

Patient Assessment & Vital Signs

Patient exam format (Revised for VT EMR)

Scene Size up – Potential hazards, and situational awareness

Body Isolation Precautions – Gloves, N95, Eye Protection

Determine Mechanism of injury “MOI” (i.e., Fall from ladder) tends to be related to trauma or **Nature of Illness “NOI”** i.e. (Vomiting, chills, short of breath, asthma.) Nature of illness tends to be a medical event.

Number of potential injured patients

Additional resources required? i.e., fire department for man power and or safety, additional ambulances due to additional person’s injured on scene, or law enforcement due to unsafe conditions.

Consider Cervical spine precautions – This means do you suspect the patient potential have a spine related injury from a MOI i.e., Snowmobile rider ejected and hit a tree or elderly female fell down a flight of stairs. You the provider would suspect injury to the spine and hold manual stabilization.

(Holding cervical spine in a neutral position – Ensure the patient does not move their head and place each hand on one side the head and hold in place. It is that easy!)



Determine level of consciousness called the AVPU

A – Alert/Awake (The patient speaks to you with appropriate responses, they are completely aware of you. Normal person reaction to your presence)

V – Verbal (Responds to verbal stimuli – Confusion, semi-conscious but responds to shouting)

P- Pain (Responds to painful stimuli – Groaning or moaning sternum rub or pinching behind the bicep)

U- Unresponsive (No response to anything)

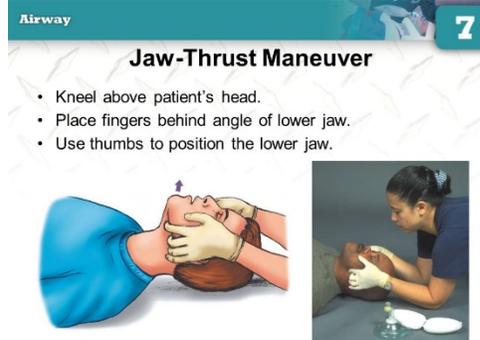
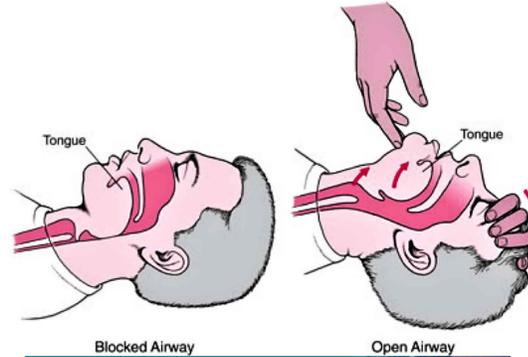
What is the chief complaint? (It is the patient own words “My chest is tight or My leg is bleeding.)

Determine Apparent Life Threats (Massive bleeding, has a pulse but not breathing, no pulse and not breathing, leg amputation) These are just some examples.

Airway / Breathing / Circulation "ABC"

Airway

- Open (Do you need to use a head-tilt-chin lift or Jaw thrust, airway adjunct) Open should require no interventions.



- Assess Airway - (Meaning inspect for no blood, vomit, loose teeth and or obstruction) i.e., speaking without difficulty is considered airway open.

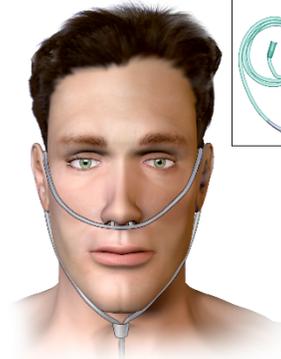
Breathing

- Assess breathing (Equal chest rise and fall or abnormal?)
- Abnormal breathing = Oxygen treatment via mechanical ventilations, Non-Rebreather or Nasal Cannula)



