

Emergency Care Basics



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Disclosures

- I have no relevant financial disclosures

Objectives

By the end of this presentation, you will be able to:

- Understand the limitations of Emergency Care worldwide
- Recognize common signs and symptoms of acute life-threatening conditions.
- Describe the components of the systematic ABCDE approach to emergency patients
- Assess each element of the ABCDE approach and critical actions for each.
- List the elements of and perform a relevant SAMPLE history
- Know when to escalate the care of patients for handover/transfer



Image: Global Emergency Care



Global emergency care

“Over half of deaths and over a third of disability in low- and middle-income countries could be addressed by the implementation of effective emergency and critical care.

Prioritizing an integrated approach to early recognition, resuscitation, treatment, and prevention of complications from acute conditions reduces the morbidity and mortality from a wide range of diseases across the life course.”

ACIOS: The African Critical Illness Outcomes Study



1 out of 8
hospital patients
are critically ill of
which...



Treated in general
wards (not ICUs)



Not receiving Essential
Emergency and Critical
Care



Die within seven days

**Essential Emergency
and Critical Care can
save millions of lives**

Global emergency care

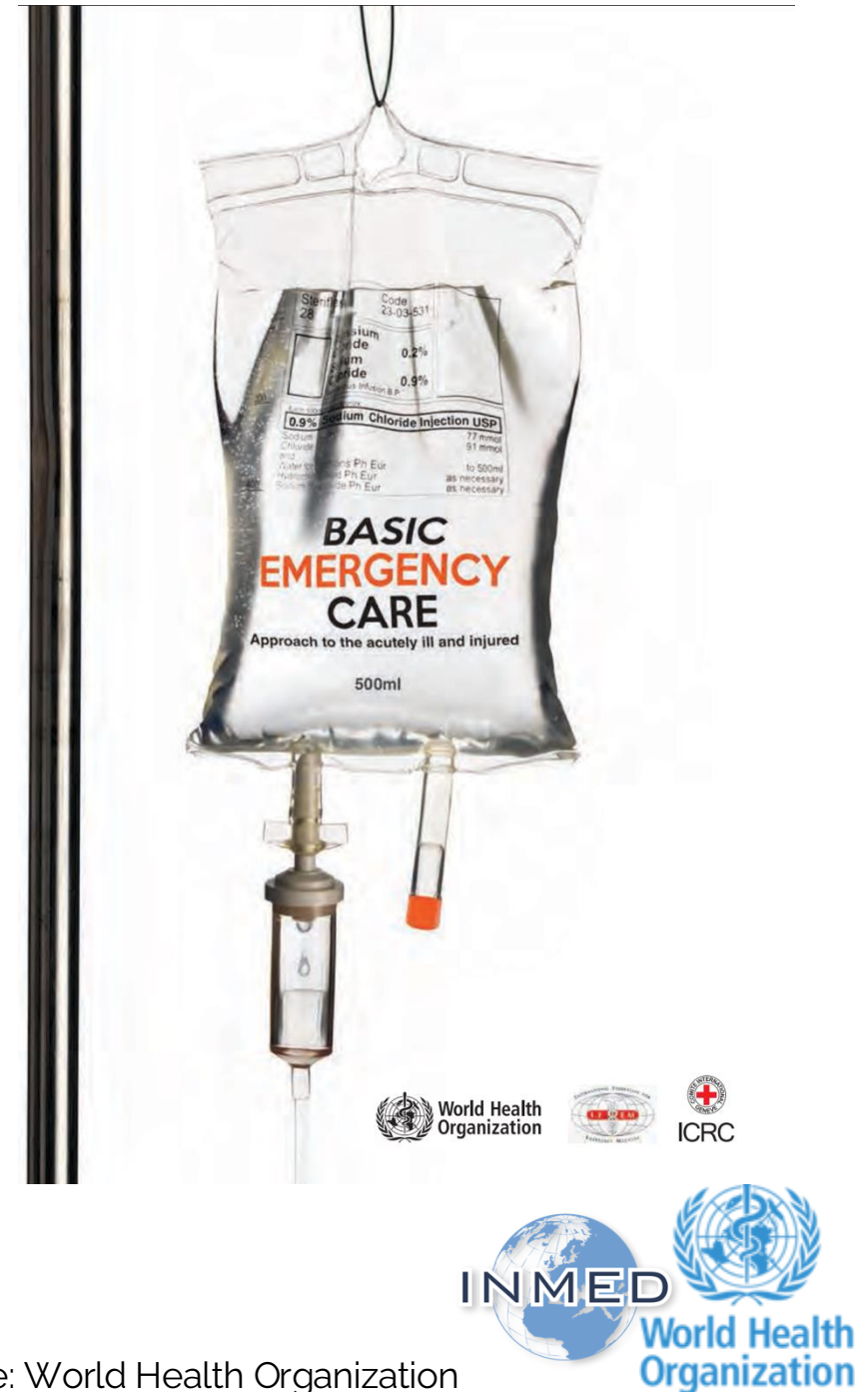
- In low-resource settings, emergency care is provided by general practitioners (often with little/no training in emergencies).
- Most emergencies are managed as other conditions would be on a normal outpatient day, without consideration of the golden hour.
- Many only understood trauma as emergent, negating other medical concerns.
- Equipment (glucometers, pulse oximeters, and defibrillators) is not used due to a lack of trained staff, rather than cost.
- More education is required to improve performance and increase capacity in emergency care in low-resource settings.

WHO - Basic Emergency Care Course

- Much of this presentation today is modeled after the WHO Basic Emergency Care (BEC) course:
 - Open-access course designed for low-resource areas worldwide.
 - Follows a TOT model of sustainability
 - The Mindset – Treat first, Diagnose later
 - What kills first gets treated first
 - Continual reassessment is key
- This mindset is similar to that of courses you have taken in emergency or life-saving care (ACLS, PALS, ATLS, TNCC, etc.).

BEC Course

- Launched in 2018 with ICRC and IFEM
- Uses a systematic approach for all patients
- Focuses on injuries and 3 key syndromes: *breathing difficulty, shock, altered mental status*
- Builds on WHO emergency and clinical care guidelines
- Covers a wide range of conditions across all ages
- Designed for multiple health worker roles and settings, including humanitarian emergencies



What are the basics of Emergency Care?

- How, even with limited resources and specialists, can we make a difference in the emergency care provided?
- How can we increase our confidence to respond in emergencies?
- How can we build the capacity and knowledge in the places where we serve?

Early Recognition – Danger Signs

What is an Emergency?

- Any immediate threat to life, limb, or function.
- Time-sensitive conditions that pose a life-threatening risk also apply.

