ADULT BASIC LIFE SUPPORT (BLS)
Students should be able to demonstrate:

– How to assess the collapsed victim
– How to perform chest compression and rescue breathing
– How to place an unconscious breathing victim in the recovery position.
BACKGROUND

• Approximately **700,000** cardiac arrests per year in Europe

• Survival to hospital discharge presently approximately **5-10%**

• Bystander CPR vital intervention before arrival of emergency services – **double or triple** survival from SCA (sudden cardiac arrest)

• Early resuscitation and prompt defibrillation (within 1-2 minutes) can result in **>60% survival**
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CHAIN OF SURVIVAL

Early recognition and call for help
- to prevent cardiac arrest

Early CPR
- to buy time

Early Defibrillation
- to restart the heart

Post resuscitation care
- to restore quality of life
SEQUENCES OF PROCEDURES PERFORMED TO RESTORE THE CIRCULATION OF OXYGENATED BLOOD AFTER A SUDDEN PULMONARY AND/OR CARDIAC ARREST

CHEST COMPRESSIONS AND PULMONARY VENTILATION PERFORMED BY ANYONE WHO KNOWS HOW TO DO IT, ANYWHERE, IMMEDIATELY, WITHOUT ANY OTHER EQUIPMENT

Protective devices
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- Approach safely
- Check response
- Shout for help
- Open airway
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths
### APPROACH SAFELY!

<table>
<thead>
<tr>
<th>Scene</th>
<th>Approach safely</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Check response</td>
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<tr>
<td>Rescuer</td>
<td>Shout for help</td>
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<tr>
<td>Victim</td>
<td>Open airway</td>
</tr>
<tr>
<td>Bystanders</td>
<td>Check breathing</td>
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CHECK RESPONSE

- Approach safely
- Check response
- Shout for help
- Open airway
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths
Shake shoulders gently
Ask “Are you all right?”
If he responds
• Leave as you find him.
• Find out what is wrong.
• Reassess regularly.
SHOUT FOR HELP

Approach safely
Check response
Shout for help
Open airway
Check breathing
Call 112
30 chest compressions
2 rescue breaths
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<thead>
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**Open Airway**

- Approach safely
- Check response
- Shout for help
- Open airway
- Check breathing
- Call 112
- 30 chest compressions
- 2 rescue breaths

[Image of a person performing CPR on a person.]
OPEN AIRWAY

Head tilt and chin lift
- lay rescuers
- non-healthcare rescuers

No need for finger sweep unless solid material can be seen in the airway
Head tilt, chin lift + jaw thrust
- healthcare professionals
Approach safely
Check response
Shout for help
Open airway
Check breathing
Call 112
30 chest compressions
2 rescue breaths
CHECK BREATHING

- Look, listen and feel for NORMAL breathing
- Do not confuse agonal breathing with NORMAL breathing
AGONAL BREATHING

- Occurs shortly after the heart stops in up to 40% of cardiac arrests.
- Described as barely, heavy, noisy or gasping breathing.
- Recognise as a sign of cardiac arrest.

Erroneous information can result in withholding CPR from cardiac arrest victim.
Approach safely
Check response
Shout for help
Open airway
Check breathing
Call 155 / 112
30 chest compressions
2 rescue breaths
FOREIGN-BODY AIRWAY OBSTRUCTION (FBAO)

Approximately 16,000 adults and children receive treatment for FBAO in the UK yearly

<table>
<thead>
<tr>
<th>SIGNS</th>
<th>MILD obstruction</th>
<th>SEVERE obstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Are you choking?”</td>
<td>“YES”</td>
<td>Unable to speak, may nod</td>
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<tr>
<td>Other signs</td>
<td>Can speak, cough, breathe</td>
<td>Can not breathe/wheezy breathing/silent attempts to cough/unconsciousness</td>
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</table>
ADULT FBAO TREATMENT

Assess severity

Severe airway obstruction (ineffective cough)

- Unconscious: Start CPR
- Conscious: 5 back blows, 5 abdominal thrusts

Mild airway obstruction (effective cough)

- Encourage cough: Continue to check for deterioration to ineffective cough or until obstruction relieved
BACK BLOWS
ABDOMINAL THRUSTS
30 CHEST COMPRESSIONS

Approach safely
Check response
Shout for help
Open airway
Check breathing
Call 112

30 chest compressions
2 rescue breaths
• Place the heel of one hand in the centre of the chest
• Place other hand on top
• Interlock fingers
• Compress the chest
  – Rate 100 min\(^{-1}\)
  – Depth 4-5 cm
  – Equal compression : relaxation
• When possible change CPR operator every 2 min
RESCUE BREATHS

Approach safely
Check response
Shout for help
Open airway
Check breathing
Call 112
30 chest compressions
2 rescue breaths
• Pinch the nose
• Take a normal breath
• Place lips over mouth
• Blow until the chest rises
• Take about 1 second
• Allow chest to fall
• Repeat
RESCUE BREATHS

RECOMMENDATIONS:
- Tidal volume
  500 – 600 ml
- Respiratory rate
  give each breaths over about 1s with enough volume to make the victim’s chest rise
- Chest-compression-only
  continuously at a rate of 100 min
CONTINUE CPR

30

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Approach safely
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Some AEDs will automatically switch themselves on when the lid is opened.
ATTACH PADS TO CASUALTY’S BARE CHEST
ANALYSING RHYTHM
DO NOT TOUCH VICTIM
SHOCK INDICATED

- Stand clear
- Deliver shock
SHOCK DELIVERED
FOLLOW AED INSTRUCTIONS

30

2
NO SHOCK ADVISED

FOLLOW AED INSTRUCTIONS

30

2
IF VICTIM STARTS TO BREATHE NORMALLY PLACE IN RECOVERY POSITION
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CONTINUE RESUSCITATION UNTIL

- Qualified help arrives and takes over
- The victim starts breathing normally
- Rescuer becomes exhausted
1. Name adult basic life support sequences of actions.
2. What is the manoeuvre for keeping the airway open called?
3. What is the numeral combination of chest compression and rescue breaths in adult basic life support?
4. Where do you place your hands while performing chest compressions?
5. How would you describe „agonal breathing“?
6. What is the telephone number of emergency response system?
7. Name 2 techniques applied in severe airway obstruction?
THANK YOU

Consultations: Monday 3.30 – 4.00pm