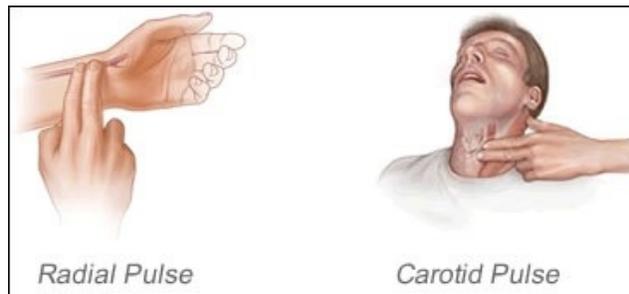


Nasal Cannula



Circulation

- Check for a pulse
 - o Carotid or Radial – Adult
 - o Brachial – Infant



- Asses Skin (Pink, blue (Cyanotic), pale (white/ashy), red (flushed), and temperature (warm, dry, sweaty and or cold)
- Assess and control bleeding – Obvious bleeding/control with bandages, pressure dressings or tourniquet (TQ)
 - o Treat for shock (Keep warm – put a blanket over them)

Vital Signs

Blood pressure is the pressure of circulating blood against the walls of blood vessels. Most of this pressure results from the heart pumping blood through the circulatory system.

Systolic (120) / Diastolic (80)

The top number refers to the amount of pressure in your arteries during the contraction of your heart muscle. This is called **systolic** pressure.

Diastolic (80)

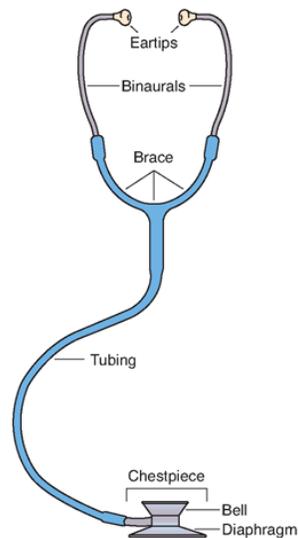
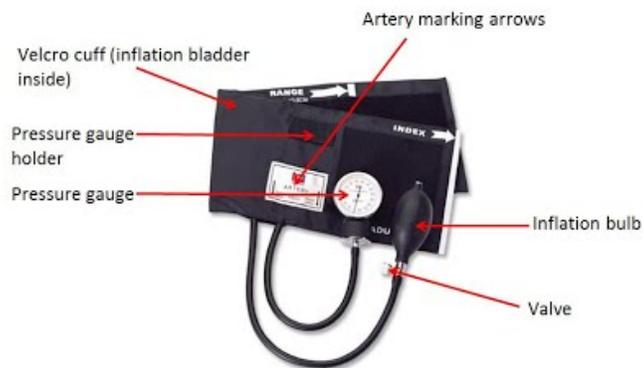
The **diastolic** reading, or the bottom number, is the pressure in the arteries when the heart rests between beats. This is the time when the heart fills with blood and gets oxygen.

Normal Range

Adults 120/80

Children/Infants (Depends of age) – A rule of thumb is hypertension (high blood pressure) for children and infants is a systolic <120 and diastolic <80 = **abnormal**

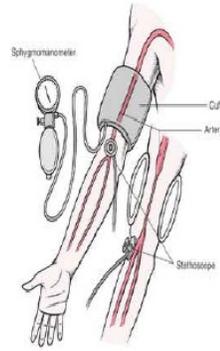
Sphygmomanometer (blood pressure cuff)



Steps

- **Blood Pressure**

- To take the blood pressure, have the student sit down and have the left arm (closer to the heart) just rest on the table.
- Place the cuff on the arm about 2 fingers above the antecubital space (where the arm bends).
- Place the stethoscope on the brachial artery.
- Raise the cuff pressure rapidly to about 160 mmHg (millimeters of Mercury).
- Slowly release the pressure in the cuff.
- Pay attention to the first sharp release of blood known as the Korotkoff sound, once heard read the number on the manometer and write it as the systolic pressure.
- The continued release of pressure from the cuff will allow more blood flow meaning the Korotkoff sound will slowly diminish.
- The last sound you hear will be recorded as the diastolic pressure.



