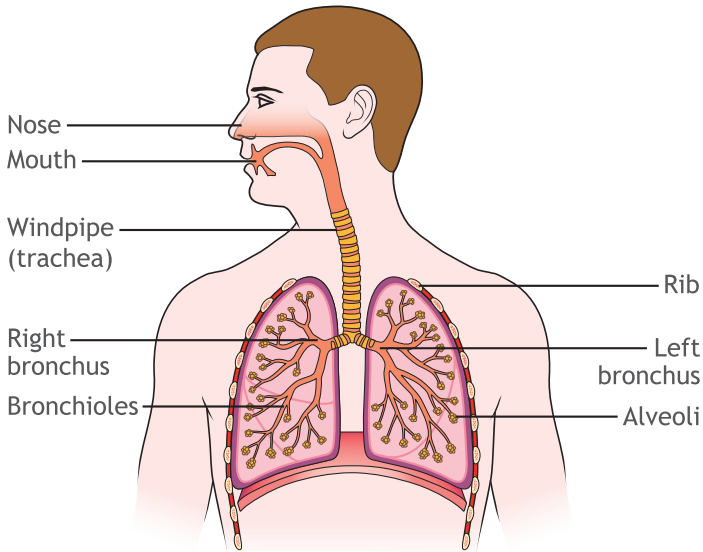


The respiratory system



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The lungs

There are two lungs, one on each side of the chest, which are protected by the ribcage.

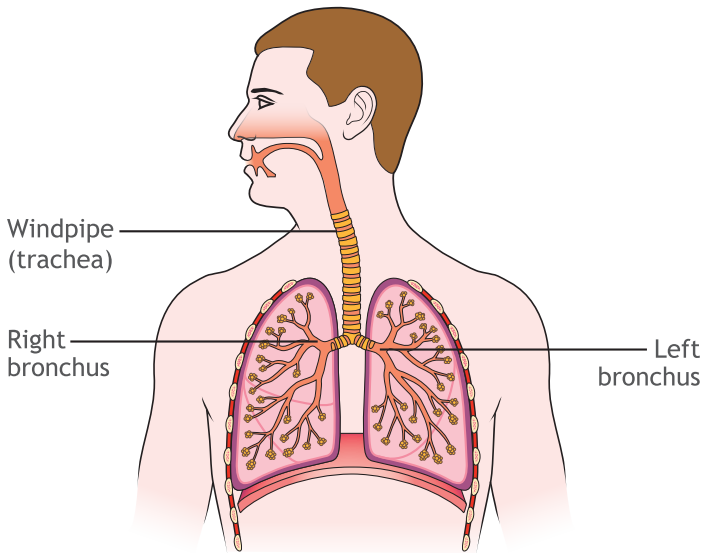
Each lung has different sections, called lobes. The left lung has two lobes (to make space for the heart) and the right lung has three lobes.

The lungs are separated from the stomach and liver by the diaphragm - a wide, thin muscle that helps with breathing. The lungs are surrounded by the pleura. The pleura has an outer layer and an inner layer. Each layer of pleura is about as thin as plastic wrap. Between the two layers is the pleural space (cavity), which normally holds a thin fluid. This fluid allows the two layers of pleura to slide against each other so your lungs can move smoothly against the chest wall as you breathe.

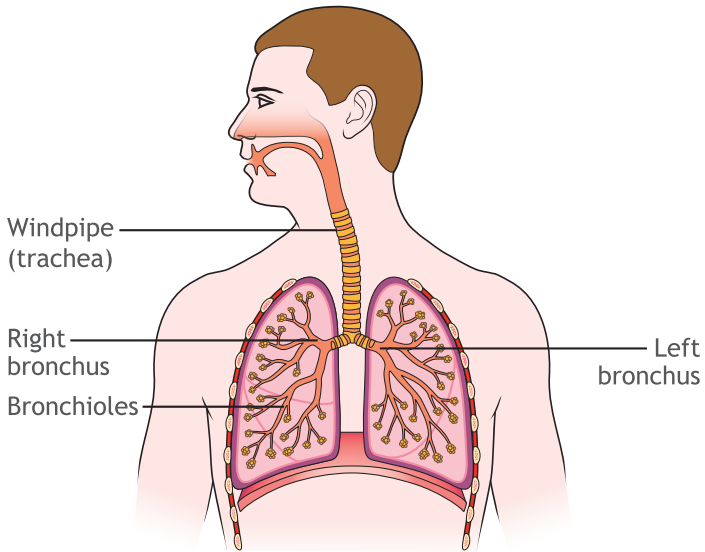
How you breathe

The lungs do not move on their own. The muscles between the ribs and the diaphragm make the chest expand and contract, pulling and pushing air into and out of the lungs.

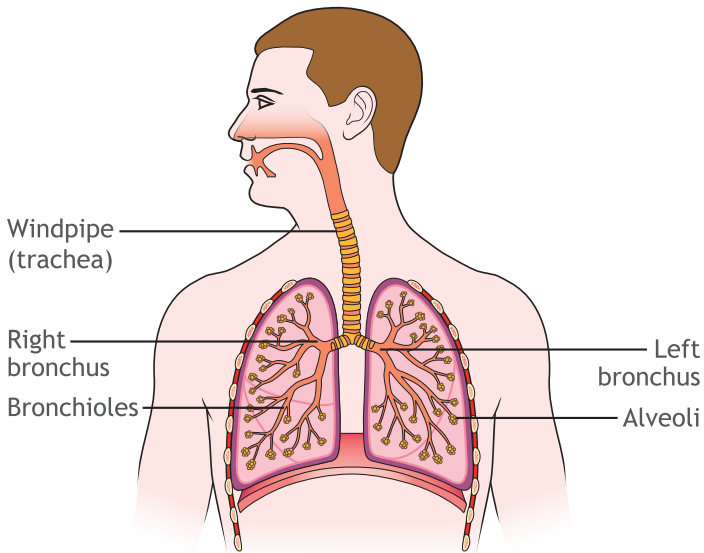
When we breathe in, air goes through the nose or mouth, into the throat, down the windpipe, and through the bronchus and bronchioles until it reaches the alveoli.



The windpipe divides into two airways. These are called the right bronchus and left bronchus.



Each bronchus divides into even smaller tubes called bronchioles.



Each bronchiole ends up in tiny, bubble-like air sacs called alveoli.

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Blood flows through very small blood vessels (capillaries) in the thin walls of the alveoli. This allows oxygen to move from the air we breathe into the blood, and carbon dioxide (a waste product) to move from blood to air that is breathed out.

Alveoli

