Body Cavities, Regions and Serosa
Body Cavities

• **Dorsal cavity** protects the nervous system, and is divided into two subdivisions
  – Cranial cavity is within the skull and encases the brain
  – Vertebral cavity runs within the vertebral column and encases the spinal cord

• **Ventral cavity** houses the internal organs (viscera), and is divided into two subdivisions:
  - Thoracic and Abdominopelvic cavities
Cavities

Dorsal cavity = cranial + spinal

Cranial
Spinal
Thoracic
Diaphragm
Abdominal
Abdominopelvic
Pelvic

Dorsal cavity = cranial + spinal

Cavities
#1
Body Cavities

- **Thoracic cavity** is subdivided into pleural cavities, the mediastinum, and the pericardial cavity
  - **Pleural cavities** – each houses a lung
  - **Mediastinum** – contains the pericardial cavity, and surrounds the remaining thoracic organs
  - **Pericardial cavity** – encloses the heart
Cavities

#2

- Cranial
- Spinal
- Thoracic
- Pleural
- Mediastinum
- Diaphragm
- Abdominal
- Abdominopelvic
- Pelvic
Body Cavities

- The abdominopelvic cavity is separated from the superior thoracic cavity by the dome-shaped diaphragm.
- It is composed of two subdivisions:
  - Abdominal cavity – contains the stomach, intestines, spleen, liver, and other organs.
  - Pelvic cavity – lies within the pelvis and contains the bladder, reproductive organs, and rectum.
Abdominopelvic Regions

1. R Hypochondriac
2. Epigastric
3. L Hypochondriac
4. R Lumbar
5. Umbilical
6. L Lumbar
7. R Iliac
8. Hypogastric
9. L Iliac
Ventral Body Cavity Membranes

- **Parietal serosa** lines internal body walls

- **Visceral serosa** covers the internal organs

- **Serous fluid** separates the serosae
Serosa

- Parietal serosa
- Fluid filled cavity
- Visceral serosa
- Cavity wall
Ventral Body Cavity Membranes

Figure 1.10a
Ventral Body Cavity Membranes

Figure 1.10b
Other Body Cavities

- **Oral and digestive** – mouth and cavities of the digestive organs
- **Nasal** – located within and posterior to the nose
- **Orbital** – house the eyes
- **Middle ear** – contain bones (ossicles) that transmit sound vibrations
- **Synovial** – joint cavities