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### **What is a coronavirus?**

 Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Coronavirus is like most respiratory viruses. It starts with droplets from an infected person’s cough, sneeze, or breath. They could be in the air or on a surface that you touch before touching your eyes, nose, or mouth. That gives the virus a passage to the mucous membranes in your throat. Within 14 days, your immune system  may respond with early symptoms like a sore throat, a fever, or a dry cough.

**HOW DOES THE CORONA VIRUS AFFECT THE RESPIRATORY SYSTEM?** The virus moves down your respiratory tract. That’s the airway that includes your mouth, nose, throat, and lungs. For most people, the symptoms end with a cough and a fever. More than 8 in 10 cases are mild. Older people and those with chronic medical conditions appear to have a higher risk. About 5 to 8 days after symptoms begin, they have shortness of breath (known as dyspnea).These coronaviruses cause severe infections by first latching onto proteins that sit on the outside of lung cells. Those attachments help the viruses penetrate far more deeply into the airways than their cold-causing kin. The lungs might become inflamed, making it tough for you to breathe. But if this gets worse, it goes past just the lining of the airway and goes to the gas exchange units, which are at the end of the air passages. If they become infected they respond by pouring out inflammatory material into the air sacs that are at the bottom of our lungs. If the air sacs then become inflamed, This causes an “outpouring of inflammatory material [fluid and inflammatory cells] into the lungs and we end up with pneumonia. The lungs that become filled with inflammatory material are unable to get enough oxygen to the bloodstream, reducing the body’s ability to take on oxygen and get rid of carbon dioxide. When the virus enters the air sacs, it interacts with a specific type of cell that lines the sacs called the alveolar cells — specifically called type II cells. The spike-like appearance of the novel coronavirus is how the illness is able to interact with a molecule on the type II alveolar cells, and then invade those cells. Once it gets inside these cells it’s going to start to replicate and multiply and divide and create copies of itself… and then because it infected that one cell of ours, that one cell of ours essentially gets destroyed and bursts open. When that cell bursts, it releases hundreds of new virus particles that can go on to infect more and more cells.

**Other organs affected by COVID-19**

The lungs are the main organs affected by COVID-19. But in serious cases, other organs which include; intestine and stomach, heart and blood vessels, liver and kidney, and also the immune system. There’s still a lot we don’t know about the novel coronavirus that’s already sickened more than 1,844885 people worldwide with more than 113,853deaths reported. But one thing that’s clear is that in serious cases, the virus can have a devastating effect on the body and not just on the lungs.