous.

- **STEP 4 If there are several injured people, prioritize.**

- Attend first to any unconscious person.

- If there is more than one unconscious person:

- ✓ Check each for pulse and breathing;

- ✓ Begin resuscitation of a person who is not breathing or has no detectable heart beat (see following sections for the Cardio- pulmonary resuscitation)

- Attend to conscious patients:

- ✓ Treat bleeding by applying pressure to the wound;

- ✓ wait until the patient has been moved to the sick bay before dealing with other injuries, **UNLESS** you suspect spinal injury (see following sec. what to do in the case of spinal injury).

# First Aid Onboard

## What not to do when giving first aid?

- **DO NOT GIVE FIRST AID** if you have doubts about your ability to do so correctly.
- **DO NOT ENTER AN ENCLOSED SPACE** unless you are sure it is safe.
- **DO NOT MOVE THE PERSON** without checking for:
  - spinal injuries
  - fractured long bones.
- **DO NOT GIVE THE PATIENT ANYTHING TO EAT OR DRINK** (especially alcohol).

# The ABC Sequence of Basic Life Support

- **ABC sequence** stands for open **A**irway aimed at restoring **B**reathing and blood **C**irculation.
- **Cardio-pulmonary resuscitation (CPR)** is an emergency procedure that combines chest compressions often with artificial ventilation in an effort to manually preserve intact brain function until further measures are taken to restore spontaneous blood circulation and breathing in a person who is in **cardiac** arrest.

## CPR: Step by Step



1

Lay the person on their back and open their airways



2

If they are not breathing, start CPR



3

30 chest compressions



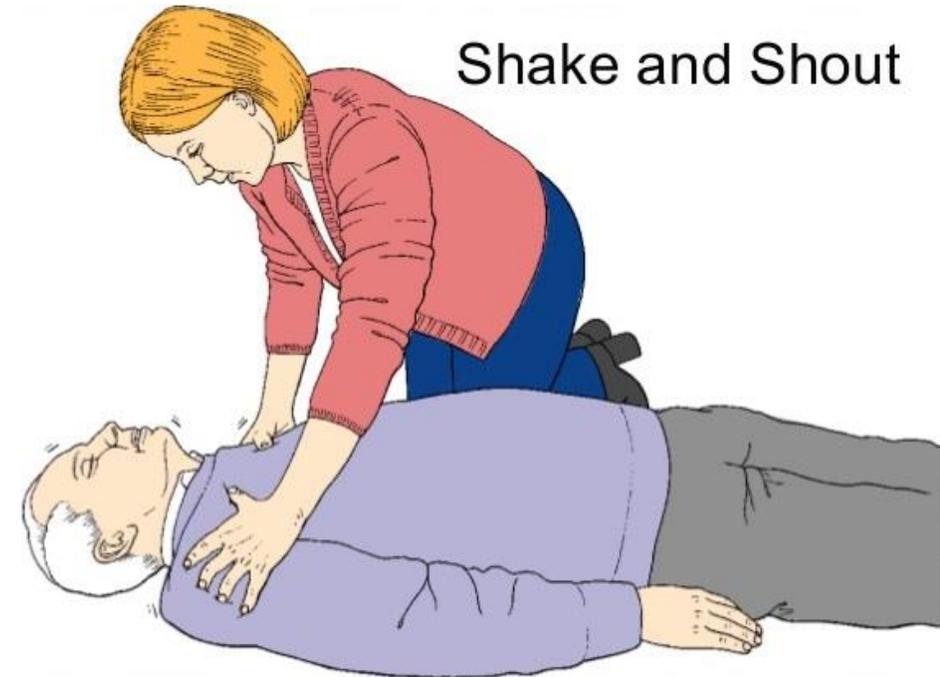
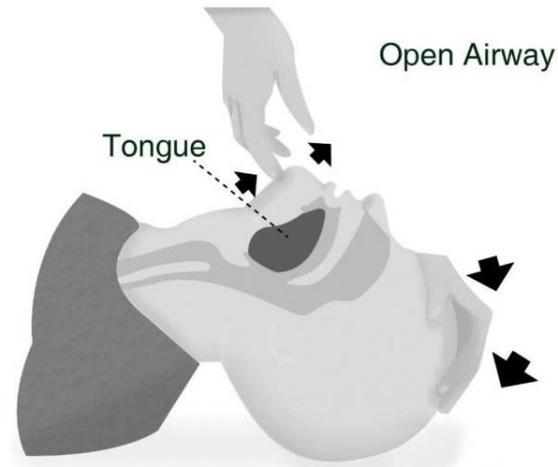
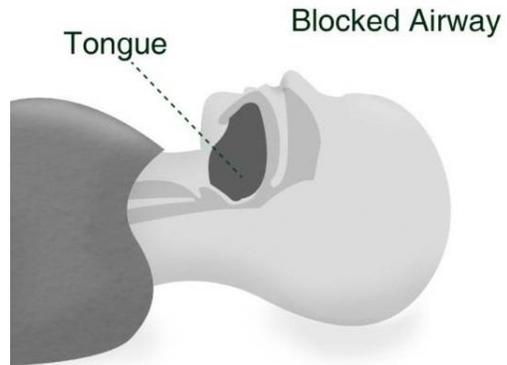
4

