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COVID-19 VACCINE FAQ
Pfizer BioNTech Vaccine

Details about the COVID-19 vaccine and distribution process change frequently. This FAQ will be updated as new information becomes available

Vaccine Distribution at MultiCare

- **Is MultiCare receiving the COVID-19 vaccine?**

  Yes, we received a small shipment of 3000 vials of the vaccine December 17th and will receive regular allocations from the state.

- **Who is eligible to receive the COVID-19 vaccine at MultiCare?**

  All employees, volunteers and contracted providers will be prioritized based on risk level.

- **How is MultiCare prioritizing which employees get the vaccine first? When will I find out when I can get vaccinated?**

  Based on guidance from the CDC and the Washington State Department of Health, a vaccine committee at MultiCare, including leaders, physicians and health equity representatives are determining how to prioritize distribution.

  The recommendation is that health care workers who are most at risk for becoming infected, such as those working in COVID-19 units and emergency departments, along with first responders and residents and employees of long-term care facilities, should be offered the first available doses of the vaccine.

  MultiCare's prioritization will be based on an employee's likelihood of contact with COVID-19 positive and immunocompromised patients, including the type and duration of exposure. Once the vaccine committee has determined a prioritization plan and confirmed how many doses of vaccine will be received in each allocation, the committee and your operational leaders will provide additional information to employees.

- **Will the COVID-19 vaccine be required for MultiCare employees?**

  The vaccine is a critically important milestone in our response to the pandemic and in our ability to ensure the safety of our communities and ourselves. We strongly encourage all our employees to get the vaccine when it is available to them, but it will not be required at this time.

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- **I'm healthy. Why do I need to be vaccinated? What is the benefit of vaccination?**

  It is important that as many people get vaccinated as possible. We know from other diseases and their vaccines that we can slow or stop the spread of disease when roughly 60 – 80% of a population is vaccinated.

  The COVID-19 vaccine is designed to protect you from developing an infection when you come in contact with the virus and it reduces the chance you will spread the virus to others.

  It is important to be aware of the risks associated with COVID-19. About 10-15% of people infected with COVID-19 will have severe symptoms requiring hospitalization and 5% will end up critically ill in the ICU. While we know many of the factors that put a person at risk for severe disease, such as advanced age and diabetes, there are also patients who develop severe illness who have minimal or no known risk factors. At this point, we cannot always predict who will become critically ill.

  Many people recover within one to two weeks from COVID-19. However, in some cases, symptoms take longer to resolve and may last for months. In a survey of 292 patients with COVID-19 in the outpatient setting, 35% had not returned to baseline health by two to three weeks after diagnosis. Reports are increasing of 'long haulers' whose symptoms - including fatigue, chest pain, shortness of breath and memory problems - have lasted for months following their diagnosis, preventing a return to normal daily activities and a worsened quality of life. Health care providers do not understand why this happens, how frequently it occurs -- and importantly -- we do not know who is at risk for developing these long-term symptoms. We do know that this is happening to young, previously health individuals.

  Finally, there is increasing evidence that even those without symptoms still have inflammatory reactions to the virus. It occurs in both adults and children, with studies showing evidence of inflammation of the blood vessels and organs such as the lungs and heart. We do not yet know the long-term complications of COVID-19.

- **What if I already had COVID-19, do I still need the vaccine?**

  Yes. There is still not enough information about how long immunity lasts after COVID-19 infection, so it is important for you to receive the vaccine as well. However, if you have tested positive for COVID-19 in the past 90 days, you may defer your vaccine to allow others to receive the it. Current evidence suggests reinfection is uncommon during the 90 days after initial infection. If you were treated with a monoclonal antibody cocktail or convalescent plasma for your COVID-19 infection, the CDC recommends you wait a full 90 days from receiving these therapies before you are vaccinated.

