

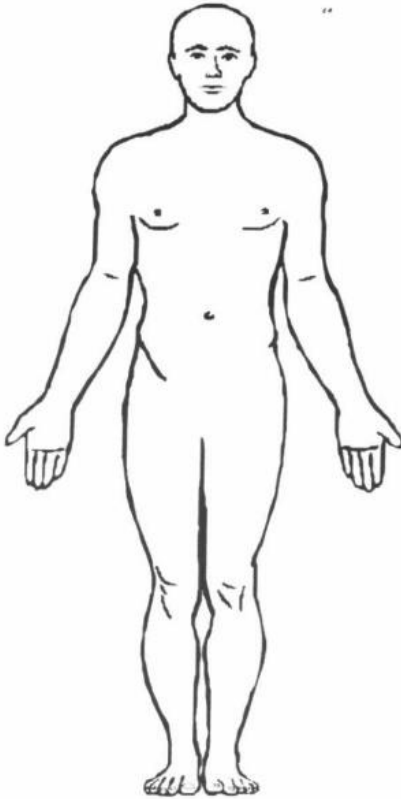
Health Science 20

Musculo/Skeletal Unit

Anatomy Terminology

Standard Anatomical Position:

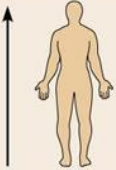
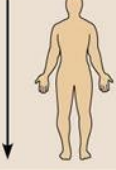


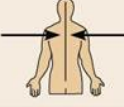
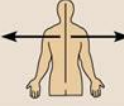

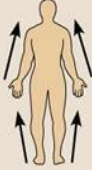

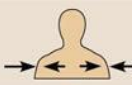

- When looking at a human body, there is a standard position. It is:
 - Face forward
 - Arms at side
 - Body upright
 - Feet parallel
 - Palms forward



Directional Terms:

- Use specific terms to explain where one body part is in relation to another.
- Allows for more precision.
 - Example: Could say that, “ears are on the side of head to the left and right of the nose” or say, “ears are lateral to the nose.”

Table 1.1 Orientation and Directional Terms

TERM	DEFINITION	EXAMPLE	
Superior (cranial)	Toward the head end or upper part of a structure or the body; above		The head is superior to the abdomen.
Inferior (caudal)	Away from the head end or toward the lower part of a structure or the body; below		The navel is inferior to the chin.
Ventral (anterior)*	Toward or at the front of the body; in front of		The breastbone is anterior to the spine.
Dorsal (posterior)*	Toward or at the back of the body; behind		The heart is posterior to the breastbone.
Medial	Toward or at the midline of the body; on the inner side of		The heart is medial to the arm.
Lateral	Away from the midline of the body; on the outer side of		The arms are lateral to the chest.
Intermediate	Between a more medial and a more lateral structure		The collarbone is intermediate between the breastbone and shoulder.
Proximal	Closer to the origin of the body part or the point of attachment of a limb to the body trunk		The elbow is proximal to the wrist.
Distal	Farther from the origin of a body part or the point of attachment of a limb to the body trunk		The knee is distal to the thigh.
Superficial (external)	Toward or at the body surface		The skin is superficial to the skeletal muscles.
Deep (internal)	Away from the body surface; more internal		The lungs are deep to the skin.

*The terms *ventral* and *anterior* are synonymous in humans, but this is not the case in four-legged animals. *Anterior* refers to the leading portion of the body (abdominal surface in humans, head in a cat), but *ventral* specifically refers to the "belly" of a vertebrate animal, so it is the inferior surface of four-legged animals. Likewise, although the dorsal and posterior surfaces are the same in humans, the term *dorsal* specifically refers to an animal's back. Thus, the dorsal surface of four-legged animals is their superior surface.

