

Frequently Asked Questions

Utah's Vaccination Plan

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Are there different types of COVID-19 vaccines?

Will more than one company offer a vaccine?

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<u>What is herd immunity?</u> <u>What percentage of the population needs to get vaccinated to have herd immunity to COVID-19?</u> <u>Are vaccines dangerous?</u>





<u>I hear about people who don't believe in vaccines. Is there any scientific evidence to support this point of view?</u>

Someone I know told me never to get a flu shot, because the one time she did, she ended up getting the flu. Will a flu vaccine give me the flu?

You still need to take safety precautions after you get vaccinated.

Will the vaccine mean the pandemic is over?If I am vaccinated against COVID-19, can I still spread the virus to other people?Do I need to wear a mask after I get a COVID-19 vaccine?Why do we need a vaccine if we can take other safety precautions to keep the virus from spreading?Do I need to wear a mask if I have received 2 doses of the vaccine?When can I stop wearing a mask after I have been vaccinated?

COVID-19 vaccination and other vaccines

Can I have the flu and COVID-19 at the same time? What is the difference between the flu shot and the COVID-19 vaccine? Are there other vaccines that can help prevent me from getting COVID-19? Is it safe to get the COVID-19 vaccine at the same time as other vaccines?

What should I do if I can't get vaccinated because of a health condition?

I have a health condition that prevents me from getting other vaccines. What should I do?





Frequently Asked Questions

Utah's Vaccination Plan

Do we have COVID-19 vaccines yet in Utah?

The Food and Drug Administration (FDA) has issued emergency use authorization (EUA) for 2 COVID-19 vaccines to be used throughout the U.S. to prevent COVID-19.

Utah's first shipment of COVID-19 vaccine arrived the week of December 14. More shipments of the vaccine are scheduled to arrive each week.

• It was a great day for Utahns when the first COVID-19 vaccines were given to Utah's healthcare workers at Intermountain Healthcare and the University of Utah Health on December 15.

When can I get vaccinated?

See the anticipated vaccination <u>distribution schedule</u> or visit Coronavirus.utah.gov to learn more. Please keep in mind that the vaccine distribution schedule is likely to change as more vaccines become available and as we learn more about COVID-19 vaccines.

I work in such-and-such industry, when will I get the vaccine?

Prioritization based on an individual's employment status in certain industries is no longer being considered by the Unified Command group or the Governor's office. Vaccinating those who are at the highest risk of hospitalization and death first makes the most sense right now. As additional recommendations for who should receive the vaccine are announced by the CDC, we will review our plans and make adjustments as needed.

How does Utah get the vaccine?

The federal government oversees a centralized system to order, distribute, and track COVID-19 vaccines. All vaccines are ordered through the CDC. Vaccine providers will receive vaccines from CDC's centralized distributor or directly from a vaccine manufacturer.

For more information about the federal government's COVID-19 plan for vaccine distribution, click here.

What type of vaccines did we have?

Two vaccines have been approved for emergency use in the United States, Pfizer and Moderna. These are both mRNA vaccines.





Like all vaccines, COVID-19 mRNA vaccines have been rigorously tested for safety before they were authorized for use in the United States. The mRNA technology is new, but not unknown. Scientists have been studying mRNA vaccines for more than 10 years.

An mRNA vaccine doesn't use a live virus, so there's no risk of causing disease when you get vaccinated. The mRNA from the vaccine never enters the nucleus of the cell and doesn't affect or interact with your DNA. An mRNA vaccine creates instructions for building certain proteins that are part of a virus. Your body's cells read these instructions and begin to make the protein. This protein is not the complete virus, so there's no way you can get COVID-19 from the vaccine.

Once your body makes these proteins, they attach to the outside of other cells. Your immune system recognizes the protein as a danger to your body. It sends t-cells to fight it off. The t-cells now know how to defend against the protein, in case it enters your body again in the future. If you're infected with the actual virus, your t-cells recognize the protein and attack it right away, before the virus has a chance to make you sick.

These new types of mRNA vaccines can be quickly developed and manufactured — and are safe and effective in the fight against COVID-19. For more information about mRNA vaccines, click <u>here</u>.

Who got the first doses?

Healthcare workers that provide care to the highest numbers of COVID-19 patients will get the first doses. These doses of vaccine are for healthcare personnel identified as being most at-risk of COVID-19 exposures. Everyone who gets the Pfizer vaccine will be given 2 doses of the vaccine, spaced 21 days apart. Anyone who gets the Moderna vaccine will get 2 doses, spaced 28 days apart.

As more vaccines are produced and distributed, health care workers in the remaining healthcare facilities will be added; followed by other high-risk priority groups (such as long-term care facility residents and staff, school staff, first responders, EMS personnel, and clinical staff).

Does this mean healthcare workers get a different vaccine than everyone else?

No. Different types of COVID-19 vaccines will be available very soon. Right now, there's not one specific group of people who will receive one type of vaccine over the other. The decision about which vaccine a healthcare facility, pharmacy, clinic, or other facility decides to use may be based on several factors, such as: their capability to store the vaccine, if a vaccine comes in smaller quantities, is easier to ship, etc.

When will vaccines be available to the public?

We want it to be easy for everyone to get a COVID-19 vaccine as soon as large quantities are available. However, we will only have a limited supply of the vaccine at first. Supplies will increase over time, and the public should be able to get vaccinated later in 2021.





The vaccine will be administered in "waves," based on who is most at-risk from becoming ill from COVID-19. The vaccine will be made available to the general public once high-priority groups (those who are most at-risk) have been vaccinated.

Approved COVID-19 vaccines

Pfizer COVID-19 vaccine	Moderna COVID-19 vaccine
Approved for anyone 16 years of age or older.	Approved for anyone 18 years of age or older.
Number of shots: 2 shots, 21 days apart How it's given: Shot in the muscle of the upper arm	Number of shots: 2 shots, 28 days apart How it's given: Shot in the muscle of the upper arm
 The vaccine does not include: Fetal material DNA Antibiotics Blood products Preservatives, like thimerosal Gluten Egg proteins Latex Pork products Microchips 	 The vaccine does not include: Fetal material DNA Antibiotics Blood products Preservatives, like thimerosal Gluten Egg proteins Latex Pork products Microchips
For a full list of ingredients, side effects, and who should get the vaccine, see the fact sheet. <u>Pfizer vaccine fact sheet</u> (For other languages, click here)	For a full list of ingredients, side effects, and who should get the vaccine, see the fact sheet. <u>Moderna vaccine fact sheet</u> (For other languages, click <u>here</u>)

- You should **not** get the COVID-19 vaccine if you are younger than 16 years old.
- Do **not** get the vaccine if you've had a severe allergic reaction to any ingredient in the vaccine.
- Do **not** get the vaccine if you had a severe allergic reaction after your 1st dose of the COVID-19 vaccine.
- Talk to your doctor if you are immunocompromised before getting the vaccine.
- Pregnant women should talk to their doctor about whether or not they should be vaccinated for COVID-19 during pregnancy.



Early clinical trials for the COVID-19 vaccine were limited to non-pregnant adults. Pregnant women and children did not participate in the early clinical trials for COVID-19 vaccines. However, clinical trials are expanding who they recruit to participate. This means the recommendations for who should get the vaccination could change in the future.

