
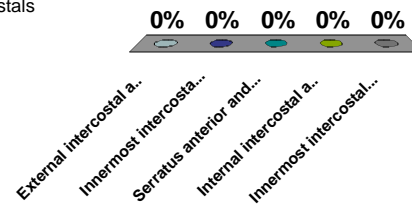
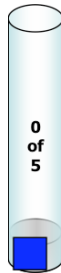


**Blood is supplied and drained from the lateral thoracic wall by intercostal arteries and veins. In the mid-axillary line, the intercostal arteries and veins course between the \_\_\_\_\_ and \_\_\_\_\_ muscles.**

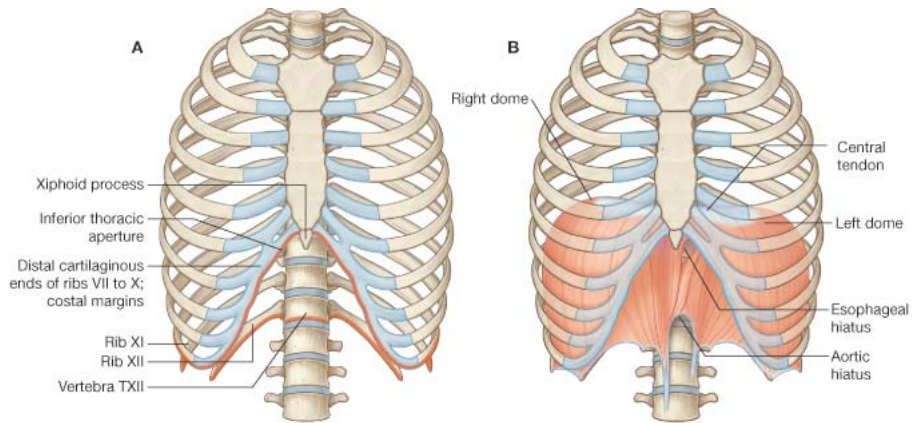
- A. External intercostal and internal intercostal
- B. Innermost intercostal and transversus thoracis
- C. Serratus anterior and external intercostal
-  D. Internal intercostal and innermost intercostal
- E. Innermost intercostal and subcostals



## Lungs

- **Surface Anatomy of Thoracic Wall**
  - Dry lecture (clinical correlations)
- **Diaphragm**
  - Gray's pp. 134-135, p. 317
- **Lungs**
  - Gray's pp. 136-152
  - Gray's Dissector pp. 73-83

## The Diaphragm

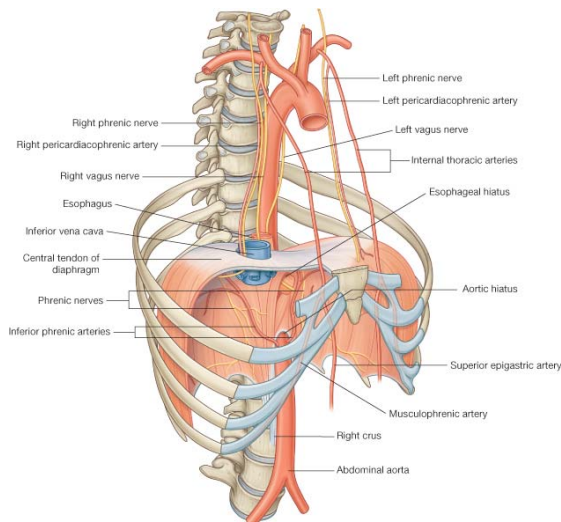


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## The Diaphragm



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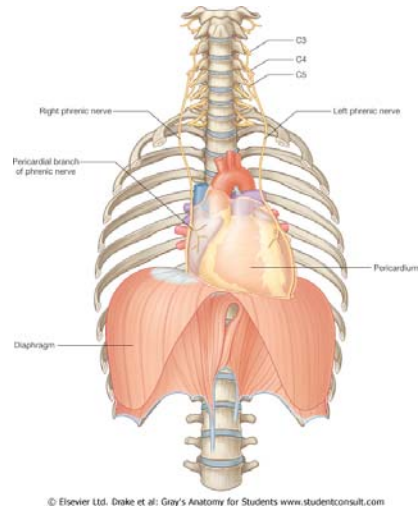
### Apertures:

- Caval opening (T8)
- Esophageal Hiatus (T10)
- Aortic Hiatus (T12)

