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SHSS6067

Sports Trauma Management Basic Life Support

*Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives*



www.uwtsd.ac.uk

- Introduction

- Cardiac arrest is one of the worst case scenario's for any therapist
- Can take place ANYWHERE
 - On field
 - Changing rooms
 - Clinic
 - During travel
 - Etc....
- This session will focus on Cardiopulmonary Resuscitation of adults and children, choking and the recovery position.

Learning outcomes

- Upon completion of this session, you should be able to demonstrate the ability to deliver basic life in the Immediate Care in Sport setting to the injured/ill athletes.

Objectives

- Understand the chain of survival.
- Identify potential risks to the rescuer and accept a safe approach.
- Understand the basic life support algorithm for adults.
- Identify correct cardio pulmonary resuscitation (CPR) techniques.
- Understand the basic life support algorithm for children, identifying differences from adult CPR.
- Understand the adult choking algorithm.
- Understand the paediatric choking algorithm.
- Understand when and how to use the recovery position.

Chain of Survival



Rescuer Safety

- SAFE Approach
 - **S** for Shout for help
 - **A** for Assess the scene
 - **F** for Free from danger
 - **E** for Evaluate the player

- Vigilant
 - Safety is dynamic in time & place not confined to a single assessment at the beginning of the incident
- Correct clothing
- Gloves
- Hi Vis Bib

Rescuer Safety

- When considering CPR (Esp. mouth-to-mouth) there is a risk of infection
 - To date:
 - 15 documented cases of CPR related infection
 - Meningitis
 - Tuberculosis
 - HIV transmission from high-risk cutaneous exposure
 - No cases of Hep B or C or CMV (Mono)
 - The best way to prevent risk of infection is to use a face shield or ideally a pocket mask

Pocket Mask



- Port allows the attachment of oxygen piping to increase the amount of oxygen being delivered
- Usually 16% in expired air
- Can create good seal with C-Shaped grip

C Shaped Grip



Traditional Shaped Grip



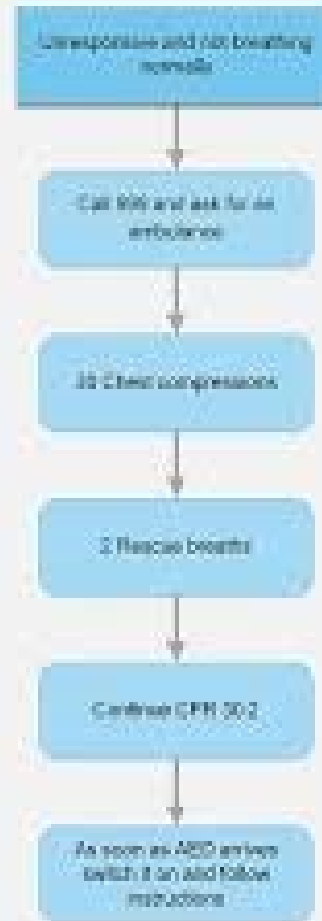
Adult Basic Life Support (BLS) (Jan 2015)



Resuscitation Council (UK)



