# EMT Patient Assessment: A Comprehensive Study Guide

## I. Introduction to Patient Assessment

The EMT patient assessment is a systematic, four-component process designed to identify and rapidly treat life-threatening conditions. It provides a structured approach to patient care, ensuring that critical steps are not overlooked. The four main components are:

* Scene Size-Up
* Primary Assessment
* Secondary Assessment
* Reassessment

## II. Scene Size-Up

The scene size-up is the initial phase where the EMT gathers information from the dispatcher and assesses the immediate environment and patient's chief complaint.

### A. Body Substance Isolation (BSI)

* Definition: Isolating oneself from potential hazards and patient-related risks.
* Examples: gloves, gowns, masks, turnout gear (for firefighters), helmets.

### B. PENMAN (Acronym for Scene Size-Up)

* P – Personal, Partner, Patient Safety: Prioritizing safety in that order. Personal and partner safety must be ensured before assisting the patient.
* E – Environmental Hazards: Identifying potential dangers on scene (e.g., freeway traffic, dogs, weather, unsafe structures).
* N – Number of Patients: Determining if additional resources (e.g., more ambulances) are needed for multiple patients (e.g., traffic collisions).
* M – Mechanism of Injury (MOI) / Nature of Illness (NOI):MOI: The force or event that caused the injury (e.g., fall causing a hip fracture, head hitting a windshield).
* NOI: The medical condition causing the symptoms (e.g., hypoglycemia causing unconsciousness, seizure).
* Interrelation: MOI and NOI are not isolated; one can cause the other (e.g., seizure (NOI) causing a traffic collision and head injury (MOI)).
* A – Additional Resources: Requesting necessary support (e.g., more ambulances, Advanced Life Support (ALS) for complex cases, police for unsafe scenes like GSWs or stabbings).
* N – Need for Extrication and Spinal Immobilization:Extrication: Required for trapped patients (e.g., in a car, needing special tools).
* Spinal Immobilization: Considered for patients with suspected neck pain or potential cervical spine injury from severe falls or collisions (e.g., applying a C-collar for whiplash).

## III. Primary Assessment

The primary assessment's goal is to rapidly identify and treat any life-threatening conditions.

### A. General Impression

* Definition: A quick visual assessment of the patient upon approach.
* Observations: Age, sex, position found, MOI, possibilities, initial stability (stable/unstable, life-threatening situation).

### B. AVPU (Acronym for Level of Consciousness - LOC)

* A – Awake and Alert: Patient's eyes open, tracking, responding to presence.
* V – Verbal Stimuli: Patient responds to verbal commands or names.
* P – Painful Stimuli: Patient responds to pain (e.g., alae nasi pinch, sternal rub, trap pinch).
* U – Unresponsive: Patient does not respond to verbal or painful stimuli.

### C. Unresponsive Patient Protocol

* Check Carotid Pulse: Use two fingers (never the thumb) on the carotid artery.
* No Pulse → CPR: Immediately begin Cardiopulmonary Resuscitation (30 compressions to 2 ventilations).
* AED Setup: While one EMT performs CPR, the other sets up the Automated External Defibrillator.
* Adult Pad Placement: Upper right chest and lower left abdomen.
* Child Pad Placement (under 8 years): One on front chest, one on back (pediatric-specific pads).
* BVM Ventilation: Use a Bag-Valve-Mask (BVM) connected to 15 liters of oxygen to assist the patient in breathing.
* AED Analysis: The AED analyzes heart rhythm for shockable rhythms (Ventricular Fibrillation (V-fib) and Pulseless Ventricular Tachycardia (V-tach)). Asystole (flatline) is NOT a shockable rhythm.
* Airway Maintenance: Clear airway obstructions (e.g., relaxed tongue, blood, teeth, vomit) using suction.
* Insert an Oropharyngeal Airway (OPA) or Nasopharyngeal Airway (NPA) to maintain airway patency.
* Transport: Rapid transport to the nearest hospital, requesting ALS follow-up (for intubation, drug administration like epinephrine, fluids).
* Continuous Care: Maintain CPR, airway, and monitor vitals throughout transport.