It's important to tell the healthcare provider giving you the vaccine about all of your medical conditions, before you get vaccinated. Along with any other medical condition you may have, make sure the healthcare provider knows if you:

- have any allergies
- have a fever
- have a bleeding disorder or are on a blood thinner
- are immunocompromised or are on a medicine that affects your immune system
- are pregnant or plan to become pregnant
- are breastfeeding
- already got another COVID-19 vaccine

Who decided who gets vaccinated first?

We want it to be easy for everyone to get a COVID-19 vaccine as soon as large quantities are available. However, we only have a limited supply of the vaccine right now. This means that policymakers had to develop plans to make sure those who are most at-risk get the vaccine first and that vaccines are distributed in a fair, ethical, and transparent way.

The Utah Department of Health organized a workgroup made up of health professionals throughout the state (The Utah Prioritization Workgroup) to develop recommendations for how to prioritize vaccination groups on the state and local level. The Utah Strategic Vaccination Coalition is also providing input and recommendations on who should get the vaccine during Phase 2 of Utah's Vaccination Plan. This group is made up of doctors, business representatives, legislators, and policy makers. Their final recommendations are based on state and local data and need, vaccine storage capability of facilities, and guidance from the CDC and the Advisory Committee on Immunization Practices (ACIP).

More vaccines will be available over the next few weeks and months. We will continue to provide additional updates about vaccine distribution information when more doses of the vaccine become available.

To learn more about Utah's Vaccination Plan, click <u>here</u>. To learn more about high-priority vaccination recommendations from the CDC and ACIP, click <u>here</u>.





Will we have enough vaccines for everyone?

The FDA has authorized or approved COVID-19 vaccine for emergency use in the United States, but there is a limited supply right now. This means not everyone is able to be vaccinated right away. It is understandable how concerning this would be for people, especially for those who are, or have loved ones, at increased risk for serious illness from the virus. We want it to be easy for everyone to get a COVID-19 vaccine as soon as large quantities are available. Having only a limited supply of the vaccine at first meant that policymakers had to develop plans to make sure those most at risk get the vaccine first and that vaccinations these limited vaccines are distributed in a fair, ethical, and transparent way.

The vaccine will be administered in "waves," based on who is most at-risk from becoming ill from COVID-19. The vaccine will be made available to the general public once high-priority groups (those who are most at-risk) have been vaccinated.

Early in the response, the federal government began investing in select vaccine manufacturers to help increase their ability to quickly make and distribute a large amount of COVID-19 vaccine. This allows the United States to start with as much vaccine as possible and continue to increase the supply in the weeks and months to follow. The goal is for everyone to be able to easily get a COVID-19 vaccine as soon as large quantities are available. Several thousand vaccination providers will be available, including doctors' offices, retail pharmacies, hospitals, and federally qualified health centers (FQHCs).

How do I protect myself until I'm vaccinated?

You should keep practicing the health behaviors we know reduce the spread of COVID-19, until it is safer. This means even after you've been vaccinated.

- Wear a mask when you are in close contact with anyone who doesn't live in your home, especially indoors.
- Wash your hands often with soap and water for 20 seconds.
- Try to keep at least 6 feet or 2 meters between you and people who don't live in your home, especially indoors.
- Stay home if you are sick.

Do **not** wear a mask if you are younger than 2 years of age, have trouble breathing, or are unable to remove a mask without help.





Information about COVID-19 vaccines

Benefits of the COVID-19 vaccine

Why should I get vaccinated?

We understand you may be concerned about getting vaccinated for COVID-19. Even though these vaccines are being developed as quickly as possible, it is important to know they are using the same safety approval processes and procedures they use for other vaccines authorized or approved for use. Safety is a top priority, and there are many reasons to get vaccinated.

- Clinical trials of COVID-19 vaccines must first show they are safe and effective before any vaccine can be authorized or approved for use in the United States.
- The known and potential benefits of a COVID-19 vaccine must outweigh the known and potential risks of the vaccine for use under what is known as an Emergency Use Authorization (EUA).

There is no way to know how COVID-19 will affect you.

Most people who get COVID-19 recover within a few weeks. However, there is no way to know in advance how COVID-19 will affect you. Based on what we know about vaccines for other diseases, experts believe getting a COVID-19 vaccine may help keep you from getting seriously ill, even if you do get COVID-19.

COVID-19 can have serious, life-threatening complications. If you get sick, you could spread the disease to friends, family, and others around you. Getting vaccinated for COVID-19 is a safer way to help build protection. The vaccine will help keep you from getting COVID-19.

- Experts believe that getting a COVID-19 vaccine may help keep you from getting seriously ill even if you do get the virus, based on what we know about vaccines for other diseases and from the data from the clinical trials.
- If you get vaccinated it may also protect people around you, especially people at higher-risk for severe illness from COVID-19.
- Vaccines are only authorized or approved after they are carefully evaluated in clinical trials and will make you much less likely to get COVID-19.

We think of COVID-19 as a respiratory disease that mostly affects the lungs, but it can also damage many other organs as well. This organ damage may increase your risk of long-term health problems. We are seeing many cases where people- even those with mild symptoms — continue to suffer complications and symptoms months after they are considered "recovered." There is not enough data yet to tell us how long these complications from COVID-19 will last.





Getting vaccinated for COVID-19 is an important tool to help stop the pandemic.

Long-term symptoms and complications of COVID-19

We are seeing organ damage caused by COVID-19, even in people who only had mild symptoms.

Heart

Even in people who only had mild symptoms, imaging tests taken months after they recovered from COVID-19, have shown lasting damage to the heart muscle. This may increase the risk of heart failure or other heart complications in the future.

Lungs

The type of pneumonia often associated with COVID-19 can cause damage to the tiny air sacs (alveoli) in the lungs. The scar tissue that results can lead to long-term breathing problems.

Brain

COVID-19 can cause strokes, seizures, and Guillain-Barre syndrome — a condition that causes temporary paralysis-even in young people. COVID-19 may also increase the risk of getting Parkinson's disease and Alzheimer's disease.

Blood clots and blood vessel problems

COVID-19 can make blood cells more likely to clump up and form clots. While large clots can cause heart attacks and strokes, much of the heart damage caused by COVID-19 is believed to stem from very small clots that block tiny blood vessels (capillaries) in the heart muscle.

Other organs affected by blood clots include the lungs, legs, liver, and kidneys. COVID-19 can also weaken blood vessels, which may contribute to potentially long-lasting problems with the liver and kidneys.

Problems with mood and fatigue

People who have severe symptoms of COVID-19 often have to be treated in a hospital's intensive care unit with mechanical assistance, such as a ventilator, in order to breathe. Simply surviving this experience can make a person more likely to later develop post-traumatic stress syndrome (PTSD), depression, and anxiety.

It's hard to predict long-term outcomes from the new COVID-19 virus, so scientists are also looking at the long-term effects seen in related viruses, such as severe acute respiratory syndrome (SARS). Many people who've recovered from SARS have developed chronic fatigue syndrome. This is a complex disorder where a person has extreme fatigue that gets worse with physical or mental activity and doesn't get better with rest. The same may be true for people who have had COVID-19.

Many long-term COVID-19 effects are still unknown.





There is a lot we still don't know about how COVID-19 will affect people over time. However, researchers recommend that doctors closely monitor people who have had COVID-19, to see how their organs are functioning after recovery.

It's important to remember that most people who have COVID-19 recover quickly. But the potential for long-lasting problems from COVID-19 make it even more important to reduce the spread of the disease by following precautions: wear a mask, avoid close contact with people you don't live with, and wash your hands often. You should also get vaccinated for COVID-19 if you can.