Body Planes and Sections:

- There are 3 sections/views in the human body:

Fig. 1.4

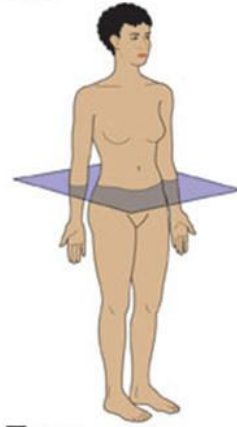
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a. Sagittal (median) plane



b. Frontal (coronal) plane



c. Transverse (horizontal) plane



d. Sagittal section of pelvic cavity



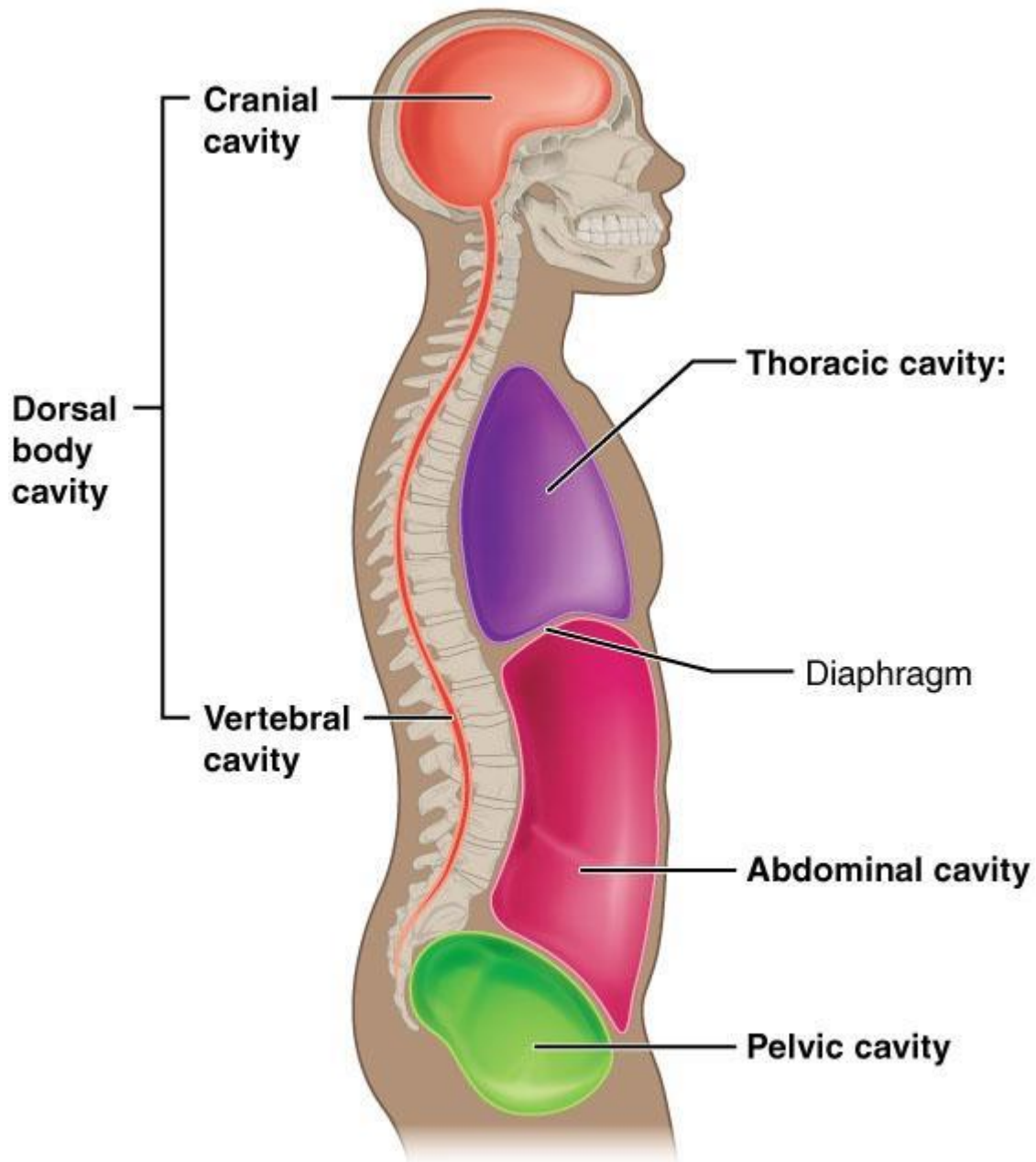
e. Frontal section of thoracic cavity



f. Transverse section of head at eye level

Body Cavities:

- There are 5 major body cavities:
 - Cranial
 - Vertebral
 - Thoracic
 - Abdominal
 - Pelvic



Lateral view