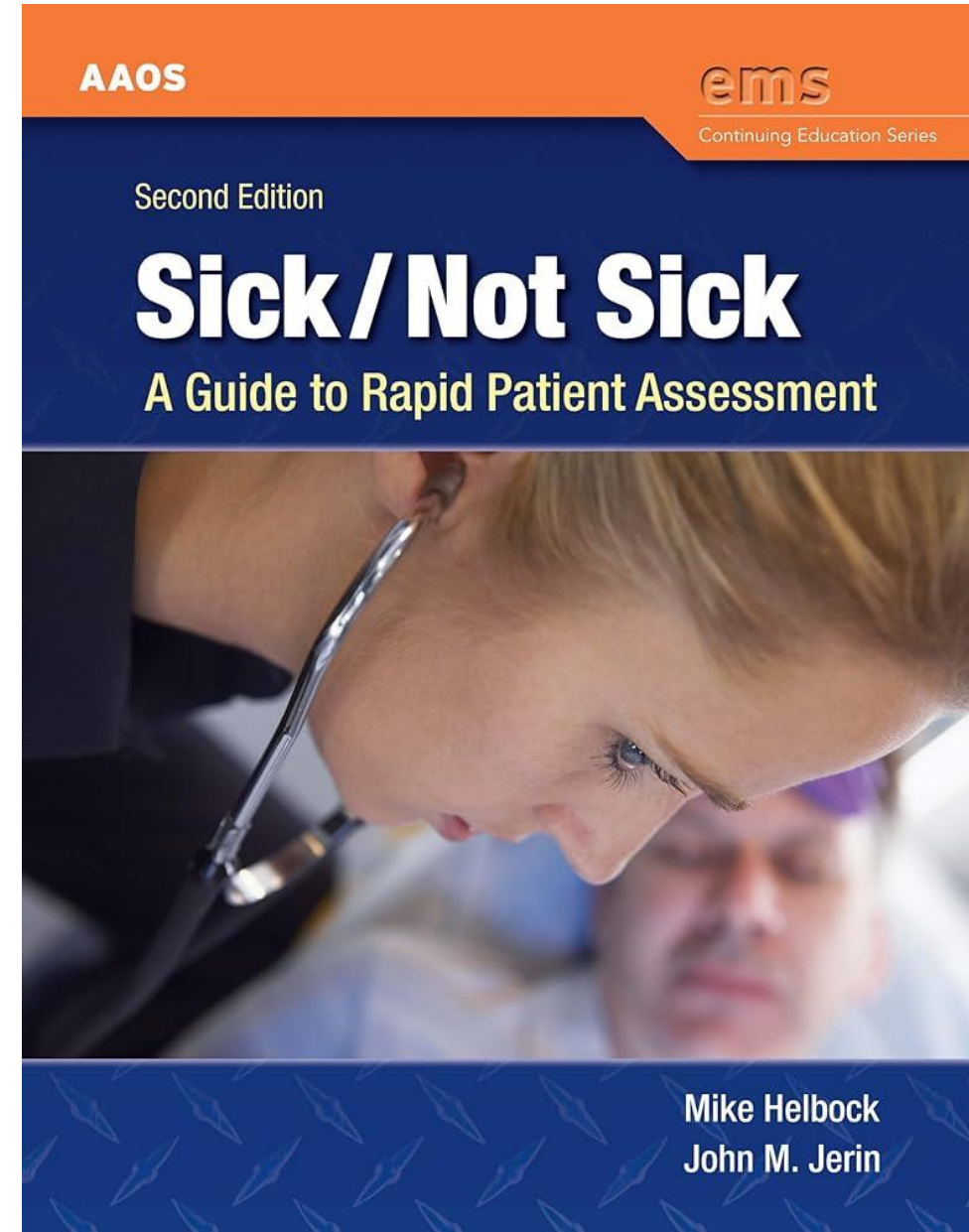
Danger Signs:

- Airway obstruction
- Severe respiratory distress
- Shock
- Altered mental status
- Severe bleeding

First Look Assessment

This is a “from the doorway” type of assessment.

- Completed very quickly
- You must decide whether the patient “*sick or not sick.*”
- “First Look” assessment:
 - General Appearance
 - Work of Breathing
 - Skin color/appearance
 - Level of consciousness



Your patient is sick. What to do?



Image: BBC

Systematic approach - ABCDE

- Approach every patient in a systematic way – creates confidence and decreases delays in life-saving care.
- Recognize life-threatening conditions early
- Perform most critical interventions first
- Fix problems before moving on
- The ABCDE approach is very quick in a stable patient.

Goals:

- Identify **life-threatening conditions** rapidly
- Ensure the airway stays open
- Ensure breathing and circulation are adequate to deliver oxygen to the body

ABCDE: On-Site Response Safety

- The most important step is to keep the rescuers safe.
- Scene safety: Consider hazards, violence, and infectious disease risk
- Examples of hazards
 - Fire
 - Motor vehicle crash
 - Building collapse
 - Chemical spill
- Ask for help early.
- Multiple patients
- Plan for transfer early if needed
- Know who to call for infectious outbreaks or hazardous exposures



Personal Safety considerations

Personal protective equipment

- Consider appropriate PPE for situation
 - Gloves
 - Gown
 - Mask
 - Goggles
 - Hand washing



Cleaning and decontamination

- Use PPE and wash your hands before and after every patient contact (or alcohol gel cleanser).
- Clean/disinfect surfaces
- Refer to local decontamination protocols for chemical exposures.

ABCDE Approach: Elements



- **Airway with cervical spine immobilization**
 - **Check** for obstruction.
 - If trauma, immobilize cervical spine.



- **Breathing** plus oxygen if needed
 - Ensure adequate air movement into the lungs.



- **Circulation with bleeding control** and IV fluids
 - Determine if there is adequate perfusion.
 - **Check** for life-threatening bleeding

ABCDE Approach: Elements



- **Disability**

- Assess and protect brain and spinal functions.
- Check AVPU/GCS, pupils, and glucose.



- **Exposure** and keep warm

- Identify all injuries and environmental threats.
- Avoid hypothermia.



This stepwise approach is designed to ensure that **life-threatening conditions** are identified and treated early, in order of priority.

A problem discovered in one step (A-B-C-D-E) must be addressed immediately before moving on to the next step.

Essential skills for each step



- Cervical spine immobilization
- Head-tilt and chin-lift/jaw thrust
- Airway suctioning
- Management of choking
- Recovery position
- Nasopharyngeal (NPA) and oropharyngeal airway (OPA) placement



- Oxygen administration
- Bag-valve-mask ventilation
- Needle-decompression for tension pneumothorax
- Three-sided dressing for chest wound



- Intravenous (IV) line placement
- IV fluid resuscitation
- Direct pressure, deep wound packing or tourniquet for hemorrhage control
- Pelvic binding
- Fracture immobilization
- Skin pinch test, CR assessment



- Full spine immobilization
- AVPU (alert, voice, pain, unresponsive) assessment
- Glucose administration



- Wound management
- Snake bite management
- Log roll

REMEMBER...



Always check for signs of trauma in each of the ABCDE sections.

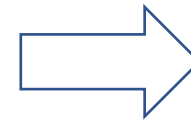
If you are working with limited resources, remember that any life-saving care you can provide is better than no care at all (e.g., pain management, IV fluid resuscitation, splinting, and bleeding management).

Airway Assessment



- **Can the patient talk normally?**
- **Look** for foreign body, airway swelling
- **Look** for altered mental status
- **Listen** for abnormal sounds suggesting obstruction
- **Look** and **listen** for fluid in the airway
- **Look** to see if the chest wall is moving in or out
- **Listen and feel** for air movement from the mouth and nose

Problem identified



Manage airway



LOOK, LISTEN,
FEEL for air
movement

Normal

Breathing Assessment

Airway Management



- If the patient is unconscious and not breathing normally:

- If **no concern for trauma**

→ open airway using HEAD-TILT / CHIN-LIFT maneuver.