Experts will continue to study the effects of the COVID-19 vaccination on the severity of the disease and its ability to keep people from spreading the virus. Based on what we know right now, the benefits of being vaccinated for COVID-19 outweigh the risks for most people. The Utah Department of Health and the CDC will continue to provide updated information when more data become available.

Do the COVID-19 vaccines work?

We understand some people may be concerned about getting vaccinated for COVID-19. Even though these vaccines are being developed as quickly as possible, it is important to know they are using the same safety approval processes and procedures they use for other vaccines authorized or approved for use. Safety is a top priority, and there are many reasons to get vaccinated.

Two vaccine manufacturers have released initial results of their clinical trials. Their data show that COVID-19 vaccines are very effective. Both the Pfizer and Moderna vaccines are about 90-95% effective at preventing COVID-19. This means only about 5-10% of people who got the vaccine showed any symptoms of COVID-19. This tells us the vaccine will protect most of the people who get it.

Scientists are still learning whether the vaccines also prevent you from spreading the virus that causes COVID-19 to others, even after you are fully immunized. According to the FDA, most vaccines that protect you from viral illnesses are also effective at preventing the spread of the virus. It is likely the COVID-19 vaccines will do the same but until scientists and doctors learn more, it is important for everyone to continue taking precautions like covering your nose and mouth with a mask.

How COVID-19 vaccines are developed

Did the government develop the vaccines?

COVID-19 vaccines were developed by independent pharmaceutical companies.

The federal government, through Operation Warp Speed (OWS) has worked since the pandemic started to make one or more COVID-19 vaccines available as soon as possible. Operation Warp Speed is a partnership among components of the Department of Health and Human Services (HHS) and the





Department of Defense (DoD) to help develop, make, and distribute millions of vaccine doses for COVID-19 as quickly as possible while making sure the vaccines are safe and that they work.

How did they develop safe vaccines in such a short time, when vaccines usually take years to develop?

Operation Warp Speed is part of a broader strategy to speed up the development, manufacturing, and distribution of COVID-19 vaccines, therapeutics, and diagnostics (commonly called countermeasures).

The goal of OWS is to produce and deliver 300 million doses of safe and effective vaccines.

Who is involved in the Operation Warp Speed partnership?

- Department of Health and Human Services (HHS), including:
 - Centers for Disease Control and Prevention (CDC)
 - National Institutes of Health (NIH)
 - Biomedical Advanced Research and Development Authority (BARDA)
- Department of Defense (DoD)
- Department of Agriculture
- Department of Energy
- Department of Veterans Affairs
- Private firms

Operation Warp Speed took processes that normally take years and compressed them into months by running these processes at the same time.

The process to develop a vaccine is usually done in sequential steps. Usually, one step is completed before the next step begins. For example, clinical trials and the process for FDA approval are usually completed before large quantities of a vaccine are produced. However, in order to quickly have a vaccine available, OWS completed these processes at the same time. They began manufacturing the vaccine while they were running the Phase 3 trials, before they knew if the vaccine was effective or not. The vaccines were ready to use right when the FDA approved them. If any of the vaccines still being developed and in clinical trials are not effective, they won't use them.

OWS selected the most promising candidates and provided coordinated government support to make sure safety and efficacy standards were met while speeding up development. Traditional protocols for public-private partnerships allow pharmaceutical companies to decide their own protocols for clinical trials. However, protocols for the clinical trials for COVID-19 vaccinations have been overseen by the federal government. This allows the clinical trials to proceed more quickly.

OWS did not need to eliminate any steps of the traditional vaccine development process because the steps were completed at the same time.





To learn more about Operation Warp Speed and COVID-19 vaccination development, click here.

Why does it take so long to develop vaccines for new diseases, but only a short amount of time to develop new flu vaccines?

COVID-19 is a new virus, so there was no licensed vaccine or vaccine process to build on. Entirely new vaccines had to be developed and tested to make sure they were safe and worked to prevent someone from getting COVID-19. There are many steps in the testing and approval process for vaccines. When scientists identify a new strain of flu, like H1N1 in 2009, vaccine manufacturers can use the same processes to make the new vaccine that they use to make the seasonal flu vaccine. This saves valuable time.

Many agencies and partners in the United States worked together to make sure that safe and effective COVID-19 vaccines were available as quickly as possible.

Have there been coronavirus vaccines developed before?

Researchers began working to develop vaccines for 2 diseases caused by coronaviruses that are closely related to the virus that causes COVID-19 after they were discovered (in about 2003 and 2012). These diseases are severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS).

None of the SARS vaccines ever made it past the first stages of development and testing. This was largely due to a lack of interest because the virus disappeared. One MERS vaccine (MVA-MERS-S) successfully completed a phase 1 clinical trial in 2019.

Lessons learned from this earlier vaccine research have been used to inform strategies when developing a COVID-19 vaccine.

How many vaccines are being developed?

There are many COVID-19 vaccines being developed. Two vaccines (made by Pfizer and Moderna) have been issued emergency use authorization (EUA) by the FDA.

Types of COVID-19 vaccines

Are there different types of vaccines?

Right now, both vaccines which have received emergency use authorization from the FDA are mRNA vaccines. However, scientists are also developing other types of COVID-19 vaccines:

• **mRNA vaccines** have material from the virus that causes COVID-19 and give your cells instructions for how to make a harmless protein that is unique to the virus. After your cells make





copies of the protein, they destroy the genetic material from the vaccine. Your body recognizes the protein should not be there and builds T-lymphocytes and B-lymphocytes that will remember how to fight the virus that causes COVID-19 if you are infected in the future.

- **Protein subunit vaccines** include harmless pieces (proteins) of the virus that cause COVID-19 instead of the entire germ. Once vaccinated, your immune system recognizes that the proteins don't belong in your body and begins making T-lymphocytes and antibodies. If you are ever infected in the future, memory cells will recognize and fight the virus.
- Vector vaccines contain a weakened version of a live virus—a different virus than the one that causes COVID-19—that has genetic material from the virus that causes COVID-19 inserted in it (this is called a viral vector). Once the viral vector is inside your cells, the genetic material gives your cells instructions to make a protein that is unique to the virus that causes COVID-19. Using these instructions, your cells make copies of the protein. This prompts your body to build T-lymphocytes and B-lymphocytes that will remember how to fight that virus if you are infected in the future.

Will more than one company offer vaccines?

Yes, there are several companies working to develop a COVID-19 vaccine. The FDA has issued emergency use authorization (EUA) for vaccines made by Pfizer and Moderna.

Does this mean healthcare workers will get a different vaccine than everyone

else?

No. There will be more than one type of COVID-19 vaccine available very soon. Right now, there is not one specific group of people who will receive one type of vaccine over the other. The decision about which vaccine a healthcare facility, pharmacy, clinic, or other facility decides to use may be based on several factors, such as their capability to store the vaccine, if a vaccine comes in smaller quantities, is easier to ship, etc.

What's the difference between the vaccines?

The COVID-19 vaccine approved for emergency use needs 2 doses of the vaccine, given several weeks apart.

- The vaccine produced by Pfizer needs to have 2 doses given 21 days apart.
- The Moderna vaccine is also a 2 dose series; the doses need to be given 28 days apart.
- There may also be other differences between vaccines such as who the vaccine is best recommended for.

We will learn more as the vaccine clinical trials are finished and the study results are evaluated.





Can I get one dose of each type of vaccine?

