

UNDERSTANDING COVID-19 & HOW YOU CAN COMBAT IT

IN DECEMBER 2019, THE CHINESE AUTHORITIES NOTIFIED THE WORLD THAT A VIRUS WAS SPREADING THROUGH THEIR COMMUNITIES. IN THE FOLLOWING MONTHS, IT SPREAD WORLDWIDE, WITH THE NUMBER OF CASES DOUBLING WITHIN DAYS. THIS VIRUS IS THE SEVERE ACUTE RESPIRATORY SYNDROME-RELATED CORONAVIRUS 2 (SARS-COV-2) THAT CAUSES THE DISEASE COVID-19. IN THE EARLY DAYS OF THE OUTBREAK, THE MEDIA, MEDICAL EXPERTS, AND HEALTH PROFESSIONALS WERE REFERRING TO "THE CORONAVIRUS" AS A CATCH-ALL TERM TO DISCUSS THE OUTBREAK. HOWEVER, IT'S IMPORTANT TO NOTE THAT A CORONAVIRUS IS A TYPE OF VIRUS, RATHER THAN A DISEASE ITSELF.

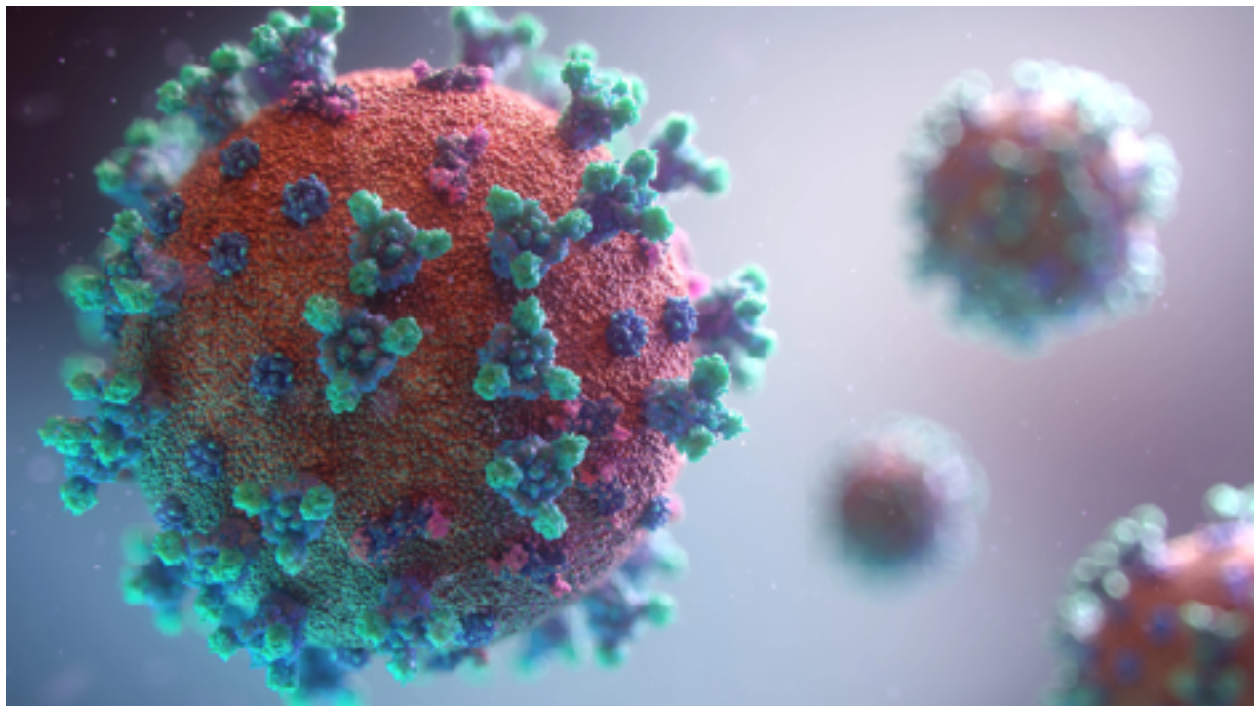
THEREFORE:

- THE 2019 NOVEL CORONAVIRUS IS OFFICIALLY NAMED **SARS-COV-2**.
- THE *DISEASE* CAUSED BY **SARS-COV-2** IS OFFICIALLY NAMED **COVID-19**.

