



How Does the Respiratory System Work?

What is the function of the respiratory system?



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- To get oxygen from the environment into the body
- To remove carbon dioxide and other waste products from your body

How do the gasses get to and
from the cells?

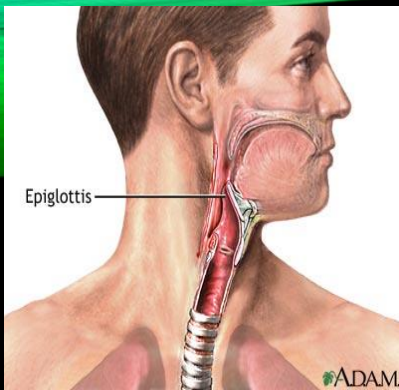


How do the gasses get to and from the cells?

- Oxygen enters your body when you inhale
- Transported to the cells by red blood cells
- Cells use oxygen and glucose to release energy
- CO_2 is the waste product and high levels can damage cells
- The blood takes CO_2 back to the lungs

What are the organs of the
respiratory system?





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1. Nose and Mouth

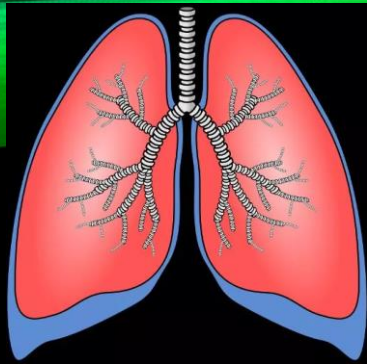
- Air enters and is filtered by the cilia (tiny hairs)
- Mucus (sticky liquid) traps particles
- Nasal cavity warms air

2. Trachea

- Windpipe, tube like structure where air passes through

3. Epiglottis

- Keeps air from entering stomach and food from entering the lungs



What are the organs of the respiratory system?

4. Lungs

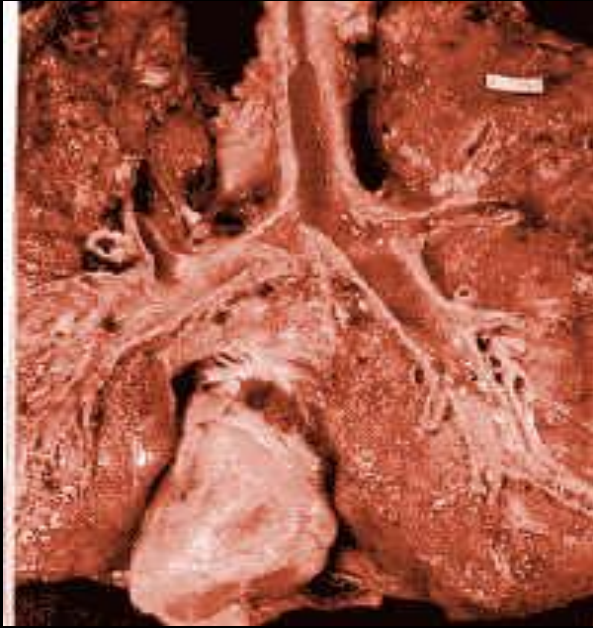
- Large organs located on either side of your heart

5. Bronchial Tubes

- Moves air into the lungs
- Branches through the lungs into smaller tubes
- Moves air into alveoli

6. Alveoli

- Tiny air sacs with walls only one cell thick
- Air passes and diffuses into the blood
- CO₂ waste passes from blood into alveoli



Healthy Lung



Unhealthy Lung

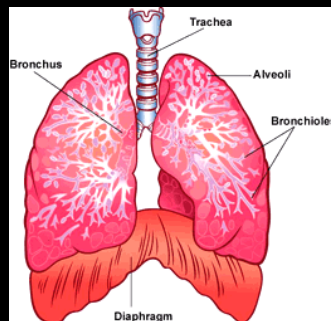
What are the organs of the respiratory system?

7. Rib Cage

- Encloses a space called the thoracic cavity
- Ribs are connected by cartilage allowing it to expand

8. Diaphragm

- Large muscle that contracts (pulls downward) when you inhale and pulls in air



SPEECH AND THE RESPIRATORY SYSTEM

1. **Air** from lungs is forced between vocal cords
2. **Vocal cords** vibrate
3. **Sound waves** generated
4. **Sound waves** are shaped to form specific sounds.
5. Sound waves travel through air and become **speech**

OTHER MOVEMENTS OF THE RESPIRATORY SYSTEM

- Coughing
- Sneezing
- Sighing
- Yawning
- Laughing
- Hiccupping
- Etc.





Respiratory
Video from
Kids Health