

1. Scene Size-up
- a. Body Substance Isolation
 - b. Is my scene safe
 - c. Mechanism of injury Nature of illness
 - d. # of patients
 - e. Call for help
 - f. Begin Triage

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2. Initial Assessment

Use a General Impression to Assess the patients Position/Signs/Activity "Hey, Hey are you okay"

- (1) Alert
- (2) Verbal stimulus
- (3) Painful Stimulus
- (4) Unresponsive

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TAKE CSPINE (ABCDEF)

- a. Airway assessment
- b. Breathing assessment Look/Listen/Feel
- c. Circulation assessment
- d. Determine Patient Priority
- e. Expose the patient
- f. Focused exam

Acronyms

PCR Pre-hospital Care Report

PPE

Personal Protective Equipment

LOC Level of Consciousness

PTSD Post Traumatic Stress Disorder

OSHA Occupational Safety and Health Administration

DABDA Denial Anger Bargaining Depression Acceptance

CISD Critical Incident Stress Debriefing

PEARL Pupils Equal And React to Light

Compensated – Hypoperfusion/Hypoxia starts – compensated by reduced container constricted blood flow increased respiratory rate increased force of heart contractions
Uncompensated – Decreased perfusion of organs – no longer maintains normal BP ext time cells die
Irreversible – Cease to function – Little can be done in field, transport immediately

3A. Rapid Focused P. E. and History

(TRAUMA)

a. Rapid focused physical exam (using DCAPBLS-TIC-PMS)

- (1) Head
- (2) Neck
- (3) Chest
- (4) Pelvis
- (5) Abdomen (TRDG)

3A

Tenderness Rigidity Distension Guarding

- (6) Extremities
- (7) Back
- (8) Baseline vitals

Signs of Trauma (DCAPBLS-TIC-PMS)

- (1) Deformities
- (2) Contusions
- (3) Abrasions
- (4) Punctures/Penetrations/Paradoxical Mvmnt
- (5) Burns
- (6) Lacerations
- (8) Swelling
- (9) Tenderness
- (10) Instability
- (11) Crepitus
- (12) Pulses
- (13) Motor response
- (14) Sensory

b. Rapid focused history (SAMPLE)

- (1) Signs
- (2) Allergies
- (3) Medications
- (4) Pertinent medical history
- (5) Last oral intake

ON-GOING ASSESSMENT

- 1. Repeat initial exam
- 2. Vital signs
- 3. Recheck what was found during focused exam
- 4. Recheck interventions

On-Going

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Secure the Airway
Heat Conservation in the Body
Oxygenation of RBCs
Core perfusion improved by elevation of legs
Keep the field as short

Shock

3B. Rapid Focused P. E. and History (MEDICAL)

a. Rapid focused physical exam (using DCAPBLS-TIC-PMS)

- (1) Head
- (2) Neck
- (3) Chest
- (4) Pelvis
- (5) Abdomen (TRDG)
- (6) Extremities
- (7) Back
- (8) Baseline vitals

3B

Evaluate chief complaint (OPQRST)

- (1) Onset
- (2) Provocation
- (3) Quality
- (4) Radiation
- (5) Severity
- (6) Time

b. Rapid focused history (SAMPLE)

- (1) Signs
- (2) Allergies
- (3) Medications
- (4) Pertinent medical history
- (5) Last oral intake
- (6) Event

ROOT WORDS/MEANINGS

CARDI	Heart
OSTE	Bone
GASTR	Stomach
NEPHR	Kidney
PHLEB	Vein
TRACHE	Trachea
THORAC	Chest

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PREFIXES/MEANINGS

AMBI	Both, Both Sides
PRE	Before, In Front
HYPO	Under, below
EPI	Upon
INTER	Between
POST	After, Behind

SUFFIXES/MEANINGS

-ECTOMY	Excision
-IT IS	Inflammation
CENTESIS	Surgical Puncture
-METER	Instrument to Measure
-SCOPY	Visual Exam
-PARESIS	Partial Paralysis

3C. Detailed physical examination

- a. Head
- b. Face
- c. Ears
- d. Eyes
- e. Nose
- f. Mouth
- g. Neck
- h. Chest
- i. Abdomen
- j. Pelvis
- k. Extremities
- l. Back
- m. Reassessment of Baseline vitals

