



World Health
Organization

Medical Resuscitation Algorithm



1 Recognize



Recognize an acutely ill patient using the **Interagency Integrated Triage Tool (IITT)**.



Move patient to red or resuscitation area.

2 Resuscitate



Use the **ABCDE approach** to systematically evaluate the patient, identify and correct immediate life threats.

Remember:

- 1 If suspected TRAUMA, maintain spine precautions & follow trauma algorithm.
- 1 Special considerations in paediatric, elderly or pregnant patients.

ABCDE Approach

AIRWAY



A

LOOK FOR:

- Unconscious with limited or no air movement
- Foreign body in airway
- Gurgling
- Stridor

ACT:

- Open the airway (Use jaw thrust or head tilt and chin lift).
- Insert OPA or NPA.
- Place in recovery position.
- Encourage coughing. Remove visible foreign body.
- If unable to cough: chest/abdominal thrust/back blow as indicated.
- If patient becomes unconscious, start CPR per local protocols.
- Open airway as above, suction (avoid gagging).
- Keep patient calm and allow position of comfort.
- For signs of anaphylaxis: give IM adrenaline.
- For hypoxia: give oxygen.

2 Is the patient talking normally with no signs of obstruction?

CHECK:

Is airway clear?

- ✓
- ✗ Re-evaluate Airway
- ✗ Re-intervene
- ✗ Reach out to advanced provider

BREATHING



B

LOOK FOR:

- Signs of abnormal breathing or hypoxia
- Wheeze
- Signs of tension pneumothorax
- Signs of opiate overdose (altered mental status and slow breathing with small pupils)
- Signs of organophosphate poisoning (difficulty in breathing, sweating, vomiting, diarrhoea, salivation)

ACT:

- Give oxygen. Assist ventilation with BVM if breathing NOT adequate.
- Give salbutamol. For signs of anaphylaxis: give IM adrenaline.
- Perform needle decompression, give oxygen and IV fluids.
- Arrange for chest tube.
- Give naloxone.
- Give atropine.

2 Does the patient have increased work of breathing, abnormal breathing pattern, abnormal breath sounds, cyanosis, chest wounds? *Check oxygen saturation.

CHECK:

Is breathing adequate?

- ✓
- ✗ Re-evaluate Airway and Breathing
- ✗ Re-intervene
- ✗ Reach out to advanced provider

CIRCULATION



C

LOOK FOR:

- Signs of poor perfusion/shock.
- Signs of internal or external bleeding.
- Signs of pericardial tamponade (poor perfusion with distended neck veins and muffled heard sounds).

ACT:

- Give oxygen and IV fluids. If no pulse, follow relevant CPR protocols.
- Control external bleeding. Give IV fluids.
- Give IV fluids, oxygen. Arrange for rapid pericardial drainage.
- Arrange urgent referral and/or handover.

2 Does the patient have external or internal bleeding, distended neck veins, muffled heart sounds or poor perfusion? *Check BP, HR, capillary refill. *Always adjust fluids for malnutrition.

CHECK:

Is perfusion adequate?

- ✓
- ✗ Re-evaluate Airway, Breathing and Circulation
- ✗ Re-intervene
- ✗ Reach out to advanced provider

DISABILITY



D

LOOK FOR:

- Altered mental status (AMS)
- Convulsion
- Convulsion in pregnancy (or after recent delivery)
- Suspected hypoglycaemia
- Signs of life-threatening brain mass or bleed (AMS with unequal pupils)

ACT:

- Place in recovery position.
- Check glucose.
- Check glucose. Give benzodiazepine.
- Give magnesium sulphate.
- Check glucose. Give glucose if <3.5mmol/L (<60 mg/dL) or unknown.
- Monitor airway, raise head of bed. Avoid hypoxia, hypotension, hyperthermia.
- Rapid transfer for neurosurgical services.

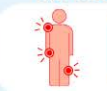
2 Does the patient have head trauma, convulsions, unequal or fixed pupils, movement in all extremities? *Check AVPU. *Always check blood glucose.

CHECK:

Is mental status improved?

- ✓
- ✗ Re-evaluate Airway, Breathing, Circulation and Disability
- ✗ Re-intervene
- ✗ Reach out to advanced provider

EXPOSURE



E

LOOK FOR:

- Wet or constrictive clothing

ACT:

- Remove wet clothing and dry skin thoroughly.
- Remove jewellery, watches & constrictive clothing.
- Prevent hypothermia and protect dignity.

2 Does the patient have hidden injuries, rashes or other lesions? *Expose and examine the entire body.

3 Review



Review patient status and interventions using the **WHO Medical Emergency checklist**.

- ✓ Recheck vital signs.
- ✓ If patient condition changes, repeat **ABCDE**.
- ✓ If no further interventions needed, take a **SAMPLE** history and perform a **SECONDARY** exam.
- ✓ Document care in a WHO Standardised Clinical Form or locally available option.

4 Refer



If health facility unable to provide on going care, arrange for safe transfer to appropriate facility as soon as possible.

REMEMBER: PREPARATION is key. Use the elements of the WHO Emergency Care Toolkit to prepare your unit to better manage emergencies.



Basic Emergency Care



Interagency Integrated Triage tool



Resuscitation Area Designation



Trauma & Medical checklists



Standardised Clinical Form



WHO Clinical Registry

Contact emergencycare@who.int for more information