Two rescue breaths

# Basic Life Support

1) SHAKE AND SHOUT

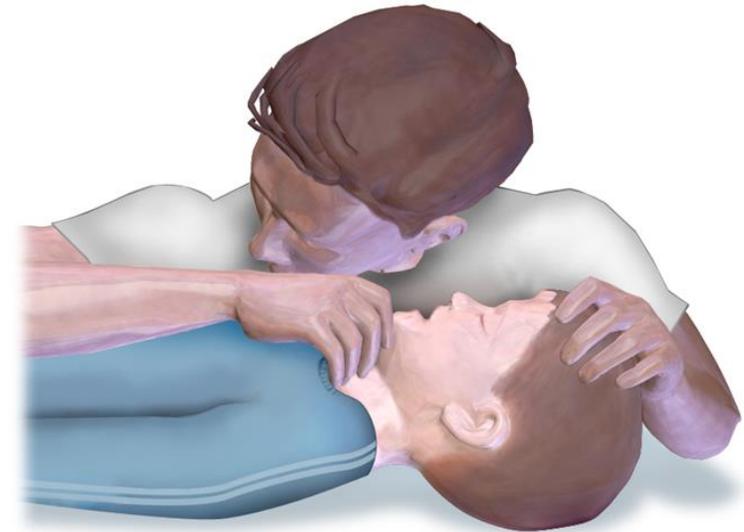
2) AIRWAY – IF BLOCKED, OPEN IT



# Basic Life Support

3) CIRCULATION – IF STOPPED, RESTART IT

4) BREATH- IF STOPPED, RESTART IT

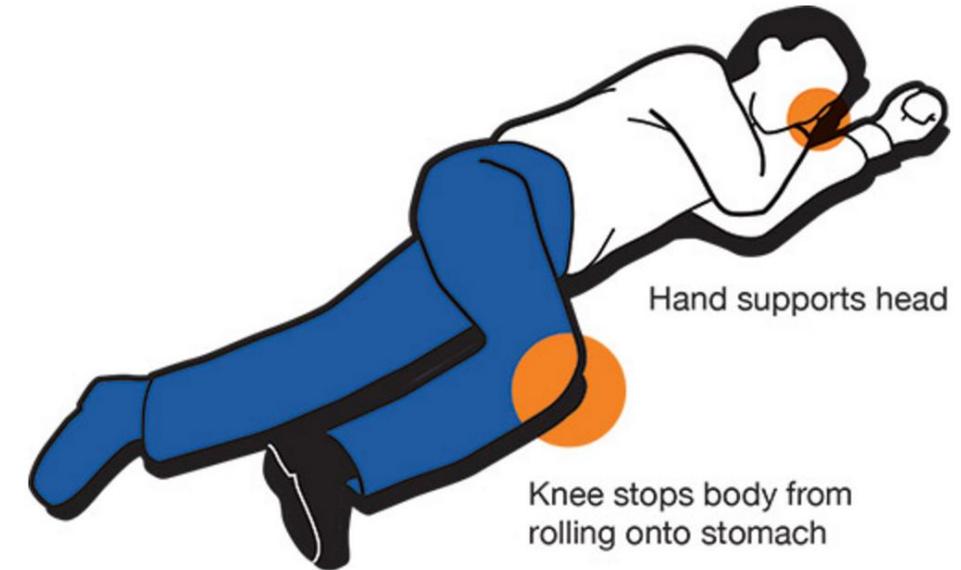


**Look, Listen, and Feel  
for Breathing**

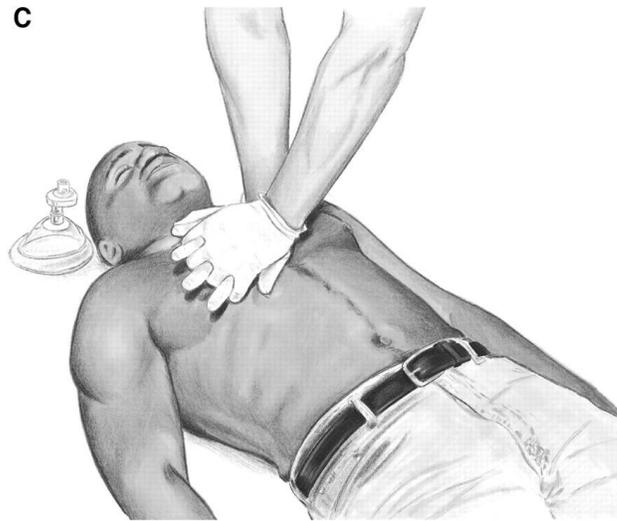
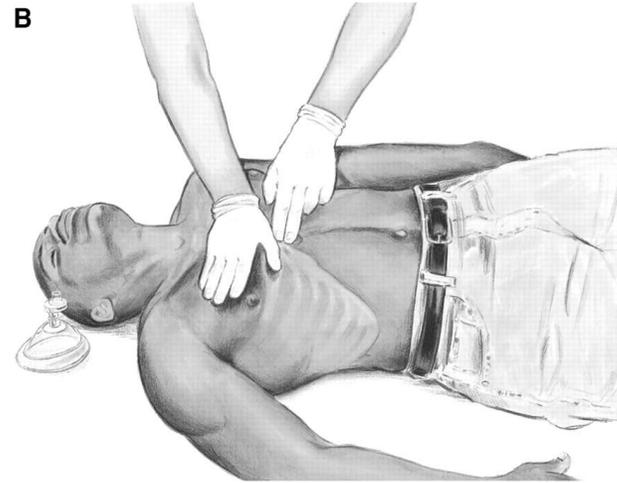
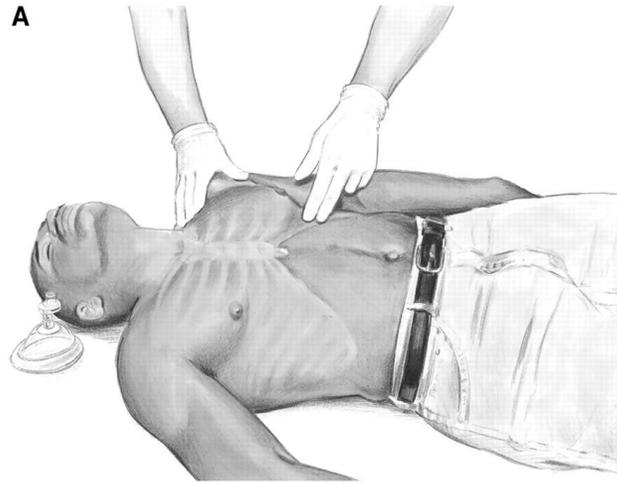
# A Basic Life Support Sequence

- RESPONDS TO SHAKE AND SHOUT – NO.
- BREATHES – YES.
- HEART BEATS – YES:
  - put patient in **recovery position** (see figures right)
  - check for other life-threatening conditions
- RESPONDS TO SHAKE AND SHOUT – NO.
- BREATHES – NO.
- HEART BEATS – YES:
  - clear airway
  - apply rescue breathing.
- RESPONDS TO SHAKE AND SHOUT – NO.
- BREATHES – NO.
- HEART BEATS – NO:
  - apply cardio-pulmonary resuscitation (CPR).