3C

ABBREVIATIONS/MEANINGS

AMI	Acute Myocardial Infarction
ASHD	Atherosclerotic Heart Disease
BP	Blood Pressure
C	Centigrade
CA	Cancer
CCU	Cardiac Care Unit
CHF	Congestive Heart Failure
COPD	Chronic obstructive Pulmonary Disease
CSF	Cerebrospinal Fluid
CVA	Cerebrovascular Accident
DX	Diagnosis
ECG	Electrocardiogram
F	Fahrenheit
FX	Fracture
GI	Gastrointestinal
GM	Gram
ICU	Intensive Care Unit
IV	Intravenous
O2	OXYGEN
RN	REGISTERED NURSE
RX	Treatment
P-	Pulse
R-	Respiration

Abbreviations

4. Baseline Vitals Signs

- a. Pulse
- b. Ventilations
- c. Blood pressure
- d. Skin color and temperature
- e. Level of consciousness (AVPU)/LOC Level
 - 1. Person
 - 2. Place
 - 3. Time
 - 4. Event
- f. Pupil Reaction
- g. SAMPLE History (Reassess vitals every 5 minutes for Trauma every 15 minutes for other)

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TYPES: Hypovolemic: low volume Cardiogenic: pump failure Psychogenic: emotional Septic: infections
Anaphylactic: allergic reaction

COMMON DIRECTIONAL TERMINOLOGY

<u>TORSO</u>	Trunk of the body	The chest is located in the TORSO
<u>MIDLINE</u>	Line vertically down the middle	The nose is located in the MIDLINE
<u>MEDIAL</u>	Toward the midline	The heart is MEDIAL to the right arm
<u>LATERAL</u>	Away from the middle	The ear are located LATERAL to the head
<u>PROXIMAL</u>	Closer to the trunk	The elbow is PROXIMAL to the trunk
<u>DISTAL</u>	Farther from the trunk	The wrist is DISTAL to the elbow
<u>SUPERIOR</u>	Above	The head is SUPERIOR to the shoulders
<u>INFERIOR</u>	Below	The feet are INFERIOR to the knees
<u>MIDAXILLARY</u>	Line down mid armpit to ankle	Divides body into anterior and posterior
<u>ANTERIOR</u>	Toward the front	The abdomen is located ANTERIOR to the spine
<u>POSTERIOR</u>	Toward the rear	The spinal column is located POSTERIOR to the heart
<u>MIDCLAVICULAR</u>	Line down clavicle to pelvis	The nipples are located in the MIDCLAVICULAR line
<u>BILATERAL</u>	Pertaining to both sides	The patient had BILATERAL wrist deformities
<u>DORSAL</u>	Toward the back	The buttocks are located on the DORSAL side of body
<u>VENTRAL</u>	Toward the front	The abdomen is located on the VENTRAL side of body
<u>PALMAR</u>	Relating to the palm	The patient had a PALMAR wart
<u>PLANTAR</u>	Relating to sole of the foot	The patient had a PLANTAR wart
<u>PRONE</u>	Lying face down	The patient was found PRONE
<u>SUPINE</u>	Lying face up	The patient was found SUPINE
<u>FOWLER position</u>	Sitting up	The patient was placed in the FOWLER position
<u>TRENDELENBURG pos</u>	Feet up, head down	The patient was placed in the TRENDELBERG position
<u>RECOVERY position</u>	On side	
<u>ASPICES</u>	Plural of APEX	The uppermost portion of the liver is the APEX

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ARTICULATIONS

CARTILIDGE between bones lubricate and cushion

LIGAMENTS hold bones together

206 Bones divided into eight parts

JOINTS

Ball and Socket, Hinged, Pivot, Fused/Sutured

Ellipsoid, Saddle, Plane/Gliding Joints connect bone to bone

SKULL (4 major areas)

Frontal Occipital Temporal Parietal

BONES of the FACE (5 major bones)

Nasal 2 Maxilla 2 Zygomatic Mandible Orbit

SPINAL COLUMN

33 bones called vertebrae

7 Cervical, 12 Thoracic, 5 Lumbar, 5 Sacrum, 4 Coccyx

THORAX

12 Ribs attached posteriorly to thoracic vertebrae

Of 12 only 10 attached anteriorly to the Sternum

Sternum divided into 3 parts Manubrium, Body, Xiphoid Process

PELVIS

Iliac Crest, Ischium, Pubis

UPPER EXTREMITIES

Shoulder blade (3 parts) Scapula, Acromion, Clavicle, Humerus, Ulna, Radial

Carpals, Metacarpals, Phalanges

LOWER EXTREMITIES

Femur Hip Joint Patella Tibia Fibula

Ankle (Medial and Lateral Malleolus)