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- **What happens if I'm out sick, on leave, or choose not to get vaccinated during my initial window to get the vaccine?**

  You can get the vaccine at a later date, although we do not know how long you will need to wait. We are evaluating how and when to offer doses to those who are unable or choose not to get vaccine as part of their initial prioritized group.

- **Will I get a proof-of-vaccination document?**

  We will be documenting vaccinations in Epic, with information available to employees in their MyChart accounts. Employees also will receive a 'COVID-19 vaccination record card' at the point of vaccination. We will share more detailed information on the document process as it becomes available.

- **Once I am vaccinated, do I still need to wear a mask? Am I exempt from lockdown restrictions?**

  Even after receiving the vaccine, you should continue to follow MultiCare and public health recommendations on masking and distancing. Experts need to understand more about the protection that COVID-19 vaccines provide before changing public health recommendations on steps everyone should take to slow the spread of the virus. Other factors, including how many people get vaccinated and how the virus is spreading in communities will also affect this decision.

- **Once I am vaccinated, will I still be able to spread COVID-19?**

  We do not have enough information yet to know if vaccination completely prevents mild or asymptomatic infection. If it does not, then a vaccinated person could still spread the virus to others. This is one of the reasons it is important to continue following masking and distancing guidelines after vaccination until we learn more.

- **When will we administer the vaccine to our patients?**

  Once priority groups including health care workers and first responders have been vaccinated, we will begin vaccinating patients following CDC guidelines and based on their level of risk. We will provide more information on the timing and location of our patient vaccinations when it becomes available.

- **When can my family and the general public get a vaccine from MultiCare?**

  We are following CDC guidelines and, at this time, will focus on our health care workers, first responders and long-term care facilities first. Please continue to check the multicare.org website for more information on when vaccines will be available to the general public.

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- **What vaccine will we get at MultiCare?**

  While we do not know which brand of vaccines we will get over time, our first allocations will be the Pfizer BioNtech vaccine since we are able to store it at the ultra-low temperatures it requires. As additional vaccines receive approval and become available, we may also receive allocations of the Moderna vaccine as well as others. Both the Pfizer and Moderna vaccines require two doses.

- **Can I choose which type of vaccine I get?**

  Because we do not know when each vaccine will be approved for use or how many doses of each type Washington state will receive, we cannot guarantee employees will be able to select between the different vaccine options. You are encouraged to take the vaccine type that is available when it is offered to you.

- **When will my second dose be scheduled? Will it be the same brand as the first dose?**

  Your will schedule your second dose in MyChart after you receive your first dose. The second dose must be the same brand of vaccine as the first. Please schedule your second dose between 19-23 days after your first dose. Though the ACIP allows the second dose as early as 17 days, our Covid Medical Advisory group recommends a 19-23-day range based on the phase 2/3 study design. You will be able to access your appointment through your Epic MyChart account if you need to reschedule. Find out how to sign up for a MyChart account here.

- **What happens if I miss my second dose of vaccine?**

  You should get your 2nd dose as soon as possible. The longer you go past 23 days, the more likely it is to reduce the efficacy of the vaccine. At this time, we do not have data on how longer intervals between the two doses might impact the efficacy.

- **If I have side effects from the vaccine and do not feel well enough to work, will I need to use PTO?**

  A certain small percentage of those vaccinated may experience one or more side-effects. Less than 2% of all clinical trial participants after the first dose and less than 5% of all participants after the second dose reported side effects severe enough to miss work. Some of these side effects may be severe enough that you may not feel well enough to work. Much like the annual flu vaccine, if you feel unwell following your COVID-19 vaccine and must miss work, then your paid leave accruals will apply to your time off.

  Washington State Paid Sick Leave is protected sick leave that is meant to apply to time off for sick reasons and will be the first pay code applied to your time off. When your sick time off accruals are exhausted, paid time off accruals will be applied pursuant to usual policy. Paid Time Off accruals differ in different employee

populations. Please ask your direct manager or submit a case to the Employee Resource Center if you have questions about pay for sick time off.

