

BRONZE MEDALLION

PUA21010 Certificate II in Public Safety (Aquatic Rescue)

RESUSCITATION

Chapter 4

Learning outcomes

- Chain of survival
- Perform CPR
- Primary assessment
- Lateral position
- Complications during rescue breathing

Chain of Survival

Resuscitation is the preservation or restoration of life by establishing and maintaining a person's airway, breathing and circulation. The management of a collapsed person is based on the

“Chain of survival”.



Early access

Early CPR

Early defibrillation

Early advanced
life support

Australian for life.



What is CPR?

Cardio Pulmonary resuscitation

Cardio = heart

Pulmonary = lungs

When combined, rescue breathing and chest compressions establish effective life support, and can prevent irreversible brain damage resulting from lack of circulating oxygen

Primary Assessment

- Danger
- Response
- Send for help
- Airway
- Breathing
- Compression
- Defibrillation

Checking for Danger & Response



Check for dangers to yourself, bystanders & the casualty.

A common danger is casualties body fluids.

Introduce gloves and mask ASAP



Squeeze the shoulders without moving the head



Putting on gloves while checking for danger

If unresponsive
call 000

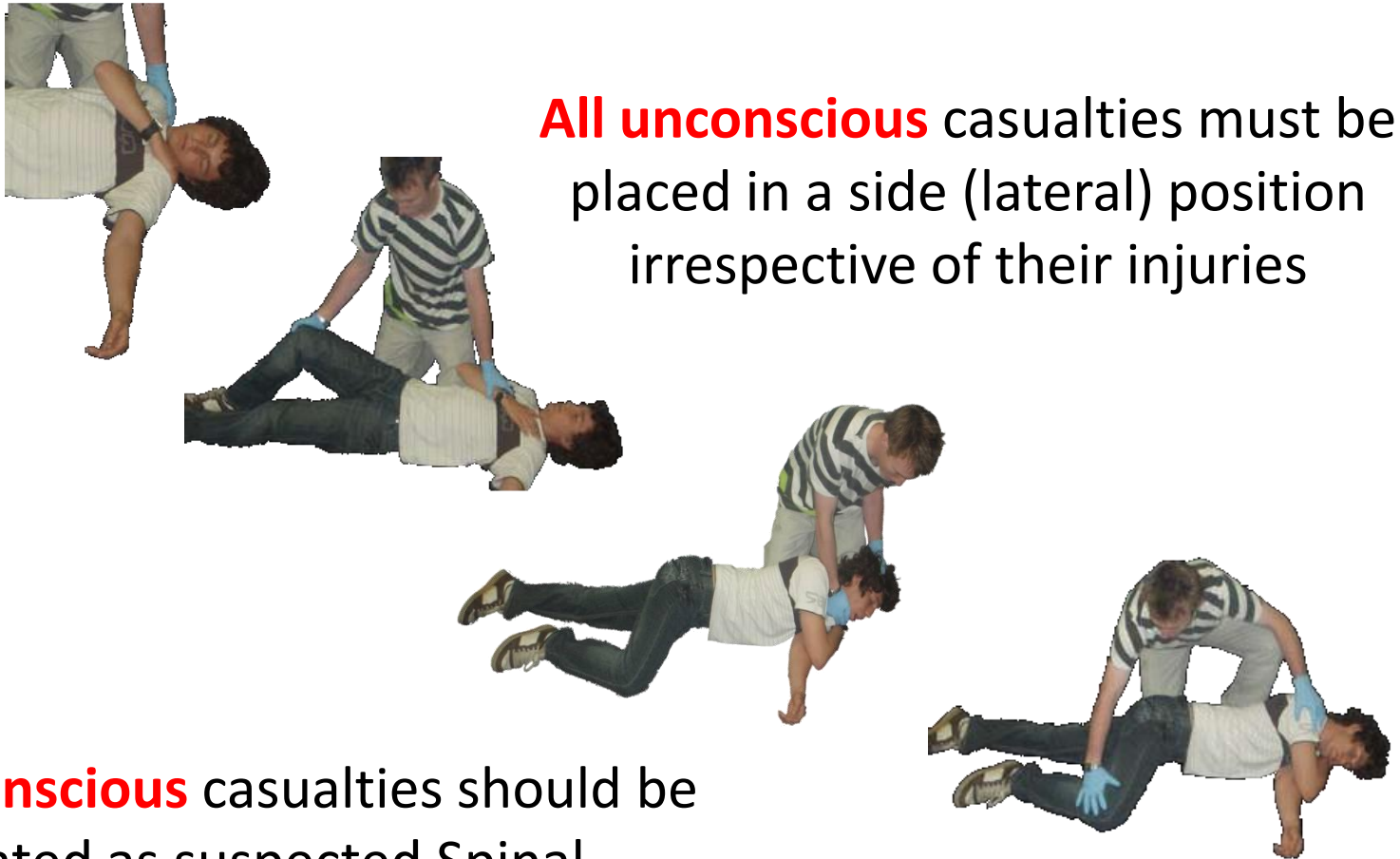


Check verbal response & "squeeze my hand"

Australian for life.



Airway (Side (lateral) Position)



All unconscious casualties must be placed in a side (lateral) position irrespective of their injuries

All unconscious casualties should be treated as suspected Spinal

Airway

(backward head tilt & chin lift)

Tongue blocking airway

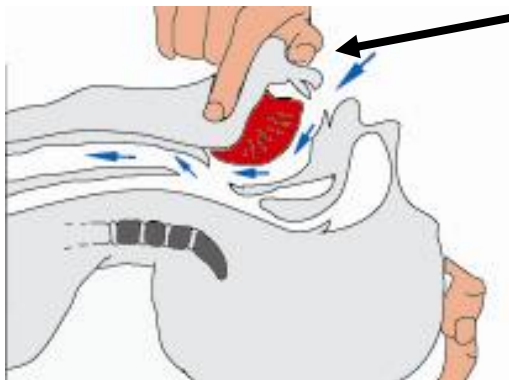


Jaw support (Pistol Grip)



Pistol Grip

Clear airway (Backward head tilt & Chin Lift)



Jaw Thrust



Maximum Head Tilt
(Except Infants)

Airway (Clearing the airway)

Checking airway on back



Clearing airway on back



Use finger sweep to remove foreign material

Checking airway on side



Clearing airway on side



A clear airway is the key to a successful resuscitation

Breathing



On back

Check for breathing:

- LOOK
- LISTEN
- FEEL



On side

If no breathing:
Deliver 2 rescue breaths

Mouth to mouth rescue breathing

Mouth to mask rescue breathing

Check for breathing and response. None = start CPR



Mouth to mouth



Mouth to nose



Pistol grip

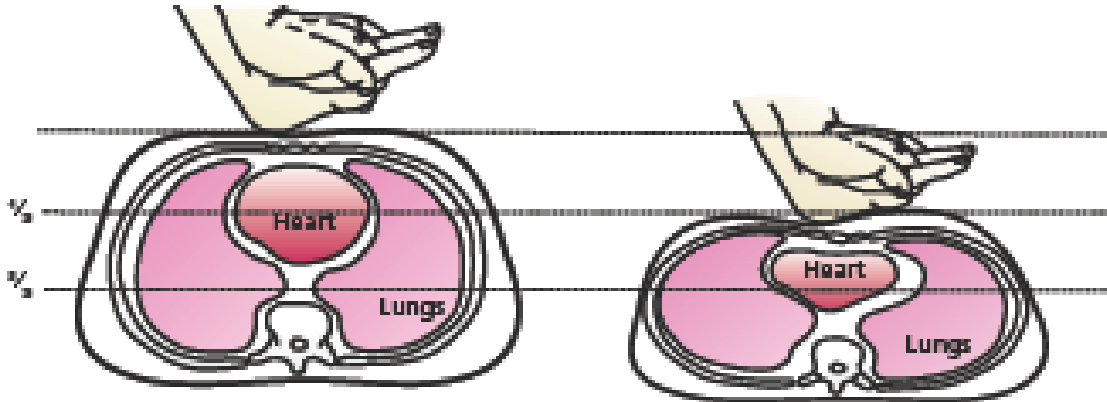


Jaw thrust

Compressions

CPR RATES

BODY TYPE	COMPRESSION: RESCUE BREATHS	CYCLES PER 2 MINUTES	DEPTH OF COMPRESSION	NUMBER OF HANDS	LOCATION OF COMPRESSION	HEAD TILT
ADULT	30:2	5	1/3 depth of chest	2 hands	centre of chest	maximum
CHILD	30:2	5	1/3 depth of chest	2 hands	centre of chest	maximum
INFANT	30:2	5	1/3 depth of chest	2 fingers	centre of chest	no head tilt



It is important to compress 1/3 the depth of the chest to effectively “squeeze” the blood out of the heart, then fully release hand pressure to allow the heart to refill

step 5 compressions

Locate the correct compression point by visualising the centre of the chest.



Correct hand position



Recovery after CPR

Monitor airway and breathing of the unconscious casualty in the lateral position



Always suspect a spinal injury in any unconscious casualty where the cause of unconsciousness was not witnessed. Therefore be very careful when moving the casualty

Caring for casualties after CPR.

- Maintain a clear airway.
- Continue to check for breathing and response
- Manage the environment and protect from the weather.
- Handle the casualty gently and reassure.
- Leave defib pads in position.
- Refer all CPR casualties to hospital.

Complications during rescue breathing

Blocked airway

If the casualties chest does not rise, check:

- Head tilt & jaw lift.
- No foreign material in airway.
- Good seal.
- Sufficient air being blown in.

Distension of the stomach.

Usually caused by over breathing or drowning. Prevent further distension by:

- Maintaining a clear airway.
- Watch the rise & fall of the chest.
- Blow only until the chest rises.
- Don't blow too quickly or hard.



Clear the airway after vomiting or regurgitation



Resuscitation of infants and small children

Children (12 months – eight yrs):

- Smaller breaths than adults

Infants (up to 12 months):

- Neutral head tilt
- Mouth to mouth and nose
- Smaller breaths than children

Both – blow only until chest is seen to rise



Communicable diseases

Examples of communicable diseases

- Colds.
- Measels or mumps.
- Skin infections (sores).
- Hepatitis (various strains)
- HIV infection.
- Herpes viruses.

Means of transmission

- Blood, saliva, vomit.
- Urine, faeces.

Rules for infection free resuscitation

- Mouth to mask (ASAP)
- Wear gloves
- Wash hands after CPR or first aid
- Use sharps containers for disposal of “sharps”
- Dispose of contaminated waste in a sealed labelled container
- Avoid contact with patients body fluids, wear PPE

Standard precautions and personal protective equipment (PPE)



First Aiders must always take precautions to prevent contact with body fluids or other infectious materials.

- Treat all body fluids as potentially infectious.
- Wash hands thoroughly before and after treatment.
- Always wear surgical gloves and change between treating casualties.
- Use appropriate PPE i.e. gloves, mask, goggles etc.
- Contaminated waste must be placed in appropriate containers and disposed of as per local arrangements.



Removing gloves

Step 1



- **Step 1**

Grasp one glove near the cuff and pull down and off the hand, turning the glove inside out, and hold it in the still gloved hand.

- **Step 2**

Grasp the second glove at the cuff and pull down and off the hand.

Step 2



- **Step 3**

Cover the already removed glove with the one now being removed.