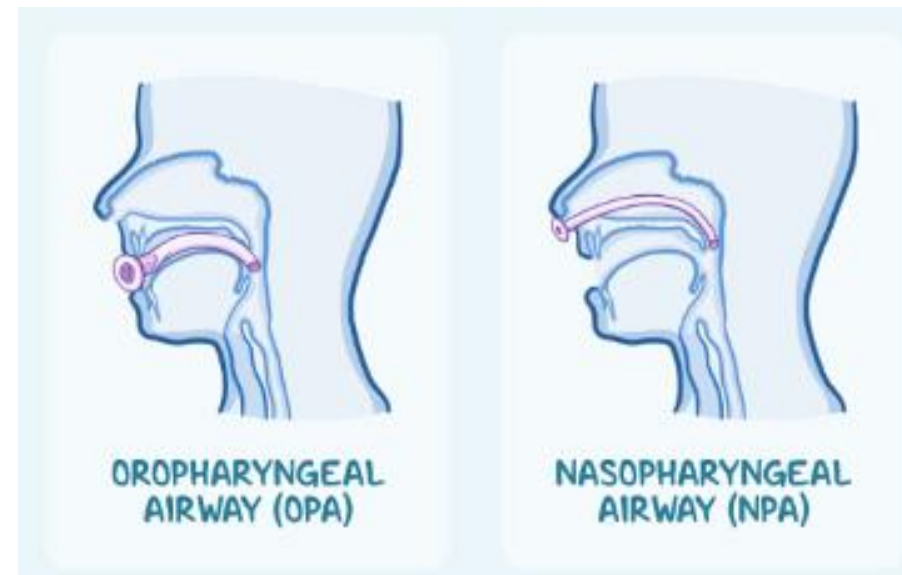


- If **trauma suspected**

→ Maintain C-SPINE IMMOBILISATION and use JAW-THRUST maneuver.

Consider placing an AIRWAY DEVICE to keep the airway open

- Oropharyngeal airway
- Nasopharyngeal airway



Airway Management: Choking



If **foreign body** is suspected:

- If there is a visible foreign body → , carefully REMOVE IT
- If the patient is able to cough or make noise
→ Keep the patient calm and encourage cough.
- If the patient is choking (unable to cough/make sounds)
→ use 5 BACK BLOWS followed by 5 ABDOMINAL THRUSTS
- If the patient becomes unconscious while choking, → follow CPR PROTOCOLS.



Airway Management



- If secretions are present:
 - SUCTION airway or wipe clean
 - Consider RECOVERY POSITION if the rest of the ABCDE is normal and no trauma
- If the patient has swelling, hives, or stridor, → consider a severe allergic reaction (anaphylaxis)
 - Give IM epinephrine/adrenaline
- Allow patient to stay in position of comfort.
- Prepare for insertion of an advanced airway or HANDOVER/TRANSFER to a location capable of advanced airway management.



RECOVERY
POSITION

Breathing: Assessment



Look, listen and **feel** to see if the patient is breathing

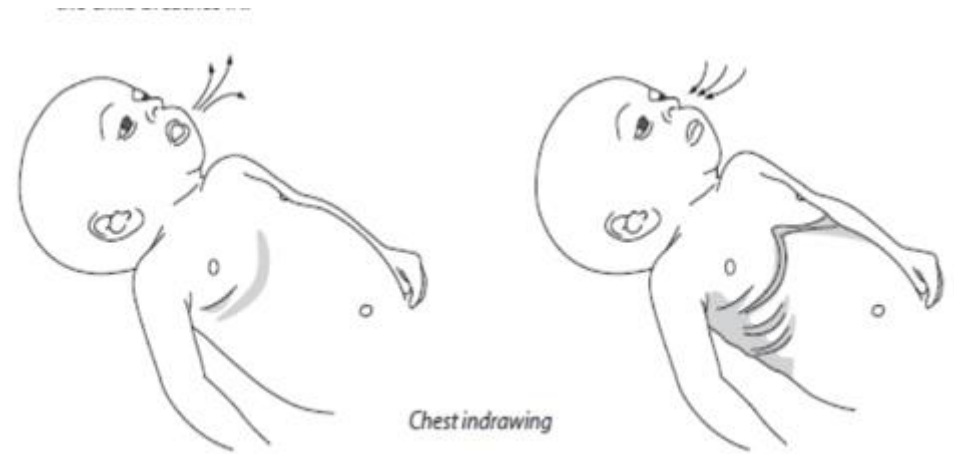
Assess if the breathing is very fast, very slow or very shallow.

Look for increased work of breathing.

- *Accessory muscle work*
- *Chest indrawing*
- *Nasal flaring*
- *Abnormal chest wall movement*

Listen for abnormal breath sounds.

REMEMBER with severe wheezes there may be **no audible breath sounds** because of **severe airway narrowing**.



Breathing: Assessment



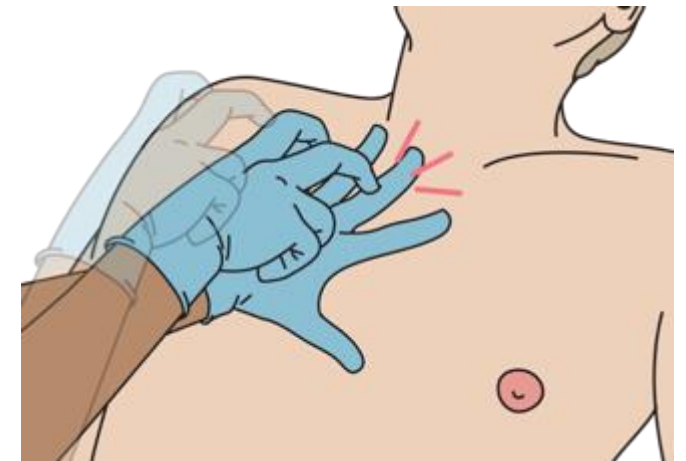
Listen to see if breath sounds are equal.

Check for the absence of breath sounds on one side.

- If dull sound with percussion to the same side
 - THINK large pleural effusion or hemothorax.
 - If *hyperresonance* on percussion on same side
 - THINK simple pneumothorax.
- If hypotension, distended neck veins or tracheal shift are present.
 - THINK tension pneumothorax.

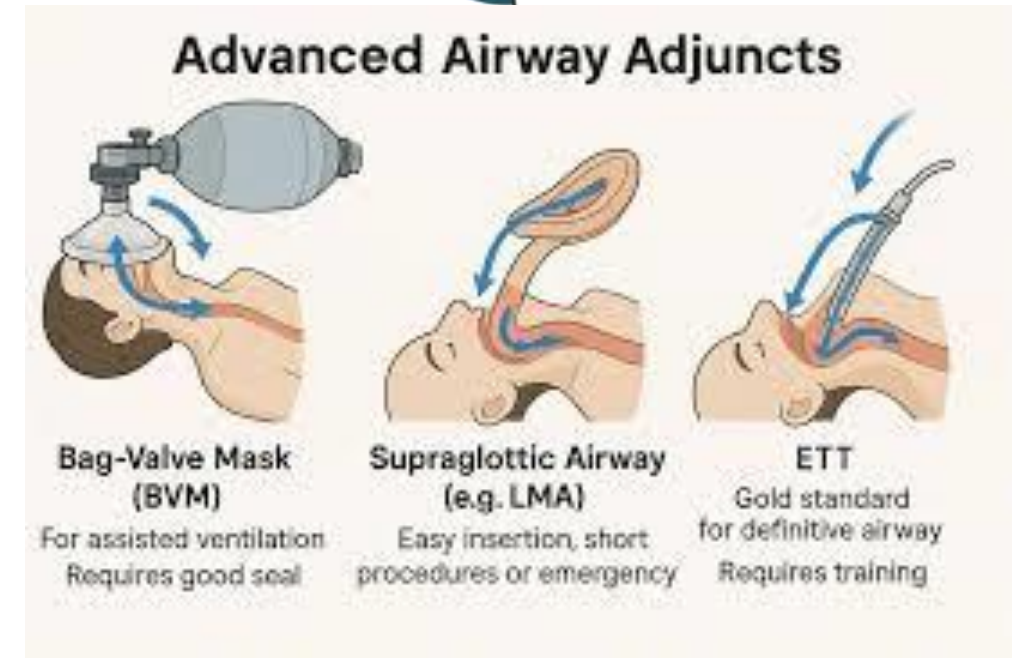
Check oxygen saturation.