- **Since the side effects of the vaccine are the same as some of the symptoms of COVID-19, how will I know if I need to get a test to rule out if I already have COVID-19?**

  If you have side effects from the vaccine (i.e. injection site pain/redness, fatigue, headache, fever, chills, muscle/joint pain, diarrhea or vomiting) in the 24-48 hours following vaccination and feel well enough to work, you may come to work.

  If you develop any of the symptoms listed below at any time following vaccination, or the vaccine side effects listed above last longer than 48 hours, please stay home. Complete the online COVID-19 assessment for instructions on testing
  - Loss of taste or smell
  - New cough or shortness of breath
  - Runny nose or congestion
  - Sore throat

- **If side effects are possible, what are we doing to ensure staff from the same unit are not all out sick at the same time?**

  In order to minimize any potential impact on patient care, staff from the same clinical unit will not get their vaccines on the same day. Distribution of vaccinations will be staggered to ensure that staff are available to provide patient care. We suggest staff arrange with their leaders to get the vaccine before scheduled days off work. By doing so, we can plan for the small number of staff that may experience side effects.

Pfizer BioNtech Vaccine Information

The information below is based on data from the first three phases of the Pfizer BioNtech clinical trial. We will provide information on additional vaccines if MultiCare receives them in the future.

- **What does an Emergency Use Authorization (EUA) mean?**

  In an emergency like a pandemic, the FDA can make a judgment that it's worth releasing a drug or vaccine for use without the typical timeline for a new vaccine or drug. If evidence strongly suggests that patients benefit from the vaccine in clinical trials, the agency can issue an EUA to make it available. EUA approved vaccines will continue to be studied, as is true with all vaccines. To read more about the EUA process for vaccines, visit the FDA EUA Page.

- **What age group can or cannot get the vaccine?**

  The vaccine has only been authorized for use in people 16 years of age and older based on the phase 3 clinical trial data. Pfizer and other vaccine manufacturers are

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expanding their trials to include participants 12 years of age and older, but we will have to wait for safety and efficacy data in these younger patients before use is expanded to include them.

- **Is this vaccine a live-virus vaccine?**

  No, the vaccine MultiCare expects to receive from Pfizer is not made using a live virus or any fragment of a live virus. This means there is no risk of getting COVID-19 infection from the vaccine.

- **Can I get COVID-19 infection from the vaccine?**

  No, this vaccine uses only one small gene from the virus and cannot infect you with COVID-19. You may experience side effects from the vaccine that are similar to some of the symptoms of COVID-19, however this only due to your immune system reacting appropriately to the vaccine to build an immune response.

- **I've heard that the Pfizer vaccine is an mRNA vaccine. What is a mRNA vaccine?**

  - mRNA, or messenger RNA, is the genetic material your cells use to build proteins, like an instruction manual. The mRNA in the COVID vaccine contains instructions for making the spike protein of the novel coronavirus that causes COVID-19. The spike protein is what the coronavirus uses to enter our cells and cause infection.

  - Once the mRNA vaccine is injected into the muscle, the mRNA moves into the nearby cells, which then "read" the mRNA instructions and build the spike protein. The spike protein then moves to the surface of the cell, where the immune system reacts to it, creating antibodies and memorizing how to respond to the spike protein if it ever sees it again. After the cell has made enough spike protein, it breaks down the mRNA from the vaccine, resulting in no long-term changes to the cell.

  - Now your immune system has been trained to recognize the spike protein on the novel coronavirus. When you are exposed to the virus later, your immune system will recognize it immediately, reducing the chances that it will cause a serious infection.

- **How effective is the Pfizer vaccine?**

  Efficacy in specific populations:

  Elderly patients

  A major concern for many vaccines is whether they remain effective in older patients, who tend to have weaker immune responses to vaccines compared to younger

patients. For patients in the trials older than 55, the vaccine was 93.7% effective; almost as effective as it was for younger patients.

