

Upper Respiratory Tract

by Sophia



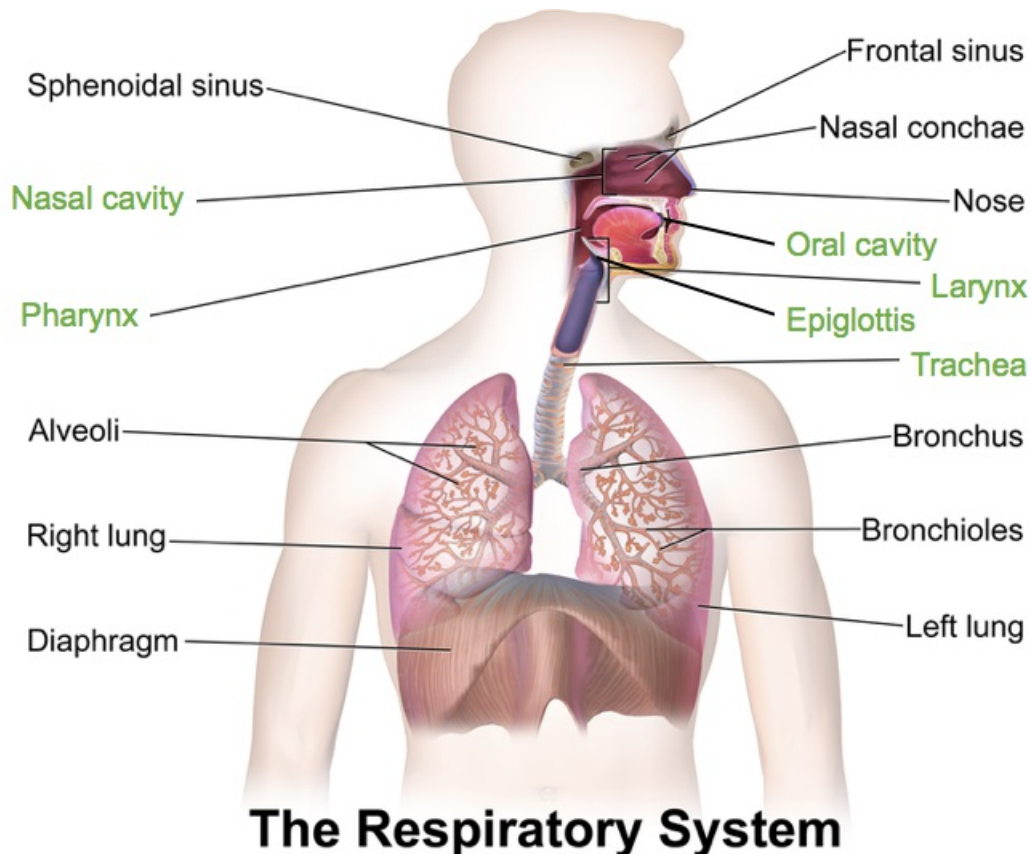
WHAT'S COVERED

In this lesson, you will learn to identify the role of the upper respiratory tract in breathing. Specifically, this lesson will cover:

1. The Structures of the Upper Respiratory Tract

The respiratory tract as a whole is an organ system that's composed of the lungs and airways. It plays a role in gas exchange. The respiratory system works closely with our circulatory system to deliver important gases such as oxygen to our cells and tissues. It also helps to remove gases such as carbon dioxide from our tissues as we breathe in and out.

The respiratory system can be broken down into two sections, the upper respiratory tract and the lower respiratory tract. Let's focus here on the different structures associated specifically with the upper respiratory tract, labeled in green.



The **nasal cavity** is an airway in your nose where air enters and is then moistened, filtered and warmed. The **oral cavity** is a location associated with our upper respiratory tract where air can enter. The oral cavity is like a backup airway if breathing is labored or heavy.

The **pharynx**, also known as the throat, is where the nasal cavity and the oral cavity converge. The pharynx connects the nasal and oral cavity to the larynx.

Larynx is also known as the voice box and is an airway where sound is produced. As air moves through the larynx, sound can be produced. This is how you are able to make sounds to speak.



TERMS TO KNOW

Nasal Cavity

The main cavity through which air is drawn in from the outside environment.

Oral Cavity

A secondary cavity through which air is drawn in from the outside environment.

Pharynx

Connects the nasal cavity to the mouth (commonly known as the “throat”).

Larynx

The airway in which sound is produced (commonly known as the “voice box”).

2. The Trachea & Esophagus

The next structure that we're going to discuss is the **trachea**, also known as the windpipe. The trachea connects the larynx with the bronchi and the lungs, which are a part of the lower respiratory tract. The trachea is the connective tube between the upper and lower respiratory tract. The trachea is a flexible tube that's reinforced with cartilage bands.

The esophagus is not a part of the upper respiratory system but sits close to your trachea. The esophagus is the tube that carries food down to your stomach. The **epiglottis** is the flap of skin that closes off your trachea when you're swallowing food. This is important because as you're eating and swallowing food, it closes off your trachea to make sure that food will then go down your esophagus into your stomach and won't accidentally go down your trachea and then into your lungs.



TERMS TO KNOW

Trachea

Connects the larynx to the lower respiratory tract (commonly known as the windpipe).

Epiglottis

Covers the larynx during swallowing to prevent food or liquids from entering the lungs.



LEARN MORE

Investigate the respiratory system in three dimensions using augmented reality (AR)!

If you're on a laptop or desktop computer: Scan the QR code using the camera on your smartphone or tablet.

If you are on a phone or tablet [click here](#).



SUMMARY

The respiratory tract is responsible for gas exchange and is divided into the upper respiratory and lower respiratory tracts. **The structures of the upper respiratory tract** includes your nasal and oral cavities, where air can enter. The pharynx connects the nasal cavity and associated oral cavity and is commonly called the throat. The larynx is where sound is produced. **The trachea** is the connecting tube between the lower and upper respiratory systems. **The esophagus** is not part of the respiratory tract; the epiglottis divides the trachea from the esophagus.

Keep up the learning and have a great day!

Source: THIS WORK IS ADAPTED FROM SOPHIA AUTHOR AMANDA SODERLIND



ATTRIBUTIONS

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