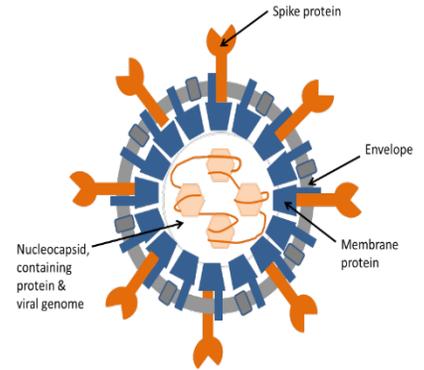


COVID-19 and the Pandemic

COVID-19 is from a family of Corona virus's that have club-shaped projections, which can infect birds and many mammals, including humans. The Corona viruses are the causative agents of MERS, SARS, and Covid-19.

- COVID-19 is defined as a mild to severe respiratory illness that has been caused by a corona virus.
- COVID-19 first showed up in Wuhan, China in December of 2019.
- The first documented case was in December 2019
- In January 2019, The CDC confirmed that the virus had spread in the United States.
- As of December 2021, the United States has had over 51 million confirmed cases and over 800 thousand deaths due to Covid.
- Globally, there have been over 275 million confirmed cases and over 5 million deaths.
- Covid is now the third leading cause of death in the United States and has shortened the life expectancy of American's by nearly 2 yrs.



COVID-19 AND MUTATIONS

Since the initial start of the pandemic, the Covid virus has mutated and caused changes to it's properties.

Mutations make a virus more successful in infecting other living organisms – including humans. With mutations, viruses then start the process of spreading the virus all over again.

Just because you have had COVID before, does **not** make you immune to any new variants.

The main new variants of Covid-19 are: Alpha, Beta, Gamma, Epsilon, Eta, Iota, Kappa, 1.6173, Mu, Zeta.

The variants of MOST concern are **Delta** and **Omicron**.

A VOC (variant of concern) is a variant for which there is evidence of increased transmission, more severe disease (for example, increased hospitalizations or deaths), significant reduction in the prevention of the infection by antibodies generated during a previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures.

<p>DELTA</p> <ul style="list-style-type: none"> • First identified in India late in 2020 • Was named on May 31, 2021 and had spread to over 179 countries by November 2021. • Is still the main variant that is being detected by testing <p>Characteristics of Delta included:</p> <ul style="list-style-type: none"> • Increased transmissibility • Susceptible to some monoclonal antibody treatments (monoclonal antibodies seek out specific proteins in the cell to interfere with cell growth) • Reduction in effectiveness of vaccinations 	<p>OMICRON</p> <ul style="list-style-type: none"> • First identified in South Africa in mid Nov 2021 • Was then found in California on Nov 29th, 2021 • Appears to be more contagious and is spreading more rapidly. <p>Characteristics of Omicron include:</p> <ul style="list-style-type: none"> • Potential increased transmissibility • Potential decrease in effectiveness of monoclonal antibodies • Potential decrease in effectiveness of vaccines
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COVID -19 INFECTION

Contagious is defined as transmissible by direct or indirect contact with an infected person. Symptoms of Covid-19 include:

Most common <ul style="list-style-type: none">• Fever• Dry cough• Tiredness	Serious symptoms <ul style="list-style-type: none">• Difficulty breathing or shortness of breath• Chest pain or pressure• Loss of speech or movement
Less common <ul style="list-style-type: none">• Aches and pains• Sore throat• Diarrhea• Eye infection• Headache• Loss of taste or smell• A rash on skin• Discoloration of fingers or toes	

On average it takes 5-6 days from the time when someone is infected with the virus for symptoms to show up, however, it can take up to 14 days. At Covid's worst, patients that ended up in Intensive Care on a Ventilator resulted in a high number of deaths due to viral pneumonitis.

VULNERABLE POPULATIONS

<ul style="list-style-type: none">▪ Racial or ethnic minorities▪ Children▪ Elderly▪ Various Occupations	<ul style="list-style-type: none">▪ Socioeconomically Disadvantaged▪ Under Insured▪ Those with certain medical conditions▪ Immuno-compromised
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Members of vulnerable populations often have health conditions that are exacerbated (made worse) by inadequate healthcare.

Home health care patients are a vulnerable population. They frequently are immuno-compromised and have chronic conditions (such a diabetes, hypertension, stroke, heart disease) or have compromised immune systems (such as lupus, rheumatoid arthritis, cancer).

Various occupations are considered to have a higher risk of exposure. These include:

- Healthcare Workers (including Hospitals, Nursing Homes, **Home Health Care**, Medical Transport and Medical Support Staff)
- Death care providers (including Coroners, Medical Examiners, and Funeral Directors)
- Airline Industry Workers
- Waste Management Workers
- Anyone who may have traveled to any area where the virus is spreading.

EXPOSURE

According to the CDC: A **close contact exposure** is defined as anyone who has prolonged close contact **within 6 feet of an infected person for a combined total of 15 minutes over a 24 hour period.**

However, when close contact occurs, factors that can reduce risk for transmission include correct use of PPE (personal protective equipment such as mask, gloves, goggles, face shields), Covid vaccination, and performance of hand hygiene.