### D. ABCs (Airway, Breathing, Circulation) - For Patients with a Pulse

* A – Airway (Airway is King): Alert Patient: Patent airway if talking.
* Unresponsive Patient :Suspected Trauma: Modified Jaw-Thrust (avoids neck movement).
* No Suspected Trauma: Head-Tilt Chin-Lift (opens airway).
* Importance: Brain damage can occur within 6-10 minutes without oxygen.
* B – Breathing:Assessment: Rate (12-20 respirations/minute for adults), tidal volume (depth), effort.
* Intervention: Assist slow respirations with BVM; calm hyperventilating patients.
* Special Consideration: Children deteriorate rapidly with breathing issues, leading to cardiac arrest.
* Lung Sounds: Auscultate for stridor, wheezing, or other abnormal sounds; want clear bilaterally.
* C – Circulation (COPS Acronym):C – Capillary Refill: Squeeze nail bed; color should return to pink in less than 2 seconds (indicates adequate perfusion).
* O – Obvious Signs of Bleeding: Identification & Treatment: Scan body; apply direct pressure, elevate above heart; use tourniquet if bleeding persists.
* Rule: Stop and treat life-threatening bleeding immediately during assessment.
* P – Pulse:Assessment: Check radial pulse for 10-15 seconds for irregularities (strong, regular, weak, thready). (Full 30-second check in Secondary Assessment).
* S – Skin Signs:Assessment: Condition, temperature, moisture, color (normal, warm, dry vs. cool, pale, diaphoretic).
* Shock Indication: Cool, pale, diaphoretic skin suggests shock.
* Intervention: Place patient in shock position (elevate legs), cover with blanket, administer oxygen.

### E. D – Deformities, Deficits

* Assessment: Visually scan for deformities; ask about previous deficits (e.g., stroke-related paralysis).
* Importance: Differentiating new injuries/deficits from old ones to determine priority.

### F. E – Expose, Visualize, Palpate

* Purpose: To thoroughly examine the area of the chief complaint.
* Process:Expose: Remove clothing to expose the area.
* Visualize: Observe for abnormalities (e.g., distended abdomen, pulsating mass).
* Palpate: Gently apply pressure to assess tenderness or masses (e.g., abdominal quadrants).
* Caution: DO NOT palpate a pulsating abdominal mass (suspected AAA) as it could rupture. Transport immediately.

### G. F – Formulate a Field Impression

* Definition: A concise summary of findings from the primary assessment.
* Purpose: To quickly relay critical patient information to incoming ALS personnel (e.g., paramedics) or hospital staff.
* Includes: Key patient details, chief complaint, primary assessment findings (AVPU, ABCs, D, E), and initial thoughts on the situation.

### H. I – Identify Patient Priority

* Definition: Determining the urgency of transport to the hospital.
* Consideration: Is the patient stable enough for a detailed secondary assessment on scene, or do they need immediate transport with assessment en route?

## IV. Secondary Assessment

The secondary assessment involves delving deeper into the patient's condition, medical history, and taking a full set of vitals. EMTs often work in pairs during this phase, with one asking questions and the other taking vitals.

### A. SAMPLE (Acronym for Patient History)

* S – Signs and Symptoms:Signs: Objective observations (e.g., rapid breathing).
* Symptoms: Subjective complaints (e.g., headache, chest pain).
* Chief Complaint: Why the patient called 911.
* A – Allergies: Ask about any known allergies (foods, bugs, drugs). Prod with common examples like penicillin.
* M – Medications: Ask about current medications.
* More effective to ask specifically for medications related to known conditions (e.g., "What do you take for your high blood pressure?").
* "HAM" (History, Allergies, Meds) is an alternative specific approach.
* P – Pertinent Medical History: Documenting significant past medical problems (e.g., hypertension, diabetes, stroke, heart attacks).
* L – Last Oral Intake: When the patient last ate or drank. Less critical for some conditions, but important if surgery is possible or for suspected food poisoning.
* E – Events Leading Up To: What the patient was doing before symptoms began (e.g., sudden onset vs. activity-related onset). Important for the timeline.