PERCUSSION



Breathing: Management

- If unconscious with abnormal breathing → perform BAG-VALVE-MASK-VENTILATION with OXYGEN and follow CPR PROTOCOLS.
- If not breathing adequately (too slow or too shallow) → begin BAG-VALVE-MASK-VENTILATION with OXYGEN
 - If oxygen is unavailable, do not delay ventilation.
 - Plan for advanced airway management.



Breathing: Management



NOT BREATHING ADEQUATELY

- If breathing fast or hypoxia → give OXYGEN.
- If wheezing → give Albuterol/Salmeterol
- If concern for anaphylaxis → give IM ADRENALINE/EPI.
- If concern for tension pneumothorax
 - perform NEEDLE DECOMPRESSION, give OXYGEN, give IV FLUIDS.
 - Plan for **immediate chest tube placement or transfer.**
- If concern for pleural effusion or hemothorax → give OXYGEN.
 - Plan for chest tube.
- If cause unknown → consider trauma.

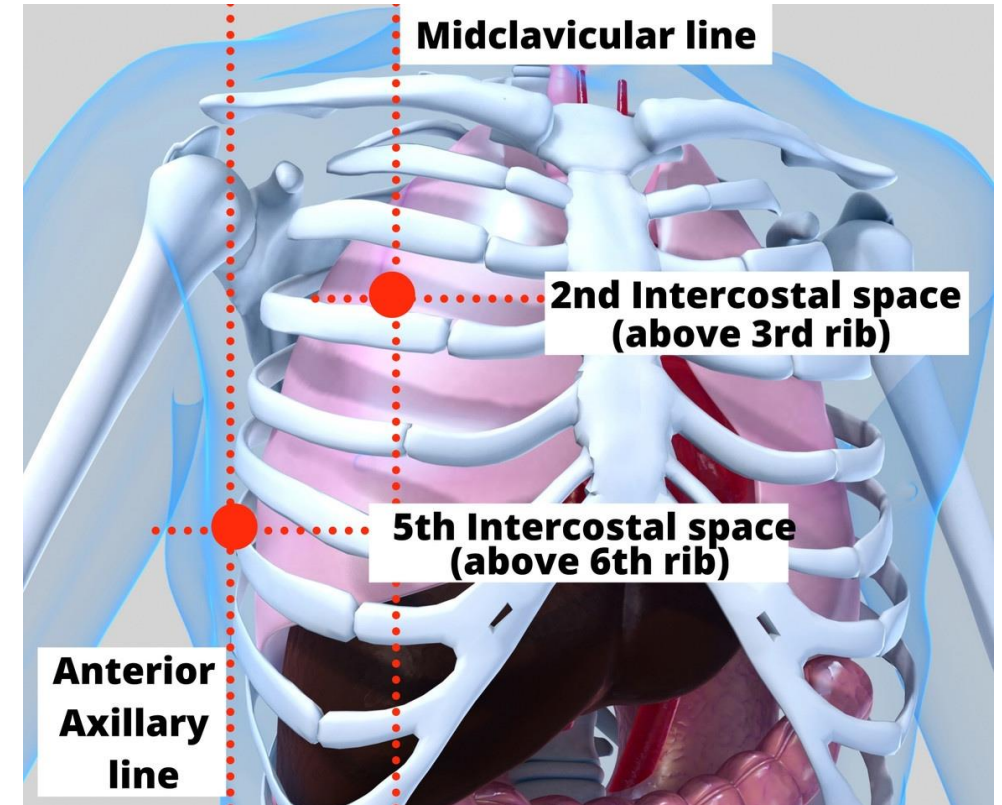


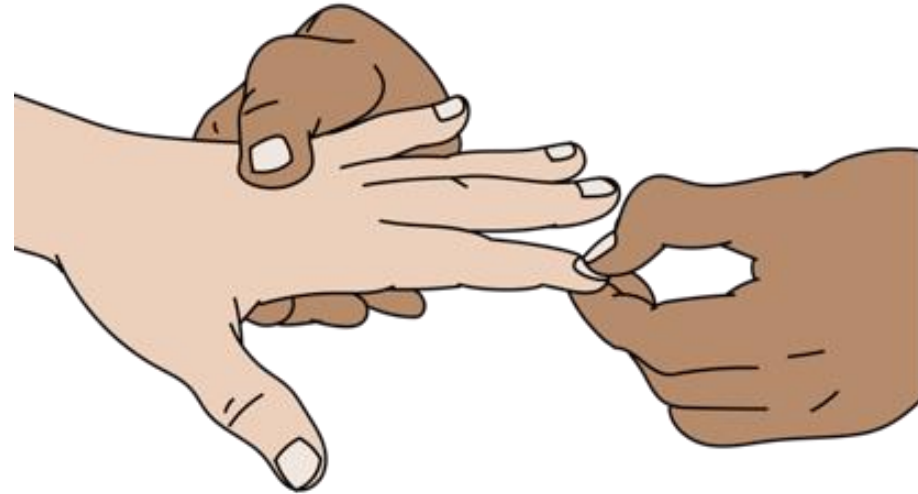
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Circulation: Assessment



Look, listen and **feel** for signs of poor perfusion.

- Cool, moist extremities
- Delayed capillary refill
- Diaphoresis
- Low blood pressure
- Tachypnea
- Tachycardia
- Absent pulses



Circulation: Assessment



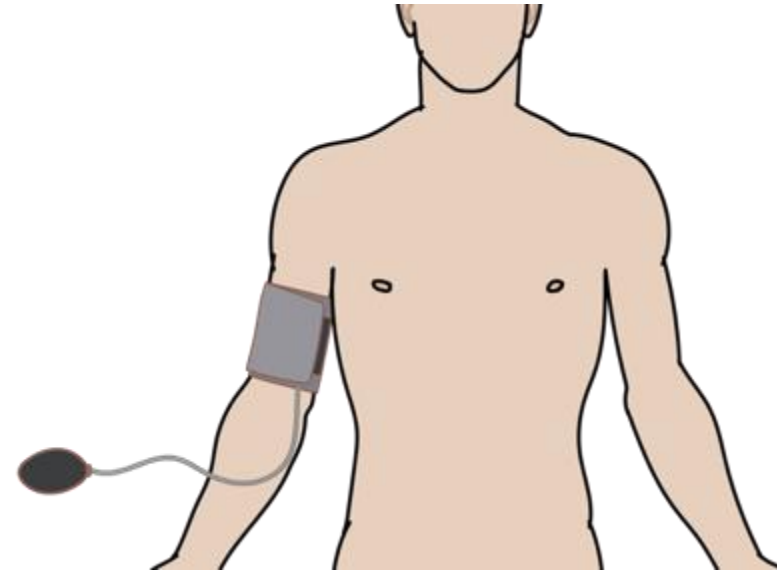
Look for internal and external signs of bleeding.