WHEN THE CAREGIVER BECOMES THE PATIENT

- Stay at Home
 - Do not leave your home except to seek medical attention
 - If you live with others, isolate yourself in your home with a separate bedroom and if possible, a separate bathroom.
 - Do not share dishes, eating utensils, drinking cups, towels or bedding with other family members.
 - Clean and disinfect surfaces in your designated isolation room every day.
 - Have someone clean and disinfect surfaces in other parts of your home that are high touch areas such as counter tops, surfaces of phones, remote controls, doorknobs, bathroom fixtures and toilets.
- Monitor your symptoms
 - Seek medical attention if your symptoms worsen (such as high fevers or difficulty breathing.
 - Warning signs that require immediate medical care include:
 - Difficulty breathing or shortness of breath
 - Persistent pain or pressure in chest
 - Confusion or inability to arouse
 - Bluish lips, nail beds or face.

RETURNING TO WORK

Per the CDC, the criteria for symptom-based strategy for returning to work is the following:

1. For Mild to Moderate illness
 - a. At least 10 days have passed since symptoms first appeared **and**
 - b. At least 24 hrs. have passed since last fever *without the use of fever-reducing medication* **and**
 - c. Symptoms (e.g., cough, shortness of breath) have improved
 - d. Those who were *asymptomatic* (had no symptoms) throughout their infection
 - e. At least 10 days have passed since the date of their first positive vial diagnostic test
2. For Severe to Critical illness
 - a. At least 10 days and up to 20 days have passed *since symptoms first appeared* **and**
 - b. At least 24 hrs. have passed since last fever *without the use of fever-reducing medications* **and**
 - c. Symptoms (e.g., cough, shortness of breath) have improved
 - d. Consider consultation with an infection control expert

OTHER CONSEQUENCES OF THE COVID PANDEMIC

- Mental Health Issues
 - PTSD, Depression, Anxiety, Insomnia, and more
 - Job Loss
 - Travel Restrictions and Social Isolation
- Interruption of supply chains
- Interruption in healthcare workforce

Those on the front-line, essential workers, who continue to work during this time may struggle with anxiety with the increased threat of exposure in addition to the above-mentioned concerns. Healthcare workers may struggle with lack of coping skills due to this virus mutating and not having a cure. The high number of deaths are unlike most care givers have ever seen.

Signs of Caregiver stress include:

- Feeling constantly overwhelmed / worried / anxious / sad
- Feeling chronically tired
- Changes in weight (sudden weight loss or weight gain)
- Losing interest in hobbies or activities you once enjoyed
- Experiencing frequent headaches, body aches or other physical problems
- Requiring alcohol or drugs to function in your role

The emotional and physical demands of a Healthcare Worker during a healthcare crisis can be overwhelming. It is important to take care of yourself and use resources or tools that may be available to provide support and selfcare. These may include:

1. Keep a routine.
2. Stay connected with family and friend through phone calls, social networking, email, texts, and video conferencing such as Zoom, Facetime, and Skype.
3. Focus on hobbies that make you happy such as yoga, listening to music, reading, etc.
4. Contact support groups or counselors

COVID VACCINES

- COVID-19 Vaccines are messenger RNA (mRNA) vaccines that teach our cells how to make a protein that will trigger an immune response in our bodies.
- Even though these vaccines are newly available to the public, researchers have been working on mRNA vaccines for decades.

There are currently three COVID-19 vaccines. These include:

<u>Pfizer-BioNTech</u>	<u>Moderna</u>	<u>Johnson and Johnson</u>
<ul style="list-style-type: none">▪ A two series vaccine that now has a booster available▪ Second dose is given at least 21 days after the first dose.▪ Booster should be given 6 months after the second vaccine dose	<ul style="list-style-type: none">▪ Two-vaccine series that now has a booster available▪ Second dose is given after at least 28 days after the first dose▪ Booster should be given 6 months after the second vaccine dose	<ul style="list-style-type: none">▪ A single dose vaccine with a booster▪ Booster is recommended after 2 months since the first dose

COVID VACCINE FACTS:

- Covid-19 mRNA vaccines cannot give someone the virus that causes Covid-19.
 - mRNA vaccine does not use the live virus that causes Covid-19 and cannot cause infection
- They **do not** affect or interact with our DNA in any way.
 - mRNA never enters the nucleus of the cell where and DNA (genetic material) is located, so it cannot change or influence our genes.
- The mRNA and spike protein do not last long in the body.
 - Our cells break down the mRNA and get rid of it within a few days after vaccination.
 - Scientists estimate that the spike protein, like other proteins in our bodies create, may stay in the body up to a few weeks.

COVID TREATMENT ORAL MEDICATION

On December 22, 2021, the FDA approved the first COVID treatment PILL that is made by Pfizer called **PAXLOVID**.

Paxlovid is an antiviral medication that has been approved for use in high risk patients for the treatment of mild to moderate Covid-19 who are at least 12 years of age and have a weight of 88 lbs. or more. The medication is an antiviral and will only be administered to patients who test positive for Covid-19. The medication must be given within the first three days after testing positive for Covid, in order to be effective. The way Paxlovid works is it binds to an enzyme in the Covid-19 virus and prevents the virus from replicating. Paxlovid will only be available as a prescription.