### B. BELLS RP (Acronym for Full Vitals)

* B – Blood Pressure (BP): Manual Measurement: Inflate cuff (e.g., to 200-220 mmHg), slowly release air, listen for first (systolic) and last (diastolic) heartbeats with a stethoscope.
* Accuracy: Emphasize the importance of accurate readings; never make up blood pressures. Verbalize if unable to obtain.
* E – Eyes (PERRL) P – Pupils:
* E – Equal: Are pupils the same size?
* R – Round: Are pupils circular?
* R – Reactive to Light: Do pupils constrict in response to light and dilate when light is removed? (Use a penlight).
* L – Light: Checking reactivity.
* L – Lung Sounds (Auscultate):Assessment: Listen in multiple spots (front and back) for clear bilateral sounds or abnormalities like wheezing, stridor.
* L – Level of Consciousness (Recheck - Person, Place, Time, Event):Assessment: Ask for name, location, current time/date, or recent event/president.
* Documentation: "A/O x4" (alert and oriented to person, place, time, event) or "A/O x1" etc. if altered.
* Baseline: Ask family if current LOC is the patient's normal baseline (e.g., for dementia).
* S – Skin Signs (Recheck):Assessment: Re-evaluate complexion (pale, flushed), moisture (sweating, dry), and temperature (cool, hot) of extremities and core.
* Intervention: Blanket if cool, ice packs (neck, armpits, groin) if overheated.
* R – Respirations:Assessment: Full 30-second count (multiply by 2 for rate), note depth and effort (12-20 bpm for adults). Observe chest rise and fall.
* Intervention: Assist with BVM if slow/shallow; calm hyperventilating patients.
* P – Pulse:Assessment: Full 30-second count (multiply by 2 for rate), note strength (pounding, normal, weak, thready) and regularity.

### C. OPQRST (Specific Pain Assessment for Medical Patients)

* O – Onset: When did the pain begin? Was it sudden or gradual? What caused it?
* P – Provocation and Palliation: What makes the pain better or worse? What position is most comfortable?
* Q – Quality: Describe the pain (e.g., sharp, dull, aching, tearing, crushing).
* R – Region, Radiating, Reoccurrence: Where is the pain (point with one finger)? Does it move/radiate elsewhere? Have you had this pain before?
* S – Severity: Rate the pain on a scale of 1-10 (10 being worst).
* T – Time: How long has the pain been going on?

### D. Physical Exam (Trauma vs. Medical Patients)

* Rapid Physical Exam:When: Unresponsive patients and major trauma patients.
* Goal: Quick (1-1.5 minutes) but thorough head-to-toe assessment to identify potential life-threats, even if hidden by other injuries or adrenaline.
* DCAP-BTLS (for Trauma):
* D – Deformities
* C – Contusions
* A – Abrasions
* P – Punctures/Penetrations
* B – Burns
* T – Tenderness
* L – Lacerations
* S – Swelling/Scars
* Verbalization: Crucial to verbalize looking for DCAP-BTLS during class assessments.
* Focused Physical Exam: For conscious medical patients, a more specific exam based on the chief complaint. (Not detailed in this excerpt but implied).

## V. Reassessment

The reassessment is a continuous process of monitoring the patient and identifying changes in their condition.

* Frequency:Critical Patients: Every 5 minutes.
* Less Critical Patients: Every 15 minutes.
* Process: Recheck vitals, run through primary and secondary assessments again, ask about changes in pain, and monitor response to any treatments (e.g., medications from paramedics).
* Importance: Patient conditions are dynamic and can deteriorate rapidly. Ensures optimal patient care throughout transport.

## Quiz: Short-Answer Questions

Instructions: Answer each question in 2-3 sentences.

* What are the four main components of the EMT patient assessment, and why is this systematic approach beneficial?
* Explain the importance of "Personal, Partner, and Patient Safety" in the PENMAN acronym and why they are prioritized in that specific order.
* Describe the difference between Mechanism of Injury (MOI) and Nature of Illness (NOI), and provide an example of how they can be interrelated.
* You encounter an unresponsive patient. What is the immediate first step you would take after determining unresponsiveness, and why is using your thumb to check for a pulse discouraged?
* What are the two shockable heart rhythms that an AED looks for, and why is asystole (flatline) not considered a shockable rhythm?
* Explain why "Airway is King" in the primary assessment, and describe the two maneuvers used to open an airway, differentiating when each is appropriate.
* During the circulation assessment (COPS), what does "Capillary Refill" indicate, and how is it assessed? What is the expected normal finding?
* A patient presents with cool, pale, and diaphoretic skin. What critical condition might this indicate, and what three immediate interventions would you perform for this patient?
* List the components of the SAMPLE acronym and explain the difference between a "sign" and a "symptom" when gathering patient history.
* When is a rapid physical exam indicated, and what mnemonic is used to guide the assessment for trauma patients during this exam?

