Medical Terminology Overview

Week 2

Day 1: Vital Signs

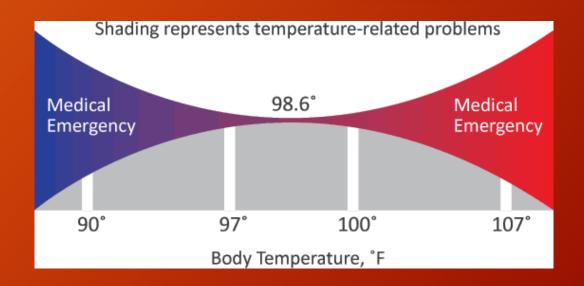
Vital Signs

Clinical measurements that indicate the condition of a person's essential body functions

- Body temperature
- Pulse rate
- Respiration rate
- Blood pressure

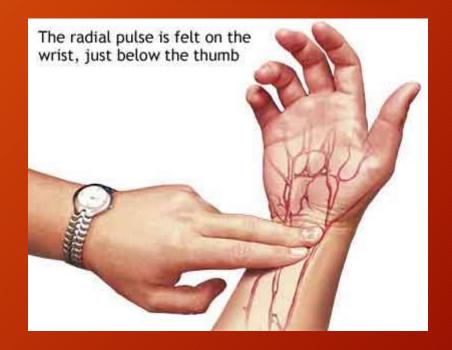
Body Temperature

- Normal body temperature can range from 97 - 100 degrees F (36.1 - 37.8 degrees C)
- Variations can occur due to differences in people, time of day, activity level, and where the temperature is taken
 - oral mouth
 - rectal rectum (1 degree higher)
 - axillary under the upper arm (1 degree lower)
 - aural or tympanic in the ear canal,
 - temporal scanning thermometer on a straight line across forehead



Pulse Rate

- The pulse is the pressure of the blood pushing against the wall of an artery
- The pulse rate can be taken at different places on the body. It is usually taken over the radial artery (on the inner side of the wrist, above the thumb.)
- Rate (beats per minute) variations can occur due to age, sex, and body size
 - 60 70 beats/min. is average male adult range,
 - 65 80 beats/min. is average female range.)
- Rhythm (spacing of the beats: regular or irregular)
- Volume (strength: strong, weak, etc.)



Respiratory Rate

- Respiration is the process of breathing in and out
- 3 facts must be noted:
 - Rate (breaths per minute): 12 20 breaths/min. is average adult range
 - Rhythm (spacing of the breaths): regular or irregular
 - Character (depth and quality): deep, shallow, labored, etc.



Blood Pressure

- The pressure that the blood makes on the artery walls during heart activity
- Blood pressure measurements:
 - Systolic (systole) pressure when the left side of the heart is contracting and pushing blood into the arteries (normal range: 100 -120 mm of Mercury)
 - Diastolic (diastole) -when the left side of the heart is at rest, i.e., between contractions (normal range: 60 - 80 mm of Mercury)



Day 2: Medical Prefixes

Acr/o= Extremities

- <u>acroarthritis</u>: inflammation of the hands or feet
- <u>acro</u>anesthesia: loss of sensation of the hands, fingers, feet, and toes
- <u>acro</u>asphyxia: poor blood circulation of the extremities

- <u>acro</u>agnosis: decrease of feelings in arms or legs
- <u>acro</u>ataxia: inability to perform smooth movements of extremities

Cardi-/o=Heart

- <u>cardio</u>active: affecting the heart
- cardialgy: heartburn
- <u>cardio</u>centesis: incision into the heart
- <u>cardio</u>oncology: study and treatment of cancers of the heart

- <u>cardiopathy</u>: disease or disorder of the heart
- <u>cardio</u>vascular: relating to the circulatory system
- <u>cardio</u>metry: measurement of the heart
- <u>cardio</u>logy: study of the structure, function, and disorders of the heart

Cyan-/o=Blue

- cyanosis: blue discoloration of the skin due to poor circulation
- cyanotoxin: toxins produced by bacteria

Cyt/o=Cell

- cytomegalovirus:
- cytology: analysis of cell samples
- cytosis: abnormal increase in the number of a specified type of cells
- cytoma: a cell tumor

- cytobiology: cell biology
- cytopathy: disease or deterioration of a cell
- cytotoxin: any substance having a specific toxic effect on certain cells
- cytogeny: cell production or development

Derma-/o, derm-/o=skin

- dermatologist: doctor specializing in the study/treatment of skin and its diseases
- dermatology: study of skin and its diseases
- <u>derma</u>titis: inflammation of the skin

- dermis: second layer of the skin
- dermabrasion: treatment to improve the look of the skin

Electr/o=electrical

- <u>electro</u>cardiogram: ECG; medical tests that detect heart abnormalities
- electorgastrography: recording of the electric signals that travel through the stomach muscles and control their contractions
- <u>electro</u>cardiograph: device that detects and records minute differences in electric potential caused by heart action; used to diagnose heart disease
- <u>electrography</u>: use of electrodes implanted directly in living tissue

eti/o=cause

- etiology: science studying the cause of diseases
- etiopathogenesis: cause and development of a disease or abnormal condition
- etiogenic: arising from a cause

- etiologist: someone who studies the cause of a disease
- etiopathy: determining the cause of a disease or illness
- etiotropic: treatment or medication that destroys the cause of a disease

Gastr/o=stomach

- gastrointestinal: of or pertaining to the stomach and intestines
- gastrology: study of the structure, functions, and diseases of the stomach
- gastralgia: stomach pain

- gastroplasty: surgical operation to correct stomach defect
- gastroesophageal: of or relating to the stomach and esophagus

