

Welcome to this lesson today on the upper respiratory tract. Today we will be discussing the different structures associated with the upper respiratory tract.

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

So the respiratory tract or the respiratory system can kind of be broken down into two sections, the upper respiratory tract and the lower respiratory tract. So this lesson today is going to focus on the upper respiratory tract. So what we're going to be doing is labeling this diagram here with the different structures associated specifically with the upper respiratory tract.

So first of all, we have the nasal cavity. So as the name kind of implies, the nasal cavity is an airway in your nose where air enters and then air is then moistened, filtered, and warmed. So it's the location where air enters in through your nose. And then within that cavity, the air will be moistened, filtered, and warmed.

The oral cavity is the other location of our upper respiratory tract where air can enter. So the nasal cavity and oral cavity are the two places where air can enter the respiratory system. Now, normally air will enter through the nasal cavity. But the oral cavity is kind of like a backup airway if breathing is labored or heavy.

The next structure that we're going to label on our diagram here is the pharynx. And the pharynx is also known as the throat. So you'll notice that the nasal cavity and the oral cavity kind of converge together back here in the pharynx. So the pharynx connects the nasal and oral cavity to the larynx.

So therefore, the next structure we're going to be labeling today is the larynx. So the larynx is also known as the voice box. And it's an airway where sound is produced. So as air moves through the larynx, sound can be produced. So this is how you are able to make sounds and to speak, is due to the structure of the larynx. So the larynx is also known as the voice box.

The next structure that we're going to label today is the trachea. And the trachea is also known as the wind pipe. So the trachea basically connects the larynx with the bronchi and the lungs, which are a part of the lower respiratory tract. So the trachea is kind of the connective tube between the upper and lower respiratory tract.

And basically, the trachea is a flexible tube that's reinforced with cartilage bands. And you can actually feel these cartilage bands from the outside. If you put your hand up next to your throat, you can actually feel the little bumps

of cartilage bands along your trachea. So again these cartilage bands are very, very flexible, allowing the trachea to be a flexible tube.

We also have labeled in here the esophagus. And the esophagus is not a part of the upper respiratory tract. But I want to label it because I want you to see the difference between the esophagus and the trachea.

So the esophagus is the tube that carries food down to your stomach. So the tube that carries food down to your stomach is different from the tube that carries air into your lungs. They're actually two separate tubes.

And there's something called an epiglottis, which is this flap of skin that closes off your trachea when you're swallowing food. So this epiglottis is an important structure, 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. So it's kind of a protective feature to make sure that food doesn't go down the wrong tube, as people sometimes say.

So these are all the structures associated with the upper respiratory tract. And this lesson has been an overview on these structures and their functions.