### Blood Supply:

- Pericardiophrenic
- Musculophrenic
- Superior Phrenic
- Inferior Phrenic

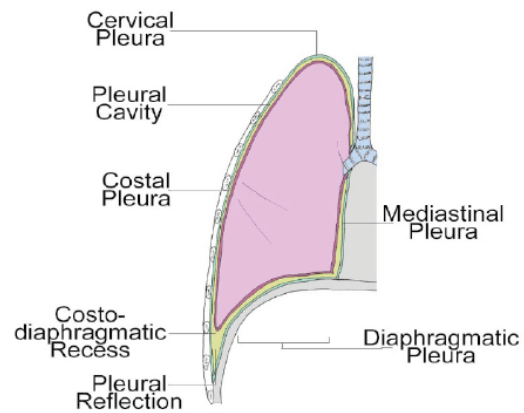
## The Diaphragm



**Innervation:**  
**-Phrenic Nerves**

**Movement:**  
**-Contraction flattens the diaphragm**

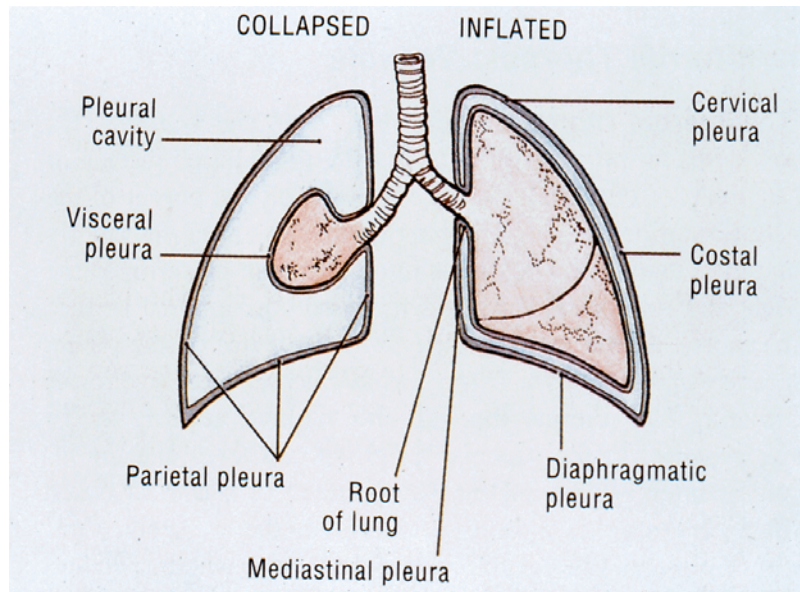
## Pleura



Thorax; Coronal section through the right lung

Syllabus p. 36

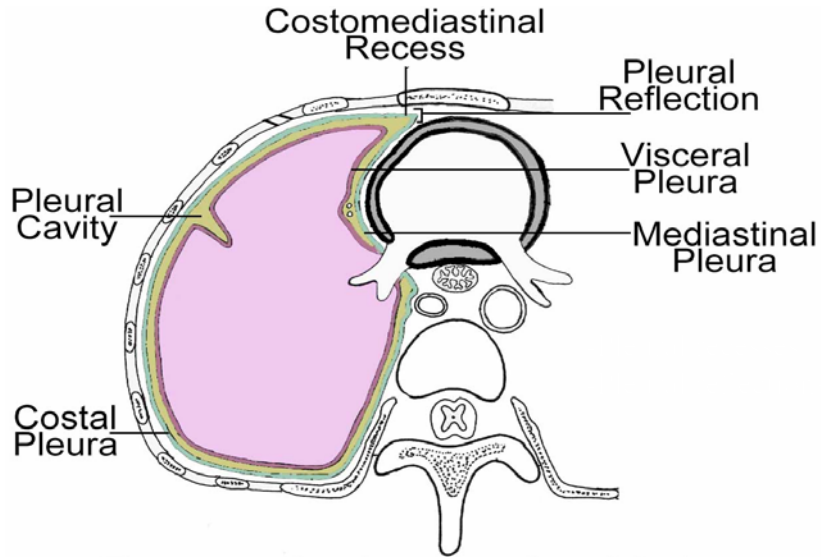
## Pleurae



## Visceral Pleurae

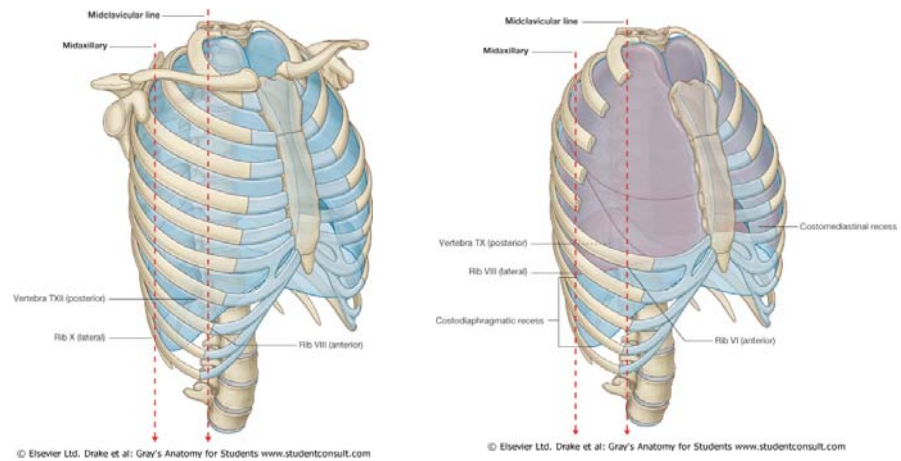


## Reflections and Recesses

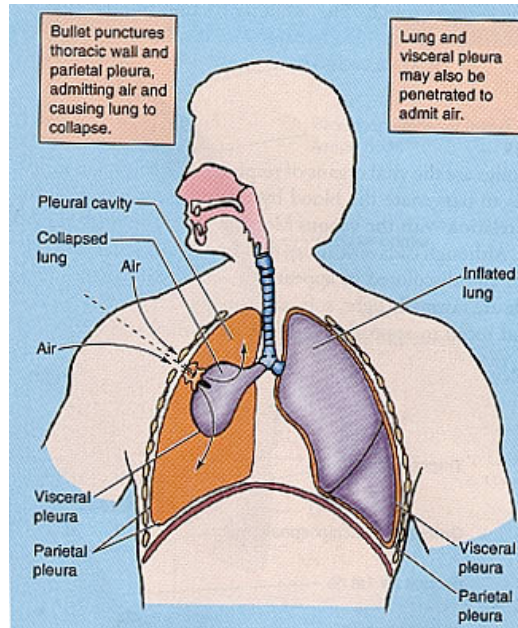