Minorities

Patient demographics from the trials included 81.9% White, 9.8% African American, 4.4% Asian, and < 3% from other racial groups. Additionally, 26.2% of participants self-described as Hispanic/Latino. Efficacy was 95% for all participants when grouped together. Most groups showed a trend towards protection from symptomatic COVID-19 infection; however, most groups did not have enough participants to accurately predict efficacy rates.

Those with comorbidities

Patients with comorbidities were represented in the trials, the most common conditions were obesity, hypertension, COPD, and diabetes. Others such as heart failure, liver disease, and stable HIV were uncommon in study participants. While the rates of symptomatic COVID-19 infection were lower in patients with comorbidities who were vaccinated, the total number of patients was too low to accurately predict efficacy rates based on comorbidity.

Children, adolescents

This vaccine has not been adequately studied in children; however, trials are under way. It has been approved under EUA for adolescents 16 and 17 years old, as there were some patients in this age group in the phase 3 trial.

- **What level of immunity can I expect to have between the first and second doses?**

  Following a single dose of vaccine, the placebo group had roughly twice as many cases of symptomatic COVID-19 compared to the vaccine group, making the efficacy of the first dose of vaccine approximately 50%. This early immunity does not appear until around 14 days after the first dose.

- **How long does immunity last after getting the vaccine?**

  No one knows just how long immunity lasts after getting the vaccine. Because the studies available so far were conducted over two months, we can say with confidence that immunity lasts for at least two months. It is not yet clear how long protection from vaccination will last. The vaccines could last longer than natural immunity, but we will not know until we study this longer-term. Since we do not know how long protection will last, we do not know if or when know re-vaccination may be necessary.

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- **Will the mutations to the coronavirus affect how well the vaccine works?**

  The U.K. reported a new strain of the virus recently that appears to be more contagious than the virus circulating in prior months. The new strain has mutations in the spike protein, raising concerns that the new vaccines, which train the body to generate an immune response to the spike protein, may not be as effective for this new strain. It's important to remember that virus mutations are common in nature and most do not have a significant impact on how we treat or prevent infection.

  Currently, scientists believe the vaccine will still be effective against this new strain. The new vaccines were developed over decades of trial and error based on what we know about mutations in coronaviruses, therefore scientists feel confident minor mutations will not significantly impact the vaccine efficacy. Scientists are monitoring new strains for mutations that would affect vaccine efficacy.

- **What are the side effects of the Pfizer vaccine?**

  - There were very few side effects rated as severe by participants in the trial. (Severe was defined as symptoms that prevented the person from doing their normal daily activities). Less than 2% of all participants after the first dose and less than 5% of all participants after the second dose reported side effects severe enough to miss work.

  - Vaccine side effects vary, with many participants in the trial reporting no side effects. Side effects are more common after the second dose. Side effects tended to be less significant in participants over 55 years of age.

  - The side effects from the vaccine are due to your immune system recognizing the spike protein created from the vaccine and activating in reaction to it. Since everyone's immune system is unique, each person's reaction to the vaccine will be unique, that's why some people have more side effects than others. You will not get COVID-19 from the COVID-19 vaccine. Side effects are not the same as getting ill.

  - Pain at the injection site occurred in 50-60% of all participants after each dose of the vaccine. Swelling and redness were less common and occurred in less than 10% of participants after each dose. These reactions usually occurred quickly and typically lasted 1-2 days.