ACCORDING TO THE WORLD HEALTH ORGANIZATION (WHO), AS OF APRIL 16, 2020, THE RESPIRATORY ILLNESS HAS INFECTED OVER TWO MILLION PEOPLE AND KILLED NEARLY ONE HUNDRED FORTY THOUSAND PEOPLE WORLDWIDE. AS OF THIS WEEK, THE PANDEMIC HAS NOW REACHED EVERY CONTINENT ON EARTH BESIDES ANTARCTICA.

HERE'S THE LATEST INFORMATION ON THE COVID-19 PANDEMIC AND WHAT YOU CAN DO TO COMBAT IT.

COVID-19 IN THE UNITED STATES



U.S. health officials continue to monitor COVID-19 cases in the United States. The COVID-19 death toll in the U.S. increased by more than 2,000 in a single day for the first time on Friday, April 10th, and has now surpassed the number of reported deaths in Italy. According to the Centers for Disease Control and Prevention (CDC), as of April 16th, more than 630,000 cases have been confirmed in the U.S., and there have been more than 31,000 deaths.

Wyoming recorded its first death Monday, April 13th, meaning that all 50 states now have at least one fatality in the pandemic.

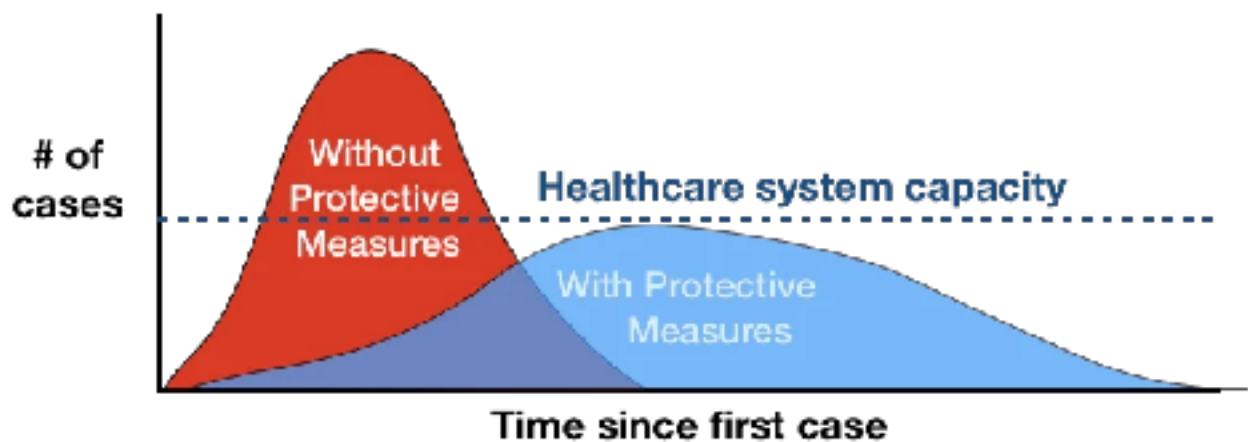
The increase in deaths comes as state and local officials around the country seek scarce lifesaving ventilators and personal protective equipment (PPE) for healthcare workers. With the outbreak expected to persist, Americans have been urged by the CDC to wear cloth face coverings in public, and hundreds of makeshift hospitals have been built in major cities including Los Angeles and New York City, the current epicenter of the COVID-19 pandemic with over 123,000 confirmed cases and over 11,000 deaths.

The COVID-19 outbreak in the U.S., which now has the highest number of known cases in the world, looks vastly different than it did just over a month ago. At the beginning of March, with extremely limited testing available, only 70 cases had been reported in the U.S., with most of them tied to overseas travel. In recent days, the number of cases and deaths have grown rapidly. On Monday, April 13th, New York State announced that more than 10,000 people had been killed by the virus since early March, with more than half of the fatalities happening during the past week.

FLATTENING THE CURVE

You've probably been hearing and seeing the term "flattening the curve" everywhere lately. It's on every news station and all over social media. So what does it actually mean?

