



Coronavirus Disease 2019 (COVID-19)

The Equipment for Oxygen Monitoring and Oxygen Therapy during the COVID-19 Pandemic

People with COVID-19 can have low oxygen levels, even without showing signs or symptoms of shortness of breath.

Oxygen levels can be measured using a pulse oximeter and oxygen therapy can be delivered using an oxygen cylinder tank. This equipment is simple to use and can save lives.

This is a pulse oximeter. It has sensors that are placed on the skin. Some pulse oximeters are battery operated and others connect to a power source. Many have just one or two simple buttons - to turn on the device and provide the measurement information.

Bright light, such as sun light, may interfere with the light detector and cause inaccuracy so, when possible, use them in areas without direct sunlight.

The pulse oximeter provides information about a patient's heart rate and oxygen saturation, or SpO₂. The SpO₂ is the percent oxygen in the blood and this value guides decisions about starting oxygen therapy. An oxygen saturation of 95 to 100 percent is normal for healthy children and adults; oxygen therapy should be started when oxygen saturation drops below 90 percent, even in a patient without symptoms.

Oxygen therapy can be given using an oxygen tank.

Oxygen tanks have a regulator which includes a pressure gauge and a flow meter. The regulator limits the pressure of oxygen that's released.

The pressure gauge shows the amount of oxygen in the tank. If the needle on the gauge is in the red zone, the tank is nearly empty.

The flow meter controls the oxygen flow to the patient. It shows you how much oxygen, measured in liters per minute, is given to the patient when you open and close the adjustable valve.

On the oxygen tank, there's a port that connects to tubing for nasal cannula or a mask.

The oxygen moves from the tank, through the regulator, and out through the tubing. It then reaches the patient via the nasal cannula or mask. It's important that the connections are tight and secure so the oxygen can flow properly through the tubing without any leaks.

This simple equipment is safe to use in children, adults, and pregnant women and can help providers deliver life-saving oxygen to people who need it.