- Chest
- Abdomen
- From stomach or intestines
- Pelvic fracture
- Femur Fracture
- From wounds

Check for pericardial tamponade.

- Hypotension
- Distended neck veins
- Muffled heart sounds

Check pulse, capillary refill, blood pressure.



Circulation: Management

- For cardiopulmonary arrest, follow CPR or BLS guidelines
- If poor perfusion → GIVE IV FLUIDS (isotonic, crystalloid).
 - If external bleeding → APPLY DIRECT PRESSURE .
 - If internal bleeding or pericardial tamponade
→ plan HANDOVER / TRANSFER to center with surgical capabilities.
- If unknown cause → remember trauma.
 - Apply BINDER for pelvic fracture or SPLINT for femur fracture with compromised blood flow.



Disability: Assessment



Assess level of consciousness.

- AVPU or GCS in trauma

Check for low blood glucose (hypoglycemia).

Check pupils (size, reactivity to light and if equal).

Check movement and sensation in all four limbs.

Look for abnormal repetitive movements or shaking.

- Seizures/convulsions





Disability: Management

- If altered mental status, no trauma, ABCDEs normal
→ Place in RECOVERY POSITION.
- If altered mental status, low glucose (<3.5mmol/L or <60 mg/dL) or if unable to check glucose
→ Give GLUCOSE.
- If actively seizing
→ Give BENZODIAZEPINE.
- If pregnant and seizing
→ Give MAGNESIUM SULPHATE.



Disability: Management



- If *small* pupils and slow breathing, consider opioid overdose
 - Give NALOXONE.
- If *unequal* pupils, consider increased pressure in the brain
 - RAISE HEAD OF BED 30 DEGREES if no concern for spinal injury.
 - Plan for early TRANSFER/REFERRAL.
- If unknown cause of altered mental status, consider **trauma**
 - IMMOBILIZE the cervical spine.



Exposure: Assessment



Examine the entire body for hidden injuries, rashes, bites or other lesions.

- Rashes, such as hives, can indicate an allergic reaction
- Other rashes can indicate infection

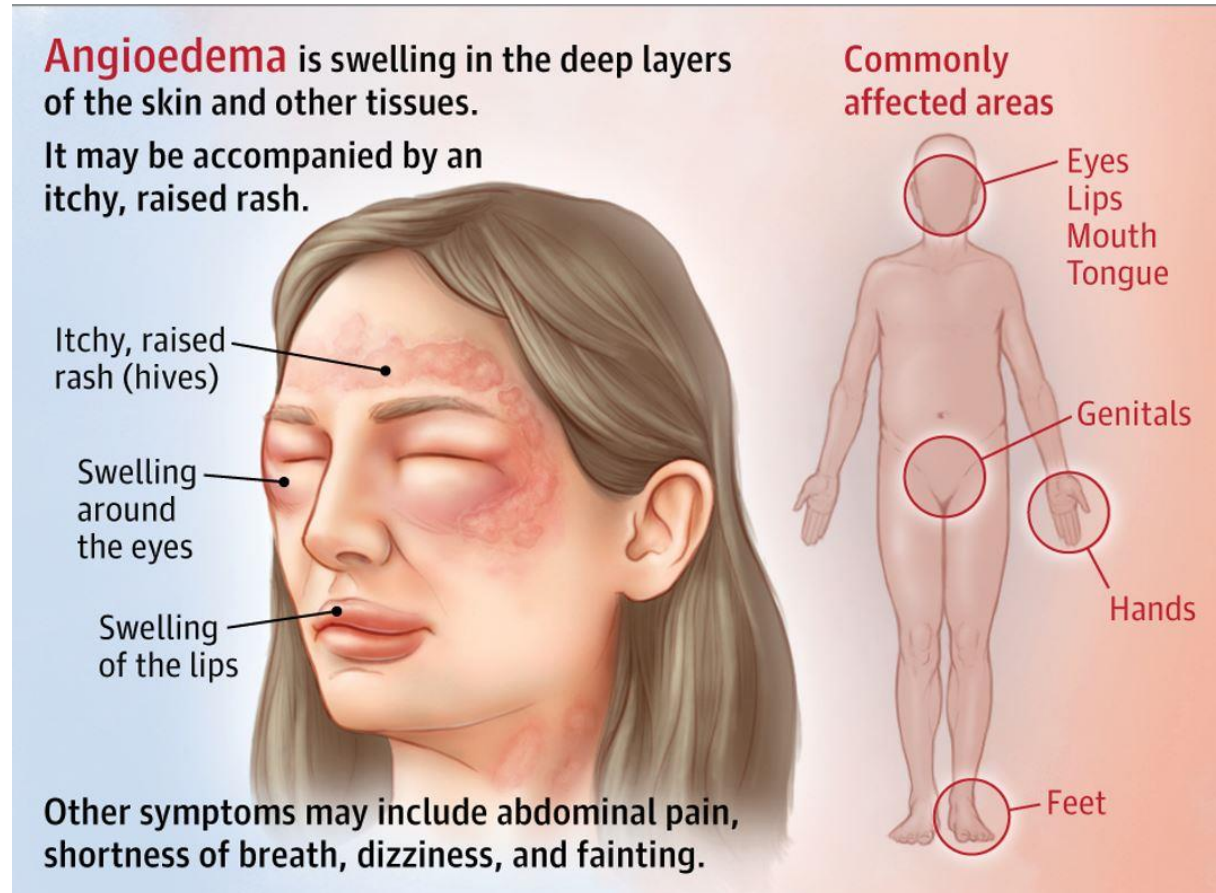


Image: JAMA

Exposure: Management



- If snake bite is suspected
 - IMMOBILIZE the bitten extremity.
 - Take a picture of the snake (if possible and safe)
 - Administer anti-venom if available, or refer/transfer
- General exposure considerations.
 - REMOVE constricting clothing and jewelry
 - COVER the patient to prevent hypothermia
 - Acutely ill patients may be unable to regulate body temperature
 - PREVENT **hypothermia**
 - Remove wet clothing and dry patient thoroughly
 - Respect the patient's modesty
- If cause unknown → consider **trauma**
 - LOG ROLL for suspected spinal cord injury.



Reassess frequently






The ABCDE approach is designed to quickly identify reversible life-threatening conditions.

Vital signs should be checked at the end of the ABCDE approach.

Once you find an ABCDE problem AND manage it, you need to GO BACK and repeat the ABCDE again to identify any new problems that have developed and make sure that the management provided was effective.

Ideally, the ABCDE approach should be repeated every 15 minutes or with any change in condition.

Common emergencies in each element?

