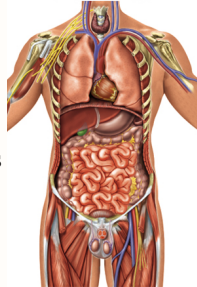


## Atlas A General Orientation to Human Anatomy

- Anatomical position
- Planes of section
- Directional term
- Regions of the body
- Body cavities and membranes
- Organ systems
- Visual survey of the body
  - illustrations

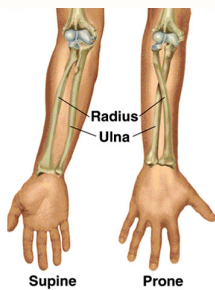


## Anatomical Position



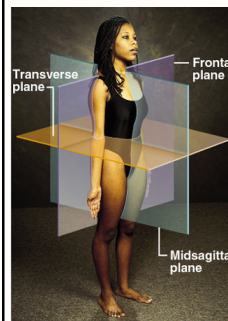
- Person stands erect
- Feet flat on floor
- Arms at sides
- Palms, eyes & face facing forward
- Standard frame of reference for anatomical descriptions & dissection

## Forearm Positions



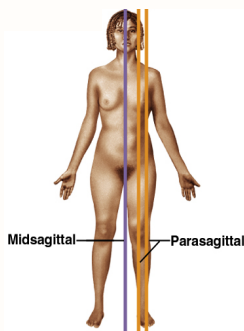
- Supine
  - palms face forwards or upwards
  - radius & ulna are parallel
- Prone
  - palms face rearward or downward
  - radius & ulna are crossed

## Anatomical Planes



- Planes are imaginary flat surfaces passing through the body
  - sections are anatomical views if body is cut on a plane
- Sagittal plane divides body into right and left halves
- Frontal (coronal) plane divides body into front & back portions
- Transverse (horizontal) plane divides the body into upper & lower portions

## Sagittal and Parasagittal Planes

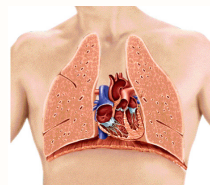


- Sagittal plane divides body into right and left halves
  - midsagittal plane divides body into equal right and left halves
  - parasagittal plane divides the body into right and left portions
    - an infinite number

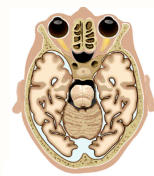
## Typical Sectional Views of the Body



Sagittal



Frontal

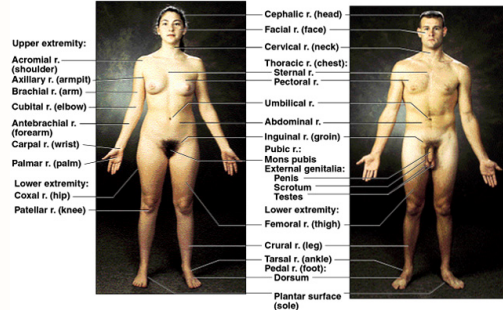


Transverse

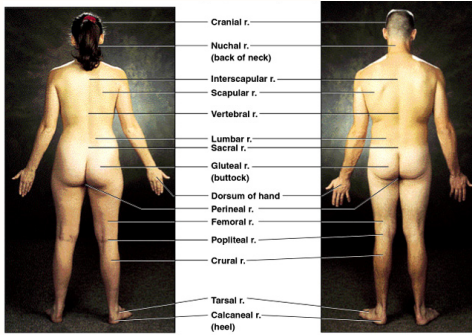
## Directional Terms

- Defined in Table A.1
- Intermediate directions are often given as combinations of these terms (ex. dorsolateral)
- Different meanings for humans and animals
  - anterior surface of human is surface of chest & belly
  - anterior in a four-legged animal is the head end
  - posterior surface of human is back side
  - posterior in a four-legged animal is the tail end