Adult Basic Life Support



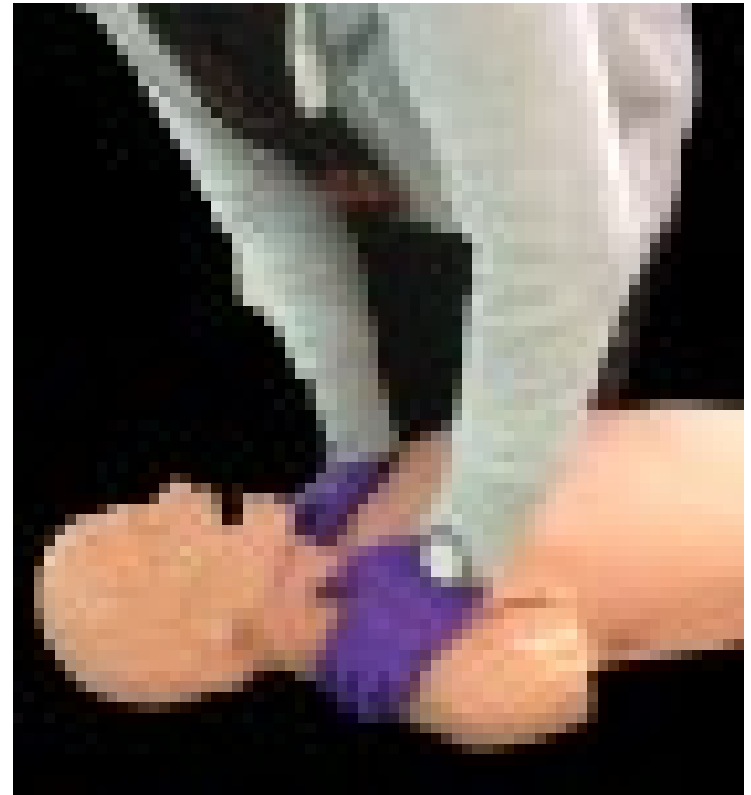
Adult BLS Jan 2015

1. SAFE approach
2. Response • Hello can you hear me? Can you open your eyes?
3. Open Airway
4. Check Breathing
 - Not breathing normally?
5. Call Emergency Services (999)
6. 30 Chest Compressions
7. 2 Rescue Breaths
8. Continue at 30:2

1. SAFE approach
- 2. Response**
 - **Hello can you hear me?**
 - **Can you open your eyes?**
3. Open Airway
4. Check Breathing
 - Not breathing normally?
5. Call Emergency Services (999)
6. 30 Chest Compressions
7. 2 Rescue Breaths
8. Continue at 30:2

• **Checking for a Response:**

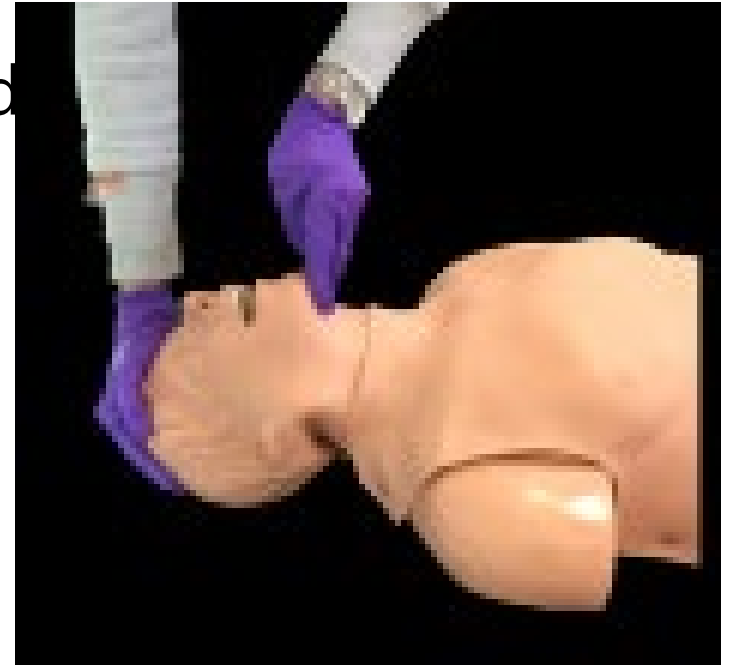
- Approach casualty
- Place one or two hands on their shoulder
- Say loudly:
- “Hello, can you hear me; can you tell me what happened”
- DO NOT SHAKE THE CASUALTY



1. SAFE approach
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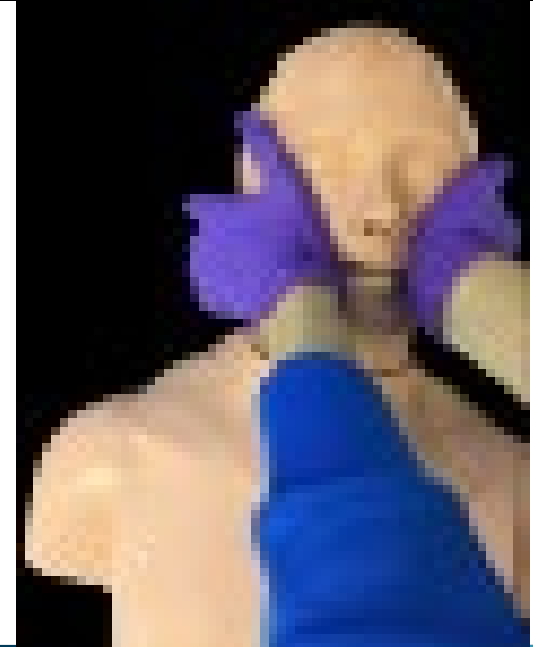
Open Airway

- Head Tilt, Chin Lift
 - Place one hand on forehead
 - Two fingers under the chin
 - Lift the chin upwards
 - The head in this position brings the tongue forward removing any potential block of the airway