Thorax; section through region of the heart

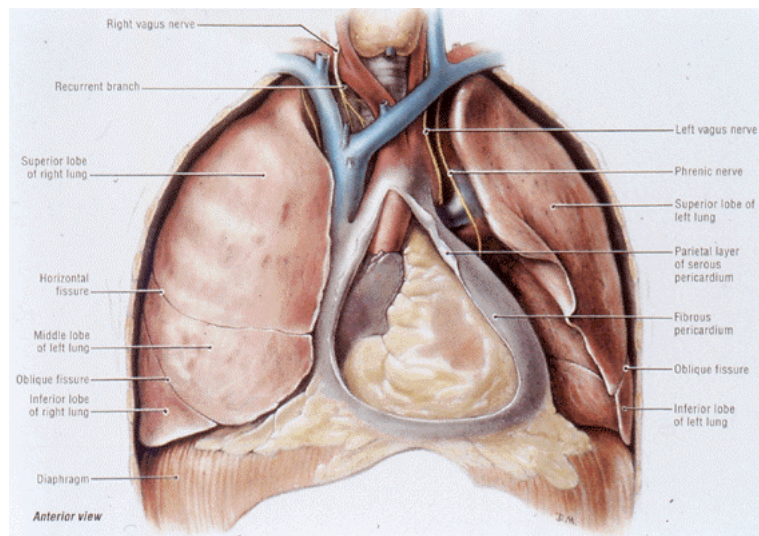
## Reflections and Recesses



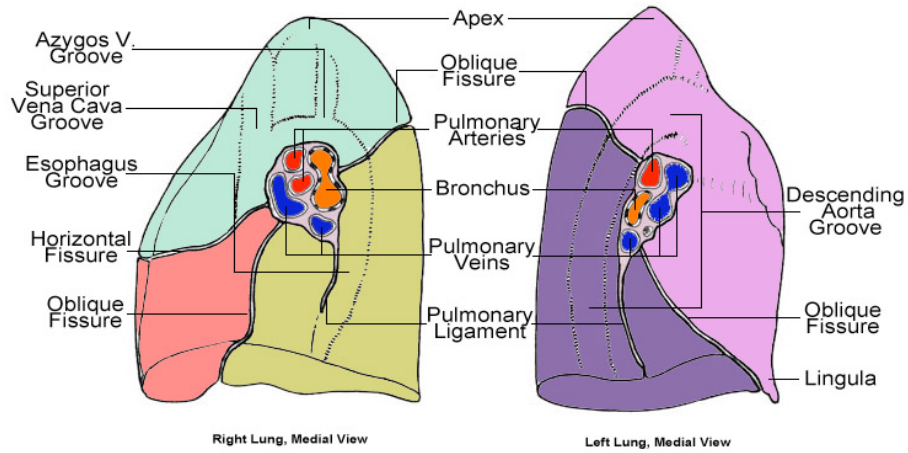
## Pneumothorax



## The Lungs in situ

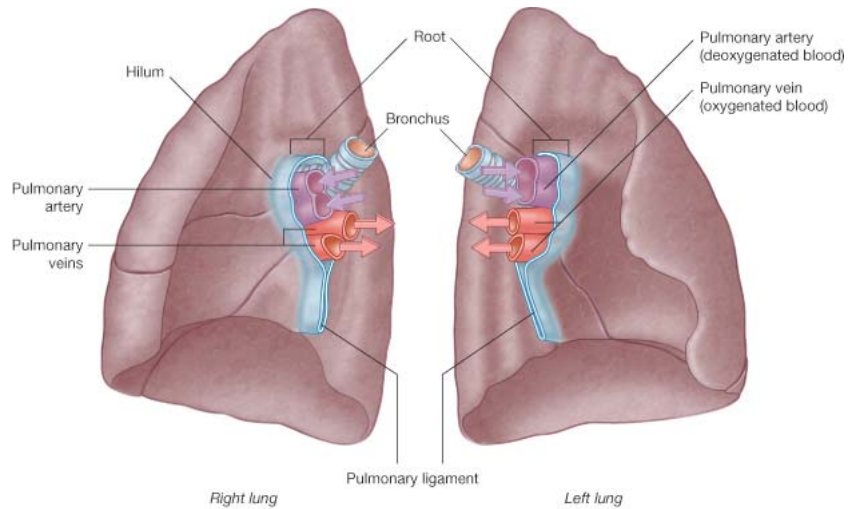


## Characteristics of Right and Left Lung



Syllabus p. 37

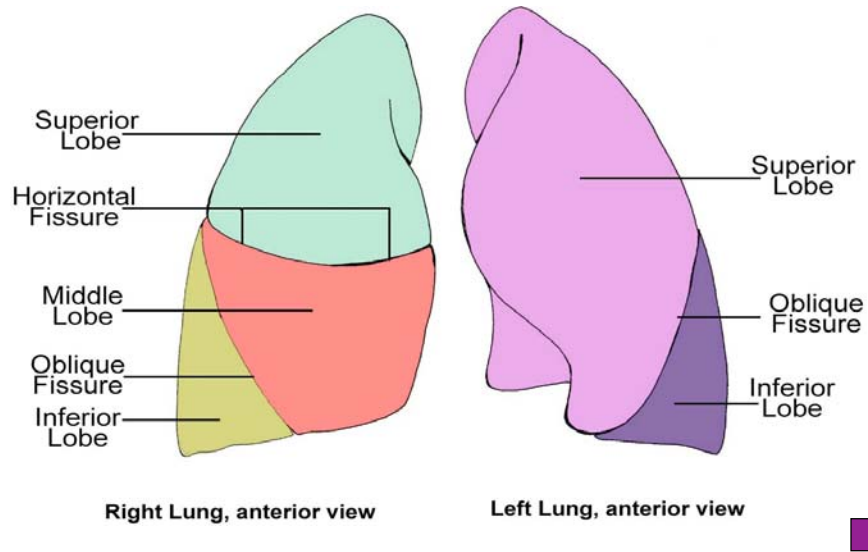
## Characteristics of Right and Left Lung



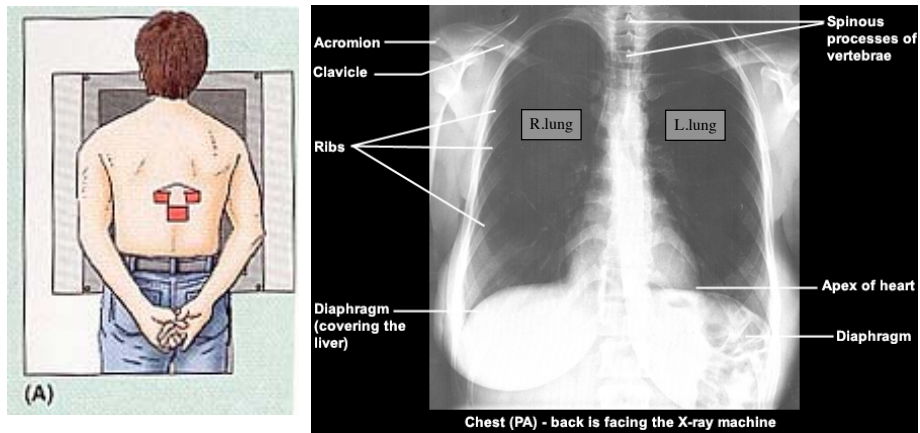
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Syllabus p. 37

