

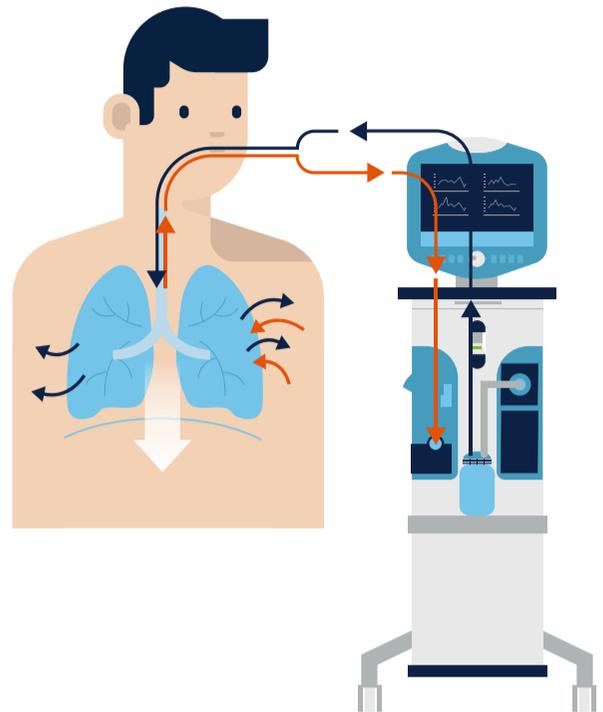
VENTILATORS

WHAT THEY ARE, HOW THEY WORK, AND WHY THEY MATTER

As the COVID-19 pandemic continues, ~30% of all hospitalized COVID-19 patients will require some type of ventilation.¹

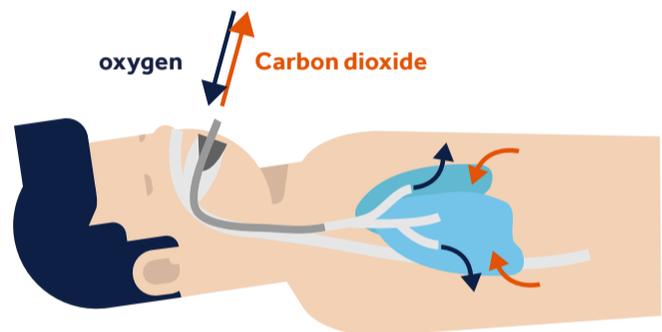
A VENTILATOR IS A DEVICE THAT HELPS PEOPLE BREATHE:

- A typical person takes about 22,000 breaths per day.²
- In severe cases of acute respiratory infections like COVID-19, a patient may contract pneumonia; the resulting fluid buildup in the lungs reduces the body's ability to take in oxygen and expel **carbon dioxide**.
- Ventilators help the patient rest and breathe while their body fights the infection.
- Ventilators are different from respirators. Respirators and surgical masks (face masks) are types of personal protective equipment that protect the wearer from airborne particles and liquid contaminating the face.



VENTILATORS CAN DO 4 KEY THINGS:

1. Help get oxygen into the lungs and body
2. Help expel carbon dioxide
3. Help ease the work of breathing for people who are having trouble
4. "Breathe" for people who can't do it for themselves



OVERVIEW OF MEDTRONIC VENTILATORS

Medtronic has a range of ventilators, from basic models used to treat less acute cases, to more complex models used to treat high acuity cases.



ACUTE CARE MODEL

- Designed for high-acuity cases
- Requires more than 1,500 parts from more than 100 suppliers in 14 countries
- Has more than 1 million lines of software code

PORTABLE MODEL (not for emergency transport)

- Designed for less acute cases
- Can be used in a range of care settings, including at home
- Contains approximately 700 components



PROTECTING EVERYONE'S SAFETY

When a patient is brought into a hospital with a severe respiratory illness, the safety of the patient, caregivers, other patients, and even family members is on the line.



Ventilator filters can play a key role in protecting the safety of anyone entering the environment of patients on mechanical ventilation by reducing the risk of cross contamination, helping to prevent the inhalation of harmful viruses and the contamination with bacteria and viruses that can lead to the spread of the infection.

1. Imperial College in London. Ferguson NM, Laydon D, Nedjati-Gilani G, et. al. Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand. March 16, 2020. Accessed April 6, 2020. doi: 10.25561/77482.
2. Cleveland Clinic. Vital Signs. Cleveland Clinic Health Library. <https://my.clevelandclinic.org/health/articles/10881-vital-signs>. Updated Jan. 23, 2019. Accessed April 6, 2020.

More information at medtronic.co.uk/rms