

Risks & Medications for Severe COVID-19 Cases

In many areas of the country, COVID-19 cases continue to rise at an alarming rate. Most people who develop COVID-19 will have a mild case and will not need to go to the hospital for treatment. However, some individuals will need to be hospitalized and may even require intensive care. For those people who develop a severe case of COVID-19, recent studies indicate that certain medications may reduce the severity of the illness, time to recovery, or death rate when given in addition to standard hospital care treatments.

Who is at an increased risk for getting seriously ill with COVID-19?

The U.S. Centers for Disease Control and Prevention published detailed information about who is at risk for coming down with a serious case of COVID-19. It's not just older adults who are at increased risk for severe illness. People with the following medical conditions are at increased risk for getting seriously ill with COVID-19:

- Chronic kidney disease
- COPD (chronic obstructive pulmonary disease)
- Obesity (BMI of 30 or higher)
- Weakened immune system from an organ transplant
- Serious heart conditions, such as heart failure, coronary artery disease, or heart muscle disease
- Sickle cell disease
- Type 2 diabetes

Are there other medical conditions that may increase a person's risk for a severe case of COVID-19?

People with the following conditions may also be at an increased risk for a serious case of COVID-19:

- Asthma (moderate-to-severe)
- Cerebrovascular disease (affects blood vessels and blood supply to the brain)
- Cystic fibrosis (an inherited disease that affects the lungs and digestive tract)
- High blood pressure
- Weakened immune system from blood or bone marrow transplant, immune deficiencies, HIV infection, use of corticosteroids or other immune weakening medicines
- Neurologic conditions, such as dementia
- Liver disease
- Pregnancy
- Pulmonary fibrosis (having damaged or scarred lung tissues)
- Smoking
- Thalassemia (a type of blood disorder)
- Type 1 diabetes

What should I do if I have an increased risk of getting seriously ill with COVID-19?

Individuals noted to be at a higher risk of serious illness with COVID-19 should take precautions to reduce their risk of being infected by the virus. They should think carefully about the risk of infection from contact with others and limit those activities based on the associated risk.

In addition, it is important to take basic precautions such as wearing a mask and practicing safe distancing, which means placing 6 feet between you and others, if you go out of the house. Wash your hands often with soap and water for at least 20 seconds. If you leave your home, wash your hands as soon as you come back inside. If soap and water are not readily available, use a hand sanitizer with at least 60% ethanol or 70% isopropanol. Be sure to also wash your hands after blowing your nose, sneezing, or coughing. Do not touch your eyes, nose, or mouth with unwashed hands. Clean and disinfect surfaces that are frequently touched. Examples of high-touch surfaces that need to be regularly cleaned and disinfected are light switches, doorknobs, keyboards, faucets, tables, and countertops.

Are there medications to treat severe illness associated with COVID-19?

For those people who develop severe illness due to COVID-19, recent studies have found that certain medications such as [remdesivir](#) and [dexamethasone](#) may improve outcomes when given in addition to standard hospital care treatments.

Remdesivir is an investigational antiviral medication that has not undergone the standard review for approval by the Food and Drug Administration (FDA). But based on the evidence from certain clinical studies, the FDA has granted an Emergency Use Authorization (EUA) to allow adults and children hospitalized with severe COVID-19 to receive remdesivir.

The National Institutes of Health COVID-19 Treatment Guidelines also recommend remdesivir in hospitalized patients with severe COVID-19. A clinical study found that remdesivir reduced the time to recovery by 4 days in severely ill hospitalized COVID-19 patients who received the drug intravenously for 5 to 10 days along with standard care treatments, compared with similar patients receiving only standard care.

However, other studies in people with moderate or severe COVID-19 treated with remdesivir have not noted significant improvements in outcomes. Additional studies are testing remdesivir and certain other medications to see if they reduce the severity or length of the illness or prevent deaths from the disease.

Dexamethasone is an FDA-approved corticosteroid medication that has been used for treatment in other serious respiratory virus infections. It has anti-inflammatory and other properties to reduce lung damage, which may help improve serious aspects of COVID-19.

A United Kingdom study of hospitalized COVID-19 patients assessed a low dose of dexamethasone given orally or intravenously along with standard care for up to 10 days. Preliminary information suggests that among patients receiving mechanical ventilation, dexamethasone treatment reduced the death rate by nearly one third, compared with patients who did not receive dexamethasone. In patients receiving oxygen (but not mechanical ventilation), the death rate was reduced by 20% in those given dexamethasone. The study also found that hospitalized patients receiving dexamethasone who did not require oxygen or mechanical ventilation did not have a difference in recovery compared to those receiving standard care.

Experts state that corticosteroids such as dexamethasone should not be used for early or mild COVID-19 and should be used only in hospitalized patients requiring intensive care.

It is important to know, however, that patients with COVID-19 who already take corticosteroids for another reason (such as asthma or rheumatoid conditions) should continue to take their prescribed therapy as directed by their doctor.

Summary

Researchers are continuing to study the most effective treatments for COVID-19, and the evidence is rapidly changing. However, the best strategy is to avoid becoming infected, especially for those at risk for serious illness and for those who may live with high-risk individuals.

It is important to limit your interactions with other people as much as possible and to take precautions such as wearing a mask, adhering to physical distancing guidelines, and washing your hands frequently to prevent illness when you interact with others.

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Note: The information contained in this article is emerging and rapidly evolving because of ongoing research. Talk to your pharmacist or other healthcare provider if you have any questions about your medications, COVID-19, or other health issues.