No. The mRNA COVID-19 vaccines are not interchangeable. You need 2 doses of the same vaccine. This means that you **can't** get one dose of one type of vaccine (like the Pfizer vaccine) and get your 2nd dose of a different type of mRNA vaccine (like the Moderna vaccine).

There is no data to tell us whether it is safe or effective to mix different mRNA vaccines. This was not studied in the clinical trials.

From what we know right now, if you happen to get one dose of the Pfizer vaccine and another dose of a different type of mRNA vaccine, even if you only got only the first shot of each, you should not get any more doses of **either COVID-19 vaccine**. These recommendations may change when we have more data and know more about the vaccine.

How will they decide who gets which type of vaccine?

The vaccine will drive the response. This means that many of the decisions about who gets which type of vaccine will be based on the availability of vaccine and the risk level of the person. There will be more than one type of COVID-19 vaccine available very soon. Right now, there is not one specific group of people who will receive one type of vaccine over the other. The decision about which type of vaccine a healthcare facility, pharmacy, clinic, or other facility decides to use may be based on several factors, such as their capability to store the vaccine, if a vaccine comes in smaller quantities, is easier to ship, etc.

Vaccine safety

How do we know the vaccines are safe?

In the United States, there are many steps in place to make sure vaccines and medicine are safe and effective. These steps include independent reviews of the data from clinical trials. Information and data from the clinical trials of COVID-19 vaccines is reviewed by many scientists, medical professionals, and public health experts before you ever get a vaccine. Even after vaccines and medicines are approved, we keep monitoring and studying them. That's how we know they're safe.

Before the COVID-19 vaccine was approved:

FDA approval

The Food and Drug Administration (FDA) plays a critical role in protecting the United States from threats like the COVID-19 pandemic. In June 2020, the FDA released guidelines to assist sponsors (those interested in developing a COVID-19 vaccine) in the clinical development and licensure of vaccines that prevent COVID-19.





The FDA evaluated scientific data and other information to determine the safety and effectiveness of the investigational COVID-19 vaccines used in clinical trials.

Vaccines used in the United States must have FDA approval. The FDA only approves, or gives emergency use authorization for, vaccines from clinical trials that were conducted using the FDA's guidelines, and which meet the FDA's rigorous <u>safety and effectiveness standards</u>.

What is an Emergency Use Authorization (EUA)? https://www.youtube.com/watch?v=iGkwaESsGBQ

Even though the FDA has approved COVID-19 vaccines for emergency use, scientists will keep critically reviewing the methods, results, and conclusions of the studies to make sure they were performed correctly and the conclusions and data are valid.

Even after vaccines and medicines are approved, we keep monitoring and studying them. It's important to understand any side effects found during clinical trials. A document called a Vaccine Information Statement, or VIS, is legally required to be given to you before you get a vaccine. This is to help you make informed health decisions based on the risks and benefits of the vaccine. For more information about Vaccine Information Statements, click <u>here</u>.

ACIP review and recommendation

The Advisory Committee on Immunization Practices (ACIP) is a federal advisory committee, made up of medical and public health experts. The ACIP provides advice and guidance about the most effective ways to prevent vaccine-preventable diseases in the United States to the Director of the Centers for Disease Control and Prevention (CDC) and the Secretary of the Department of Health and Human Services (HHS). The goals of the ACIP are to provide advice that will help the CDC and HHS reduce the number of people who get vaccine-preventable diseases and increase the safe use of vaccines and any of the biological products that go with it, including active and passive immunoprophylaxis.

The ACIP reviews data and information about COVID-19 vaccines for adult and pediatric populations. In order to make their recommendations, the committee considers: disease epidemiology and burden of disease, vaccine safety, vaccine efficacy and effectiveness, the quality of evidence reviewed, economic analyses, and implementation issues.

The ACIP provides recommendations and information to the CDC and HHS about:

- Who should get the vaccine.
- The circumstances a vaccine or related agent (such as immune globulin preparations) should be used.
- Precautions for using the vaccine and any related agents.





- Recommendations for contraindications. A contraindication is a condition that puts you at an increased risk of severe adverse reactions from vaccinations.
- Recognized adverse events (side effects).
- Special situations or groups of people that may need to have different recommendations than everyone else.

The committee may revise or withdraw their recommendation(s) for a vaccine if new data becomes available.

ACIP will meet again after the FDA authorizes or approves other COVID-19 vaccines and will make more recommendations for the use of individual vaccines at that time.

CDC and HHS approval of recommendations

Once the ACIP recommendations have been reviewed and approved by the CDC Director and the U.S. Department of Health and Human Services, COVID-19 vaccines are published in CDC's Morbidity and Mortality Weekly Report (MMWR). The MMWR publication represents the final and official CDC recommendations for immunization of the U.S. population. Utah received our COVID-19 vaccinations after the COVID-19 vaccine was added to the MMWR.

How do we know the vaccines will be safe long-term?

After vaccines are authorized or approved for use, the CDC and FDA use many different vaccine safety monitoring systems to watch for adverse events (possible side effects). This continued monitoring can pick up on adverse events that may not have been seen in clinical trials. If an unexpected adverse event is seen, experts quickly study it more to see whether it is a true safety concern. Experts then decide whether changes are needed in vaccine recommendations. This critical monitoring process is already in place and is used for all vaccines. This is how we make sure the benefits of getting a vaccine continue to outweigh the risks.

Expanded Safety Monitoring Systems

The CDC is working to expand safety surveillance with new systems and additional information sources, as well as by increasing the use of existing safety monitoring systems.

New vaccine safety monitoring systems

These new vaccine safety systems and information sources add another layer of safety monitoring. This gives the CDC and FDA the ability to evaluate COVID-19 vaccine safety in real time and make sure COVID-19 vaccines are as safe as possible.





<u>V-SAFE</u>	A new smartphone-based safety checker people can use after they get COVID-19 vaccines. V-SAFE allows people who received the vaccine to let the CDC know directly if they had any health problems following COVID-19 vaccination using text messaging and web surveys. The system also will provide telephone follow up to anyone who reports health concerns or adverse events the CDC considers medically significant
<u>National Healthcare Safety</u> <u>Network (NHSN)</u>	This monitoring system lets acute and long-term care facilities report adverse events to the Vaccine Adverse Event Reporting System (VAERS).
Other large insurer or payer databases	The FDA will monitor and use administrative and claims-based data for surveillance and research as people get vaccinated.

Existing vaccine safety monitoring systems

The CDC, FDA, and other federal partners will increase the use of the following existing, robust systems and data sources to conduct ongoing safety monitoring of COVID-19 vaccinations.

General public	
<u>Vaccine Adverse Event</u> <u>Reporting System (VAERS)</u>	The national system that collects reports of adverse events (possible side effects) that happen after vaccination. These reports are collected from healthcare professionals, vaccine manufacturers, and the public. If reports of adverse events are unexpected, appear to happen more often than expected, or have unusual patterns, experts quickly study it further to see whether it is a true safety concern.
<u>Vaccine Safety Datalink (VSD)</u>	A network of 9 integrated healthcare organizations across the United States that conduct active surveillance and research. The system is also used to help determine whether possible side effects identified using VAERS are actually related to vaccination.
Clinical Immunization Safety Assessment (CISA) Project	A collaboration between CDC and 7 medical research centers to provide expert consultation on individual cases and conduct clinical research studies about vaccine safety.