Open Airway

- Jaw Thrust
- Fingers hook underneath the mandible (Jaw) and pull the jaw forward
- The bottom set of teeth should move forward
- The tongue should also move forward and clear of the airway
- Unlikely to be tolerated in a conscious patient
- Used if suspicion of spinal injury



1. SAFE approach
2. Response
 - Hello can you hear me?
 - Can you open your eyes?
3. Open Airway
- 4. Check Breathing**
 - Not breathing normally?
5. Call Emergency Services (999)
6. 30 Chest Compressions
7. 2 Rescue Breaths
8. Continue at 30:2

Check Breathing

- Listen
 - For any noises
- Look
 - For the rise and fall of the chest
- Feel
 - For expired air on your cheek
- Assess
 - For at least 10 secs

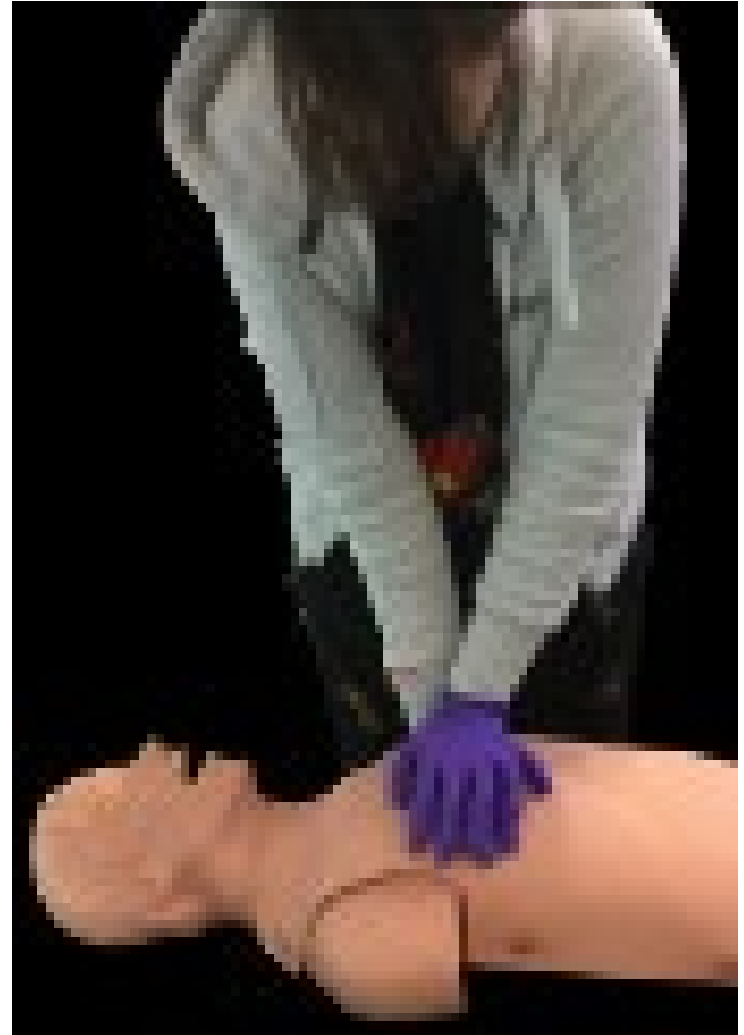


1. SAFE approach
2. Response
 - Hello can you hear me?
 - Can you open your eyes?
3. Open Airway
4. Check Breathing
 - Not breathing normally?
- 5. Call Emergency Services (999)**
 - Unresponsive Not Breathing**
6. 30 Chest Compressions
7. 2 Rescue Breaths
8. Continue at 30:2

1. SAFE approach
2. Response
 - Hello can you hear me?
 - Can you open your eyes?
3. Open Airway
4. Check Breathing
 - Not breathing normally?
5. Call Emergency Services (999)
- 6. 30 Chest Compressions**
7. 2 Rescue Breaths
8. Continue at 30:2

Chest Compressions

- Two Hands over the middle of the chest
- Straight arms
- Compress to depth of 5-6cm
- At a rate of 100-120bpm
- Repeat 30 times



