

Planes, directions and cavities

- ✓ **Anatomic position:** erect, face forward, arms at sides, palms forward, toes forward
- ✓ **Coronal (frontal):** front and back. Front = anterior/ventral, back = posterior/dorsal

- ✓ **Midsagittal (median):** equal right and left halves. Toward midline = medial, away = lateral
- ✓ **Transverse (horizontal):** upper and lower. Above = superior/cephalad, below = inferior/caudad

Term	Meaning	Term	Meaning
Proximal	Near the origin / trunk	Distal	Far from the origin / trunk
Superficial	Toward the surface	Deep	Away from the surface
Ipsilateral	Same side	Contralateral	Opposite side
Afferent	Carrying toward	Efferent	Carrying away
Unilateral	One side	Bilateral	Two sides
Dextrad	Toward the right	Sinistrad	Toward the left
Supine	Lying face up	Prone	Lying face down

Cavity	Contains	Cavity	Contains
Cranial (dorsal)	Brain	Abdominal (ventral)	Stomach, liver, gallbladder, intestines
Spinal (dorsal)	Spinal cord	Pelvic (ventral)	Urinary bladder, reproductive organs
Thoracic (ventral)	Heart, lungs, esophagus, trachea		

The **diaphragm** divides the thoracic from the abdominopelvic cavity.

Combining forms by system

Form	Meaning	Form	Meaning	Form	Meaning
cardi/o, coron/o	heart	derm/o, dermat/o, cutane/o	skin	mening/o	meninges
angi/o	vessel	onych/o, ungu/o	nail	cerebr/o	cerebrum
arteri/o	artery	trich/o, pil/o	hair	nephr/o, ren/o	kidney
phleb/o, ven/o	vein	ophthalm/o, ocul/o	eye	cyst/o, vesic/o	bladder
hemat/o	blood	ot/o, aur/i	ear	ureter/o	ureter
pneumon/o, pulmon/o	lung	adren/o	adrenal gland	urethr/o	urethra
bronch/o	bronchial tube	splen/o	spleen	pyel/o	renal pelvis
laryng/o	larynx	oste/o	bone	hyster/o, metr/o, uter/o	uterus
trache/o	trachea	arthr/o	joint	oophor/o, ovari/o	ovary
nas/o, rhin/o	nose	my/o, muscul/o	muscle	salping/o	fallopian tube
gastr/o	stomach	chondr/o	cartilage	orchi/o, test/o	testis
enter/o	small intestine	ten/o, tendin/o	tendon	mamm/o, mast/o	breast
col/o, colon/o	colon	neur/o	nerve	thyroid/o	thyroid gland
hepat/o	liver	encephal/o	brain	lymphaden/o	lymph node
chol/e	gall, bile	myel/o	spinal cord, bone marrow		