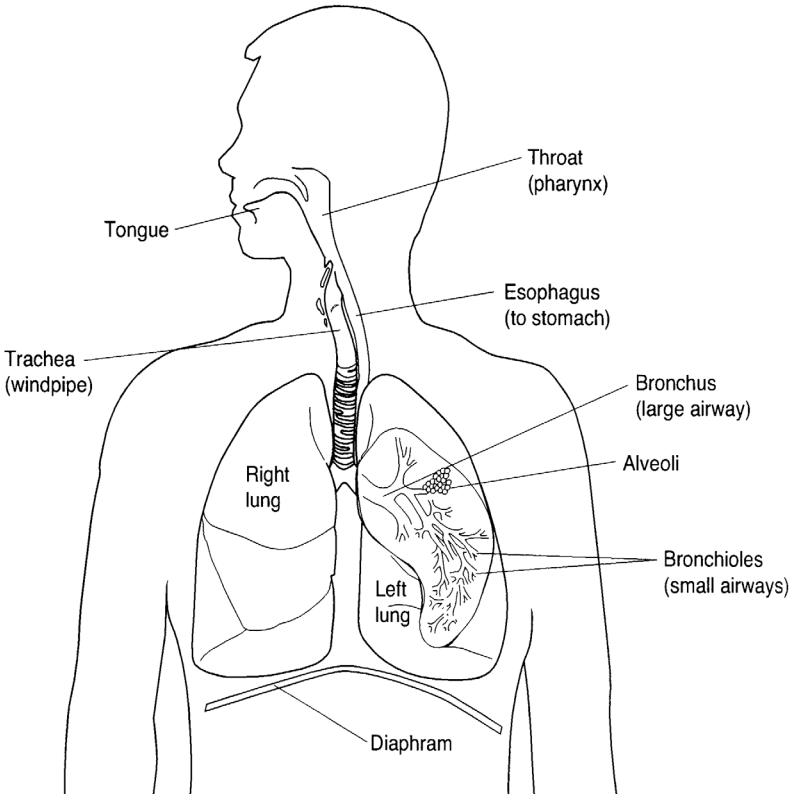
The James
The Ohio State University
Comprehensive Cancer Center

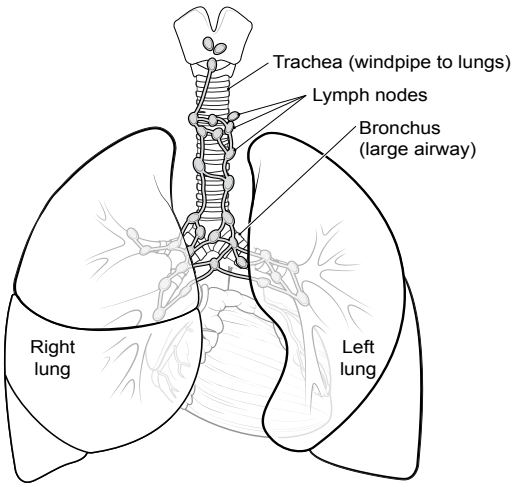
Your Lungs and How They Work

Your lungs are in your chest. When you breathe, your lungs move oxygen into your bloodstream and remove a waste product called carbon dioxide.



Your lungs are 90% air and 10% tissue. Your right lung has 3 lobes and your left lung has 2 lobes.

Your nose and mouth filter the air you breathe to make the air warm and moist before it goes into your lungs.



The air then moves through a tube called the **windpipe or trachea**. Your trachea splits into the right and left bronchus that are large airways that go into your lungs.

The **bronchus** divides into **smaller airways called bronchioles**. At the end of the smaller airways, there are **air sacs called alveoli**. **Connective tissue** around the alveoli holds your **blood vessels**.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

Your **diaphragm** is a flat dome-shaped muscle that separates your chest cavity from your abdomen. Your diaphragm moves down or flattens when you inhale (breathe in) to expand your lungs. It moves back up when you exhale (breathe out).

Your ribs protect and support your lungs. Your lungs are covered by a thin layer of tissue called the pleura. Between your lungs and your chest wall is a small space called the pleural cavity. There is a small amount of fluid in the pleural cavity. If air, blood or a large amount of fluid enters this space, your lungs can collapse and it may become hard to breathe.

Gas Exchange in the Lungs

When you breathe in, your lungs take in oxygen from the air. When you breathe out, your lungs remove carbon dioxide from your body. This is called gas exchange. The oxygen goes into your bloodstream and your heart pumps it to the rest of your body. **A good oxygen level helps your body to work well.**

Lungs with Disease

The main job of your lungs is to bring air and blood together so oxygen can be added to your blood and carbon dioxide can be removed from your body. Healthy lungs can do this well.

Lung disease or trouble with breathing can cause problems with the exchange of oxygen and carbon dioxide. This may cause your lungs not to work well and can make you feel short of breath or tired.