## Keep the Airway Clear



# How to perform chest compression



*Positioning the rescuer's hands on the lower half of the sternum. The rescuer should **(A)** locate the margin of the rib using first and second finger of the hand closer to the victim's feet, **(B)** follow the rib margin to the base of the sternum (xiphoid process) and place his or her hand above the fingers (on the lower half of the sternum), and **(C)** place the other hand directly over the hand on the sternum.*

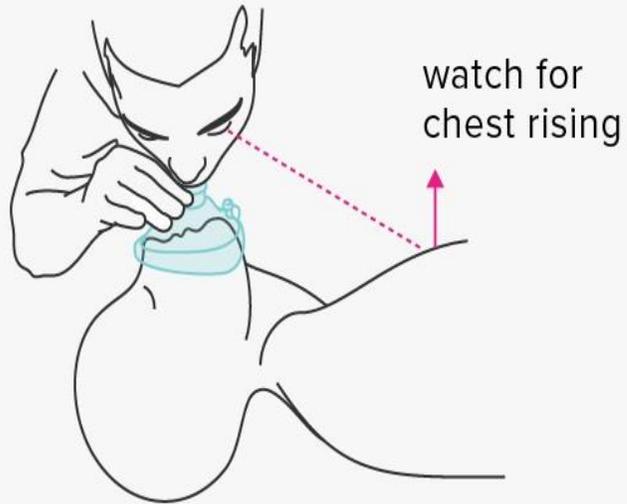


# How to perform chest compression



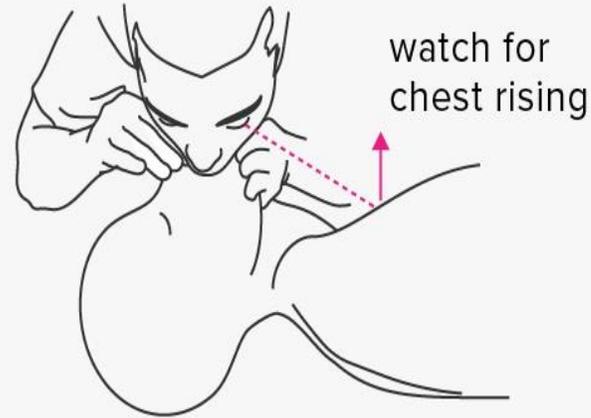
# How to perform RESCUE BREATHING

## MOUTH –TO – MOUTH RESCUE BREATHING



cover nose and mouth  
with mask

**OR**



pinch nostrils shut



# How to perform RESCUE BREATHING

## MOUTH –TO – NOSE RESCUE BREATHING

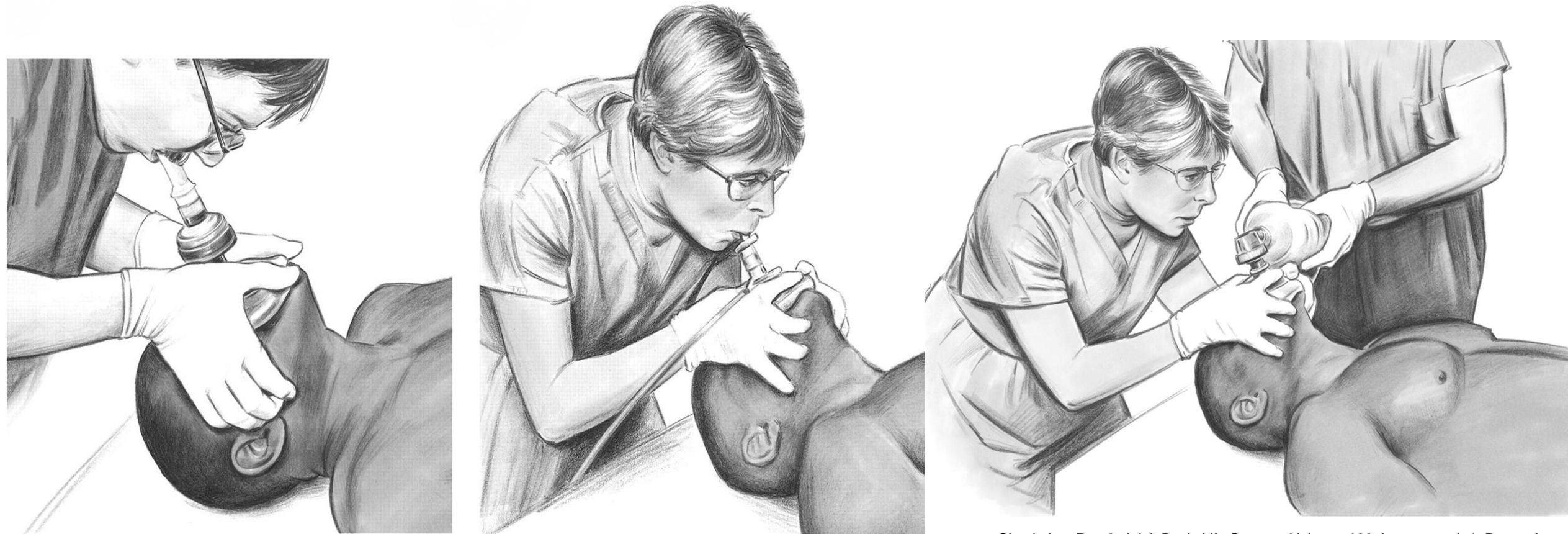
- Use mouth-to-nose rescue breathing if any one of the following conditions applies:
- Keep the patient's head tilted back with one hand: use the other hand to lift the patient's lower jaw to seal the lips.
- Take a deep breath, seal your lips around the patient's nose and breathe into it forcefully and steadily until the patient's chest rises
- Remove your mouth and allow the patient to exhale passively.
- Repeat the cycle 10–12 times per minute.



Circulation. Part 3: Adult Basic Life Support, Volume: 102, Issue: suppl\_1, Pages: I-22-I-59, DOI: (10.1161/circ.102.suppl\_1.I-22)

# How to perform RESCUE BREATHING

## USING A BAG AND MASK RESUSCITATOR



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# How to administer oxygen

■ Note that:

- oxygen is given to a patient who is breathing spontaneously but has difficulty breathing or has a disorder that impairs the uptake of oxygen into the lungs or the delivery of oxygen to the tissues;
- spontaneous combustion can occur in the presence of oxygen: smoking, naked lights or fires must not be allowed where oxygen is being administered;
- if an illness is serious enough to warrant the use of oxygen it is serious enough to seek medical advice;
- oxygen delivered through valve and bag resuscitation kits – used primarily for victims who are not breathing – should be given only by trained personnel.

■ Ensure that the airway is open.

■ If the patient is unconscious, insert a Guedel airway

■ Check that the oxygen cylinder is not empty and that the regulator and flow meter are properly attached to the cylinder and turned off.

■ Turn the main oxygen cylinder valve fully on.

■ Fit the mask snugly over the patient's nose and mouth.

■ Set the flow meter to the chosen rate.