## Quiz Answer Key

* The four main components are Scene Size-Up, Primary Assessment, Secondary Assessment, and Reassessment. This systematic approach is beneficial because it ensures that all critical aspects of patient care are covered, making the information easier to digest and reducing the likelihood of forgetting crucial steps.
* "Personal, Partner, and Patient Safety" are prioritized in that order because EMTs must first ensure their own safety and that of their partner. If the responders are unsafe, they cannot effectively help the patient, making their own protection paramount before attempting to assist the patient.
* Mechanism of Injury (MOI) refers to the force that caused a physical injury (e.g., a fall resulting in a broken arm), while Nature of Illness (NOI) refers to the medical condition causing the symptoms (e.g., hypoglycemia). They are interrelated because an NOI can cause an MOI, such as a patient having a seizure (NOI) that leads to a traffic collision and head injury (MOI).
* Upon finding an unresponsive patient, the immediate first step is to check for a carotid pulse. Using your thumb to check for a pulse is discouraged because your thumb has its own pulse, and you might mistakenly feel your own pulse instead of the patient's, leading to an inaccurate assessment.
* The two shockable heart rhythms an AED looks for are Ventricular Fibrillation (V-fib) and Pulseless Ventricular Tachycardia (V-tach). Asystole (flatline) is not a shockable rhythm because it indicates a complete absence of electrical activity, meaning there is no disorganized rhythm for the AED to correct with a shock.
* "Airway is King" because an obstructed airway prevents adequate oxygen from reaching the lungs and tissues, leading to permanent brain damage within minutes. The Head-Tilt Chin-Lift maneuver is used when no trauma is suspected, while the Modified Jaw-Thrust is used for suspected trauma to avoid neck movement and potential spinal injury.
* Capillary Refill indicates the adequacy of blood perfusion to the extremities. It is assessed by squeezing the patient's nail bed until it blanches white, then releasing and observing how quickly the pink color returns. A normal finding is the color returning in less than two seconds.
* Cool, pale, and diaphoretic skin typically indicates that a patient may be going into shock. The three immediate interventions would be to place them in the shock position (elevate their legs), cover them with a blanket to conserve body heat, and administer supplemental oxygen.
* The SAMPLE acronym stands for Signs and Symptoms, Allergies, Medications, Pertinent Medical History, Last Oral Intake, and Events Leading Up To. A "sign" is an objective finding that can be observed (e.g., rapid breathing), whereas a "symptom" is a subjective complaint described by the patient (e.g., a headache).
* A rapid physical exam is indicated for unresponsive patients and major trauma patients. The mnemonic used to guide the trauma assessment during this exam is DCAP-BTLS, which stands for Deformities, Contusions, Abrasions, Punctures/Penetrations, Burns, Tenderness, Lacerations, and Swelling/Scars.

## Essay Format Questions

* Discuss the importance of the Scene Size-Up in the overall EMT patient assessment. Detail how each component of the PENMAN acronym contributes to ensuring rescuer safety and effective patient care, providing specific examples for each letter.
* Compare and contrast the primary and secondary assessments in terms of their goals, the type of information gathered, and the urgency of interventions. How do the AVPU and SAMPLE acronyms guide each phase, respectively?
* Describe the protocol for an unresponsive patient found without a pulse, as detailed in the source material. Explain the roles of CPR, AED, and airway management in this scenario, emphasizing why timely and correct execution of each step is critical for patient survival.
* Elaborate on the components of the "Circulation" assessment (COPS) within the primary assessment. For each letter, explain what is being assessed, why it is important, and how potential findings (e.g., abnormal capillary refill, active bleeding, weak pulse, shocky skin signs) dictate immediate EMT interventions.
* Analyze the role of the OPQRST questions in assessing a medical patient experiencing pain. Explain how each component of OPQRST contributes to a comprehensive understanding of the patient's chief complaint and how this information aids in differentiating between potential conditions and informing hospital staff.