## Anatomical Terminology



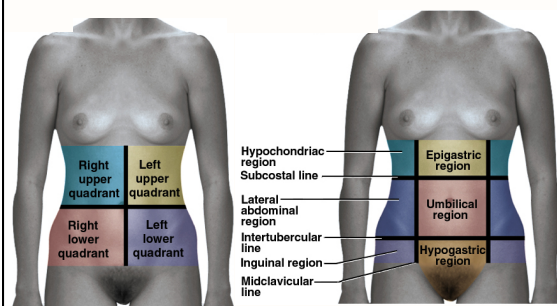
## Anatomical Terminology



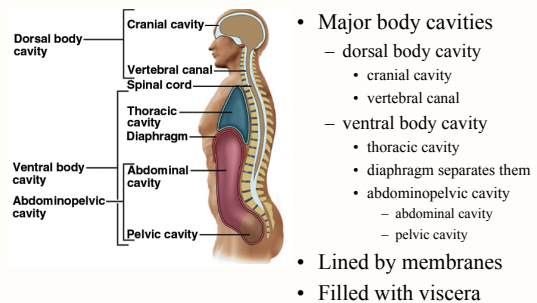
## Body Regions

- Axial region = head, neck & trunk
  - trunk
    - thoracic region above diaphragm & abdominal region below
  - abdomen
    - divided into quadrants to describe pain
    - divided into nine regions by tic-tac-toe grid
- Appendicular region = upper and lower limbs
  - upper limb = brachium(arm), antebrachium(forearm), carpus(wrist), manus(hand) and digits(fingers)
  - lower limb = thigh, crus(leg), tarsus(ankle), pes(foot) and digits(toes)

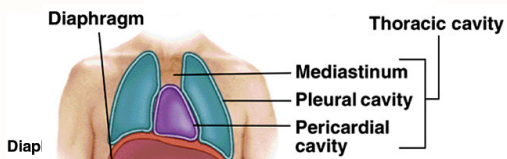
## Abdominal Quadrants and Regions



## Body Cavities and Membranes

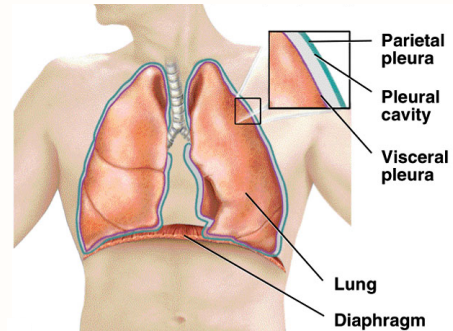


## Thoracic Cavity

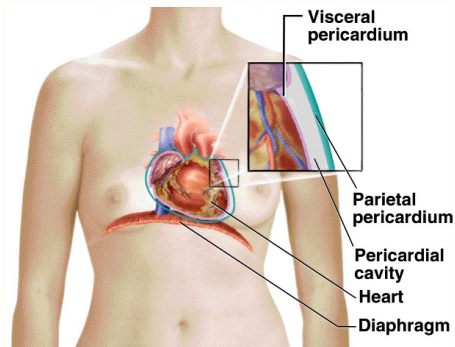


- Mediastinum is wall of organs that separates left from right pleural cavities
  - contains heart, major blood vessels, esophagus, trachea, & thymus
- Pleural cavities hold the lungs
- Membranes
  - visceral and parietal pleura cover lungs & line rib cage
  - visceral and parietal pericardium cover heart & line pericardial sac

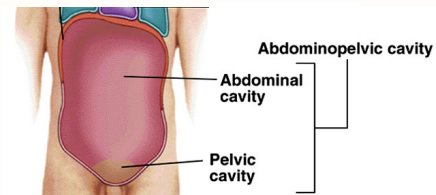
## Pleural Membranes



## Pericardial Membranes

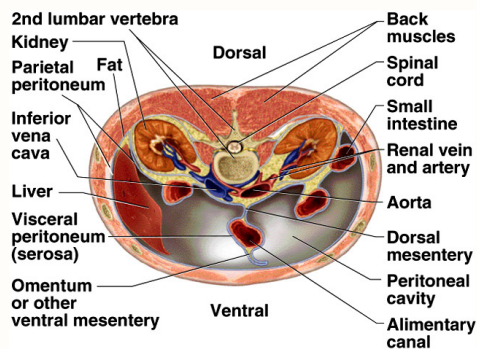


## Abdominopelvic Cavity



- Brim of the pelvis separates abdominal from pelvic cavity
- Abdominal cavity contains GI tract, kidneys & ureters
- Pelvic cavity contains rectum, bladder, urethra & reproductive organs
- Membranes = visceral & parietal peritoneum