Pulse

- Feel for a pulse on the radial (preferred site), carotid or brachial (infant)
 - o Count the beats for 60 seconds using a watch (second hand)
 - o Normal ranges 60 – 100 beats per minute (Anything besides this is consider abnormal)

Respiration Rate (Number of breaths per minute)

- Place hand on chest and count for 60 seconds using a watch (second hand)
 - o This will give you the respiration rate (RR) for one minute.
 - o Normal ranges 12-20 (Anything outside of this is consider abnormal)

Head-to-Toe Assessment

(Medical and Trauma Patients)

Every time you assess a patient, get in the habit of inspecting the head, chest, hips, legs, arms and back. This will become second nature. The purpose of an assessment is to find anything abnormal. Examples will be given throughout this process in this document. We will be doing lots of assessments every class to ensure you are ready.

When inspecting look for (don't have to memorize) "DCAP-BTLS"

Deformities, Contusions (bruises), Abrasions (scrapes), Penetrating's, - Burns, Tenderness, Lacerations (cuts), Swelling.

Head

- Inspect and palpate the head (abrasions, bleedings, fractures, pain etc.)
- Inspect the ears for fluid
- Inspect the mouth for fluid or loose/missing teeth or bleeding.
- Inspect the face
- **Inspect the eyes;** pupils react to light, they can be constricted (pinpoint), dilated (large) and or unequal pupil sizes. The pupils should be equal sizes and react to light. (Anything abnormal tell your EMS partner)

Neck

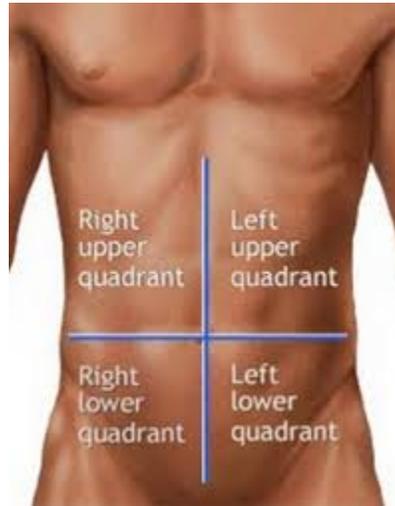
- Check for trachea is midline (Anything abnormal tell your EMS partner)
 - o Trachea is the medical term for windpipe. You have the trachea “windpipe” on the anterior “front” and the esophagus in the posterior “back” where food goes to your stomach.

Chest

- Inspect for equal chest rise and fall (normal breathing)
- Inspect for DCAP-BTLS

Abdomen

- Inspect/palpate the stomach. This is broken down into four sections.



Remember the this shows the patient right side.

Hips

- Check for stable (push down and squeeze in) without pain = stable / with pain = unstable

Lower Legs

- Inspect for DCAP-BTLS

Upper Arms

- Inspect for DCAP-BTLS

Posterior “back” Spine

- Palpate down the spinal column for DCAP-BTLS
 - o Start under the head using two fingers palpate along the spine, to the just below the underwear line.



Once this is completed, manage any findings and help the EMS provider on-scene.

Examples

Deformities

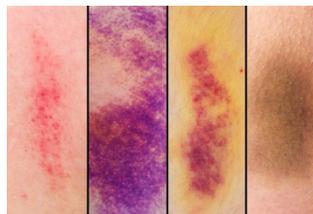


Common wrist fracture



Note the shortening of the patient right leg

Contusions



Varies of presentation

Abrasions



Tenderness – Known as soreness

Penetrating – Gunshot wounds / **Implied objects (NEVER TAKE OUT)**

Burns – Three types

1st Degree (Common Sunburn)

2nd Degree (Blisters start to form)

3rd Degree (Full thickness, nerve endings burned off)



3rd Degree burn above (More often have all three types of burns)

Lacerations – Known as cuts



Swelling – Like a sprain ankle (left ankle is normal but right is larger)