BLS/Choking/Anaphylaxis refresher session

### CHAIN OF SURVIVAL

Survival from cardiac arrest is greatest when witnessed and resuscitation is commenced immediately. When the heart is in ventricular fibrillation and defibrillation is carried out at an early stage.

Early recognition and access to emergency services Early basic life support Early defibrillation Early access to advanced life support



## **RISKS TO THE RESCUER**

- Need for resuscitation often allowed to override all other considerations, potential dangers may be ignored
- Risks must be assessed prior to a resuscitation attempt
- A little thought can provide a safe environment e.g. turning off a car engine after an accident, use of vehicles to block oncoming traffic, use of hazard warning lights or triangles, moving furniture





### PRECAUTIONS

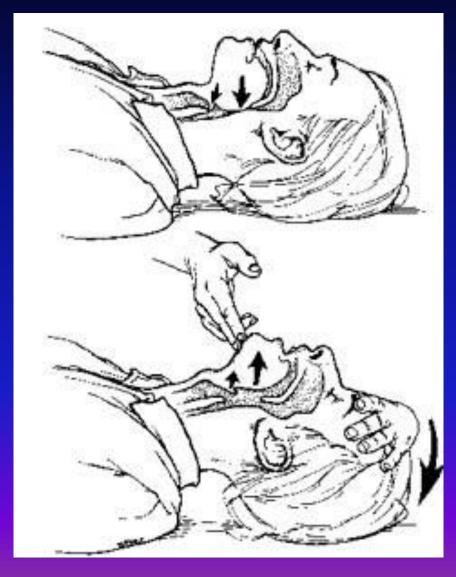
- Always check environment is safe
- Although little risk from mouth-to mouth ventilation most prefer to use a device
- Using a handkerchief is ineffective, may create a risk
- Take care with sharps
- Take care where there is spillage of blood or bodily fluids - wear PPE

### ADULT BASIC LIFE SEQUENCE

- Make sure victim, any bystanders, and you are safe
- Check victim for a response:
  - Gently shake his shoulders and ask loudly, 'Are you all right?'
- If he responds:
  - Leave him in the position in which you find him provided there is no further danger
  - Try to find out what is wrong
  - Get help
  - Reassess regularly

### ASSESSMENT

- Keeping airway open using head tilt chin lift, look, listen, and feel for normal breathing (no more than 10secs):
  - Look for chest movement.
  - Listen at the victim's mouth for breath sounds.
  - Feel for air on your cheek.
- Victim may be barely breathing, or taking infrequent, noisy, gasps – agonal gasps, not normal breathing



### **BREATHING NORMALLY**

- Place in recovery position
- Get help
- Continue to check

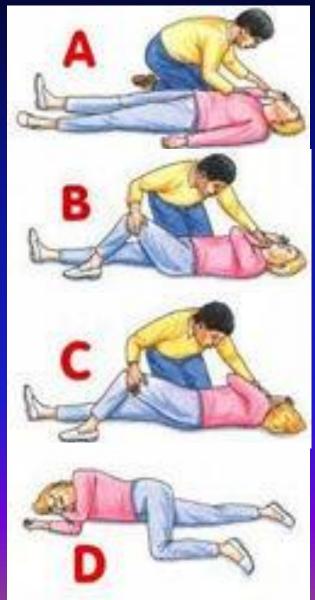
### **RECOVERY POSITION**

**Tilt patient's head back then: A** Move patient's nearest arm, as though they are stopping traffic

**B** Lift patient's furthest knee, and bring their furthest hand to near side of their face

**C** Using patient's knee as a lever, pull them onto your knees

**D** Adjust the patient's position, as shown



https://www.nhs.uk/conditions/firstaid/recovery-position/

### NOT BREATHING NORMALLY

- Get help ask for AED if available, if you are alone use your mobile phone to call 999 (available even in absence of a signal)
- Start chest compressions:
  - Kneel by side of the victim
  - Place heel of one hand in centre of chest
  - Interlock fingers of other hand
  - Position yourself vertically above victims chest and with straight arms press down vertically 5-6cms
  - After each compression release pressure without losing contact
  - Repeat at a rate of 100 120 per minute

#### COMBINE CHEST COMPRESSIONS WITH RESCUE BREATHS

- After 30 compressions open airway using head tilt chin lift
- Pinch soft part of nose closed
- Take a normal breath and place your lips around his mouth ensuring a good seal
- Blow steadily into his mouth for about 1 second
- This should make chest rise as in normal breathing (effective rescue breath)
- Watch for chest to fall
- Repeat to give 2 effective rescue breaths0 no longer than 5 secs in total
- Continue with chest compressions and rescue breaths in a ratio of 30:2
- Do not interrupt resuscitation unless victim show signs of regaining consciousness e.g. coughing, opening eyes, purposeful movement

www.youtube.com/watch?v=BQNNOh8c8ks

### **BAG – MASK VENTILATION**

- Practice and skill required, difficult for lone rescuer
- Good seal necessary which is difficult
- Used alone ventilates with ambient air 21%
- Can be increased to 45% by attaching oxygen at 5-6L min
- Can be increased to approx 90% if reservoir system attached and oxygen increased to 10L min
- Excessive compression of bag may lead to gas passing into stomach

### CHOKING

Airways obstruction caused by solid matter – attack usually occurs while eating and victim may clutch his neck

### CHOKING

#### **Signs of severe obstruction**

# RESPONSE TO QUESTION 'ARE YOU CHOKING?'

- Victim unable to speak
- Victim may respond by nodding
- OTHER SIGNS:
- Victim unable to breathe
- Breathing sounds wheezy
- Attempts at coughing are silent
- Victim may be unconscious