## Retroperitoneal Organs

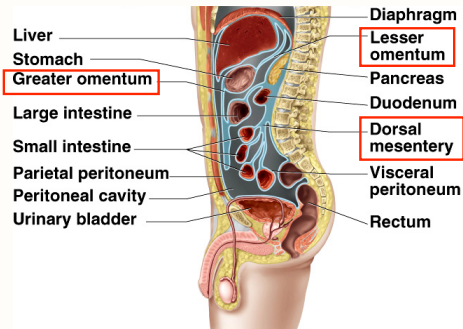


## Membranes of Abdominal Cavity

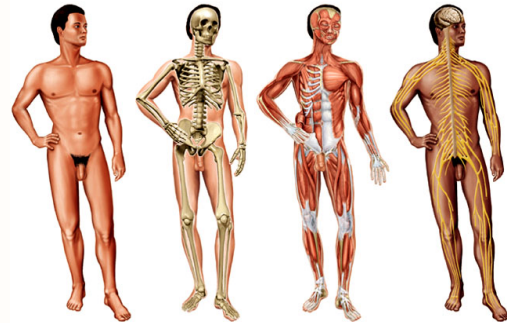
- Intestines suspended from dorsal abdominal wall by mesentery
  - continuation of peritoneum
  - wraps the intestines as the serosal layer
  - mesocolon is mesentery of the large intestine
- Greater omentum hangs like apron from stomach and transverse colon
- Lesser omentum extends from lesser border of stomach to liver



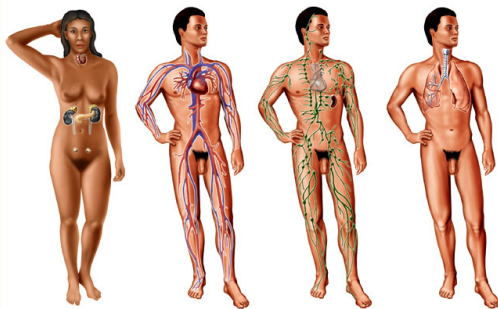
## Membranes of Abdominal Cavity



## Organ Systems of the Body (1)



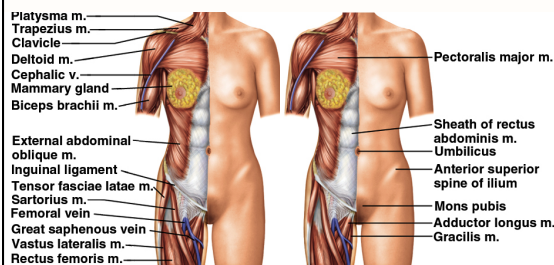
## Organ Systems of the Body (2)



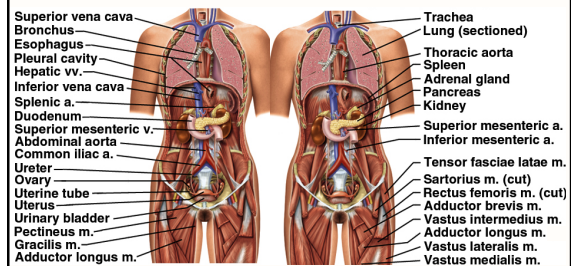
## Organ Systems of the Body (3)



