**MATRIC NUMBER; 18/MHS07/044**

**ANA 202**

**ASSIGNMENT**

**Answer;**

For most patients, COVID-19 begins and ends in their lungs, because like the flu, coronaviruses are respiratory diseases.

They spread typically when an infected person coughs or sneezes, spraying droplets that can transmit the virus to anyone in close contact. Coronaviruses also cause flu-like symptoms: Patients might start out with a fever and cough that progresses to pneumonia or worse.

Doctors have since learned that it’s a respiratory disease, one that especially reaches into your respiratory tract, which includes your **lungs.**

COVID-19 can cause a range of [breathing problems](https://www.webmd.com/lung/breathing-problems-causes-tests-treatments), from mild to critical. Older adults and people who have other health conditions like [heart disease](https://www.webmd.com/heart-disease/default.htm), [cancer](https://www.webmd.com/cancer/default.htm), and [diabetes](https://www.webmd.com/diabetes/default.htm) may have more serious symptoms.

**Here’s what the new coronavirus does to the respiratory system.**

When the virus gets in your body, it comes into contact with the mucous membranes that line your nose, mouth, and eyes. The virus enters a healthy cell and uses the cell to make new virus parts. It multiplies, and the new viruses infect nearby cells.

respiratory tract as an upside-down tree. The trunk is the trachea, or windpipe. It splits into smaller and smaller branches in the lungs. At the end of each branch are tiny air sacs called alveoli. This is where oxygen goes into the blood and carbon dioxide comes out.

The new coronavirus can infect the upper or lower part of the respiratory tract. It travels down the airways. The lining can become irritated and inflamed. In some cases, the infection can reach all the way down into the alveoli.

The virus moves down the respiratory tract. That’s the airway that includes the mouth, nose, throat, and lungs. lower airways have more ACE2 receptors than the rest of your respiratory tract. So COVID-19 is more likely to go deeper than viruses like the [common cold](https://www.webmd.com/cold-and-flu/default.htm).

 lungs might become inflamed, making it tough to [breathe](https://www.webmd.com/lung/how-we-breathe). This can lead to [pneumonia](https://www.webmd.com/lung/understanding-pneumonia-basics), an infection of the tiny air sacs (called alveoli) inside the lungs where the blood exchanges oxygen and carbon dioxide.

For most people, the symptoms end with a cough and a fever. More than 8 in 10 cases are mild. But for some, the infection gets more severe. About 5 to 8 days after symptoms begin, they have shortness of breath (known as dyspnea). [Acute respiratory distress syndrome](https://www.webmd.com/lung/ards-acute-respiratory-distress-syndrome) (ARDS) begins a few days later.

ARDS can cause rapid breathing, a fast [heart rate](https://www.webmd.com/heart-disease/heart-failure/watching-rate-monitor), dizziness, and [sweating](https://www.webmd.com/skin-problems-and-treatments/hyperhidrosis2). It damages the tissues and blood vessels in your alveoli, causing debris to collect inside them. This makes it harder or even impossible for you to breathe.