## Lobes and Fissures of Right and Left Lung



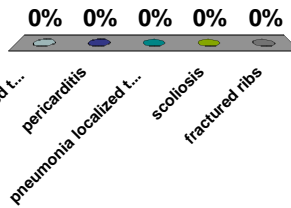
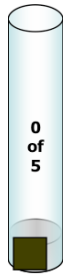
## PA View of the Lungs



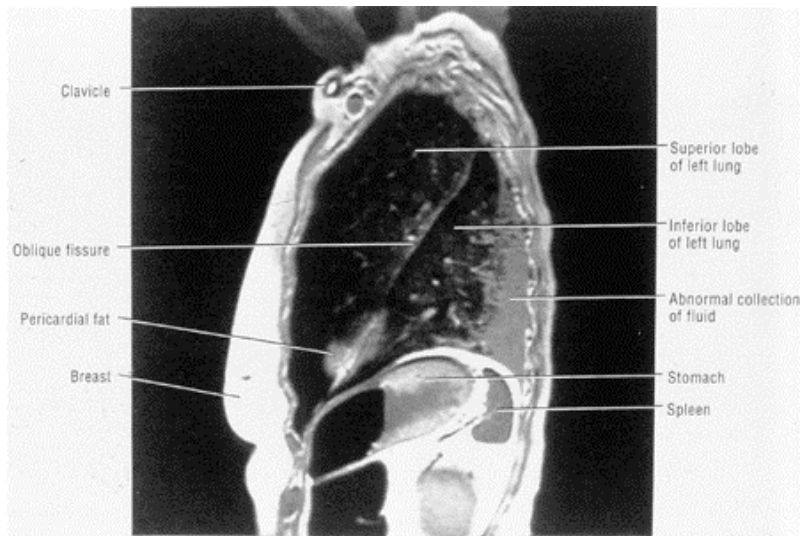


A 43 year old man presents with high fever, severe cough, and has difficulty breathing with exertion. You order a chest x-ray. Your diagnosis is \_\_\_\_\_.

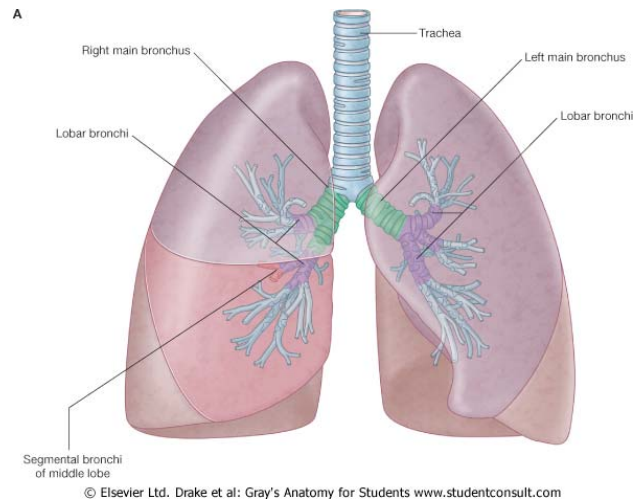
- A. pneumonia localized to the middle lobe of the right lung
- B. pericarditis
- C. pneumonia localized to the inferior lobe of the right lung
- D. scoliosis
- E. fractured ribs



## Different Ways to View the Lung



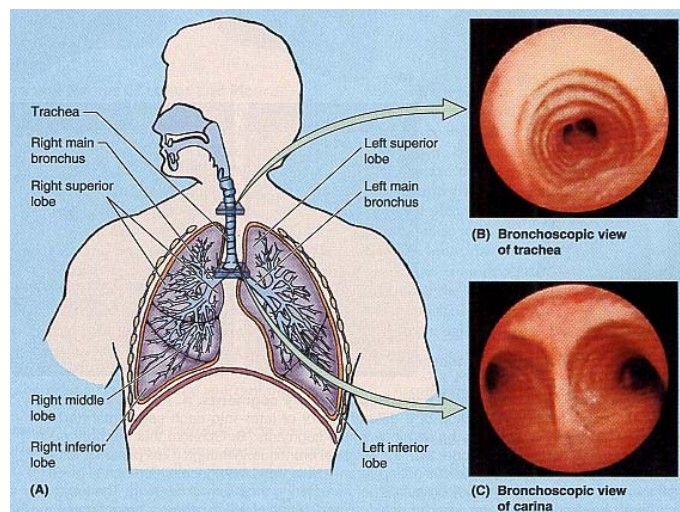
# Airways



Syllabus p. 37



# Bronchoscopy



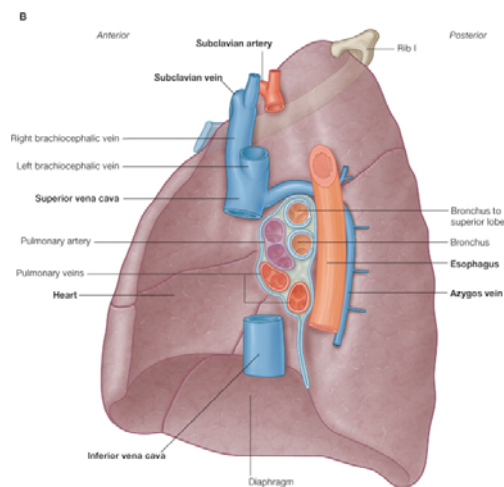
**A young girl accidentally inhales a piece of popcorn. Inhaled objects tend to settle in the right lung because**

\_\_\_\_\_.

