

Medical Termonology

The Body's Organization

The body is organized by cells, tissues, organs, and systems.

Word Part: Root	Meaning
anter/o	front, anterior
cerv/o	neck
chondr/o	cartilage
cyt/o	cell
dors/o	back
gastr/o	stomach
inguin/o	groin
my/o	muscle
myel/o	spinal cord
neur/o	nerve, neuron
poster/o	posterior, back
proxim/o	near
sarc	flesh
super/o	superior

Word Part: Prefix	Meaning
epi-	upon
hypo-	below or deficient
infra-	below
leio-	smooth
trans-	across

Word Part: Suffix	Meaning
-algia	pain
-cyte	cell
-edema	watery fluid in tissues
-ic	pertaining to
-ium	structure or tissue
-oid	resemblance to
-oma	tumor

Note: There are additional roots, prefixes, and suffixes that are not included within the tables throughout this handout; however, the examples will demonstrate how the word parts can be analyzed to determine the meaning of a word.

Example Terms:

$$\text{epigastric} = \frac{\text{epi (upon)} + \text{gastr (stomach)} + \text{ic (pertaining to)}}{\text{area just above the stomach}}$$

$$\text{hypogastric} = \frac{\text{hypo (below)} + \text{gastr (stomach)} + \text{ic (pertaining to)}}{\text{pertaining to below the stomach}}$$

The Integumentary System

This system, which protects the body from various kinds of damage, includes the skin, hair, nails, and sebaceous and sudoriferous glands.

Word Part: Root	Meaning
albin/o	white
cirr/h/o, jaund/o, xanth/o	yellow
cutane/o	skin
cyan/o	blue
cyt/o	cell
derm/o/at/ato	skin
erythr/o	red
fero	to carry
ichthy/o	dry, scaly (fishlike)
kerat/o	hornlike
melan/o	black
myc/o	fungus
onych/o	nail
pil/o	hair
scler/o	hardening
seb/o	sebum (oil; fat)
sudor/i/	sweat
xer/o	dry

Word Part: Prefix	Meaning
an-	without
anti-	against
de-	removal
epi-	upon
hyper-	above normal
para-	alongside of or abnormal
sub-	below or under

Word Part: Suffix	Meaning
-cyte	cell
-derma	skin
-ia	condition
-ism	condition
-logist	practitioner
-logy	study
-malacia	softening
-oma	tumor
-osis	abnormal condition

Example Term:

$$\text{scleroderma} = \frac{\text{sclero (hardening) + derma (skin)}}{\text{chronic hardening and thickening of the skin}}$$

The Skeletal System

The skeleton, which includes all the bones and joints, is the basic structure of our body.

Word Part: Root	Meaning
ankyl/o	stiff, fused, closed
arthr/o	joint
brachi/o	arm
cervic/o	neck
cheir/o	hand
chondr/o	cartilage
cost/o	rib
dactyl/o	finger, toe
lumb/o	lower back
myel/o	bone marrow
orth/o	correct, straight
os/te/o	bone
ped/o	foot, child
scoli/o	twisted
thorac/o	thorax, chest

Word Part: Prefix	Meaning
amphi-	both sides
syn-	joined together
zygo-	joined (yoked) together

Word Part: Suffix	Meaning
-algia	pain
-gram	written record of
-itis	inflammation
-kinesia	movement
-malacia	softening
-osis	condition
-plasty	surgical repair
-porosis	porous
-scopy	to visually examine
-sis	condition

Example Terms:

osteoarthritis = $\frac{\text{osteo (bone) + arthr (joint) + itis (inflammation)}}{\text{degeneration of joint cartilage and the underlying bone}}$

scoliosis = $\frac{\text{scolio (twisted) + sis (condition)}}{\text{lateral curvature of the spine}}$

The Muscular System

This system, which is responsible for movement, posture, and control of certain circulatory functions, is made up of skeletal, smooth, and cardiac muscles.