 A	 B	 C	 D	 E
<ul style="list-style-type: none">• Obstruction: foreign body• Obstruction: burns• Anaphylaxis• Trauma	<ul style="list-style-type: none">• Tension pneumothorax• Opiate overdose• Asthma/COPD• Large pleural effusion/hemothorax	<ul style="list-style-type: none">• Pulselessness• Shock• Severe bleeding• Pericardial Tamponade	<ul style="list-style-type: none">• Hypoglycemia• Increased intracranial pressure• Seizures/convulsions	<ul style="list-style-type: none">• Snake bite

Airway Obstruction: Foreign Body



Signs and Symptoms	Management
<ul style="list-style-type: none">• Visible secretions, vomit or foreign body• Abnormal sounds from airway<ul style="list-style-type: none">• Stridor, snoring, gurgling• Mental status changes leading to airway obstruction from tongue• Poor chest rise	<ul style="list-style-type: none">• Remove/Suction VISIBLE foreign body or fluid if possible.<ul style="list-style-type: none">• Do not push further into airway.• If completely obstructed<ul style="list-style-type: none">→ Use ABDOMINAL THRUSTS/ BACK BLOWS per BLS protocol• For obstruction due to tongue<ul style="list-style-type: none">→ Open the airway using HEAD-TILT and CHIN LIFT or JAW THRUST (trauma)• Place OPA or NPA as needed.• Plan for advanced airway or transfer if needed.

Airway Obstruction: Burns



Signs and Symptoms

- Burns to head and neck
- Burned nasal hairs/soot
- Abnormal sounds from airway
 - Stridor, snoring, gurgling
- Poor chest rise
- Rapid airway swelling



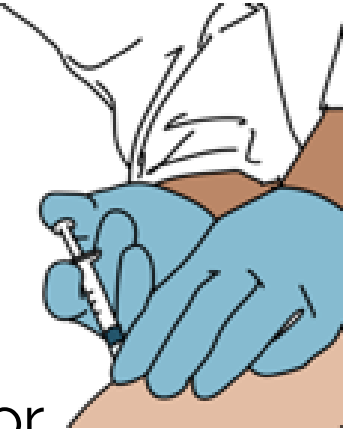
Management

- Give oxygen to ALL patients with burn injuries.
- Open the airway using HEAD-TILT and CHIN LIFT or JAW THRUST (trauma).
- Place OPA or NPA as needed.
- Maintain C-SPINE IMMOBILIZATION if there is trauma.
- Plan for HANDOVER/TRANSFER if no surgical or advanced airway capabilities.

Burns can cause airway swelling due to inhalation injuries.

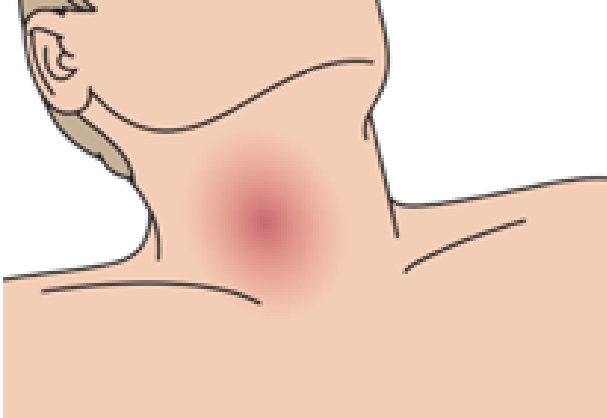
Airway Obstruction: Severe Allergic Reaction



Signs and Symptoms	Management
<ul style="list-style-type: none">• Mouth, lip and tongue swelling• Difficulty breathing<ul style="list-style-type: none">• Stridor and/or wheezing• Rash or hives• Tachycardia and hypotension• Abnormal sounds from airway<ul style="list-style-type: none">• Stridor, snoring, gurgling• Poor chest rise	<ul style="list-style-type: none">• MONITOR for airway obstruction.• Give IM Epi (Adrenaline) for airway obstruction, severe wheezing or shock.<ul style="list-style-type: none">• Can wear off in minutes, consider additional doses• Give OXYGEN.• Start IV/ give IV FLUIDS.• REPOSITION AIRWAY as needed.<ul style="list-style-type: none">• Sit patient upright (no trauma).• If severe or not improving → plan for HANDOVER/TRANSFER 

Airway Obstruction: Trauma



Signs and Symptoms	Management
<ul style="list-style-type: none">• Neck hematoma• Abnormal sounds from airway<ul style="list-style-type: none">• Stridor, snoring, gurgling• Change in voice• Poor chest rise 	<ul style="list-style-type: none">• SUCTION to remove any blood.• Open airway using JAW THRUST.• Place an OPA as needed.<ul style="list-style-type: none">• Do not use NPA with facial trauma• Maintain SPINE IMMOBILIZATION.• Plan for HANDOVER/TRANSFER.

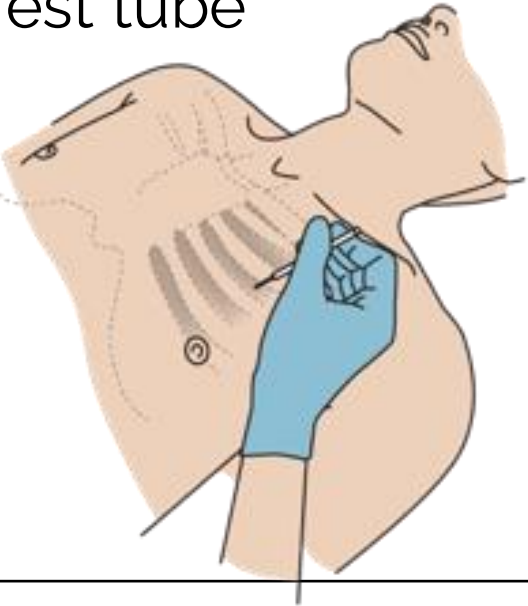
In head/neck injuries obstruction can be from blood or due to trauma. Penetrating wounds to neck cause obstruction from expanding hematoma.

For any abnormal airway sounds, REASSESS the airway frequently as partial obstruction might worsen to completely block the airway.



Breathing Conditions: Tension Pneumothorax



Signs and Symptoms	Management
<ul style="list-style-type: none">• Hypotension with difficulty breathing and any of the following:<ul style="list-style-type: none">• Distended neck veins• Absent breath sounds on affected side• Hyperresonance with percussion on affected side• May have tracheal shift away from affected side	<ul style="list-style-type: none">• Perform NEEDLE DECOMPRESSION, give OXYGEN and IV FLUIDS• Arrange for urgent chest tube  An illustration of a person's upper torso and head, tilted back. A hand in a blue glove is shown performing a procedure on the chest, specifically needle decompression. The chest area is shaded to show the rib cage and internal organs.

Any pneumothorax can become a tension pneumothorax.

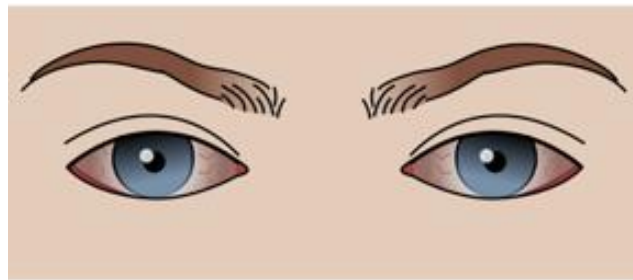
Breathing Conditions: Suspected Opiate Overdose



Signs and Symptoms

- **Slow respiratory rate** (*bradypnea*)
- Hypoxia
- Very small pupils

SMALL PUPILS



Management

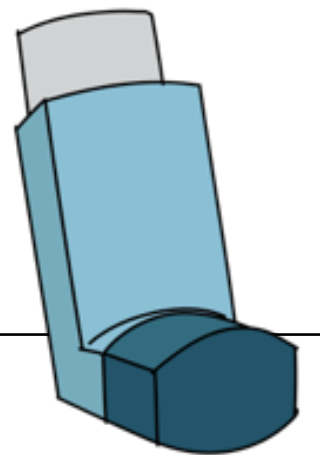
- Give NALOXONE to reverse opioid medications.
- MONITOR closely; Naloxone may wear off before opiate.
- Give OXYGEN.