Centers for Medicare and Medicaid Services: Medicare data	The FDA will monitor and use administrative and claims-based data for surveillance and research as people get vaccinated.	
<u>Biologics Effectiveness and</u> <u>Safety System (BEST)</u>	The FDA and the Office of Biostatistics and Epidemiology (OBE) will use this system of electronic health record, administrative, and claims-based data to help make sure biologic products including vaccines, blood and blood products, tissues, and advanced therapeutics are safe and effective.	
Sentinel Initiative	The FDA will monitor and use administrative and claims-based data for surveillance and research as people get vaccinated.	
Members of the military		
Department of Defense (DOD): DOD VAERS data	A system that reports adverse events people affiliated with the DOD have after they receive vaccinations to VAERS.	
Vaccine Adverse Event Clinical System (VAECS)	A system that tracks the cases and evaluation of adverse events DOD and DOD-affiliated populations have after they received vaccinations.	
DOD Electronic Health Record and Defense Medical Surveillance System	The Department of Defense will monitor and use administrative and claims-based data for surveillance and research as people get vaccinated.	
Veterans		
Department of Veterans Affairs (VA): <u>VA Adverse Drug Event</u> <u>Reporting System (VA ADERS)</u>	A national reporting system for adverse events people affiliated with the VA have after they receive drugs and immunizations.	
VA Electronic Health Record and Active Surveillance System	The Department of Veterans Affairs will monitor and use administrative and claims-based data for surveillance and research as people get vaccinated.	
Tribal nations		
Indian Health Service (IHS): <u>IHS</u> <u>VAERS data</u>	A system that allows populations served by IHS and Tribal facilities to report adverse events to VAERS.	





Are the vaccines safe for all populations?

Approved COVID-19 vaccines

Pfizer COVID-19 vaccine	Moderna COVID-19 vaccine
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Number of shots: 2 shots, 21 days apart How it's given: Shot in the muscle of the upper arm	Number of shots: 2 shots, 28 days apart How it's given: Shot in the muscle of the upper arm
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- Talk to your doctor if you are immunocompromised before getting the vaccine.
- Pregnant women should talk to their doctor about whether or not they should be vaccinated for COVID-19 during pregnancy.

Early clinical trials for the COVID-19 vaccine were limited to non-pregnant adults. Pregnant women and children did not participate in the early clinical trials for COVID-19 vaccines. However, clinical trials are expanding who they recruit to participate. This means the recommendations for who should get the vaccination could change in the future.





It's important to tell the healthcare provider giving you the vaccine about all of your medical conditions, before you get vaccinated. Along with any other medical condition you may have, make sure the healthcare provider knows if you:

- have any allergies
- have a fever
- have a bleeding disorder or are on a blood thinner
- are immunocompromised or are on a medicine that affects your immune system
- are pregnant or plan to become pregnant
- are breastfeeding
- already got another COVID-19 vaccine

What happens if they find out the vaccine isn't safe, after I get it?

The FDA does not approve vaccines for emergency use, or release vaccines, that aren't safe. Clinical trial data was reviewed by many independent researchers to make sure they are safe. After the FDA made its determination, the <u>Advisory Committee on Immunization Practices (ACIP)</u> reviewed available data before making vaccine recommendations to the CDC.

How do I know I won't be given one of the vaccines that didn't get approved?

Only vaccines that were approved for emergency use will be released. Approved vaccinations have a medical clearance like any other medication. Vaccines can't be sold if they are not approved by the FDA and the <u>Advisory Committee on Immunization Practices</u> (ACIP).

What are the ingredients in the vaccines?

The ingredients in the Pfizer and Moderna vaccines include:

- mRNA This messenger RNA (mRNA) is for the spike protein of SARS-CoV-2, the virus that causes COVID-19. It's the instructions for your body to make the protein to fight the virus if you become infected.
- Lipids These are like little "bubbles of fat" which surround the mRNA like a protective wall. The
 lipid molecules can't dissolve in water. They protect the mRNA so that it does not break down
 before it gets into our cells. There are four different lipids in the Pfizer vaccine and three in the
 Moderna vaccine. One of the lipids in both vaccines is cholesterol. The lipids are the most likely
 components of the vaccine to cause allergic reactions.
- Salts and amines The Pfizer vaccine contains four salts. One is table salt. The salts are used to
 keep the pH of the vaccine similar to that found in the body, so that the vaccine does not
 damage cells when it is administered. The Moderna vaccine also contains four chemicals to
 balance the pH, but two are in a class of organic compounds known as "amines" and two are
 acetic acid and its salt form, sodium acetate. Acetic acid is the main component of vinegar (other
 than water).





• Sugar – This ingredient is literally the same as that which you put in your coffee or on your cereal. It is used in both of the vaccines to help keep the "bubbles of fat" from sticking to each other or to the sides of the vaccine vial.

These are the only ingredients in the mRNA vaccines.

The mRNA vaccines do not include any of the following:

- Fetal material
- DNA
- Antibiotics
- Blood products
- Preservatives, like thimerosal
- Gluten
- Egg proteins
- Latex
- Pork products
- Microchips

(Information courtesy of Children's Hospital of Philadelphia)

Side effects of COVID-19 vaccines

Do the vaccines have side effects?

Vaccines are very safe and effective. However, side effects have been reported after administration of all vaccines. Most of the time, a side effect from a vaccine is minor and goes away within a few days. People who have side effects from a vaccine may feel sick for a few days. Usually, this is nothing to worry about, and they don't need medical care. It's important to remember that vaccines are continually monitored for safety. Like any medication, vaccines can cause side effects. However, the decision not to get vaccinated also involves risk and could put you, and anyone who comes into contact with you, at risk of getting a disease that could be deadly.

It is important to understand any side effects found during clinical trials. A document called a Vaccine Information Statement, or VIS, is legally required to be given to you before you get a vaccine. This is to help you make informed health decisions based on the risks and benefits of the vaccine. For more information about Vaccine Information Statements, click here.

Recommendations for who should get the COVID-19 vaccine will likely change as scientists and researchers continue to study data from clinical trials.





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- Talk to your doctor if you are immunocompromised before getting the vaccine.
- Pregnant women should talk to their doctor about whether or not they should be vaccinated for COVID-19 during pregnancy.

Early clinical trials for the COVID-19 vaccine were limited to non-pregnant adults. Pregnant women and children did not participate in the early clinical trials for COVID-19 vaccines. However, clinical trials are expanding who they recruit to participate. This means the recommendations for who should get the vaccination could change in the future.





It's important to tell the healthcare provider giving you the vaccine about all of your medical conditions, before you get vaccinated. Along with any other medical condition you may have, make sure the healthcare provider knows if you:

- have any allergies
- have a fever
- have a bleeding disorder or are on a blood thinner
- are immunocompromised or are on a medicine that affects your immune system
- are pregnant or plan to become pregnant
- are breastfeeding
- already got another COVID-19 vaccine

What are the risks of COVID-19 vaccines?

It is common for people to have mild or moderate symptoms or side effects after they get a vaccination. There is usually no reason to worry if you get mild to moderate symptoms a few days after getting vaccinated. This means your body has started working to create an immune response and is learning to fight the disease. Mild or moderate symptoms include things like systemic reactions (like a fever) or redness around an injection site.

The COVID-19 clinical trials show these types of mild to moderate symptoms were pretty common within the first 7 days after getting the COVID-19 vaccine. Mild to moderate symptoms usually happened after the 2nd dose rather than the 1st. This is because the vaccine takes 2 shots to give you the most protection, so it makes sense that your body would be learning how to fight the disease more aggressively after the 2nd shot than the first.

