

Vital Signs Patient History

Chief Complaint-The patient's most serious sign or symptom of illness or injury
In general the patient's response to the question "What's wrong?"

Symptom- what the patient tells you is wrong

- "My arm hurts."
- "I feel faint."
- "I can't breath."

Sign- something you observe

- Bleeding
- Deformity
- Pulse, blood pressure. Respirations

Inspect- to look

Palpate- to feel

Auscultate- to listen

Vital Signs- (Pulse, Respirations, Blood Pressure)- key signs used to evaluate the patients general condition

Pulse- the pressure wave that is felt as blood passes through an artery with each heart beat. Can be felt anywhere an artery passes over a bone close to the skin surface.

Pulse points-

Carotid	Radial
Ulnar	Femoral
Brachial	Posterior tibial
Dorsal pedis	Temporal
Maxillary	

Rate- Slow (bradycardia), normal, fast (tachycardia)

Normal:

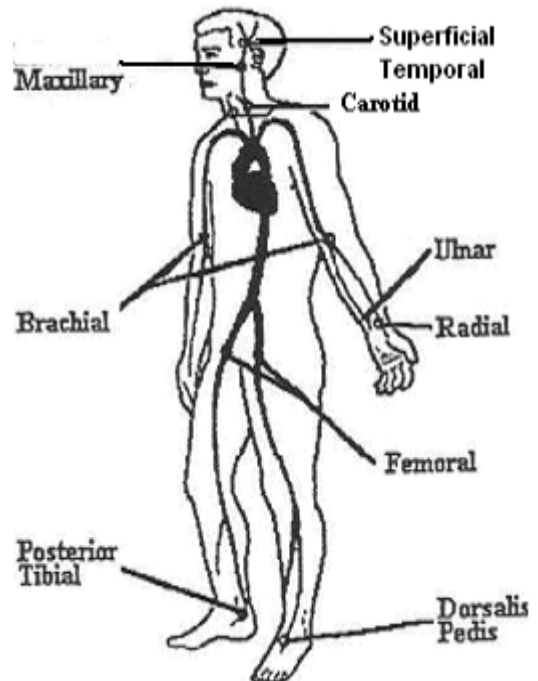
Adult	60-80 BPM
Child	60-120 BPM
Toddlers	80-150 BPM
Infants	120-150 BPM

Pulse Volume:

"Thready" - weak
"Bounding" - Strong

Regularity:

Regular
Irregular- skipped beats



Respirations

Spontaneous Respirations-breathing without assistance

Rate:

Adult 12-20 breaths per minute

Child 15-30 breaths per minute

Infant 25-50 breaths per minute

Quality/Depth- Can be described in one of four ways

❖ **Normal**- average chest wall motion, no use of accessory muscles, breathing neither Shallow or deep

❖ **Shallow**- there is slight chest or abdominal wall motion

❖ **Labored**- there is increased respiratory effort, grunting and the use of accessory muscles

- Nasal flaring, gasping, supraclavicular, intercostals retractions

❖ Noisy-

- **Snoring**- heard when relaxed tissue in the pharynx blocks the upper airway
- **Wheezing**- whistling breath sound caused by air traveling through narrowed air passages within the bronchioles, a sign of lower airway obstruction
- **Gurgling**- a gurgling sound that indicated a fluid is in the mouth or pharynx
- **Stridor**- a harsh, high-pitched sound heard on inspiration that indicated swelling of the larynx
- **Coughing**-
- **Barking**- seal like bark that is an indication of epiglottitis
- **Crowing**-similar to a cawing crow that indicated the muscles around the larynx are in spasm and the opening of the trachea is narrowing

Regularity- respirations should have a regular rate and rhythm, Changes in the rhythm Could indicate certain illness or injury.

❖ Regular

❖ Irregular

Sputum- coughing up matter from the lungs

-*Frothy pink sputum*- COPD, chest injury

-*Different color sputum*- infection of the lung

-*Red blood*-chest injury

Tripod Position- an abnormal position used to keep the airway open

Sniffing Position- an unusually upright position in which the patients head and chin are thrust forward

Blood pressure- pressure of the circulating blood against the walls of the arteries

➤ **Systolic**-pressure present as the heart contracts

- **MAXIMUM Pressure**

➤ **Diastolic**-pressure present when the heart relaxed

- **MINIMUM Pressure**

Changes in blood pressure can be an ominous sign because the body will try to maintain the perfusion of the organs. Changes are usually seen in both systolic and diastolic at the same time

Low BP (Hypo tension) -may indicate severe bleeding, heart damage or shock

High BP (Hypertension)- can cause arterial damage, rupture or stroke

Normal BP-100 + patients age in years (up to 140-160/ 60-90 slightly less in females)

Sphygmomanometer- Blood Pressure (BP) cuff

- Must be long enough to encircle the patient's arm
- Width should be 20% larger than the diameter of the patient's arm

Palpation- Place the BP cuff on the patient's upper arm with the arrow pointing toward the brachial artery. Inflate the cuff up to 30 mmHg above the point where the pulse can no longer be felt. Slowly lower the pressure and record the point at which the pulse is felt again.

*Systolic/P

Auscultation- Place the BP cuff in the patient's arm in the same manner as above. Place the stethoscope in the *Antecubital* (anterior portion of the elbow). Inflate the pressure to 30 mm Hg above the point where the beats can no longer be heard. Slowly lower the pressure, the point where the first beat is heard is the systolic pressure and the point at which the last beat is heard is the diastolic pressure. *Systolic/Diastolic

******If the pressure is heard all the way down—Systolic/all the way down******

Level of Consciousness- (LOC)- how awake and oriented a person is to his/her environment

- Normal person is awake and oriented to person, place and time (A/OX3, AWOX3)
- Most important sign in assessing neurological injuries

Skin Characteristics

Perfusion-Circulation of blood within an organ or tissue in adequate amounts to meet the cells' current needs

- Delivery of nutrients and the removal of waste products

Color-color of the skin depends primarily on the blood circulating through the vessels of the skin.

- Pink-normal skin color
- *Red*- fever, high blood pressure, heat stroke, carbon monoxide poisoning
- *Pale-white*, ashen or gray-insufficient circulation (shock), cold exposure
- *Cyanosis-blue*, poor oxygenation
- Jaundice-yellow-infection of the liver

Temperature and Moisture

- The body attempts to control its own temperature by radiation of heat from the skin's blood vessels and sweat evaporation
- Normal temperature is 98.6° F (37.0° C)
- Cool, clammy skin-shock or severe pain
- Cool, dry skin-Hypotension
- Hot, Dry skin- Hypertension

Capillary Refill-the ability of the circulatory system to restore blood flow to the capillaries after it has been squeezed out.

- Measured in the nail beds or bottom of foot (infants)
- Normal is 2 sec or less and pink in color
- Not a reliable sign in adults

Pupils:

Usually regular and equal in size. Usually respond to light by constricting

- Constricted pupils-narcotic use, nervous system disorder
- Dilated pupils- relaxed or unconscious state
- Unequal pupils- brain injury, stroke (Anisocoria)
- Unreactive pupils- poisoning, drug overdose, death

PEARL-a useful acronym in accessing pupils

P-pupils

E-equal

A-and

R-round

R-regular in size

L-react to light

Reassessment -Vital signs should be reassessed every fifteen (15) minutes in a stable patient and every five (5) minutes in an unstable patient

Obtaining a Patient history

SAMPLE History- used to obtain a brief key medical history from a patient or family member

S- signs & symptoms

A- allergies

M-medications

P- Pertinent past medical history

L-last oral intake

E- events leading to the illness or injury