- **Step 4**

Pull the second glove off completely. This leaves both gloves inside out and one inside the other ready for disposal

Step 3

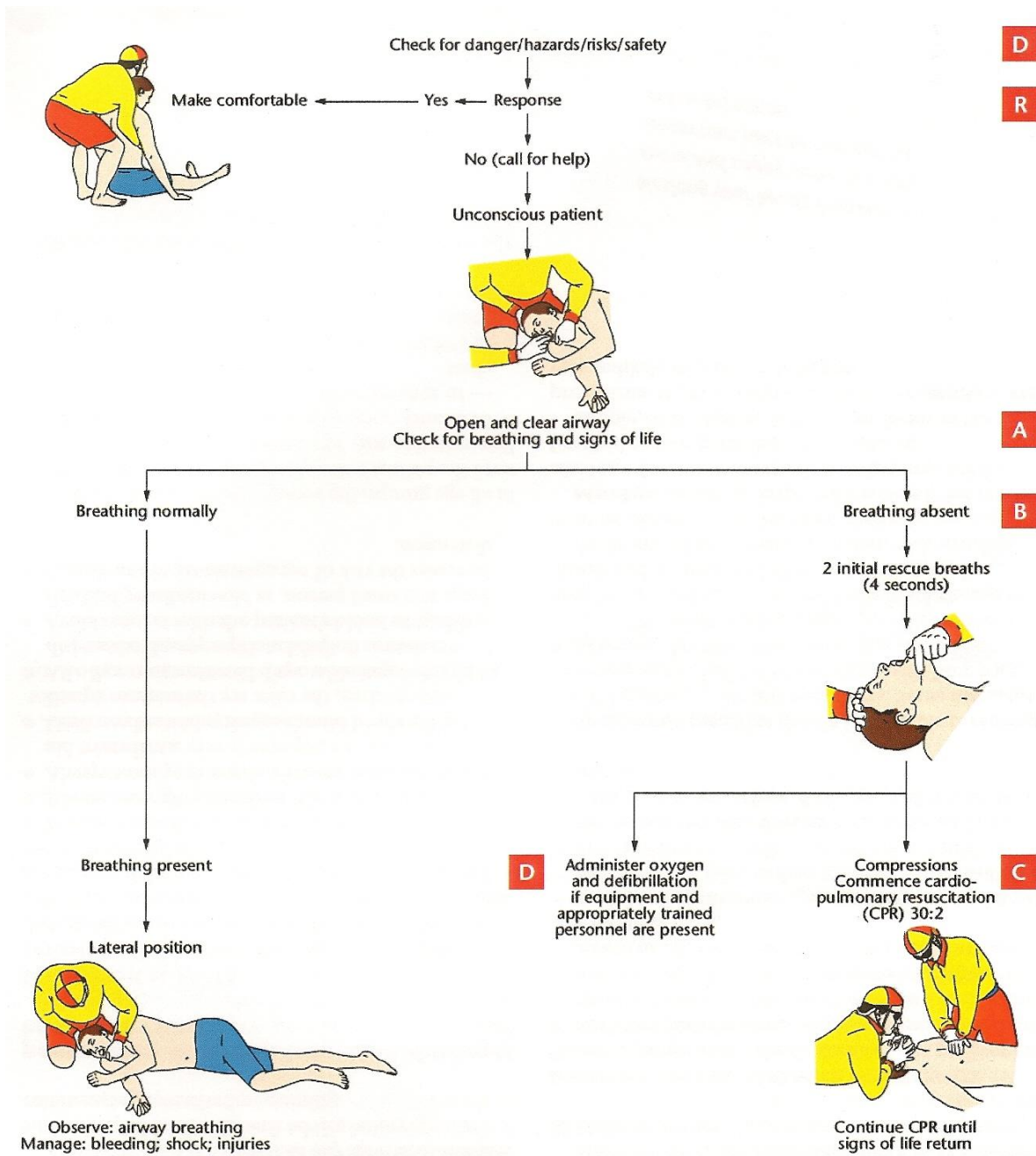


Step 4



DRSABCD summary

	ADULT/OLDER CHILD	CHILD	INFANT
Age range	9 and above	1 to 8 years	Newborn to 12 months
Compress with	2 hands	1 or 2 hands	2 fingers
Depth of compression	$\frac{1}{3}$ depth of chest	$\frac{1}{3}$ depth of chest	$\frac{1}{3}$ depth of chest
Method	1 person and 2 person		
Compressions: breaths	30:2		
Rate	100 comp/min		
Approx cycles per min	2½		
Head tilt	Backward	Slight	Neutral



Flowchart

Thank you

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