Word Part: Root	Meaning
cardi/o	heart
fasci/o	fibrous membrane
fibr/o	fiber
kinesi/o	movement
muscul/o	muscle
my/o	muscle
orth/o	straight
oste/o	bone
pedics	child
scler/o	hard
sthen/o	strength
tend/o, tendin/o	tendon
ton/o	tone

Word Part: Prefix	Meaning
a-	deficient
epi-	around
hemi-	half
para-	beside, beyond, near
quadri-	four

Word Part: Suffix	Meaning
-algia	pain
-dynia	pain
-oma	tumor
-osis	abnormal condition
-paresis	partial paralysis
-plegia	paralysis

Example Terms:

fibromyalgia = $\frac{\text{fibro (fiber) + my (muscle) + algia (pain)}}{\text{a disorder that causes widespread pain and tenderness to touch}}$

hemiplegia = $\frac{\text{hemi (half) + plegia (paralysis)}}{\text{paralysis of one side of the body}}$

The Nervous System

This system, which is made up of the central and peripheral nervous system, coordinates the body's involuntary and voluntary actions.

Word Part: Root	Meaning	Word Part: Prefix	Meaning
cephal/o	head	an-	without
cerebell/o	the cerebellum	di-	two
cerebr/o	the cerebrum; the brain	hemi-	half
cortic/o	outer layer or covering	myel/o-	bone marrow; spinal cord
encephal/o	brain		
esthesi/o	sensation	Word Part: Suffix	Meaning
gli/o	glue	-ia	condition of
hydr/o	water	-itis	inflammation
iatr/o	physician; to treat	-nesia	memory
meningi/o	a membrane	-oid	like
ment/o	referring to the mind	-paresis	weakness, loss of movement
schiz/o	to split	-phasia	speech
psych/o	referring to the mind	-plegia	paralysis

Example Terms:

$$\text{anesthesia} = \frac{\text{an (without) + esthesi (sensation) + ia (condition of)}}{\text{a condition of absence of sensation}}$$

$$\text{encephalitis} = \frac{\text{encephal (brain) + itis (inflammation)}}{\text{inflammation of the brain}}$$

The Endocrine System

This system, which consists of glands that produce hormones, works with the nervous system to maintain the body's homeostasis.

Word Part: Root	Meaning
acr/o	extremities
aden/o	gland
adren/o, adrenal/o	adrenal glands
calc/i	calcium
crin/o	to separate or secrete
endocrin/o	endocrine
gluc/o, glyc/o/s	sugar, glucose, glycogen
hypophys/o	pituitary gland
pancreat/o	pancreas
parathyr/o, parathyroid/o	parathyroid gland
thyr/o, thyroid/o	thyroid gland

Word Part: Prefix	Meaning
anti-	against or opposed to
epi-	upon
hypo-	below or deficient
para-	alongside of or abnormal

Word Part: Suffix	Meaning
-itis	inflammation
-megaly	enlargement
-oma	tumor
-tropin	nourishment; stimulation
-uria	urine

Example Terms:

$$\text{glycosuria} = \frac{\text{glycos (sugar) + uria (urine)}}{\text{sugar in the urine}}$$

$$\text{thyroiditis} = \frac{\text{thyroid (thyroid gland) + itis (inflammation)}}{\text{inflammation of the thyroid gland}}$$

The Cardiovascular System

This system, which carries oxygen and nutrients through the blood, includes the heart, blood, and blood vessels.