  - Other mild to moderate side effects, occurring 1-2 days after injection and lasting a day on average, included:
    - Fatigue (up to 60% of participants)
    - Headache (up to 52%)
    - Fever ≥ 100.4°F (up to 16%)
    - Chills (up to 35%)
    - New or worsening muscle pain (up to 37%)
    - New or worsening joint pains (up to 22%)

- Diarrhea (up to 10%)
- Swollen lymph nodes (<1%)

- **How will side effects be monitored? Where do I report side effects?**

  MultiCare is encouraging anyone who gets vaccinated to utilize the CDC's V-safe health checker website for side effect reporting. When you get vaccinated, you'll receive a handout with barcode you can scan that takes you to the CDC website, which will ask you some basic health demographic information, which manufacturer made your vaccine, and the date you received your vaccination. After registration, V-safe will text you regularly over the course of the next year to check in regarding any potential side effects. We strongly encourage employees to utilize V-safe for reporting as it's important to collect data in real-time as these vaccines roll out. To read more about V-safe, go to vsafe.cdc.gov.

  The CDC and FDA also encourage the public to report possible adverse events to the Vaccine Adverse Event Reporting System (VAERS), a national early warning system to detect possible safety problems in vaccines. This national system collects this data to look for adverse events that are unexpected, appear to happen more often than expected, or have an unusual pattern of occurrence. Visit https://vaers.hhs.gov/index.html to report an adverse reaction to the vaccine.

- **If I have side effects, can I treat them with Tylenol and/or ibuprofen?**

  Most side effects from the vaccine are a result of your immune system activating and are mild to moderate. Your immune system works best when it's allowed to have its full, normal response. If your side effects are tolerable without medication, it's best to avoid using any. However, if your symptoms are intolerable, you may use

  NSAIDs/Tylenol if you choose. A large proportion of patients studied in the trials (about 45%) used NSAIDs/Tylenol to help their symptoms and this does not appear to have affected the final effectiveness of the vaccine.

- **What do we know about serious adverse reactions reported from this vaccine?**

  There have been reports of serious reactions, including anaphylaxis, since vaccination began in the UK and US. All reported reactions occurred within 30 minutes following vaccination and the individuals involved recovered with supportive care. While some individuals had a history of severe, life-threatening allergic reactions to injectable medications, others did not. There is speculation that an ingredient in the vaccine called polyethylene glycol may be responsible for these reactions. It is important to note that allergic reactions to this ingredient have been previously documented in medical literature for many years and are reported at a very low frequency in the population, therefore scientists feel the chance of an allergic reaction to the vaccine remains very low.

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At this time the CDC recommends anyone that has had a severe allergic reaction to any ingredient in the vaccine, including polyethylene glycol, should not get this vaccine. If you have a severe allergic reaction after getting the first shot, you should not get the second shot.

Those that have had a severe allergic reaction to other vaccines or injectable therapies should discuss the risks and benefits of vaccination with their healthcare provider first. They may still receive the vaccine and will be monitored on-site for 30 minutes after vaccination. People with a history of allergies to oral medications or a family history of severe allergic reactions, or who might have a milder allergy to vaccines (no anaphylaxis), may get vaccinated. Those with a history of severe allergic reactions not related to vaccines or injectable medications—such as allergies to food, pet, venom, environmental, or latex—may get vaccinated.

Bell's palsy, a condition that causes temporary weakness or paralysis of the facial muscles on one side of the face, was reported by four vaccine participants and none in the placebo group. Since this rate is not higher than what we would normally see in the general population over time, it's not clear if these cases of Bell's palsy are related to the vaccine or just due to chance. FDA will recommend surveillance for cases of Bell's palsy once the vaccine is released.

- **Who should not get the vaccine?**

  You should not get the vaccine at this time if you meet any of the following criteria:

  - Have a known allergy to any of the vaccine ingredients, including polyethylene glycol
  - Have an acute infection or fever
  - Have received another vaccine within the past 14 days
  - Received monoclonal antibodies or convalescent plasma in the past 90 days
  - Have received another COVID-19 vaccine

- **Who should talk to their healthcare provider first before getting the vaccine?**

  - Pregnant and lactating women
  - Those with an immune-compromising condition or taking a medication that affects your immune system
  - Those with a bleeding disorder or taking a blood thinner

- **What do we know about the long-term safety of this vaccine?**

  As of November 14th, the phase 3 Pfizer trial has collected safety data for two months following the second vaccine dose in approximately 9,500 participants

  We know from prior vaccine development and research that most serious and uncommon side effects occur within the first six weeks after a vaccine is administered. This is why FDA required all COVID-19 vaccine companies to collect a

minimum of two months safety data before they would consider releasing one for widespread use.