Leuk/o=white

- <u>leuko</u>cytes: white blood cells
- <u>leuk</u>emia: cancer of the white blood cells
- <u>leuko</u>cytosis: white blood cells above the normal range

- <u>leukopenia</u>: decrease of white blood cells
- leukoplakia: white thickened patches on the mucous membranes of the cheeks, gums, or tongue

Megal/o=enlarged

- megalocytosis: unusally large numbers of macrocytes
- megalocephaly: largeness and especially abnormal largeness of head
- megaloblasts: abnormally large red blood cell found in people with anemia

- megalophthalmus: abrnomally large eye
- megalocardia: enlarged heart

Path-/o=disease

- pathology: studies the nature of diseases
- pathogen: any disease producing agent or microorganism
- <u>patho</u>formic: beginning of a disease

- <u>pathogenesis</u>: development of morbid conditions or of disease
- pathophysiology: convergence of pathology with physiology

Day 3: Medical Suffixes

-ology/iatry=study of

- oncology: study of cause and treatment of tumors
- dermatology: study of cause and treatment of diseases and disorders of the skin
- cardiology: study of cause and treatment of diseases and disorders of the heart
- psychology: study of the mental processes and behavior

- psych<u>iatry</u>: study and treatment of mental illness, emotional disturbance, and abnormal behavior
- pod<u>iatry</u>: treatment of feet and their ailments

-ologist/-ist=one who studies, a specialist

- oncologist: someone who studies/treats cancer (MD)
- dermatologist: someone who studies/treats the skin (MD)
- cardiologist: someone who studies/treats the heart (MD)
- psychologist: someone who studies human mind and behavior

- psychiatrist: someone who studies/treats mental illnesses (MD)
- podiatrist: someone who studies/treats the feet (DPM)

-iatrics/ician=medical profession/physician

- pediatrics: medical profession that involves children
- obstetrics: medial profession that involves childbirth

- pediatrician: MD who treats children
- obstetrician: MD who specializes in pregnancy, childbirth, and women's reproductive system

-gram=record

- echocardiogram: creates pictures of the heart
- electrocardiogram: records a person's heartbeat
- sonogram: records an image of the human organs

- fistulagram: X-ray that looks at blood flow and checks for blood clots in the fistula
- electroencephalogram: record of bran activity
- mammogram: records images of the inside of the breasts

-algia=pain

- cephalgia: headache
- figromyalgia: chronic pain
- mastalgia: breast pain

- arthralgia: joint pain
- myalgia: muscle pain
- neuralgia: nerve pain

-itis=inflammation of

- dermatitis: skin inflammation
- colitis: colon inflammation
- appendicitis: appendix inflammation
- gastritis: stomach inflammation

- bronchitis: bronchial tube inflammation
- carditis: heart inflammation
- neuritis: nerve inflammation

-ectomy=surgical cutting out

- splen<u>ectomy</u>: removal of the spleen
- tonsillectomy: removal of the tonsils
- append<u>ectomy</u>: removal of the appendix
- tympan<u>ectomy</u>: removal of the eardrum

- adenoid<u>ectomy</u>: removal of the adenoids
- mast<u>ectomy</u>: removal of one or both of the breasts
- nephr<u>ectomy</u>: removal of a kidney
- rhinectomy: removal of part of all of the nose

Day 4: Medical Practitioners: -ician, -ist

- anesthesiologist: doctor specializing in anesthesia (temporary loss of sensation or awareness)
- pediatrician
- obstetrician
- phlebotomist: people trained to draw blood
- cardiologist
- dermatologist
- endocrinologist

- gastroenterologist
- gerontologist: doctor specializing in the field of aging
- gynecologist: doctor specializing in the female reproductive system
- hematologist: doctor specializing in blood disorders
- hepatologist: doctor specializing in the study of liver, gallbladder, pancreas
- immunologist: doctor specializing in the immune system
- neonatologist: doctor specializing in newborn babies

- nephrologist: doctor specializing in kidney diseases
- neurologist
- oncologist
- ophthalmologist: doctor specializing in eye diseases
- otolaryngologist: doctor specializing in ear, nose, throat
- pathologist
- psychologist

- podiatrist
- psychiatrist
- pulmonologist: doctor specializing in the respiratory system
- radiologist: doctor specializing in diagnosing/treating injuries/disease through using medical imaging techniques
- rheumatologist: doctor specializing in treating musculoskeletal diseases and systemic autoimmune conditions
- urologist: doctor specializing in treating the urinary system and the male reproductive system

Medical Terminology Jeopardy

https://www.playfactile.com/medicalterminologyoverview

Day 5: Pharm Tech Overview

Pharm Tech Terms and Definitions

- Rx: prescription
- compounding: combines/alters the ingredients in a drug in order to be specific to the needs of a patient
- batch preparation: compounding many of the same item to have stock
- analgesics: painkiller
- anesthetic: causes anesthesia (short term and reversible loss of consciousness)
- antibiotic/antibacterial: destroys or inhibits the growth of a microorganism
- aseptic technique: free of microorganisms

Pharm Tech Abbreviations

- q: every
- qH: every hour
- qAM: every morning
- qPM: every evening
- qD: every day
- qOD: every other day
- qMO: every month
- q_H: every _ hours

- BID: twice a day
- TID: three a day
- QID: four a day
- C: with
- AC: before a meal
- PC: after a meal
- PRN: as needed
- GTT: drop

Pharm Tech Abbreviations

- TBSP: tablespoon
- TSP: teaspoon
- OZ: ounce
- PO: by mouth/oral
- TAB: tablet
- CAP: capsule
- IM: intramuscular

- SQ: subcutaneous
- IV: intravenous
- INJ: injection
- STAT: immediately