- Most of the time, the symptoms showed up around 1-2 days after the person was vaccinated and usually lasted for a day.
- These types of symptoms were also more common in younger people, between 18-55 years old, rather than in older people (those over 55 years old).

Common side effects reported for COVID-19 vaccines include:

- injection site pain
- tiredness
- headache
- muscle pain
- chills
- joint pain
- fever
- injection site swelling
- injection site redness





- nausea
- feeling unwell
- swollen lymph nodes (lymphadenopathy)

There is a small chance the COVID-19 vaccine could cause a severe allergic reaction. **Serious side effects from COVID-19 vaccines are extremely rare.** A very small number of people (0.6%) had serious side effects from the COVID-19 vaccine. The number of people in the clinical trials who had serious side effects is about the same number of people who have serious side effects from other vaccinations.

A severe allergic reaction would usually occur within a few minutes to one hour after getting a dose of the vaccine.

Signs of a severe allergic reaction can include:

- Difficulty breathing
- Swelling of your face and throat
- A fast heartbeat
- A bad rash all over your body
- Dizziness and weakness

Scientists and researchers do not expect the mRNA COVID-19 vaccines to have long-term side effects for a few reasons:

- Most side effects occur within 6 weeks of receiving a vaccine. This is why the FDA asked the companies who made the vaccine to provide 8 weeks of safety data after the last dose before reviewing the data and making a decision about the vaccine's safety.
- The mRNA in the vaccine breaks down quickly in our bodies. But, even if for some reason our cells did not break down the vaccine mRNA as fast as they should, the mRNA stops making the protein within about a week, regardless of our immune response to the protein.
- The mRNA vaccines do not contain a live or deactivated virus. This means there is no chance for the virus to stay latent in our body and then reactivate years later, like the virus that causes shingles does.

For more information about the Pfizer vaccine, click <u>here</u>. For more information about the Moderna vaccine, click <u>here</u>.

What if I have side effects after I get the vaccine?

If you have a severe allergic reaction, call 9-1-1, or go to the nearest hospital.





If you have any side effects that bother you or do not go away, call the provider who gave you the vaccination or your normal healthcare provider.

You can also call the **Utah Poison Control Center for help at 1-800-222-1222**. The Utah Poison Control Center is available 24/7 and provides free help to anyone who has questions about reactions to medicine, like a vaccine, or about COVID-19.

How do I report an adverse event (side effect) to a vaccine?

Call your doctor or healthcare provider if you are worried or think you may have had a reaction to a vaccine.

If you think you may have had an adverse side effect to a vaccine, you can also report it to the Vaccine Adverse Event Reporting System (VAERS). More information on the VAERS can be found at https://www.cdc.gov/vaccinesafety/ensuringsafety/monitoring/vaers/index.html.

The CDC also provides personalized health check-ins after you get a COVID-19 vaccination through a smartphone-based tool that uses text messaging and web surveys. This tool, called v-safe, lets you quickly tell the CDC if you have any side effects after you get the vaccine. Someone from the CDC may call to check on you and get more information, depending on your answers. The v-safe tool will also remind you to get your 2nd dose of COVID-19 vaccine if you need one. Your participation in CDC's v–safe tool makes a difference — it helps keep COVID-19 vaccines safe. You can learn more about v-safe at https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafe.html.

Do certain populations react differently to the vaccine?

Clinical trials for COVID-19 vaccines didn't find any specific safety concerns for any one group of people. This means based on the data we have right now, the vaccine is safe for people of all of the ages that were studied, and for any race, ethnicity, those who have underlying medical conditions, and people who have already been infected with the virus that causes COVID-19.

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• already got another COVID-19 vaccine

COVID-19 vaccine clinical trials

What are vaccine clinical trials?

Clinical trials test drugs or medical devices on human beings. To get that far, a vaccine has to have already shown promise in the laboratory and in animal studies. Once a vaccine is ready to be tested in human volunteers, the U.S Food and Drug Administration (FDA) requires success through 3 trial phases before it can be approved for widespread use.

These trials are randomized, double-blind, placebo-controlled trials. People volunteer to participate in the trials. This means that some of the volunteers get the vaccine and others get a placebo injection of salt water. Who gets the drug or a placebo is randomly assigned. Neither the participant nor the healthcare workers giving the injections will know who gets what. Even the researchers leading the trials will not know whether a participant has gotten the vaccine or the saline injection. That's why the trial is known as "double blind".

Phase 1	Phase 2	Phase 3
Assesses the safety of the vaccine in a small group of volunteers.	Assesses both safety and effectiveness of the vaccine in a slightly larger study group.	Assesses effectiveness of the vaccine in a large group of participants against control groups. A control group is a group that is not given the vaccine.

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- are breastfeeding
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For more information about clinical trials in the United States, visit <u>https://www.clinicaltrials.gov/</u>.





How many people were included in COVID-19 vaccine clinical trials?

There have been many thousands of study participants in the investigational COVID-19 vaccine clinical trials. Dr. Moncet Slaoui, Chief Advisor Operation Warp Speed has said that there have been about 30,000 study participants in each clinical trial.

This does not mean that all of the participants in the studies got the vaccine. These trials are randomized, double-blind, placebo-controlled trials. This means that some of the participants get the vaccine and others get a placebo injection of salt water. Who gets the drug or a placebo is randomly assigned. Neither the participant nor the health care workers doing the injections will know who gets what. Even the researchers leading the trials will not know whether a participant has gotten the vaccine or the saline injection. That's why the trial is known as "double blind".

What does it mean if a clinical trial is temporarily paused?

Safety is a top priority during the vaccine approval process. It is not unusual for a clinical trial to be temporarily paused if they find a possible side effect (called an adverse event). Clinical trials are designed to pause when an unexpected health event (called a safety signal) is detected so scientists and physicians can investigate potential safety concerns. The approval process for COVID-19 vaccines is no different — safety is always the focus.

What do COVID-19 studies measure in Phase 3?

Studies may be designed to measure slightly different things depending on the different companies developing the vaccines. Some of the things they may be looking for are:

- Viral shedding When people are infected with COVID-19, particles from the virus can be found in the secretions from their nose and mouth. Some studies are measuring whether people who were vaccinated have virus in these secretions, called viral shedding. With this approach, even if a person does not have symptoms, scientists can tell if the person was infected and for how long.
- **Protection against moderate or severe disease** In these studies, scientists look for specific symptoms of infection that are considered to be more severe. They can tell if the vaccine protected more people from getting severely ill when they compare the rates of these symptoms in people who were or were not vaccinated.
- Some studies are evaluating both viral shedding and protection against moderate or severe disease.

Do clinical trials tell us enough to know if the vaccines are effective?

Yes. Clinical trials provide us with data and information about how well a vaccine prevents COVID-19 and about how safe it is. Before approving them for emergency use, the FDA evaluated data from clinical trials and the manufacturing information to make sure COVID-19 vaccines were safe and effective. However, they will keep studying COVID-19 vaccines to help us understand more about how the vaccine protects you in real-world conditions and how long the protection lasts. They do this by comparing





groups of people who do and don't get vaccinated and people who do and don't get COVID-19 to find out how well COVID-19 vaccines are working to protect people.

Does COVID-19 mutation affect vaccine studies?

Viral mutations can cause vaccines to be less effective. A good example of this is the influenza (flu) virus. From what we know right now, the virus that causes COVID-19 does not appear to functionally change in an important way. But, it does happen. At some point, a change could affect how well a vaccine works. Right now, that does not appear to be happening.