If extremely rare side effects exist, such as those that occur at a rate of 1 per million, these will not become known until more people receive the vaccine.

- **Is this vaccine safe for people who are immunocompromised?**

  The Pfizer vaccine has not been studied yet in patients with an immunocompromising condition, such as active cancer, or in those taking an immunocompromising medication, such as chemotherapy or medication for an autoimmune condition. Therefore, we do not yet know how effective the vaccine will be for these patients or what side effects will occur.

- **Can I get the vaccine if I'm pregnant?**

  There is no data on the safety of COVID-19 vaccines in pregnant women. mRNA vaccines are thought to have a very low risk of fetal harm; therefore, The Society for Maternal-Fetal Medicine and American College of Obstetricians and Gynecologists recommend pregnant high-risk health care workers should be offered the vaccine after discussing the benefits and risks with their health care provider.

- **Can I get the vaccine if I'm breastfeeding?**

  There is no data on the safety of COVID-19 vaccines in lactating women or the effects of the vaccine on the breastfed infant or milk production. mRNA vaccines are thought to be very low risk to the breastfed infant; therefore, the Society for Maternal-Fetal Medicine and American College of Obstetricians and Gynecologists recommend high-risk health care works should be offered the vaccine after discussing the benefits and risks with their healthcare provider due to the potential benefits.

- **Is there a risk of an autoimmune reaction?**

  There is no current evidence of risk for autoimmune reactions based on the safety data from approximately 9,500 patients two months following a second dose. We do not know at this time whether autoimmune-like reactions will occur very rarely once more people are vaccinated, and if they occur, how long following vaccination. The vaccine has not been studied yet in those with existing autoimmune disease and we do not know for sure how people with autoimmune disease will tolerate this vaccine, however scientists feel the risk of new or worsening autoimmune disease is very low. There is no evidence at this point nor reason to expect that the vaccine would exacerbate an autoimmune condition.

- **Is there a risk of the vaccine altering my DNA?**

  No. The DNA in your cells is isolated from the rest of the cell in the nucleus, which is very secure. When the mRNA from the vaccine enters your cell, it stays in the main

compartment, or the cytosol, to be turned into protein and does not gain access to the nucleus where the DNA is.

- **Is there a risk of infertility from this vaccine?**

  There does not appear to be any risk of infertility from this vaccine. A rumor suggested the vaccine would lead to the production of a protein that looked very similar to a protein on the human placenta. There is a very short sequence of amino acids, or building blocks, in the spike protein of the virus that is shared with the placental protein, syncytin-1. The sequence, however, is too small (only 4 shared amino acids) to lead to autoimmune reactions against this part of the protein. If this did occur, we'd expect to see the same autoimmune reactions occurring in real world COVID-19 infections, and to date there is no evidence of this occurring. Finally, In the Pfizer's phase 3 data, 12 study participants in the vaccine arm subsequently became pregnant after at least one dose.

- **Is it true that this vaccine implants a microchip and is really a tracking device?**

  This rumor is completely false. The technology to embed microchips in a vaccine to track people simply doesn't exist. Read more here -- Reuters Article - Fact Check, Coronavirus Vaccine Microchip

- **Can I get HIV from the vaccine?**

  There is no risk of getting any infection, including COVID-19 or HIV, from the vaccine. This concern stems from a report published in October, where scientists warned that using very specific type of modified live-virus (adenovirus 5) in a vaccine for COVID-19 might make patients more susceptible to contracting HIV infection later on, based on previous experience trying to make a vaccine to fight HIV. This is completely different vaccine technology than that used in the Pfizer vaccine. There is no risk of contracting HIV, COVID-19, or any other infection from this vaccine.