## Glossary of Key Terms

* AED (Automated External Defibrillator): A portable electronic device that automatically diagnoses life-threatening cardiac arrhythmias (like V-fib and V-tach) and is able to treat them through defibrillation, allowing the heart to reestablish an effective rhythm.
* ALS (Advanced Life Support): Advanced medical procedures, typically performed by paramedics, that go beyond basic life support, such as intubation, intravenous fluid administration, and advanced drug administration.
* Angina Pectoris: Chest pain or discomfort due to reduced blood flow to the heart muscle, often a symptom of coronary artery disease.
* Asystole: A state of cardiac arrest where there is no electrical activity in the heart; commonly known as "flatline" on an EKG. It is not a shockable rhythm.
* Auscultate: To listen to sounds from the heart, lungs, or other organs, typically with a stethoscope, for diagnostic purposes.
* AVPU: An acronym used in the primary assessment to quickly assess a patient's Level of Consciousness (LOC): Alert, Verbal, Pain, Unresponsive.
* Baseline: A patient's normal state of health or level of functioning before an illness or injury, used for comparison.
* BSI (Body Substance Isolation): Precautions taken by emergency responders to protect themselves from exposure to a patient's body fluids (e.g., blood, vomit) through the use of personal protective equipment (PPE).
* BVM (Bag Valve Mask): A hand-held device used to provide positive pressure ventilation to patients who are not breathing or are breathing inadequately.
* C-collar (Cervical Collar): A brace used to support a person's neck and spinal cord, often used in cases of suspected cervical spine injury.
* Capillary Refill: The time it takes for color to return to an external capillary bed (like a nail bed) after pressure is applied and then released, indicating peripheral perfusion.
* Cardiac Arrest: The abrupt loss of heart function, breathing, and consciousness, typically caused by an electrical problem in the heart.
* Carotid Pulse: A major arterial pulse point located in the neck, used to assess a patient's pulse, especially when the patient is unresponsive.
* Chief Complaint: The main reason the patient called for emergency medical assistance or sought medical attention.
* COPS: An acronym used in the primary assessment to guide the circulation assessment: Capillary refill, Obvious signs of bleeding, Pulse, Skin signs.
* CPR (Cardiopulmonary Resuscitation): A life-saving procedure performed when the heart stops beating, involving chest compressions and artificial ventilations.
* DCAP-BTLS: A mnemonic used in rapid trauma assessments to check for various injuries: Deformities, Contusions, Abrasions, Punctures/Penetrations, Burns, Tenderness, Lacerations, and Swelling/Scars.
* Diaphoretic: Profusely sweating.
* Diastolic Pressure: The bottom number in a blood pressure reading, representing the pressure in the arteries when the heart rests between beats.
* Dyspnea: Shortness of breath or difficulty breathing.
* EKG (Electrocardiogram): A medical test that measures the electrical activity of the heart.
* Epinephrine: A hormone and medication (also known as adrenaline) used in emergency situations to treat severe allergic reactions (anaphylaxis), cardiac arrest, and other conditions.
* Extrication: The process of removing a patient from a dangerous or confined space, often requiring specialized tools.
* Field Impression: A concise summary of a patient's condition and initial findings, formulated by the EMT on scene to communicate to other medical personnel.
* GSW (Gunshot Wound): An injury caused by a projectile from a firearm.
* HAM: An alternative acronym for patient history: History, Allergies, Medications.
* Head-Tilt Chin-Lift Maneuver: A technique used to open a patient's airway when no cervical spine injury is suspected, by tilting the head back and lifting the chin forward.
* Hypoglycemia: A condition characterized by abnormally low blood glucose (blood sugar) levels.
* Hypotensive: Having abnormally low blood pressure.
* Intubated: The insertion of a tube (endotracheal tube) into a patient's trachea to maintain an open airway and facilitate breathing, typically performed by ALS providers.
* Laceration: A deep cut or tear in skin or flesh.
* Level of Consciousness (LOC): A measurement of a person's awareness and responsiveness to stimuli.
* Mechanism of Injury (MOI): The specific forces, energies, and events that cause trauma to a patient.
* Medical Patient: A patient whose primary problem is a medical illness rather than a traumatic injury.
* Modified Jaw-Thrust Maneuver: A technique used to open a patient's airway when a cervical spine injury is suspected, by displacing the jaw anteriorly without tilting the head.
* Myocardial Infarction (MI): A heart attack; damage to the heart muscle due to a lack of blood supply.
* Nasopharyngeal Airway (NPA): A soft, flexible tube inserted through the nostril into the posterior pharynx to maintain an open airway.
* Nature of Illness (NOI): The general type of medical problem or complaint a patient is experiencing.
* OPQRST: An acronym used in the secondary assessment to gather more specific information about a patient's pain: Onset, Provocation/Palliation, Quality, Region/Radiation/Reoccurrence, Severity, Time.