Signs of mild obstruction

- RESPONSE TO QUESTION 'ARE YOU CHOKING?'
- Victim speaks and answers yes
- OTHER SIGNS
- Victim is able to speak, cough, and breathe

#### **RECOGNITION OF AIRWAY OBSTRUCTION**

- Best achieved by look, listen and feel approach
  - LOOK for chest and abdominal movements, observe colour
  - LISTEN AND FEEL for airflow at the mouth
- Central cyanosis is a late sign of airway obstruction

### PARTIAL OBSTRUCTION

- Air entry is diminished and usually noisy
- INSPIRATORY STRIDOR (noise on breathing in) is caused by obstruction at laryngeal level or above
- EXPIRATORY WHEEZE suggests obstruction of lower airways which may collapse during expiration e.g.asthma

### PARTIAL OBSTRUCTION

- GURGLING suggests presence of liquid or semi solids in main airways
- SNORING occurs when pharynx is partially occluded by tongue
- CROWING sound of laryngeal spasm (causes considerable distress)

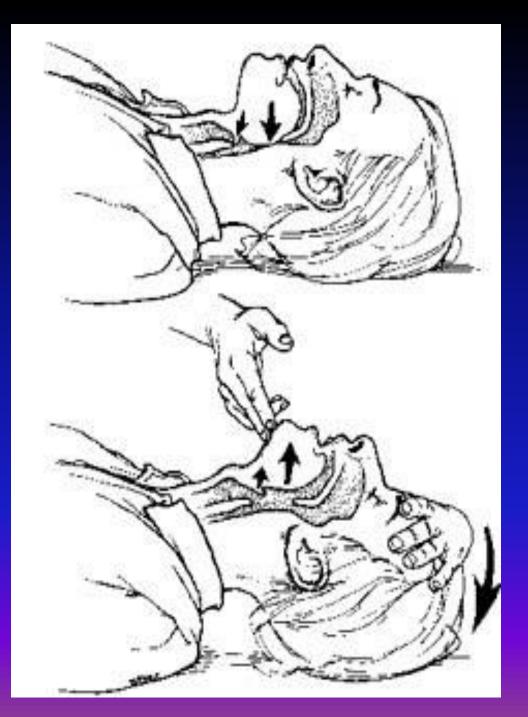
### **COMPLETE OBSTRUCTION**

- Breath sounds absent
- Paradoxical chest and abdominal movement as person attempts to breathe in chest wall lifts but abdomen is drawn inwards – often described as 'see saw' breathing
- Use of accessory muscles neck and shoulder as they attempt to assist chest movement

### WHAT TO DO

- Get help in all cases
- Encourage to cough
- Do nothing else





### WHAT TO DO -severe obstruction

- If conscious give up to 5 back blows:
  - Stand to side and slightly behind victim
  - Support chest and lean victim forward
  - Give up to 5 sharp blows between shoulder blades with heel of hand
  - Check between each one to see of obstruction is clear



### WHAT TO DO -severe obstruction

- If back blows fail, give up to 5 abdominal thrusts:
  - Stand behind victim and put both arms around upper part of abdomen
  - Lean victim forwards
  - Clench your fist and place between umbilicus and sternum
  - Grasp with other hand
  - Pull sharply inwards and upwards
  - Repeat up to 5 times



# WHAT TO DO -Unconscious victi

- Support carefully to the ground
- Call 999
- Begin CPR even if a pulse is present



### NOTES

- Following successful treatment foreign materials may remain in upper respiratory tract
- Victims should be seen by a doctor particularly if a persistent cough, difficulty swallowing or the feeling of something stuck in the throat is present
- Abdominal thrusts can cause serious internal injuries

<u>www.sja.org.uk/sja/first-aid-</u> advice/breathing/choking-adults.aspx

#### Anaphylaxis is a potentially fatal severe allergic reaction

<u>www.emerade.com</u>

 Symptoms can occur quickly or within hours following contact with an allergen. Prompt treatment can save your life. If you have an adrenaline auto-injector - use it immediately

### Common causes

 Common causes of anaphylaxis are wasp and bee stings as well as food, such as peanuts, nuts, sesame seed, fish and shellfish, dairy products and egg. Other causes include latex, penicillin and some other medications.

### **Symptoms**

- Itching, especially under the feet, in the hands or on the head
- A stinging feeling in the mouth
- Swelling in the mouth, throat, lips or eyes
- Itching, redness or nettle-rash anywhere on the body
- Dizziness, anxiety, cold sweating
- Abdominal pain, nausea or vomiting
- Shortness of breath or asthma symptoms
- Sudden fatigue, decreased blood pressure or fainting
- Disorientation or loss of consciousness

Critical symptoms: You find it hard to breath, your mouth and throat swell, you feel sudden fatigue or dizziness, or you experience a steady worsening of symptoms.

If you experience these critical symptoms, inject adrenaline immediately. Call 999 and say "anaphylaxis".

### Treatment

- Avoiding the allergens to which you are sensitive is the best way to prevent allergic reactions or anaphylaxis.
- Adrenaline is first line treatment for anaphylaxis. If you have an adrenaline auto-injector use it immediately.
  <u>How adrenaline works</u>
- Antihistamine and steroid tablets. Antihistamine reduces hives, itching and irritation. Cortisone reduces the risk of late onset reactions that can occur some hours following contact with allergens