The ideal goal in fighting an epidemic or pandemic is to completely stop the spread of the disease. But to get there, merely slowing the spread is critical. In epidemiology, the idea of slowing the spread of a virus so that fewer people need to seek medical treatment at any given time is known as "flattening the curve." This gives first responders, law enforcement, hospitals, doctors, scientists, and vaccine-manufacturers time to prepare and respond, without becoming overwhelmed. This explains why so many countries are implementing "social distancing" guidelines, including a "shelter in place" order that is currently affecting millions of Americans. The "curve" researchers are talking about refers to the model of the projected number of people who will possibly contract the virus over a period of time.



Adapted from CDC / The Economist

The more infected people reporting with the virus on a given day, the higher the curve; a high curve means the virus is

spreading fast. A low curve shows that the virus is spreading slower; fewer people are diagnosed with the disease on any given day. Keeping the curve down (diminishing the rate at which new cases occur) can ensure that anyone who needs care will find it.

THE BOTTOM LINE: IT IS CRITICAL TO FLATTEN THE CURVE BY TAKING MEASURES TO PREVENT A HUGE SPIKE IN CONFIRMED COVID-19 CASES.

COVID-19 VS. THE FLU

COVID-19 is often compared to influenza, but it's actually much more dangerous. While the exact death rate is hard to pin down during an ongoing pandemic, experts know for sure that the coronavirus is much more contagious and spreads faster than the flu. COVID-19 and the flu can have similar symptoms. Both cause fever, sore throat, cough, shortness of breath, body aches, and fatigue; sometimes vomiting and diarrhea. Both can result in pneumonia. Both can be mild or severe, even fatal in certain cases. The new coronavirus causing COVID-19 has led to more than 2,000,000 illnesses and more than 119,000 deaths worldwide. For comparison, in the U.S. alone, the flu has caused an estimated 39 million illnesses, 410,000 hospitalizations and 24,000 deaths this season, according to the CDC.

That said, it's important to note that scientists have studied influenza viruses for decades. So, despite the danger of it, we know a lot about flu viruses and what we can expect each flu season. In contrast, very little is known about the new

coronavirus and the disease it causes, COVID-19, because it's so new. This means that COVID-19 is something of a wild card in terms of how far it will spread and how many deaths it will cause before the pandemic is over.

WHAT YOU CAN DO TO HELP COMBAT COVID-19



To protect yourself and others against COVID-19, the [CDC](#) recommends that everyone should:

- Wash your hands often with soap and water for at least 20 seconds, especially after you have been in a public space, or after blowing your nose, coughing, or sneezing.

If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol.

- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Stay home as much as possible.
- Put distance between yourself and other people. Remember that some people without symptoms may be able to spread the virus.
- Cover your mouth and nose with a cloth face cover when around others.
- If you are in a private setting and do not have on your cloth face covering, remember to always cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow. Throw used tissues in the trash. Immediately wash your hands with soap and water for at least 20 seconds. If soap and water are not readily available, clean your hands with a hand sanitizer that contains at least 60% alcohol.
- Clean AND disinfect frequently touched surfaces This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks. If surfaces are dirty, clean them. Use detergent or soap and water prior to disinfection. Then, use a household disinfectant that meets the EPA's criteria for use against SARS-CoV-2.

USING VITAL OXIDE TO KILL THE NOVEL CORONAVIRUS (SARS-COV-2)

The U.S. Environmental Protection Agency (EPA) has established a list of disinfectants that meet their criteria for use against SARS-CoV-2, the coronavirus that causes COVID-19. According to EPA Administrator Andrew Wheeler, “Using the correct disinfectant is an important part of preventing and reducing the spread of illnesses along with other critical aspects such as hand washing.”

Vital Oxide is included on this list, and meets the EPA’s emerging pathogen requirements for viruses showing efficacy against envelope and non-envelope virus, both large and small.

SARS-CoV-2 may survive for several days on some surfaces. Estimates of its life span vary, from minutes to days, depending on the surface. This makes disinfecting often-touch items and surfaces a priority. To use Vital Oxide to kill SARS-CoV-2, follow the directions for use against Norovirus Feline Calicivirus** and Canine Parvovirus (Strain Cornell-780916, ATCC VR-2016**) on hard, non-porous surfaces.