* Oropharyngeal Airway (OPA): A rigid, curved device inserted through the mouth into the posterior pharynx to maintain an open airway in an unconscious patient who has no gag reflex.
* Palpate: To examine by touch, especially for medical diagnosis.
* Patency: The state of being open, unobstructed, or extended (e.g., a patent airway is clear).
* PENMAN: An acronym used in the scene size-up: Personal/Partner/Patient safety, Environmental hazards, Number of patients, Mechanism of injury/Nature of illness, Additional resources, Need for extrication/Spinal immobilization.
* PERRL: An acronym used in the secondary assessment to evaluate the patient's eyes: Pupils Equal, Round, and Reactive to Light.
* Postictal State: The altered state of consciousness following an epileptic seizure, characterized by confusion, disorientation, and sometimes nonverbal behavior.
* Primary Assessment: The initial rapid assessment conducted by an EMT to identify and treat immediate life-threatening conditions.
* Profusion: The process of fluid flowing through the circulatory system to adequately deliver blood to a tissue or organ.
* Pulseless V-tach (Ventricular Tachycardia): A rapid heart rhythm originating in the ventricles that does not produce a palpable pulse, indicating cardiac arrest. It is a shockable rhythm.
* Radial Pulse: An arterial pulse point located on the thumb side of the wrist, commonly used for quick pulse checks.
* Rapid Physical Exam: A quick, head-to-toe assessment performed on unresponsive or major trauma patients to rapidly identify significant injuries.
* Reassessment: The continuous process of monitoring a patient's condition and rechecking vital signs, performed regularly throughout patient care.
* Respirations: The act of breathing; the rate, depth, and character of breaths.
* SAMPLE: An acronym used in the secondary assessment to gather a patient's medical history: Signs and Symptoms, Allergies, Medications, Pertinent medical history, Last oral intake, Events leading up to present illness/injury.
* Scene Size-Up: The first component of the patient assessment, involving taking in information from dispatch, assessing scene safety, and gaining initial impressions before direct patient contact.
* Secondary Assessment: A more detailed assessment conducted after the primary assessment, involving a patient history (SAMPLE), vital signs (BELLS RP), and a focused or rapid physical exam.
* Shock: A life-threatening medical condition of inadequate blood flow to the body's tissues, leading to cellular dysfunction.
* Shock Position: A position where a patient lies supine with legs elevated, intended to improve blood flow to the brain and vital organs.
* Sign: An objective physical finding that can be observed or measured (e.g., rapid pulse, visible bleeding).
* Spinal Immobilization: The process of restricting movement of the spine to prevent further injury, often involving a backboard and C-collar.
* Stridor: A high-pitched, wheezing sound caused by disrupted airflow in the upper airway, often indicating a serious obstruction.
* Subjective: Information based on a patient's personal feelings, interpretations, or opinions that cannot be objectively measured (e.g., pain, dizziness).
* Suction: The process of removing fluids (e.g., blood, vomit, secretions) from a patient's airway using a suction device.
* Supine: Lying on the back, face up.
* Symptom: A subjective indication of disease or injury that the patient reports (e.g., headache, nausea).
* Systolic Pressure: The top number in a blood pressure reading, representing the pressure in the arteries when the heart beats.
* Tachycardic: A heart rate that is faster than normal.
* Thready Pulse: A weak and rapid pulse that feels like a thread or filament under the finger, often indicating inadequate circulation.
* Tidal Volume: The amount of air that moves in or out of the lungs with each respiratory cycle.
* Tourniquet: A device used to compress an artery or vein to stop blood flow, typically used to control severe bleeding in an extremity.
* Trauma Patient: A patient who has sustained a physical injury caused by an external force.
* Triage Nurse: A nurse who assesses and sorts patients according to the urgency of their need for care.
* Tripod Position: A compensatory posture often adopted by patients with severe respiratory distress, characterized by leaning forward with hands on knees or other surfaces to maximize lung expansion.
* V-fib (Ventricular Fibrillation): A chaotic, unsynchronized electrical activity in the ventricles of the heart that results in the heart "quivering" rather than pumping blood effectively. It is a shockable rhythm.
* Ventilations: The process of moving air into and out of the lungs.
* Vitals (Vital Signs): Basic physiological measurements that indicate the status of a patient's essential body functions (e.g., blood pressure, pulse, respirations, skin signs, LOC).
* Wheezing: A high-pitched whistling sound produced by air passing through narrowed airways, commonly associated with asthma or other respiratory conditions.
* Whiplash: A neck injury due to forceful, rapid back-and-forth movement of the neck, often seen in car accidents.