



Oxygen Levels, Pulse Oximeters and COVID-19

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How does COVID-19 lower a person's oxygen levels?

Some people with COVID-19 have low levels of oxygen in their blood, even when they feel well. Low oxygen levels can be an early warning sign that medical care is needed.

What is a pulse oximeter?

A pulse oximeter measures how much oxygen is in someone's blood. It is a small device that clips onto a finger, or another part of the body such as a toe or ear lobe. They are used often in hospitals and clinics and can be bought to use at home. A pulse oximeter reading will have 2 numbers, the pulse rate (or heart rate) and the "SpO2" or percentage of oxygen in the blood.

Medical providers consider oxygen level an important sign of how well a body is working, just like a person's blood pressure or body temperature. People who have a lung or heart condition may use a pulse oximeter at home to check how they are doing, as directed by their health care provider. People can buy pulse oximeters without a prescription at some pharmacies and stores.

Can a pulse oximeter tell if someone has COVID-19 or how well they are doing if they have it?

We do not recommend using a pulse oximeter to tell if someone has COVID-19. Most people with COVID-19 infections will have normal pulse oximeter readings. Get tested if you have signs of COVID-19 or if you have been close to someone who has it.

If someone has COVID-19, a pulse oximeter may help them keep watch over their health and know if they need to seek medical care. However, the oxygen level measured by a pulse oximeter is not the only way to know how sick someone is. Some people may be very sick and have good oxygen levels, and some may feel OK, but have surprisingly poor oxygen levels.

Pulse oximetry results may not be as accurate for people with darker skin. Their oxygen levels are sometimes registered by the pulse oximeter as higher (or better) than they really are. People who use pulse oximeters at home should keep this in mind when looking at results. Knowing what their normal baseline pulse oximeter reading and noticing a drop in their reading, even if still in the normal range, may be significant for someone with darker skin.

Symptoms of low oxygen levels may include feeling short of breath, breathing faster than usual, or feeling too sick to do their usual daily activities. You should call a health care provider if you have these symptoms, even if a pulse oximeter says your oxygen levels are normal.

