

At first you _____ think it's a cold and it _____ be. But COVID-19 could **escalate**. Here's what you need to know.

According to the World Health Organization, China **joint mission on** COVID-19 as of February 20th. 80 % of laboratory confirmed cases were mild to moderate, 14% were severe, and 6% were critical. Just to be clear a mild case of COVID- 19 is not like a mild cold. The symptoms will still be pretty severe. Anything less than needing oxygen puts you in this category. Severe cases do need **supplemental oxygen**, and critical ones are defined by **respiratory** or **multi organ failure**. The symptoms treatments and timelines of having the disease vary, depending on which category patients fall into. So let's **break down** what having COVID-19 looks like day to day for each level of severity. It can take as few as 2 or as many as 14 days after being **exposed to** the novel coronavirus for the first symptom to develop. This is when it _____ feel like a cold or the common flu. Many patients **develop fevers** early on. The World Health Organization China joint mission saw that about 88 percent of people who had COVID-19 had a fever. Another study out of China showed that while only 44 percent of patients had a fever **on admission to a hospital**, 89 percent eventually developed one. But there have been some cases that **led with** gastrointestinal symptoms: **diarrhea**, **nausea**, **vomiting** and/or **abdominal discomfort** may appear a couple of days before respiratory symptoms. This isn't the norm though because COVID-19 is a respiratory disease - that means for most patients the virus will start and end with the lungs. In the early days of infection the virus **invades** lung **cells**. Specifically this can damage the **cilia**, the hairlike projections that move around to keep airways clear of **mucous** and

debris. When cells get infected, they die and shed off adding to the debris and hindering your body's ability to keep stuff out of the lungs and trachea. The inflammation causes damage and damage causes more inflammation, and this cycle could continue until there's no healthy tissue left. And inflammation _____ explain why a dry cough is one of the most common symptoms. Same goes for shortness of breath and phlegm production. Other symptoms that _____ appear around this time are fatigue, sore throat, headache, joint or muscle pain, chills and a runny nose. By day five, patients with pre-existing conditions ___ find that they have trouble breathing, and it usually takes about seven days for a person to go to a hospital. Mild cases, though, usually clear up by this time. But those with moderate to critical cases will have developed pneumonia, which can range from non-life threatening to severe. Recovery time for these patients could be anywhere from a few days to weeks. For some severe and critical cases, though, symptoms can escalate into acute respiratory distress syndrome. ARDS is an illness that happens when fluid builds up in the lungs. Inflammation triggers a flood of immune cells that are meant to target the infection. They're usually isolated to infected areas but sometimes the body goes overboard, which is when the immune cells start killing anything in their path including healthy cells. ARDS is often fatal in critical cases it can lead to respiratory failure requiring advanced life support, and this is most likely when patients head to the ICU. ARDS treatment includes supplemental oxygen and mechanical ventilation. The goal is to get more oxygen into the bloodstream, since the lungs can't. When this treatment doesn't work the lungs are basically too flooded to get any oxygen into your bloodstream. That's the cause of most COVID-19

deaths, and even when a patient survives this phase they _____ be left with permanent lung damage: SARS, punched holes, and some infected people's lungs giving them a **honeycomb effect**. And these **lesions** have been seen in people affected by the novel coronavirus too. Early studies found that most people who die of the disease will do so within 14 to 19 days, and on average people who recover are released from the hospital after two and a half weeks. But with the most critical cases recovery _____ take months. Once a patient is in the recovery period it's possible that they _____ still be contagious. These people _____ work with their doctors and public health officials to determine when they're no longer a risk. As for now, there is no vaccine for the virus, so the best way to avoid getting sick is to avoid being **exposed**. COVID-19 spreads easily from person to person, through coughing and sneezing so wash your hands often and avoid close contact with people who are sick and clean and disinfect surfaces that you use daily. COVID-19 _____ be taken seriously, but most cases are survivable so: stay home stay, clean and don't panic.