Word Part: Root	Meaning
angi/o	vessel
arteri/o	artery
ather/o	fatty
atri/o	atrium
cardi/o	heart
coron/o	crown; encircling
hem/o, hemat/o	blood
isch	restricted, narrowed
my/o	muscle
ox/o	oxygen
phleb/o	vein
thromb/o	clot
varic/o	dilated
vas/o	vessel
ven/o	vein

Word Part: Prefix	Meaning
bi-	two
brady-	slow
endo-	inner, inside
epi-	upon
hypo-	below or deficient
peri-	around, surrounding
tachy-	fast
tri-	three

Word Part: Suffix	Meaning
-ectasis	dilation
-emia	blood condition
-ia	condition
-pathy	disease
-stenosis	a narrowing

Example Terms:

$$\text{bradycardia} = \frac{\text{brady (slow)} + \text{cardi (heart)} + \text{ia (condition)}}{\text{abnormally slow heartbeat}}$$

$$\text{hypoxemia} = \frac{\text{hypo (below or deficient)} + \text{ox (oxygen)} + \text{emia (blood condition)}}{\text{low level of oxygen in blood}}$$

The Lymphatic System and Immunity

The lymphatic system is responsible for protecting the body from infection, maintaining a balance of fluids, and absorbing fats. It also consists of organs, tissues, and vessels.

Word Part: Root	Meaning
aden/o	gland
hem/o	blood
immun/o	immune system
leuk/o	white
lymphaden/o	lymph nodes
lymphangi/o	lymph vessels
lymph/o, lymphat/o	lymph or lymphatic system
path/o	disease
phag/o	ingest or engulf
splen/o	spleen
thym/o	thymus
tonsill/o	lymph node, usually palatine tonsil

Word Part: Prefix	Meaning
anti-	against or opposed to
auto-	self
mono-	single
macro-	large
micro-	small

Word Part: Suffix	Meaning
-edema	swelling
-itis	inflammation
-megaly	enlargement
-osis	condition of
-pathy	disease

Example Terms:

$$\text{lymphedema} = \frac{\text{lymph (lymph or lymphatic system)} + \text{edema (swelling)}}{\text{lymph tissue swelling}}$$

$$\text{tonsillitis} = \frac{\text{tonsill (tonsils)} + \text{itis (inflammation)}}{\text{inflammation of a tonsil}}$$

The Respiratory System

This system, which supplies oxygen to the cells and removes carbon dioxide, consists of the nose, pharynx, larynx, bronchi, bronchioles, alveoli, and lungs.

Word Part: Root	Meaning
bronch/o, bronchi/o	bronchus
laryng/o	larynx
nas/o, rhin/o	nose
or/o	mouth, opening
ox/o	oxygen
phren/o	diaphragm
pleur/o	pleura
pneum/o, pneumon/o	air, lung
pulmon/o	lung
sinus/o	sinus cavity
thorac/o, thorac/i, thoracic/o	thorax, chest
trache/o	trachea

Word Part: Prefix	Meaning
a-	without
brady-	slow
bronch/o-, bronch/i-	bronchus
dys-	difficult
hypo-	below or deficient
super-, supra-	above or excessive

Word Part: Suffix	Meaning
-ia	condition of
-oxia	oxygen
-phonia	voice
-pnea	breathing

Example Terms:

$$\text{apnea} = \frac{\text{a (without) + pnea (breathing)}}{\text{absence of breathing}}$$

$$\text{hypoxia} = \frac{\text{hypo (below or deficient) + ox (oxygen) + ia (condition of)}}{\text{low level of oxygen in tissue}}$$

The Digestive System

This system, which allows the body to absorb nutrients from food and fluids, consists of the tract from the oral cavity to the anus.

Word Part: Root	Meaning
bucc/o	cheek
cheil/o	lip
cholecyst/o	gallbladder
dent/i, dent/o	teeth
enter/o	intestine
gastr/o	stomach
gingiv/o	gums
gloss/o	tongue
hepat/o	liver
phag/o	eating, swallowing
proct/o	anus and rectum
sial/o	salivary glands
stomat/o	mouth

Word Part: Prefix	Meaning
anti-	against
dys-	difficulty
hyper-	excessive

Word Part: Suffix	Meaning
-cele	hernia
-emesis	vomit
-ia	condition of
-lith	stone
-pepsia	digestion
-phagia	eat or swallow
-scope	device for visual examination
-scopy	visual examination

Example Terms:

dysphagia = $\frac{\text{dys (difficulty) + phag (eating, swallowing) + ia (condition of)}}{\text{excessive vomiting}}$

hyperemesis = $\frac{\text{hyper (excessive) + emesis (vomit)}}{\text{excessive vomiting}}$

The Urinary System

This system, which removes wastes and toxins from the body, consists of the kidneys, ureters, urinary bladder, and urethra.