For example, scientists recently found changes in the virus that have made it easier for the virus to spread, but that change did not affect the way antibodies respond to the virus. Antibodies from people who had an earlier version of the virus are still able to protect against the newer version, so a vaccine would likely also still be effective.

Is it a waste of time to keep studying COVID-19 vaccines after people are already getting them?

No, not at all. In public health, we make decisions based on scientific facts and data. Public health always collects huge amounts of data in each of the areas we focus, including about vaccinations. This is how we know what works and are able to provide Utahns with credible information to keep them healthy and safe. The more we know, the more you know, and the safer and healthier we all are.

Clinical trials happen in a strict and controlled setting. But we know there are some things in real-world situations that may affect how well a vaccine prevents you from getting sick, such as:

- How the vaccine was transported and stored
- How the vaccine was given to you
- If you have an underlying medical condition and are vaccinated in a normal, real-world setting, we want to make sure the vaccine was as effective for you, as it was for someone with an underlying medical condition who participated in a clinical trial
- We also need to know how well a vaccine works for groups of people who may not have been included, or were not well represented, in clinical trials.

How COVID-19 vaccines protect you against the virus

How do vaccines work?

The immune system—your body's defense against infection

To understand how COVID-19 vaccines work, it helps to understand how your body fights illness. When germs like the virus that causes COVID-19 get in your body, they attack and multiply. This invasion of germs is called an infection. An infection is what causes you to be sick. Your immune system uses several





tools to fight infection. Your blood has red and white blood cells. Red blood cells carry oxygen to tissues and organs. White blood cells, or immune cells, fight infection.

There are different types of white blood cells that fight infection in different ways:

- **Macrophages** are white blood cells that swallow up and digest germs and dead or dying cells. Macrophages leave behind parts of the invading germs called antigens. Your body thinks antigens are dangerous and triggers antibodies to attack them.
- **B-lymphocytes** are defensive white blood cells that make antibodies to attack the pieces of the virus macrophages leave behind.
- **T-lymphocytes** are another type of defensive white blood cell that attack cells in your body that have already been infected.

The human body has a really good system to protect you from disease. Scientists have been able to copy the system your body uses to fight infection and use it to create vaccines. Vaccines have helped protect millions of people from many diseases that used to kill thousands and thousands of people every year. Vaccines use something called vaccine-induced immunity to protect you from disease.

The first time you are infected with the virus that causes COVID-19, it can take several days or weeks for your body to make and use all the germ-fighting tools needed to get over the infection. After the infection, your immune system remembers what it learned about how to protect your body against that disease.

Immunity is how your body decides which material in your body is supposed to be there and gets rid of any foreign material (anything your body says shouldn't be there). When germs enter your body, your immune system tells your body they don't belong. Your immune system then creates antibodies to fight and get rid of the antigens. This is the system your body uses to protect you from infectious disease. Your body keeps a few T-lymphocytes, called memory cells, that go into action quickly if you get the same virus again. When the familiar antigens are detected, your B-lymphocytes make antibodies to attack them. Experts are still learning how long these memory cells protect a person against the virus that causes COVID-19.

How do vaccines protect me?

A vaccine is a type of medicine that protects you from infectious diseases by introducing your body's immune system to a virus or bacteria **in a safe way.** This allows your immune system to make antibodies that are specific to the disease-causing virus or bacteria.

COVID-19 vaccines help your body develop immunity to the virus that causes COVID-19 without having to get the illness. Different types of vaccines work in different ways to offer protection. All vaccines leave your body a supply of "memory" T-lymphocytes and B-lymphocytes that will remember how to fight that virus in the future.





It usually takes a few weeks after you get a vaccination for your body to produce T-lymphocytes and B-lymphocytes. This means that it is still possible you could get infected with COVID-19 just before, or just after, you are vaccinated. You may then get sick because the vaccine did not have enough time to protect you.

Sometimes you can get symptoms or side effects, such as a fever, after you get a vaccination. These symptoms are normal and are a sign that your body is building immunity.

What is an mRNA vaccine?

Like all vaccines, COVID-19 mRNA vaccines have been rigorously tested for safety before they were authorized for use in the United States. The mRNA technology is new, but not unknown. Scientists have been studying mRNA vaccines for more than 10 years.

An mRNA vaccine doesn't use a live virus, so there's no risk of causing disease in the person getting vaccinated. The mRNA from the vaccine never enters the nucleus of the cell and doesn't affect or interact with your DNA. An mRNA vaccine creates instructions for building certain proteins that are part of a virus. Your body's cells read these instructions and begin to make the protein. This protein is not the complete virus, so there's no way you can get COVID-19 from the vaccine.

Once your body makes these proteins, they attach to the outside of other cells. Your immune system recognizes the protein as a danger to your body. It sends t-cells to fight it off. The t-cells now know how to defend against the protein in case it enters your body again in the future. If you're infected with the actual virus, your t-cells recognize the protein and attack it right away before the virus has a chance to make you sick.

These new types of mRNA vaccines can be quickly developed and manufactured — and are safe and effective in the fight against COVID-19.

For more information about mRNA vaccines, click here.

Can an mRNA vaccine change or modify my DNA?

No. The term mRNA stands for messenger ribonucleic acid. This is best described as instructions for how to make a protein, or even just a piece of a protein. An mRNA vaccine is not able to change or modify your genetic makeup (called DNA). The mRNA from a COVID-19 vaccine never enters the nucleus of the cell, which is where your DNA is kept. This means the mRNA does not affect or interact with your DNA in any way. Instead, COVID-19 vaccines that use mRNA work with your body's natural defenses to safely develop protection (immunity) to disease. To learn more about how COVID-19 mRNA vaccines work, click here.





Effectiveness of COVID-19 vaccines

Are the vaccines effective?

Two vaccine manufacturers have released initial results of their clinical trials. Their data show that COVID-19 vaccines are very effective. Both the Pfizer and Moderna vaccines are about 90-95% effective at preventing COVID-19. This means only about 5-10% of people who got the vaccine showed any symptoms of COVID-19. This tells us the vaccine will protect most of the people who get it.

Scientists are still learning whether the vaccines also prevent you from spreading the virus that causes COVID-19 to others, even after you are fully immunized. According to the FDA, most vaccines that protect you from viral illnesses are also effective at preventing the spread of the virus. It is likely the COVID-19 vaccines will do the same but until scientists and doctors learn more, it is important for everyone to continue taking precautions like covering your nose and mouth with a mask.

Even though the FDA approved COVID-19 vaccine for emergency use, the clinical trials still need to be finished and evaluated before they will give it full FDA approval. Most likely, we'll have a better idea of how long immunity lasts from the vaccine before it is officially approved by the FDA.

Will one vaccine be more effective than the others?

It is likely that COVID-19 vaccines could have different levels of effectiveness in different groups of people. We know this from other vaccine studies. For example, older individuals (65 years and older) generally do not respond as well to vaccines as younger people and need a vaccine developed especially for them.

We understand this may make some people wonder whether or not they should get vaccinated right away, or wait to see which vaccine is more effective. Our recommendation is for everyone to get vaccinated as soon as they can. Even though the effectiveness is going to be a little different for each different type of vaccine, they will all be safe and offer protection against COVID-19. It is important to get as many people protected as we can, as quickly as possible.

Who should get vaccinated for COVID-19?