- A. the lumen of the right main bronchus is smaller than the left main bronchus
- B. the the right main bronchus runs more horizontal to the root of the lungs compared to the left main bronchus
- C. The right main bronchus has more sensitive parasympathetic innervation than the left main bronchus
- 😊 D. The right main bronchus is wider and takes a more vertical course than the left main bronchus
- E. The child is right handed



## Relationship of the Lungs To Other Thoracic Structures

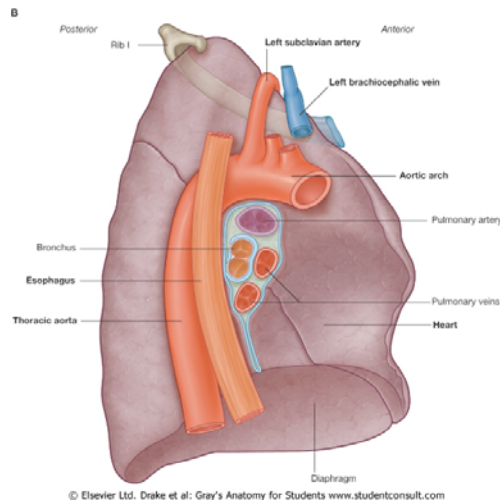


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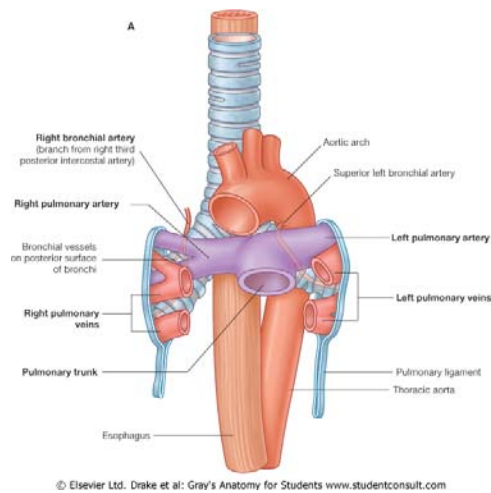
Syllabus p. 38