# How to perform chest compression

## USE OF AUTOMATIC EXTERNAL DEFIBRILLATORS



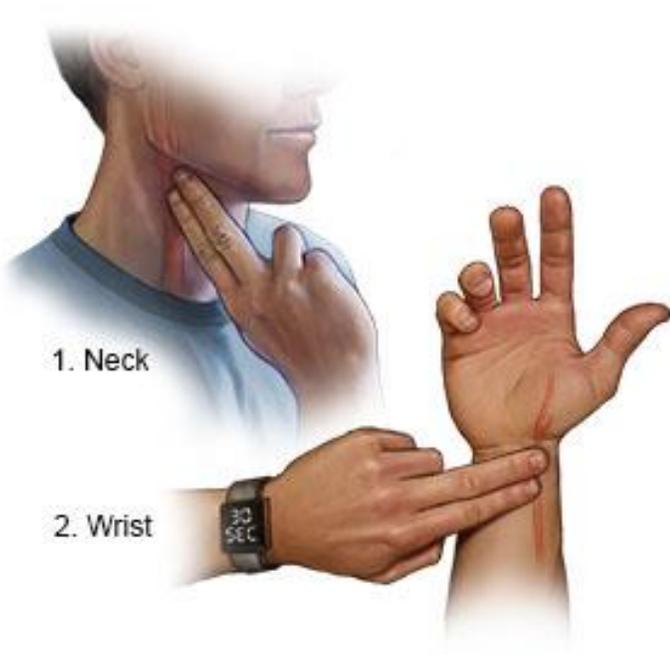
# How to apply the recovery position



# What not to do when rescuing an unconscious patient

- DO NOT LEAVE THE PATIENT ALONE.
- DO NOT ALLOW THE PATIENT'S HEAD TO BEND FORWARDS with the chin sagging.
- DO NOT FORGET TO CHECK REGULARLY FOR BREATHING.
- DO NOT PULL, STRAIN, OR STRETCH ANY JOINTS.
- DO NOT GIVE ANYTHING BY MOUTH.

# How to take the pulse



How to Take Your Pulse

## *What to do in the case of choking*



- Suspect choking in a person:
  - ● whose skin turns blue or purple; **OR**
  - ● who cannot speak or breathe but only gasp; **OR**
  - ● who clutches the throat with one or both hands (a universal sign for choking), especially in mid-meal; **OR**
  - ● whose attempts to breathe in or out produce coughing or wheezing or whistling sounds.
  
- If you suspect that food or a foreign body is blocking the airway:
  - ● try to unblock the airway
  - ● encourage the patient to cough;
  - ● if the patient cannot cough, perform the Heimlich manoeuvre
  - ● do not attempt to hook the obstructing body out with a finger: you are likely to push it in further and worsen the obstruction.

# How to perform the Heimlich manoeuvre (abdominal thrusts)



with How to Perform the Heimlich Maneuver on Yourself

Heimlich manoeuvre on yourself

The Heimlich maneuver can be performed with the victim standing (A) or lying down (B). The hands are positioned slightly above the navel

and well below the xiphoid process and then pressed into the abdomen with a quick upward thrust. The maneuver may need to be repeated.

# BLEEDING WOUNDS

Bleeding is the result of damage to blood vessels.

## KEY QUESTIONS

- Where is the bleeding coming from?
- What effect is the bleeding having on the patient?
- What can be done to stop the bleeding?



# BLEEDING WOUNDS

## BLEEDING FROM THE NOSE



- In medicine, the term “shock” refers to a life-threatening condition affecting the body as a whole and involving a severe, long-lasting decline in the delivery of blood to the tissues.

## **CAUSES**

- Severe Bleeding
- Heart Problems
- Losing Body Fluids
- Severe allergic Reactions or Infections
- Spinal Injury

## **WHAT TO LOOK FOR**

- Fast Pulse
- Pale, Cold or Clammy Skin
- Sweating
- Fast, Shallow Breathing
- Grey-Blue skin
- Weakness and Dizziness
- Nausea
- Thirst
- Weak Pulse
- Restless or Aggressive Behaviour
- Gasping for air
- Being Unresponsive



# SHOCK

## What not to do in shock?

- Do not delay treatment.
- Do not under-treat because you are unsure of the diagnosis.
- Do not give sedatives or alcohol.
- Do not give anything by mouth to a patient with impaired consciousness.
- Do not give anything by mouth if surgery is likely to take place within the next six hours.

# References



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[1] World Health Organization. International medical guide for ships. 3rd Ed. Geneva: World Health Organization, 2007.

[2] Circulation. Part 3: Adult Basic Life Support, Volume: 102, Issue: suppl\_1, Pages: I-22-I-59, DOI: (10.1161/circ.102.suppl\_1.I-22).