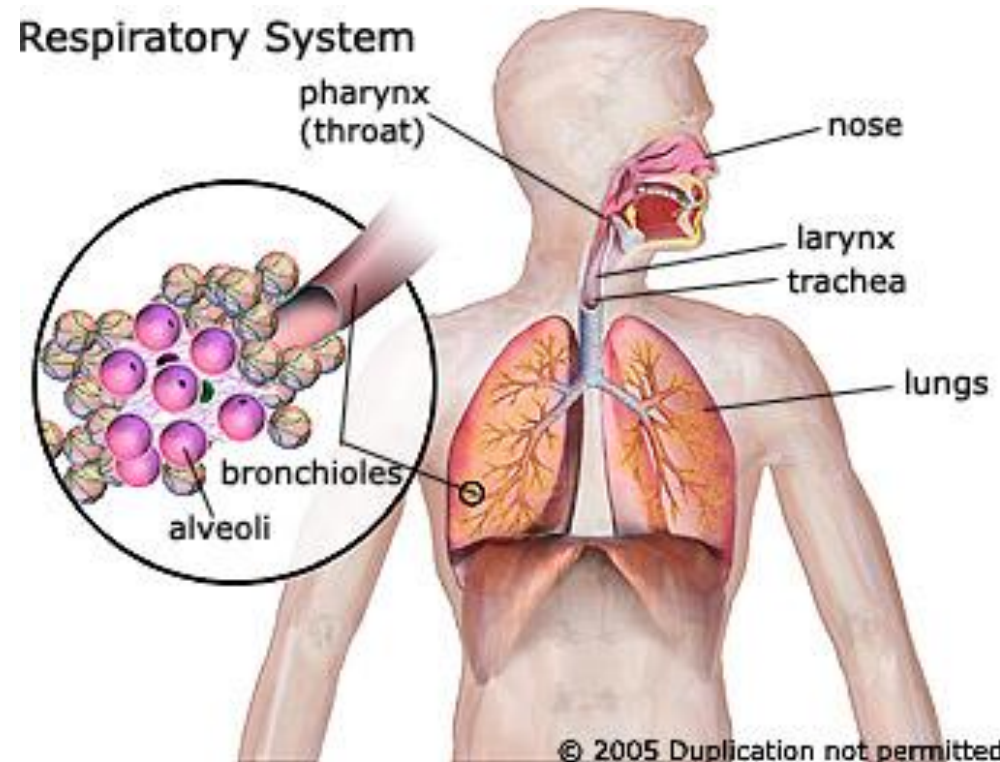


# The Respiratory System

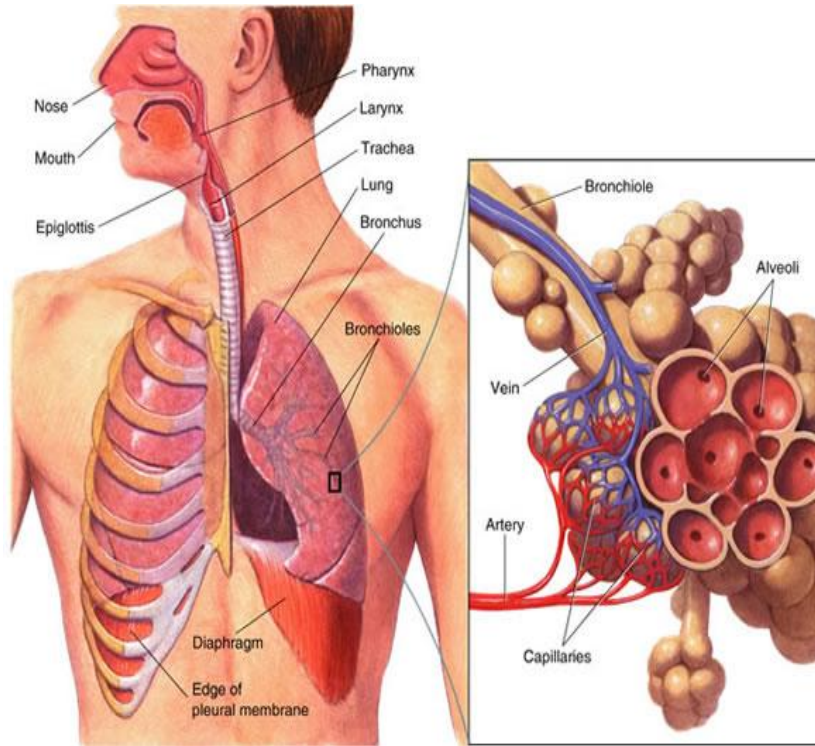
**Function(job):** to exchange oxygen (O<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) between the blood, the air, and your body cells.

The respiratory system is made up of:

1. Nose
2. Pharynx
3. Larynx
4. Epiglottis
5. Trachea
6. Bronchi
7. Lungs
8. Alveoli
9. Diaphragm



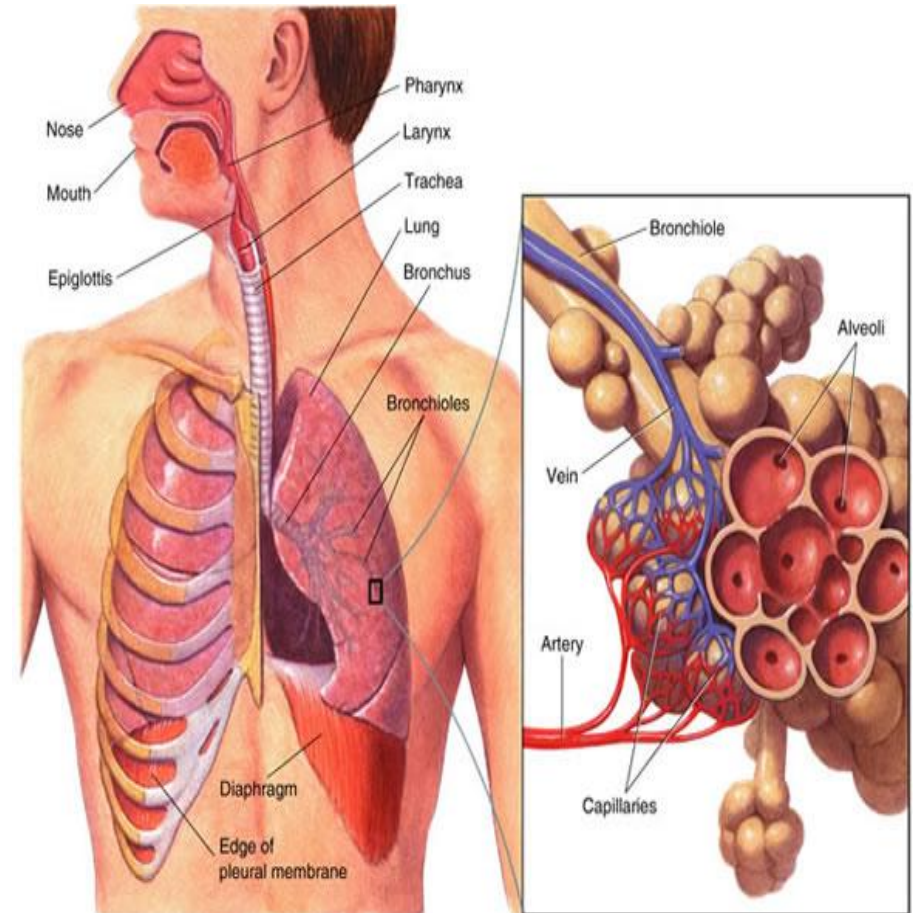
# Parts of the Respiratory System



1. **Nasal Cavity**: nose
2. **Pharynx**: tube at the back of the mouth
3. **Larynx**: voice box
4. **Epiglottis**: covers trachea - stops food from entering
5. **Trachea**: long tube that connects larynx to lungs

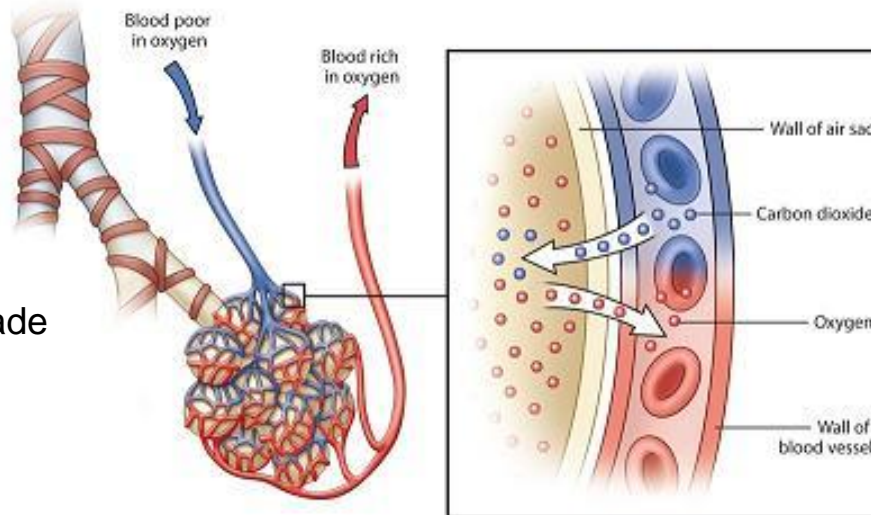
# Parts of the Respiratory System

1. **Lungs**: where gas exchange happens.
  - I. **Bronchi**: branches that carry air into lungs - branch from trachea
  - II. **Bronchioles**: branch off of bronchi.
  - III. **Alveoli**: site of gas exchange - gas crosses over into blood
2. **Diaphragm**: large, flat muscle that helps in breathing.



# Gas Exchange

- The air that you inhale moves into the lungs and travels to the alveoli (air sacs)
- Capillaries (tiny blood vessels) surround the alveoli.
- Oxygen from the inhaled air enters the blood through the *capillaries* and is sent to the heart to pump to the rest of your body
- CO<sub>2</sub> in the blood enters the alveoli so that it can be exhaled.

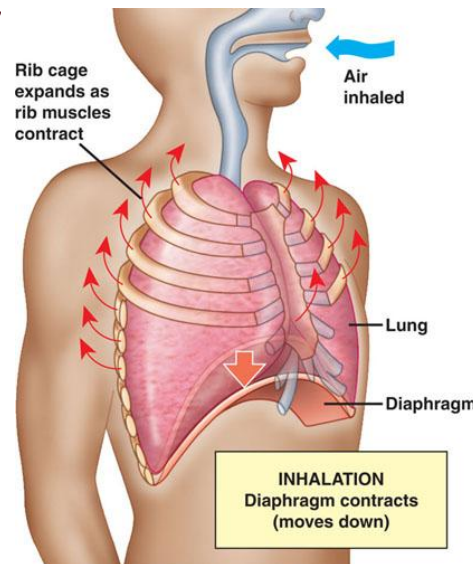


The alveoli in your lungs trade oxygen and CO<sub>2</sub> with the capillaries

# How Do You Breathe?

## Inhalation:

- When you inhale air, the rib cage expands, and the diaphragm moves downward, increasing the size of the chest cavity



## Exhalation:

- When you exhale, the opposite occurs, decreasing the size of the chest cavity, which forces air out of the lungs