## Relationship of the Lungs To Other Thoracic Structures



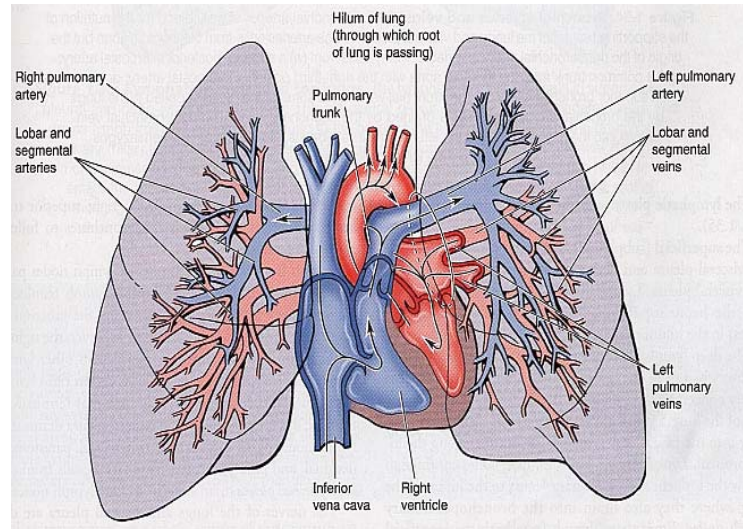
Syllabus p. 38

## Relationship of the Bronchi To Other Thoracic Structures



Syllabus p. 38

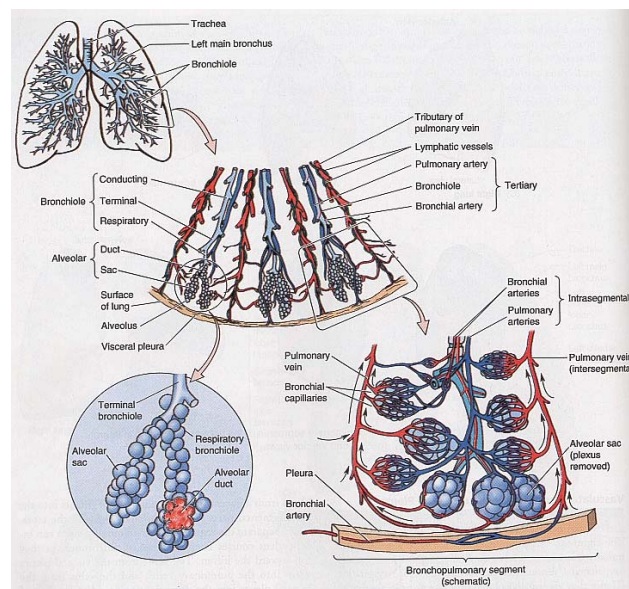
# Vascularization of the Lungs



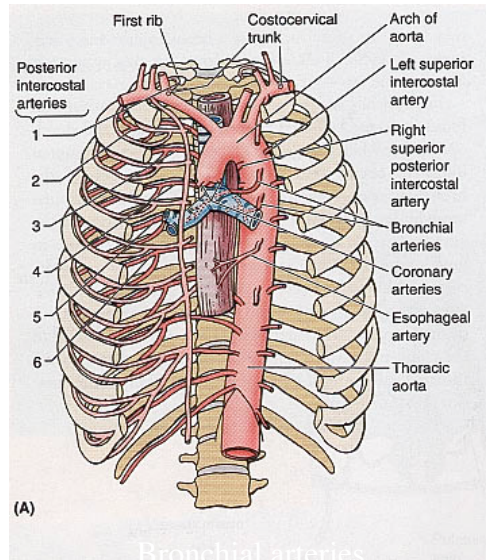
Syllabus p. 38



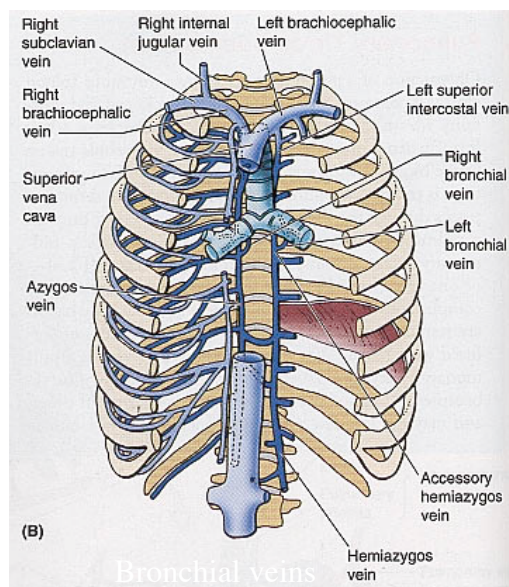
# Bronchopulmonary Segment



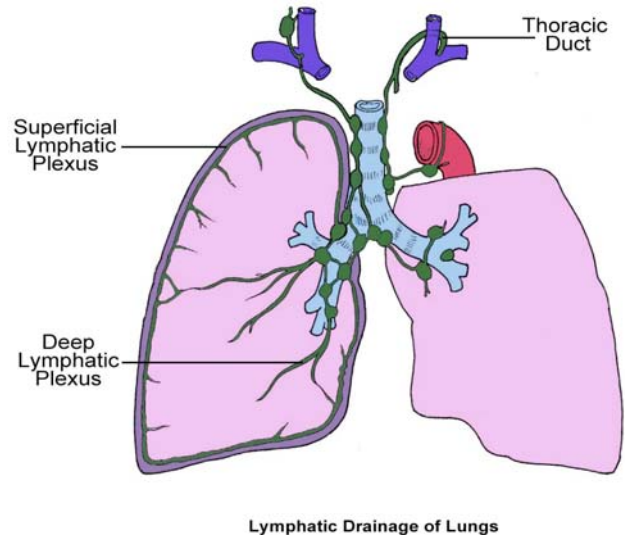
## Arterial Supply of the Lungs



## Venous Drainage of the Lungs



## Lymphatic Drainage



## Innervation of the Lungs

### -Lungs and Viscera

- a. Pulmonary Plexus  
(Vagus)  
(Sympathetic Trunks)

### -Parietal Pleurae

- a. Intercostal Nerves
- b. Phrenic Nerves



## Innervation of the Lungs

### -Sympathetic (post-ganglionic T1-T4 fibers)

- a. Bronchodilation
- b. Vasoconstriction of Pulmonary Vessels

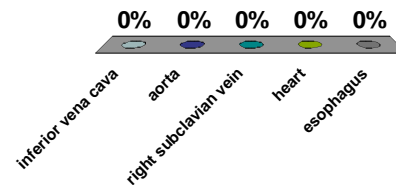
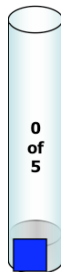
### -Parasympathetic (Vagus nerve)

- a. Bronchoconstriction
- b. Vasodilation of Pulmonary Vessels



When listening to lung sounds from each of the lobes, it is important to consider structures that lie adjacent to specific surfaces of the lung. The \_\_\_\_\_ lie adjacent to the medial surface of the right lung.

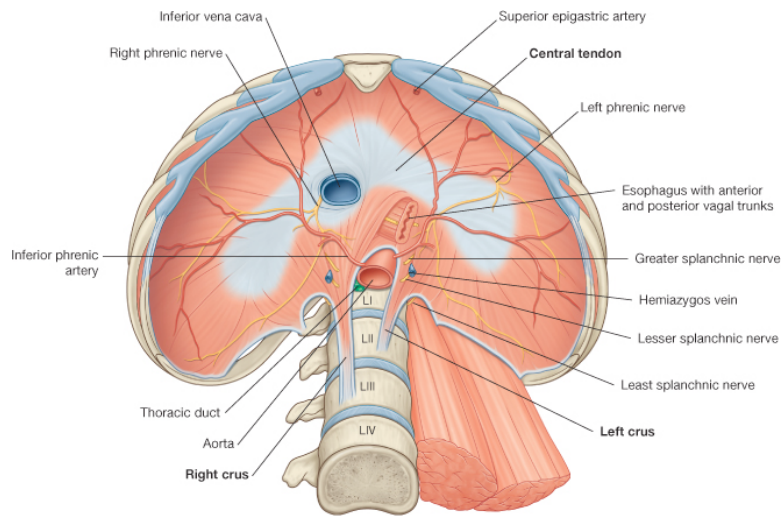
- ☺ A. inferior vena cava
- B. aorta
- ☺ C. right subclavian vein
- ☺ D. heart
- ☺ E. esophagus





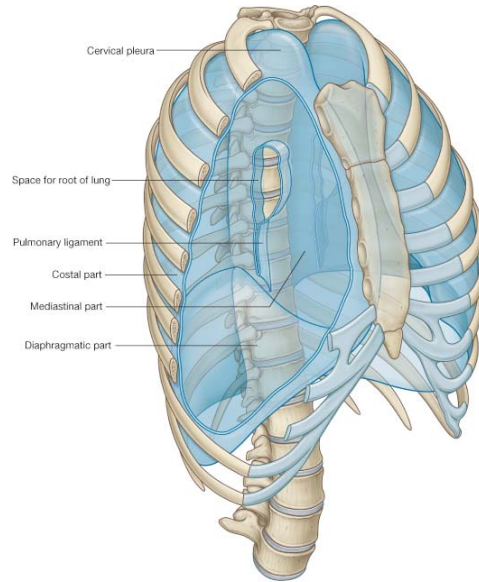
# SCREEN 2

## The Diaphragm



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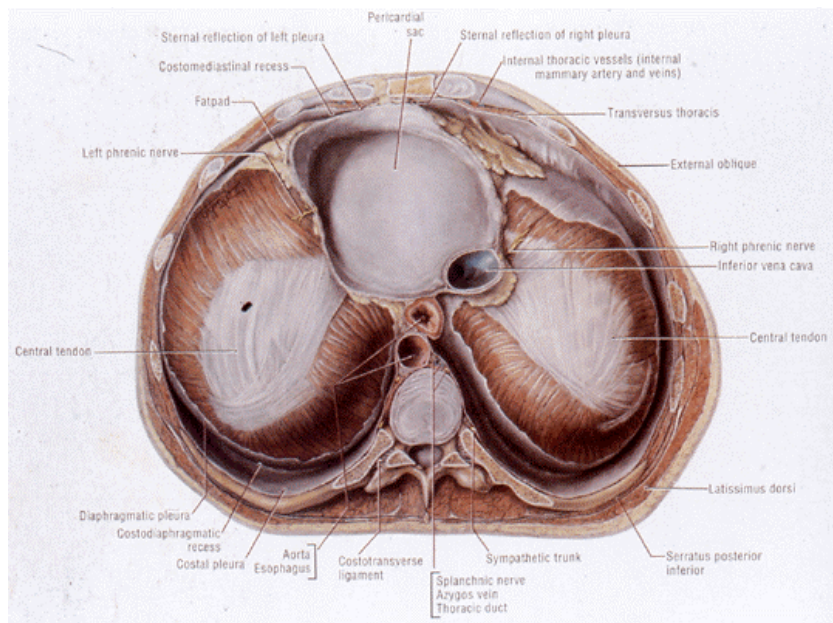
## Pleurae