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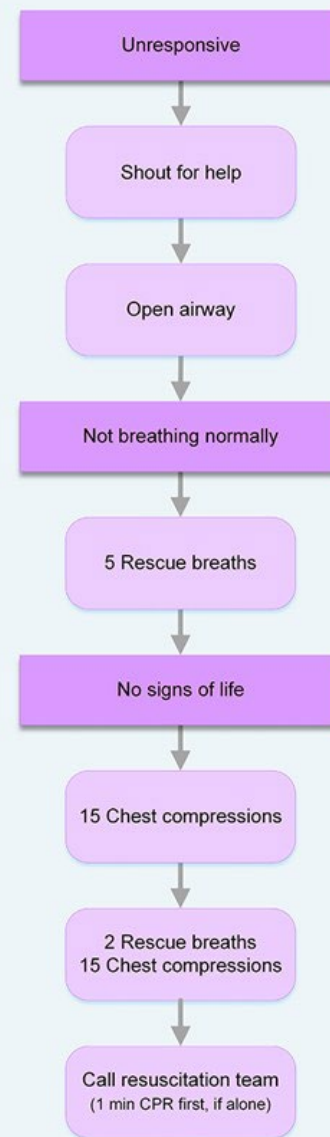
Rescue Breaths

- Use your pocket mask
- Make a seal (traditional or C-Shaped)
- Blow steadily in for 1 sec
- Watch chest to fall for 1 sec
- Repeat breath in for 1 sec
- Watch chest to fall for 1 sec
- Total for two breaths is 4-5sec
- Commence chest compressions immediately after the 2 breaths