Word Part: Root	Meaning
cyst/o	bladder
glomerul/o	glomerulus
lith/o	stone
nephr/o, ren/o	kidney
noct/o	night
olig/o	little, few
py/o	pus
pyel/o	pelvis
ur/o, urin/o	urine
ureter/o	ureter
urethr/o	urethra

Word Part: Prefix	Meaning
an-	without
dys-	difficult
peri-	around
poly-	much, many
retro-	backward, behind

Word Part: Suffix	Meaning
-algia	pain
-ectomy	removal
-ia	condition
-lith	stone
-megaly	enlargement

Example Terms:

$$\text{dysuria} = \frac{\text{dys (difficult)} + \text{ur (urine)} + \text{ia (condition)}}{\text{difficult or painful urination}}$$

$$\text{nephrectomy} = \frac{\text{nephr (kidney)} + \text{ectomy (removal)}}{\text{surgical removal of a kidney}}$$

The Reproductive System

This system, which allows us to perpetuate life, includes the reproductive organs.

Word Part: Root	Meaning		Meaning
balan/o	glans penis	a-	without
cervic/o	cervix	dys-	painful, difficult
circum/o	around	hydro-	water
colp/o, vagin/o	vagina	neo-	new
gonad/o	gonads, sex glands	pre-, pro-	before
gynec/o	woman, female	re-	again
lact/o	milk		
mast/o, mamm/o	breast		
men/o	menstruation		
nat/o	birth		
oophor/o, oo	ovary, egg		
ovari/o	ovary		
prostat/o	prostate gland		
salping/o	tube, fallopian tube		
uter/o, hyster/o, metr/o	uterus		
vas/o	vessel, vas deferens		

	Meaning
-cele	hernia
-ectomy	excision
-genesis	production
-osis	process
-pathy	disease
-plasty	surgical repair
-rrhea	flowing, discharge
-sterone	steroid hormone

Example Terms:

dysmenorrhea = $\frac{\text{dys (painful)} + \text{meno (menstruation)} + \text{rrhea (discharge)}}{\text{painful menstruation}}$

hysterectomy = $\frac{\text{hyster (uterus)} + \text{ectomy (excision)}}{\text{removal of the uterus}}$

Sense of Sight and Hearing

Certain root words are associated with the organs that process sight and sound.

Sense of Sight	
Word Part: Root	Meaning
blephar/o	eyelid
dacry/o	tears, lacrima
dipl/o	two, double
ocul/o	eye
opt/o	light, eye, vision
retin/o	retina

Word Part: Prefix	Meaning
a-	without
auri-	ear
extra-	outside
hyper-	above normal
presby-	old
sensor-	sensory

Sense of Hearing	
Word Part: Root	Meaning
acous/o, acus/o, acoust/o	hearing
audi/o	sound
aur/o	ear
auricul/o	ear
ot/o	ear
tympan/o	eardrum

Word Part: Suffix	Meaning
-cele	hernia
-ectomy	excision or removal
-itis	inflammation
-lith	stone
-opia	eye, vision
-plegia	paralysis
-ptosis	falling or downward displacement
-rrhea	discharge

Example Terms:

$$\text{diplopia} = \frac{\text{dipl (double) + opia (vision)}}{\text{double vision}}$$

$$\text{retinitis} = \frac{\text{retin (retina) + itis (inflammation)}}{\text{inflammation of the retina}}$$