## Female Torso -- Superficial Layer

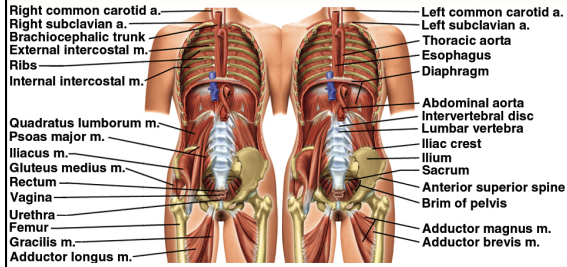


## Female Torso -- Visceral Layer

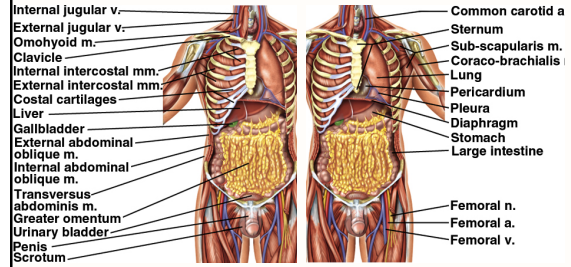




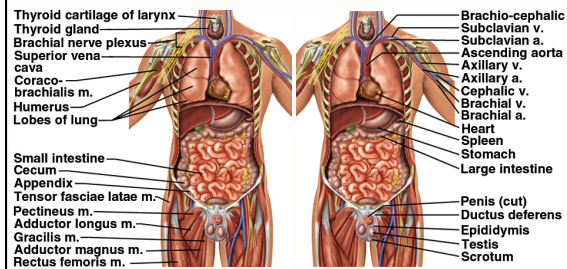
## Female Torso -- Posterior Body Wall



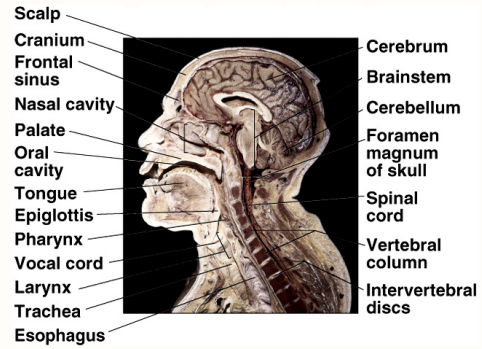
## Male Torso -- Superficial View



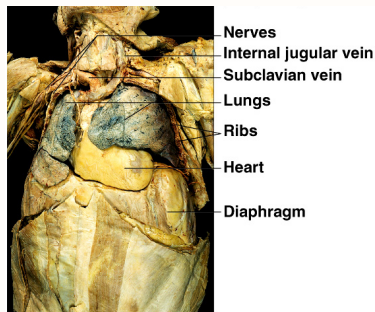
## Male Torso -- Internal Organs



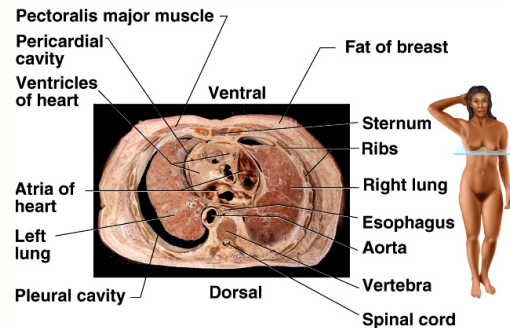
## Median Section of the Head



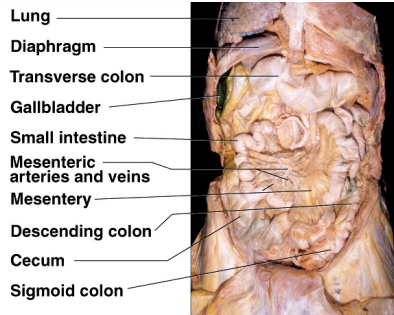
## Dissection of Thoracic Cavity



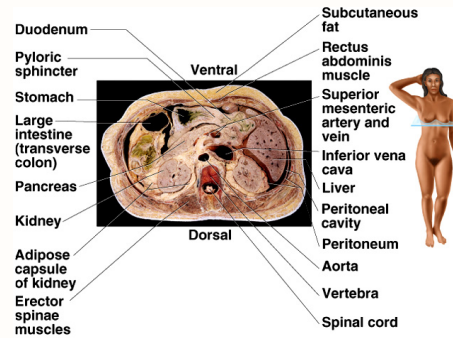
## Transverse Section of the Thorax



## Dissection of the Abdominal Cavity



## Transverse Section of the Abdomen



## Median Sections of the Pelvic Cavity