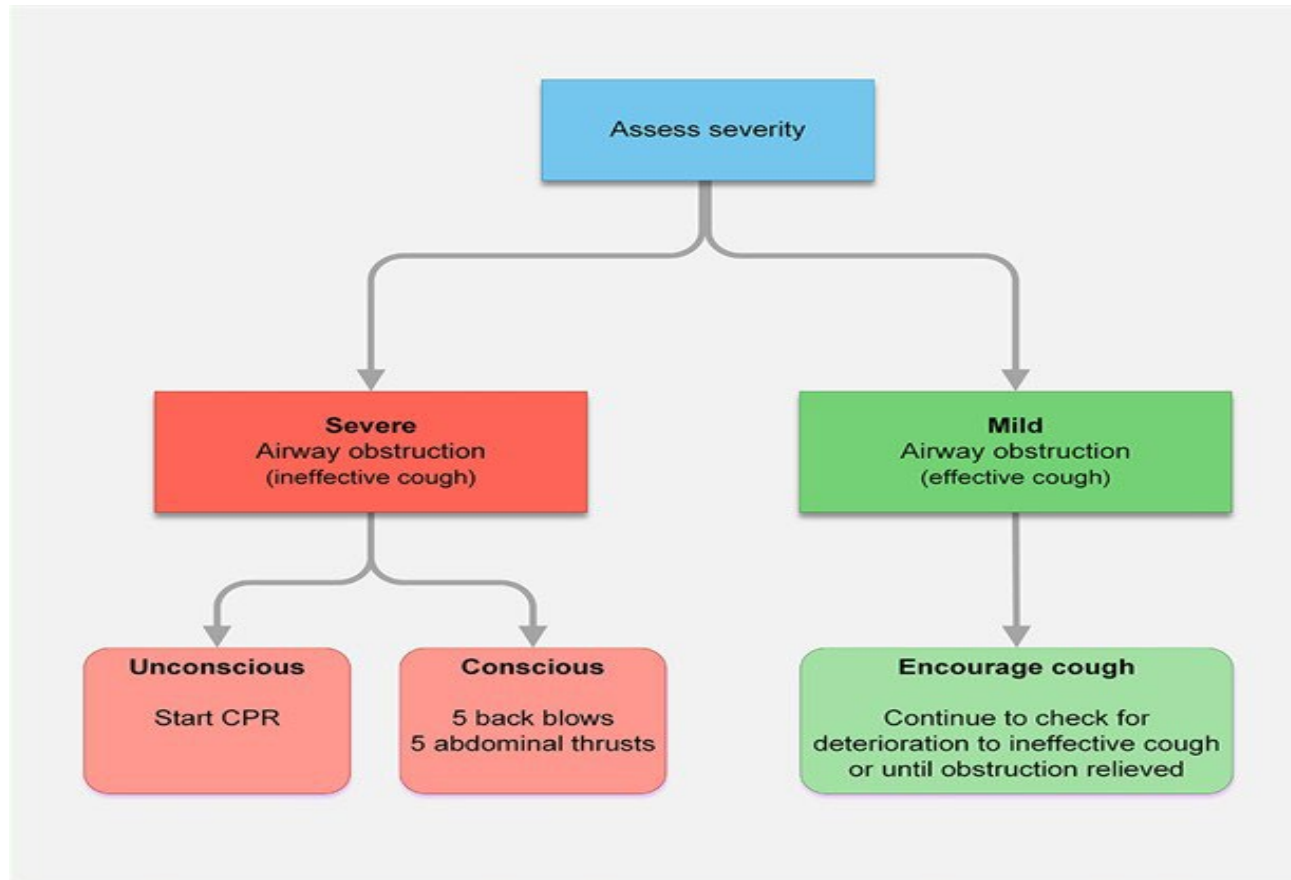


Paediatric Basic Life Support

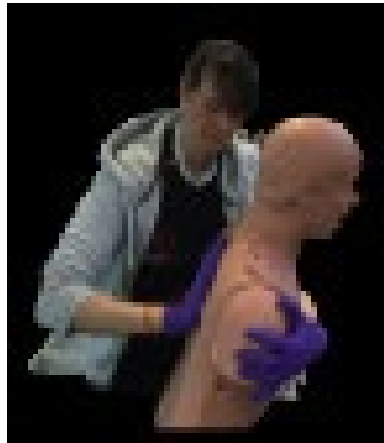
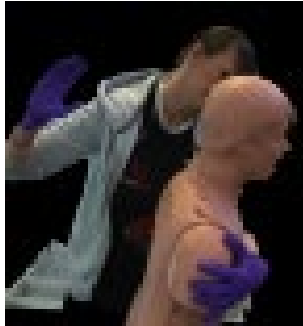
- Key differences
- 5 Rescue Breaths
- Recheck ABC's
- Perform 15 chest compressions
 - 4-5cm depth
 - 100-120 per minute
- Rescue Breaths
 - Use paediatric pocket mask
 - OR invert the adult pocket mask



Adult Choking



Adult Choking



Back Blow:

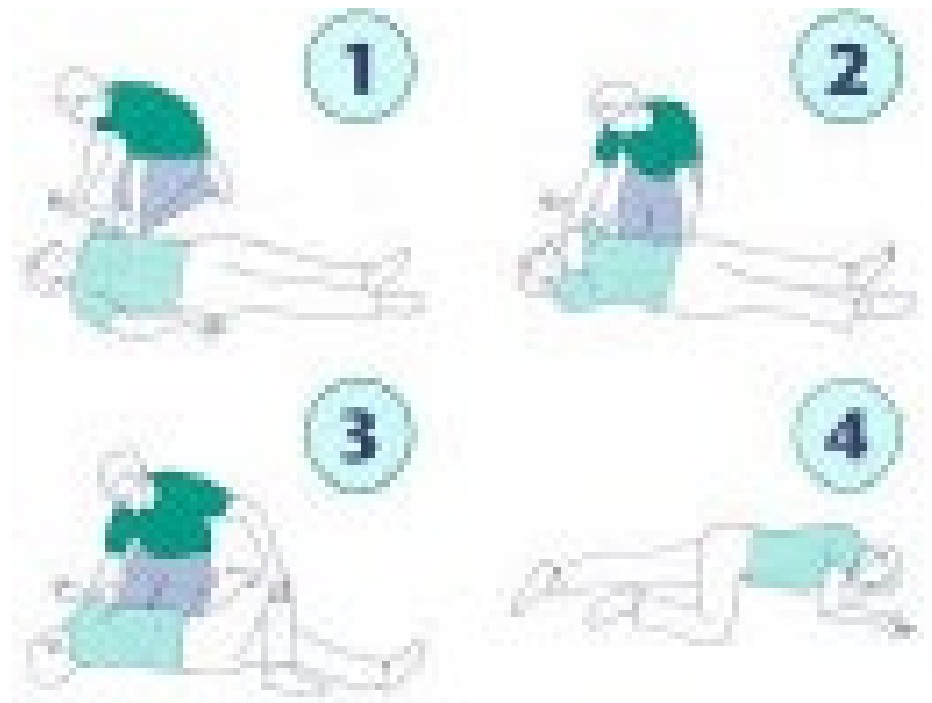
- Lean the patient forward
- Strike the patient with an open palm on their mid back

Abdominal Thrust:

- Place closed fist under the rib cage and pull upwards towards the eyes

Recovery Position

- Used to assist open airway
- USE ONLY IF:
 - Patient is breathing
 - Has a pulse
 - Is unconscious
 - No suspicion of spinal injury



Summary

- SAFE Approach
- Airway
- Breathing
- Cardiopulmonary Resuscitation
- Choking
- Recovery Position
- <https://www.resus.org.uk/resuscitation-guidelines/>