Foot (Tarsals and Metatarsals)

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Nervous System

2 Divisions,

The Central Nervous System (CNS) composed of Brain and Spinal column

Command center of the body Brain = Brain Stem, Cerebellum (big), Cerebrum (little)

The Peripheral Nervous System (PNS) composed of 2 types of nerves, Sensory and Motor

Sensory nerves (carry messages from body to CNS)

Motor nerves (carry messages from CNS to body)

Autonomic nervous system carries out voluntary and involuntary actions

Sympathetic nervous system, speeds up heart rate

Parasympathetic slows down heart rate

DIGESTIVE SYSTEM

Processes solids and liquids

Transcends oral, thoracic, abdominal, and pelvic cavities

Food taken into mouth, esophagus, stomach, small intestine,

Large intestine, colon, rectum

Digestive system

Endocrine

Secretes chemicals called hormones from glands into bloodstream

The hormones regulate body activities and functions

Two major hormones are epinephrine (adrenalin) and insulin

Insulin is produced by the pancreas and metabolizes glucose for energy

BODY CAVITIES

Skull Cavity, Thoracic Cavity

Abdominal Cavity/divided into four quadrants

Cavities

INTEGUMENTARY SYSTEM

Largest organ of the body

Protects the body from environment

3 Layers

Epidermis

Dermis

Subcutaneous

Skin

MUSCULAR SYSTEM

Muscles divided into 3 types

Voluntary

Contract/Relax at will

Tendons connect bone to muscle creating pull when the muscle contracts

Striated

Extension (muscle relaxes)

Flexion (muscle contracts)

Involuntary

Smooth muscles

Cardiac

Found in heart (smooth)

Generates own contraction

Has 3 layers

Epicardium (outer)

Myocardium (mid contracts)

Endocardium (inner)

Muscular System

Respiratory

Mouth, Nose, Oropharynx

Nasopharynx

Pharynx, Epiglottis Larynx, Vocal cords

Trachea, Carina

Bronchi, Bronchioles

Alveolus

Lungs 3 lobes right/ 2 left

Diaphragm

Visceral Pleura, lung ext

Parital Pleura, chest wall

Intercostal muscles, between ribs

Ventilation

12-20 adult

15-30 child

25-30/50 infant

Measure –

Rate/Rhythm/Quality/Depth

Mediastinum, cavity behind lungs

Tidal Volume = 500ml is normal

CARDIOVASCULAR

3 components/ Heart, Blood, Blood vessels (Pump, Pipes, Fluid)

Two circuits, Pulmonary (Lungs) and Systemic (Body)

Heart made of 3 layers, **Epicardium**, **Myocardium**, **Endocardium**

Pericardium is the thin sack or layer around the heart

Arteries flow away from the heart/Veins flow to the heart

Aorta, Arteries, Arterioles, Capillaries, Venules, Veins Vena Cava S/I

Artery: Aorta, Coronary, Carotid, Femoral, Brachial, Radial, Iliac, Pedis, Tibial,

Veins: Vena cava S/I, Iliac, Femoral, Great saphenous

4 Heart Valves, **Tricuspid**, **Pulmonary**, **Mitral**, **Aortic**

Pulmonary arteries- take waste blood to the lungs

Pulmonary veins- bring O2 rich blood to the heart

Blood composed of plasma and three types of cells

Plasma, suspends the blood cells and nutrients (45% blood fluid)

Red cells (erythrocytes) contain hemoglobin (binds O2 to tissue)

White cells (Leukocytes) (fights infection) (5 types)

Platelets (thrombocytes) (clots blood) (damaged red cells)

Adult has 5-6 liters of blood (5000ml) Infants 800 ml, Newborn 300ml

Blood pressure, Adult normal is 120/80 with females normally 10 low

Systolic (left ventricle contracts) high #

Diastolic (left ventricle rests) low #

Perfusion circulation of blood through organ/structure

Heart pumps out of blood/cycles blood in about 1 minute /called Cardiac Output

Radial most used pulse, Carotid easiest to find, check Rhythm, Character, Rate

Rhythm: Intervals between beats, regular/irregular

Character : Full=Strong, Bounding=Extremely Strong, Thready = Weak, Rapid

Pulse Rate: Adult=60–100 / Child=80–100 / Infant=100–140 Newborn=130-140

Tachycardia = high pulse >100 Bradycardia = low pulse <60

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