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## Recesses



## Differences Between Right and Left Lung

### Right Lung

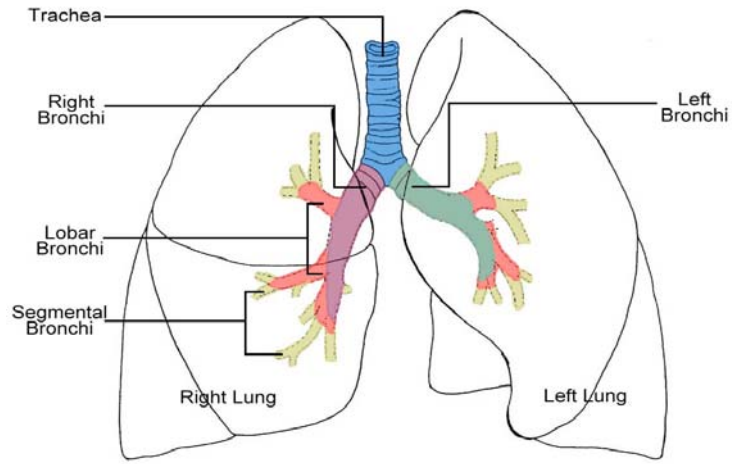
- 3 lobes
- Large, Heavy
- Short, Wide

### Left Lung

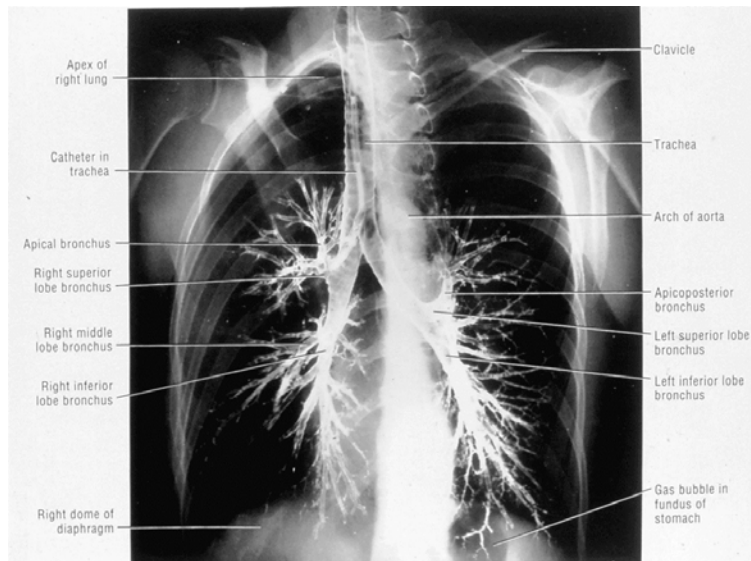
- 2 lobes
- Small, Light
- Long, Narrow
- Contains a lingula
- Fixed lung has huge cardiac impression