- **Will the COVID-19 vaccine cause me to test positive on a COVID-19 nasal or oral swab test?**

  No, this is not possible. The vaccine produces only one small part of the full virus, the "spike protein," for your immune system to react to. The vaccine does not lead to the formation of any other viral particles or full virus that could be detected on COVID-19 test.

- **Are there any preservatives such as Thimerosal included in the vaccines?**

  No, the Pfizer vaccine does not contain any preservatives or adjuvants, like thimerosol or aluminum.

- **Is the vaccine derived from fetal tissue?**

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No. The Pfizer COVID-19 vaccine and other mRNA vaccines were not derived from fetal tissue. No. The Pfizer COVID-19 vaccine and other mRNA vaccines were not derived from fetal tissue. While it is true that early-phase testing for the vaccine used fetal cell lines, the production method used for the existing vaccine does not use these cells. Catholic organizations have released statements supporting vaccination with the Pfizer BioNtech vaccine.

- **What ingredients are in the vaccine?**

    - **Active Ingredient**
        - nucleoside-modified messenger RNA (mRNA) encoding the viral spike glycoprotein (S) of SARS-CoV-2
    - **Inactive Ingredients**
        - **Lipids** – the Pfizer vaccine uses lipid nanoparticles to encase the mRNA. This lipid carrier is necessary to allow the mRNA to gain access to your cells after injection.
            - ALC-3015 (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis
            - ALC-0159 (2- hexyldecanoate),2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide
            - 1,2-distearoyl-snglycero-3-phosphocholine (DPSC)
            - cholesterol
        - **Salts** – these are used commonly in pharmaceutics to keep the acidity (or pH) of the vaccine close to that of the person's body
            - potassium chloride
            - monobasic potassium phosphate
            - sodium chloride
            - basic sodium phosphate dihydrate
        - **Sucrose** – this is used to help protect the nanoparticles from clumping together at the ultra-cold storage temperature

- **Is there any concern for antibody-dependent enhancement following this vaccine?**

    Antibody-dependent enhancement (ADE), also referred to as immune or vaccine-enhancement, is an unexpected phenomenon where, after a person or animal receives a vaccine and is then exposed to the virus, they develop more severe infection than those who were not vaccinated. This has been observed in the past during vaccine development for other viruses, such as SARS and RSV.

    There is no evidence to date that the COVID-19 vaccine causes ADE or any ADE-like reaction. In phase one and two testing, researchers confirmed this vaccine does not cause the immune system to produce the type of immune cells thought to be responsible for the ADE reaction. So far, no participants in the in phase 3 trials who received at least one dose of the vaccine (~18,000) have shown signs of an ADE-like reaction in follow-up.

- **Can I get checked for antibodies after I get the vaccine?**

    We currently do not have plans to check those receiving the vaccine for antibodies unless future FDA or CDC guidance recommends antibody testing.

- **How did this vaccine get approved for use so fast?**

  There are two major reasons this vaccine was tested and released so quickly. First, the mRNA technology has been in development for decades, both for vaccines and in cancer research. The team that developed the COVID-19 vaccine for Pfizer had previously worked on an mRNA vaccine during the SARS outbreak.

  Second, the clinical trial process was consolidated. Usually each phase of a clinical trial is done sequentially, where one phase is completed and analyzed before designing and implementing the next phase – researchers want to be sure their therapy works and is safe before moving on. In this case, they chose to design and conduct all three phases of their clinical trial all at once, assuming their first two phases would be successful. In addition, significant financial resources were devoted to this process. For example, the government invested money to build new manufacturing facilities to start making vaccine doses before it knew whether the vaccines worked.