

How Your Lungs Work

Your lungs, part of your respiratory system, do the important job of pulling in oxygen-rich air your body needs and pushing out carbon dioxide and other harmful stuff your body doesn't need.

The lungs are surrounded and protected by the rib cage. Below your lungs, a flat muscle called the diaphragm separates your lungs from your belly. The diaphragm, along with muscles in your chest, expands and contracts your lungs bringing air in and out of your nose and mouth.

As the air enters your body, it travels down your airway or trachea to the lungs.

Each lung has parts called lobes. The right lung has 3: upper, middle, and lower lobes. The left has 2 lobes and is smaller because it shares space with your heart.

The lobes of the lungs hold a complex system of bronchial tubes. The oxygen-rich air travels through the bronchial tubes and into even smaller tubes called bronchioles.

At the end of each bronchiole are tiny air sacs called alveoli. Each alveoli is wrapped in tiny blood vessels.

When you inhale or breathe in, oxygen moves out of the air sacs and into the blood vessels to send oxygen to your bloodstream throughout your body.

At the same time, a waste product called carbon dioxide moves out of your blood vessels and into the air sacs. The carbon dioxide then leaves your lungs when you breathe out or exhale.

Lining the bronchial tubes are little hairs called cilia, coated with a layer of mucus to catch and hold tiny particles. Your lungs act as filters protecting your body from harmful dust and germs you breathe in.

When you cough, sneeze, or clear your throat, you move this material out of your body.

Anything you breathe in can harm your lungs. So it's important to be aware of what you're breathing.

Protect your lungs from smoke and other pollutants so they can do the job of replenishing your body with the oxygen it needs - with every breath you take.