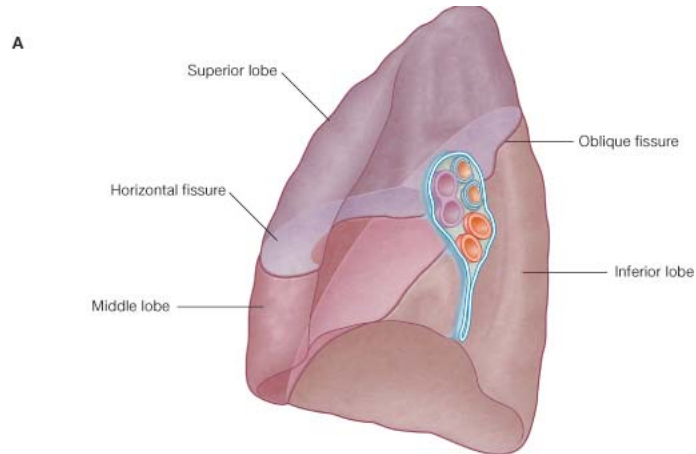
# Airways



Trachea & Airways

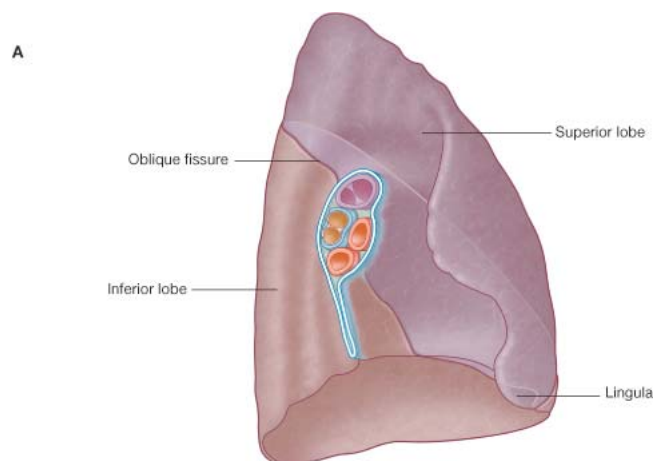


## Relationship of the Lungs To Other Thoracic Structures



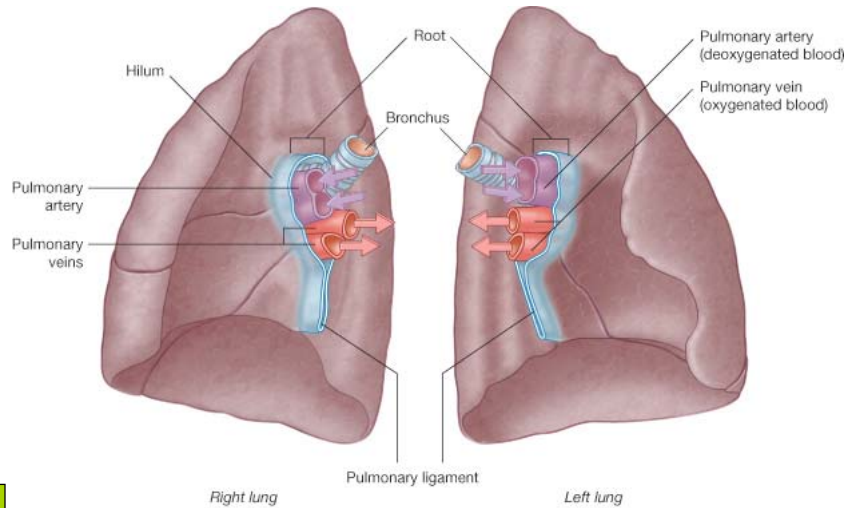
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## Relationship of the Lungs To Other Thoracic Structures

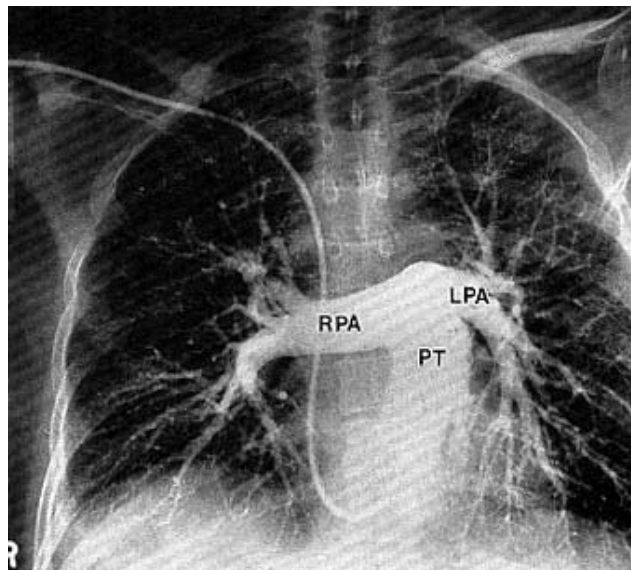


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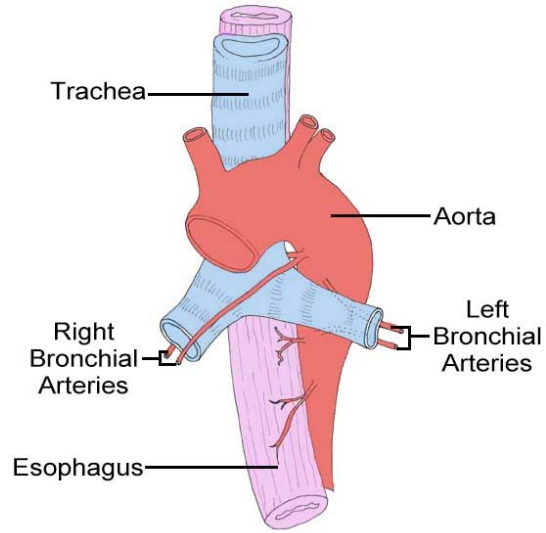
## Relationship of the Bronchi To Other Thoracic Structures



## Blood Supply to and from the Lungs



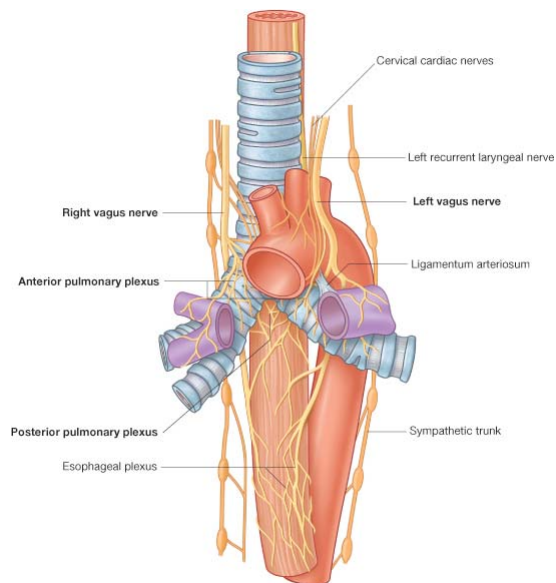
## Arterial Supply of the Lungs



Trachea, Esophagus, Aorta; Anterior View



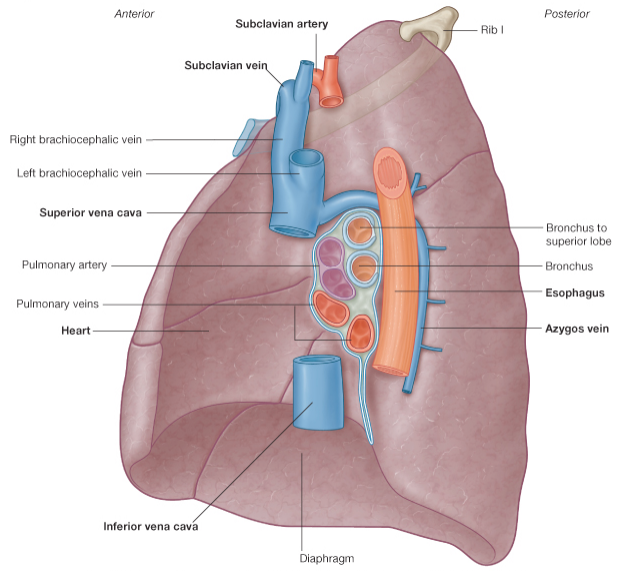
## Innervation of the Lungs



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**B**



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