Opioid drugs (such as morphine, pethidine, oxycodone and heroin) can decrease the body's drive to breathe.

Breathing Conditions: Asthma/ COPD



Signs and Symptoms	Management
<ul style="list-style-type: none">• Wheezing• Cough• Accessory muscle use• May have history of asthma/COPD, allergies or smoking	<ul style="list-style-type: none">• Give Albuterol/Salbutamol as soon as possible.• Give OXYGEN if indicated.• Take caution for over oxygenating COPD.



Asthma and COPD are conditions causing spasm in the lower airway.

Breathing Conditions: Large Pleural Effusion/ Hemothorax



Signs and Symptoms

- Difficulty in breathing
- Decreased breath sounds on affected side
- Dull sounds with percussion on affected side
- With large amount of fluid could have tracheal shift

Management

- Give OXYGEN.
- Plan for HANDOVER/TRANSFER.
- Patient may need a chest tube.



Pleural effusion occurs when fluid builds up in the space between the lung and the chest wall or diaphragm limiting the expansion of the lungs.

Circulation Conditions: Pulselessness



Signs and Symptoms	Management
<ul style="list-style-type: none">• No pulse• Unconscious• Not breathing	<ul style="list-style-type: none">• Follow CPR PROTOCOLS.



Circulation Conditions: Shock

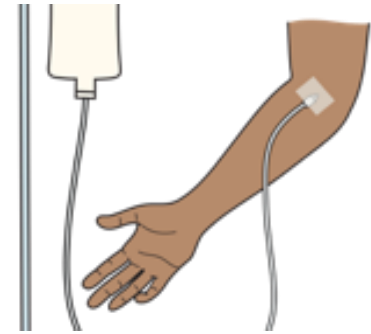


Signs and Symptoms

- Rapid heart rate (tachycardia)
- Rapid breathing (tachypnea)
- Pale and cool skin
- Capillary refill >3 seconds
- Sweating (diaphoresis)
- May have:
 - Dizziness
 - Confusion
 - Altered mental status
 - Hypotension

Management

- LAY FLAT if tolerated.
- Give OXYGEN.
- STOP and CONTROL any bleeding.
- Give IV FLUIDS.
- If signs of infection → give ANTIBIOTICS.
- Plan for TRANSFER to inpatient.



Poor perfusion is failure to deliver enough blood to vital organs
Shock is when organ function is affected, which can lead to death

Circulation Conditions: Severe Bleeding



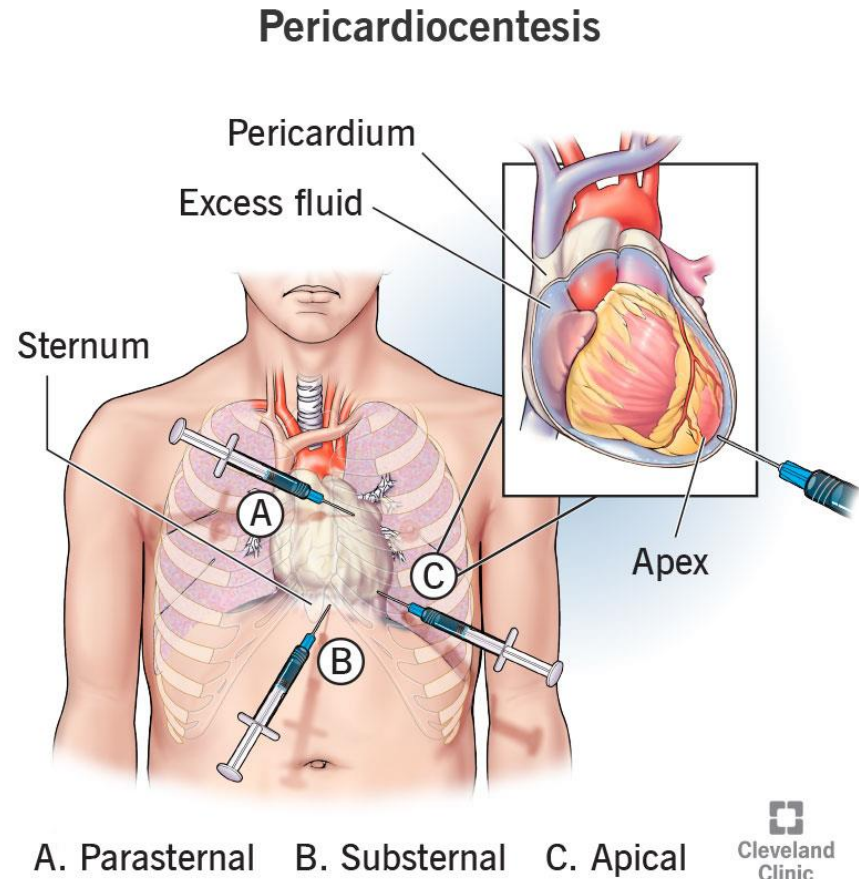
Signs and Symptoms	Management
<ul style="list-style-type: none">• Bleeding wounds• Bruising around umbilicus, over the flanks can be signs of internal bleeding• Vomiting blood, rectal or vaginal bleeding• Pelvic or femur fractures• Decreased breath sounds on one side• Signs of poor perfusion<ul style="list-style-type: none">• Hypotension, tachycardia, pale skin, diaphoresis	<ul style="list-style-type: none">• Stop bleeding depending on source.<ul style="list-style-type: none">• DIRECT PRESSURE• DEEP WOUND PACKING if large and gaping.• TOURNIQUET- Only for uncontrolled bleeding not responding to direct pressure• BIND pelvis or SPLINT femur fracture.• Give IV FLUIDS.• REFER for blood transfusion and surgical management .

Uncontrolled severe bleeding can lead to shock. Large amounts of blood can be lost in the chest, pelvis, thigh, abdomen, and externally.

Circulation Conditions: Pericardial Tamponade



Signs and Symptoms	Management
<ul style="list-style-type: none"> • Signs of poor perfusion: Tachycardia, tachypnea, hypotension, pale skin, cold extremities, CR >3 seconds • Distended neck veins • Muffled heart sounds • May have dizziness, confusion, altered mental status 	<ul style="list-style-type: none"> • Treatment is drainage by pericardiocentesis • IV FLUIDS to counter the pressure from fluid in the heart sac • Plan for HANDOVER/TRANSFER if needing facility capable of draining fluid



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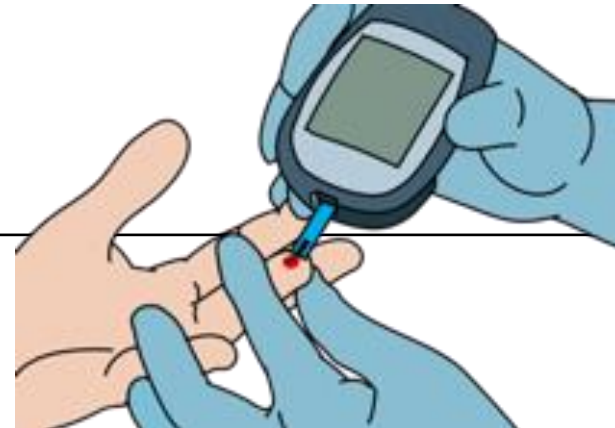
Pericardial tamponade occurs when there is a fluid buildup in the sac around the heart. Pressure build-up keeps the heart from filling properly.



