

Human anatomy : is the scientific study of the body's structures . The word “anatomy” comes from a Greek root that means (to cut apart) .

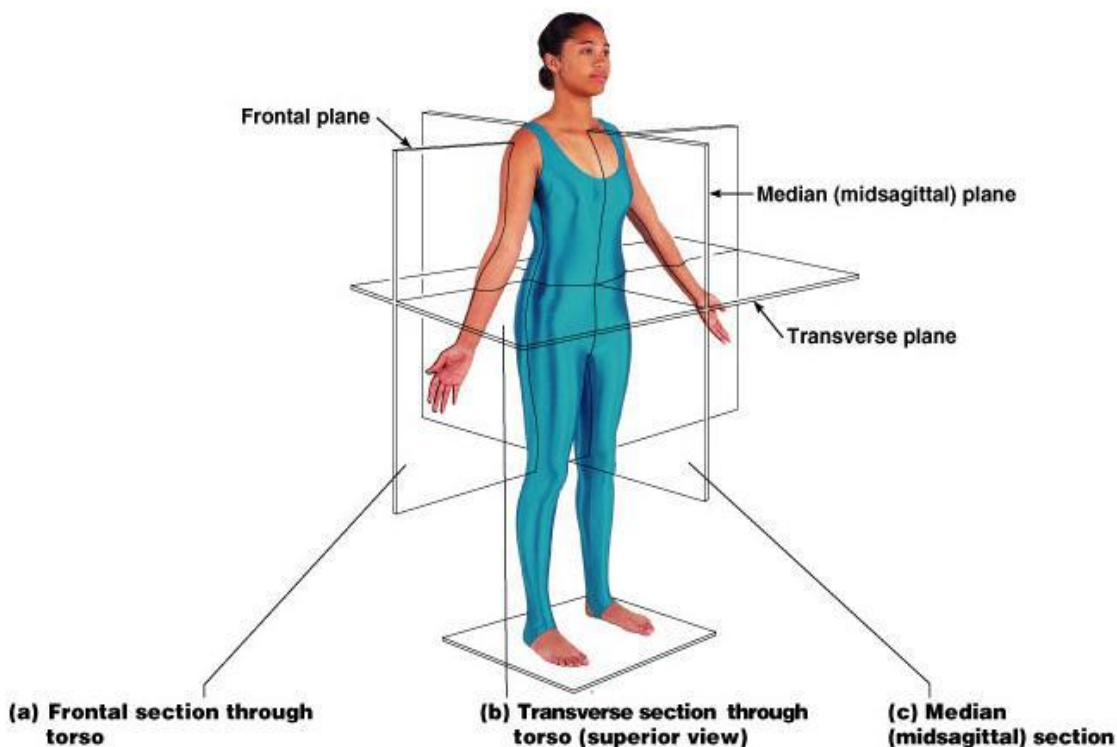
Anatomists take two general approaches to the study of the body's structures: regional and systemic.

Regional anatomy : is the study of the interrelationships of all of the structures in a specific body region, such as the abdomen OR leg .

Systemic anatomy : is the study of the structures that make up a discrete body system . For example, a systemic anatomical study of the muscular system would consider all of the skeletal muscles of the body.

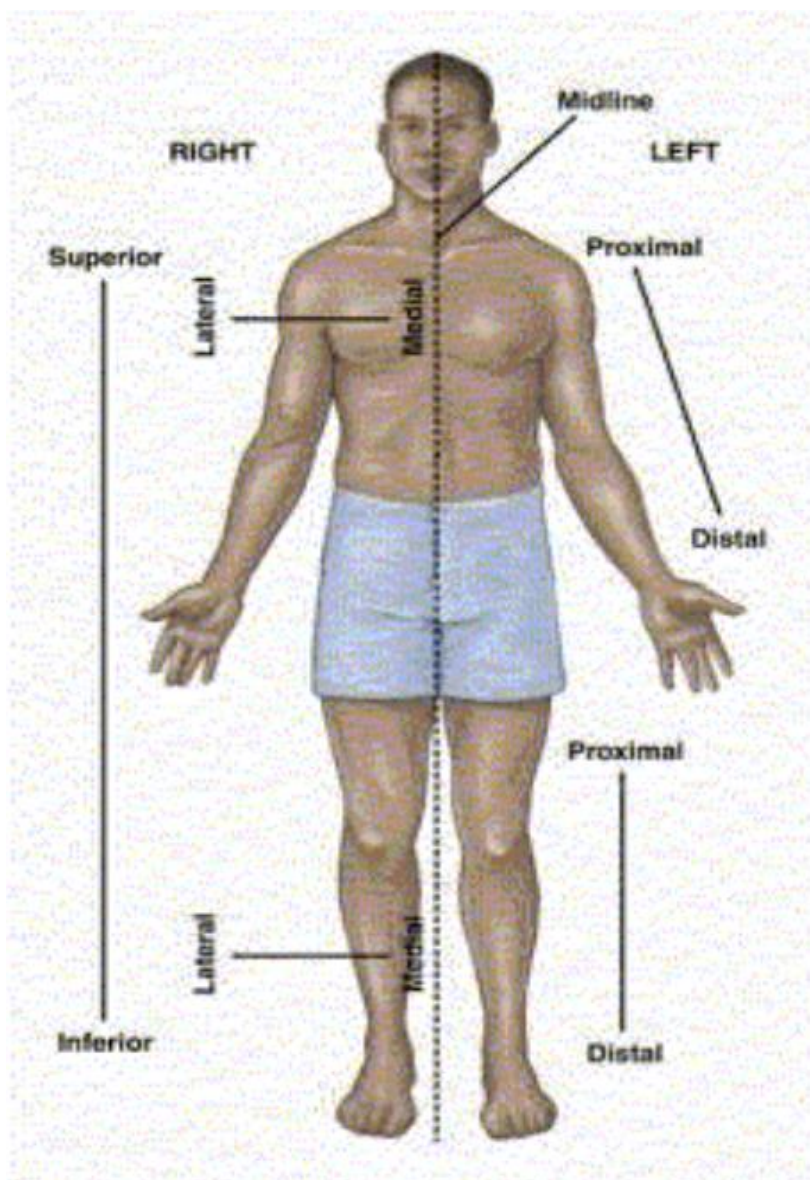
Body Planes:

- * **Sagittal** – divides the body into right and left parts. Midsagittal or medial – sagittal plane that lies on the midline.
- * **Frontal or coronal** – divides the body into anterior and posterior parts.
- * **Transverse or horizontal (cross section)** – divides the body into superior and inferior parts.



Anatomical position:

1. Body erect.
2. Feet slightly apart.
3. Palms facing forward.
4. Thumbs point away from body



Directional terms and relations :

- 1- **Anterior = In front of or front**
- 2- **Posterior = In behind of or behind**
- 3- **Ventral = Towards the front of the body**
- 4- **Dorsal = Towards the back of the body**
- 5- **Distal = Away or farthest away from the trunk or the point of origin of the body part**
- 6- **Proximal = Closer or towards the trunk or the point of origin of the body part**
- 7- **Median = Midline of the body**
- 8- **Medial = Towards the median**
- 9- **Lateral = Away from median**
- 10- **Superior = Towards the top of the head**
- 11- **Inferior = Towards the feet**
- 12- **Cranial = Towards the head**
- 13- **Caudal = Towards the tail**
- 14- **External = Towards the surface, superficial**
- 15- **Internal = Away from the surface, deep**
- 16- **Superficial = Nearer to the surface**
- 17- **Deep = Farther from the surface**
- 18- **Palmar = Anterior hand or palm of hand (palmar)**
- 19- **Dorsal (of hand) = Posterior surface of hand (dorsum)**
- 20- **Plantar = Inferior surface of foot (sole)**
- 21- **Dorsal (of foot) = Superior surface of foot (dorsum)**
- 22- **Rostral: Toward the front**
- 23- **Unilateral: Involving one side of the body**
- 24- **Bilateral: Involving both sides of the body**
- 25- **Contralateral: On opposite sides of the body**
- 26- **Ipsilateral: On the same side of the body**
- 27- **Parietal: Relating to a body cavity wall**
- 28- **Visceral: Relating to organs within body cavities**
- 29- **Axial: Around a central axis**
- 30- **Intermediate: Between two structures**

Body Cavities :

A body cavity is a fluid-filled space inside the body that holds and protects internal organs. Human body cavities are separated by membranes and other structures. The two largest human body cavities are :

1- Ventral cavity

2- Dorsal cavity

The ventral cavity is subdivided into :

- ❖ **The thoracic cavity fills the chest and is subdivided into two :**
 - ✚ **pleural cavities : hold the lungs**
 - ✚ **pericardial cavity : holds the heart**
- ❖ **The abdominopelvic cavity fills the lower half of the trunk and is subdivided into :**
 - ✚ **The abdominal cavity : holds digestive organs and the kidneys .**
 - ✚ **The pelvic cavity : holds reproductive organs and organs of excretion .**

The dorsal cavity is at the posterior, or back, of the body including both the head and the back of the trunk. The dorsal cavity is subdivided into :

- ✚ **The cranial : fills most of the upper part of the skull and contains the brain**
- ✚ **The spinal cavities : is a very long, narrow cavity inside the vertebral column. It runs the length of the trunk and contains the spinal cord**

There are other cavities of the body as :

- ✚ **Oral cavity – mouth cavity .**
- ✚ **Nasal cavity –located within and posterior to the nose .**
- ✚ **Orbital cavity – house the eyes .**
- ✚ **Middle ear cavity – contain bones that transmit sound vibrations .**
- ✚ **Synovial cavity – joint cavities .**