Disability Conditions: Hypoglycemia




Signs and Symptoms	Management
<ul style="list-style-type: none">• Sweating (diaphoresis)• Altered mental status• Seizures/convulsions• Blood glucose $<3.5\text{mmol/L}$ or $<60\text{mg/dL}$• History of diabetes, malaria or severe infection• Responds quickly to glucose	<ul style="list-style-type: none">• Give GLUCOSE immediately.• If they can speak/swallow → give oral GLUCOSE.• If they cannot speak or is unconscious → give IV GLUCOSE.<ul style="list-style-type: none">• If unavailable → give buccal (inside of cheek) glucose.



Disability Conditions: Increased Intracranial Pressure



Signs and Symptoms	Management
<ul style="list-style-type: none">• Headache• Seizure/convulsions• Nausea, vomiting• Altered mental status• Unequal pupils• Weakness on one side of the body 	<ul style="list-style-type: none">• RAISE the head of the bed 30 degrees.• If trauma → MAINTAIN CERVICAL SPINE IMMOBILIZATION.• Check glucose.• If seizures → give BENZODIAZEPINE.• Plan for HANDOVER/TRANSFER.<ul style="list-style-type: none">• Pressure must be reduced as soon as possible (requires neurosurgery)

Increased ICP can occur from trauma, tumors, increased fluid, bleeding, or infection.

Swelling, fluid or mass increases pressure around the brain, limiting blood flow.

Disability Conditions: Seizure/Convulsions



Signs and Symptoms

- Active seizure
 - Repetitive movements
 - Fixed gaze to one side or alternating rhythmically
 - Not responsive
- Recent seizure
 - Bitten tongue
 - Urinated on self
 - Known history of seizures
 - Confusion gradually returning over minutes or hours

If cause unknown, consider trauma!

Management

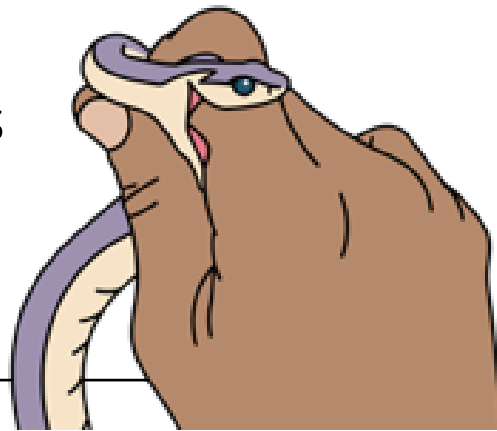
- Prevent hypoxia and injury.
- Protect from falls/dangerous objects..
- Do not stick anything in their mouth
- SUCTION as needed .
- Give OXYGEN.
- **Check glucose.**
 - Give GLUCOSE if needed.
- Give a BENZODIAZEPINE .
 - Monitor breathing.
- Place in RECOVERY POSITION (if no trauma)
- Give MAGNESIUM SULPHATE if pregnant or recently pregnant .



Exposure Conditions: Snake Bite



Signs and Symptoms	Management
<ul style="list-style-type: none">• History of snake bite• Bite marks may be seen• Edema• Blistering of skin• Bruising• Hypotension• Paralysis• Seizures• Bleeding from wounds	<ul style="list-style-type: none">• Limit the spread of venom and its effects on the body• IMMOBILIZE THE BITTEN EXTREMITY.• Take a picture of the snake if possible and safe.• If evidence of shock → give IV FLUIDS.• Monitor closely for airway obstruction and signs of shock.• Plan for RAPID HANDOVER/TRANSFER to inpatient.• Give antivenom if available.



ABCDE Approach: Summary



Airway with cervical spine immobilization



Breathing plus oxygen if needed



Circulation IV fluids and bleeding control



Disability AVPU/GCS, pupils and glucose



Exposure and keep warm

Remember !

If you find a problem with any of the ABCDEs, **STOP** and **CORRECT** the problem.

Then, **GO BACK** and **REASSESS** the ABCDEs again to identify any new problems that have developed and make sure that the management provided worked.

SAMPLE history

- Acronym addressing categories of questions to quickly and systematically obtain a patient's history
 - **S**igns and Symptoms
 - **A**llergies
 - **M**edications
 - **P**ast medical history
 - **L**ast oral intake
 - **E**vents
- Immediately follows the ABCDE approach and only follows if all ABCDEs are being addressed/stable.
- Allows providers to easily communicate

Elements of the SAMPLE history

S	Signs and symptoms	Patient/family's report of signs and symptoms is an essential assessment
A	Allergies	Important to prevent harm; may also suggest anaphylaxis
M	Medications	Obtain a full list and note recent medication or dose changes
P	Past Medical History	May help in understanding current illness and change management choices
L	Last Oral intake	Note whether solid or liquid; vomiting/choking risk for sedation; intubation or surgical procedures
E	Events surrounding the injury/illness	Helpful clues to the cause, progression and severity of current illness

Disposition Considerations

- Disposition (destination of the patient) should be considered after the ABCDE approach, SAMPLE history, and complete physical exam based on the specific condition.
- If you intervene in any of the ABCDE categories, immediately plan for HANDOVER/TRANSFER to a higher level of care or for admission, depending on available services where you practice.

A good handover includes:

- ✓ Brief identification of the patient
- ✓ Relevant elements of the SAMPLE history
- ✓ Physical exam findings
- ✓ Record of interventions given
- ✓ Plans for future care
- ✓ Things you may be concerned about

Summary

- In Emergency Medicine, there is a lot to know.
- A systematic approach to each patient helps identify and mitigate life-threatening problems, thereby avoiding delays.
- It gives providers confidence that they are providing the best possible care, given their training and resources.
- Many interventions (IV fluids, Oxygen, repositioning, bleeding management, etc.) require readily available resources.



Global emergency care

The impact of Global Emergency Care



Each Emergency Care Practitioner (ECP) trained will care for over 40,000 patients over their career.



The cost to train an ECP over 2 years is \$7,000 - just \$0.18 per patient treated over his/her lifetime

WHY WE NEED YOUR HELP

Sub-Saharan Africa has an estimated shortage of 420,000 physicians*

Less than 20% of the hospitals in Sub-Saharan Africa have the ability to deliver emergency care.



GEC ECPs are currently treating more than 4,000 children and 20,000 total patients each year for acute illness or injury



We project emergency care saves 1 additional life among every 20 children sick enough to be admitted to the hospital, based on pilot site data.

Life Saving Medical Care for all

*Based on WHO recommendation for physician to population ratio (2015)

Image: Global Emergency Care



**TIMELY
CARE
SAVES
LIVES**

Thank you