Who should get vaccinated?

Approved COVID-19 vaccines

Pfizer COVID-19 vaccine





Approved for anyone 16 years of age or older.	Approved for anyone 18 years of age or older.
Number of shots: 2 shots, 21 days apart How it's given: Shot in the muscle of the upper arm	Number of shots: 2 shots, 28 days apart How it's given: Shot in the muscle of the upper arm
 The vaccine does not include: Fetal material DNA Antibiotics Blood products Preservatives, like thimerosal Gluten Egg proteins Latex Pork products Microchips 	 The vaccine does not include: Fetal material DNA Antibiotics Blood products Preservatives, like thimerosal Gluten Egg proteins Latex Pork products Microchips
For a full list of ingredients, side effects, and who	For a full list of ingredients, side effects, and who
should get the vaccine, see the fact sheet.	should get the vaccine, see the fact sheet.
Pfizer vaccine fact sheet (For other languages,	Moderna vaccine fact sheet (For other languages,
click <u>here</u>)	click <u>here</u>)

- You should **not** get the COVID-19 vaccine if you are younger than 16 years old.
- Do **not** get the vaccine if you've had a severe allergic reaction to any ingredient in the vaccine.
- Do **not** get the vaccine if you had a severe allergic reaction after your 1st dose of the COVID-19 vaccine.
- Talk to your doctor if you are immunocompromised before getting the vaccine.
- Pregnant women should talk to their doctor about whether or not they should be vaccinated for COVID-19 during pregnancy.

Early clinical trials for the COVID-19 vaccine were limited to non-pregnant adults. Pregnant women and children did not participate in the early clinical trials for COVID-19 vaccines. However, clinical trials are expanding who they recruit to participate. This means the recommendations for who should get the vaccination could change in the future.

It's important to tell the healthcare provider giving you the vaccine about all of your medical conditions, before you get vaccinated. Along with any other medical condition you may have, make sure the healthcare provider knows if you:

- have any allergies
- have a fever
- have a bleeding disorder or are on a blood thinner





- are immunocompromised or are on a medicine that affects your immune system
- are pregnant or plan to become pregnant
- are breastfeeding
- already got another COVID-19 vaccine

Who should not get the COVID-19 vaccine?

You should **not** get the COVID-19 vaccine if you are younger than 16 years old or have a history of severe allergic reactions (anaphylaxis) to any ingredient of the COVID-19 vaccines. Talk to your doctor if you are immunocompromised before getting the COVID-19 vaccine. Pregnant women should talk to their doctor about getting vaccinated for COVID-19 during pregnancy.

It's important to tell the healthcare provider giving you the vaccine about all of your medical conditions, before you get vaccinated. Along with any other medical condition you may have, make sure the healthcare provider knows if you:

- have any allergies
- have a fever
- have a bleeding disorder or are on a blood thinner
- are immunocompromised or are on a medicine that affects your immune system
- are pregnant or plan to become pregnant
- are breastfeeding
- already got another COVID-19 vaccine

Recommendations will continue to change as more amounts of vaccine are available and we continue to get more data from clinical trials. We will update our recommendations whenever we have new information.

Can my teenager or adolescent get vaccinated?

Yes. Adolescents who are 16 years of age or older are included can get vaccinated for COVID-19. Data from clinical trials included 153 participants who were between 16 and 17 years old. **There were no safety concerns identified for this group.**

There is a limited amount of data about the effectiveness and safety of COVID-19 vaccines for this age group. The ACIP stated there was no biological reason that the effectiveness and safety of the vaccine would be different than those observed in persons 18 years of age and older.

Adolescents can get vaccinated with the appropriate individual and parental consent (if required), if they are 16–17 years old and part of a group recommended to get a COVID-19 vaccine.





Why can't children get the vaccine right now?

The vaccine will not be available for children until it is proven safe for this age group. Pregnant women and children were not included in the trials.

Can I get vaccinated if I'm pregnant?

It depends. Right now, we don't have any data to say whether or not COVID-19 vaccines are safe and effective for pregnant women. Pregnant women were not included in the first COVID-19 clinical trials. However, studies that include pregnant women are planned. Vaccine manufacturers also continue to study the outcomes of people from the clinical trials who became pregnant.

From what we know, experts don't think mRNA vaccines will pose a risk for people who are pregnant. The mRNA in the vaccine doesn't ever enter the nucleus of your cells and your body uses your normal cellular processes to quickly break down the mRNA in the vaccine.

Pregnant women are at higher-risk of severe illness from COVID-19. This includes illnesses that may result in you needing to be in the ICU, being on a ventilator, or even death. Having COVID-19 may also put you at an increased risk of adverse pregnancy outcomes, such as preterm birth.

If you are pregnant, you may choose to get vaccinated if you are part of a group that is recommended to get a COVID-19 vaccine (like healthcare workers). You may want to talk to your doctor or healthcare provider before you make the decision about whether or not you should get a vaccine to prevent COVID-19 that was approved under EUA. A conversation with a healthcare provider may be helpful, but isn't required before you get vaccinated.

You and your healthcare provider should consider:

- The spread of COVID-19 in your community
- Your personal risk of getting COVID-19
- The risks of COVID-19 to you and potential risks to your baby
- The effectiveness of the vaccine
- Side effects of the vaccine and the lack of data about the vaccine during pregnancy

If you get a fever after vaccination, it may be recommended for you to take acetaminophen (Tylenol). Getting a fever when you are pregnant has been associated with adverse pregnancy outcomes. Acetaminophen may also be offered as an option if you have other symptoms after vaccination as well.

You don't need to avoid getting pregnant after getting vaccinated if you're trying to get pregnant. You don't need to get tested for COVID-19 before you get a COVID-19 vaccine because you're pregnant.





Can I get the vaccine if I'm breastfeeding?

It depends. Experts don't think mRNA vaccines will be a risk to an infant who is breastfeeding. However, we don't have any data to know for sure, or whether or not COVID-19 vaccines are safe or effective for women who are breastfeeding or if the vaccine affects milk production or excretion.

If you are breastfeeding, you may choose to get vaccinated if you are part of a group that is recommended to get a COVID-19 vaccine (like healthcare workers). You may want to talk to your doctor or healthcare provider before you make the decision about whether or not you should get a vaccine to prevent COVID-19 that was approved under EUA. A conversation with a healthcare provider may be helpful, but isn't required before you get vaccinated.

Do I need to get vaccinated if I've already had COVID-19?

Yes. Clinical trials show that the COVID-19 vaccines are safe and effective for people who have already been infected with COVID-19. Current research shows that after you are infected, you may have some natural protection against COVID-19 for up to 90 days. If it has been less than 90 days since you tested positive, you may be okay if you choose to wait to get vaccinated until it has been more than 90 days since you tested positive.

If you have COVID-19 right now, you should wait to get vaccinated until you don't have symptoms and have been released from isolation. If you have had long-term symptoms from COVID-19 talk to your doctor before getting the COVID-19 vaccine.

Can I get the COVID-19 vaccine if I am quarantined?

Current data tells us getting vaccinated within 14 days of being exposed to COVID-19 is not a good way to prevent illness for that exposure. Wait to get vaccinated until at least 14 days after your last exposure to the person who tested positive for COVID-19, even if you test negative or never get symptoms while you're quarantined. Getting vaccinated while you're quarantined may not hurt you or cause any side effects, but it puts other people at risk. You can still spread the virus to healthcare workers and other people. Healthcare workers have to be in close contact when they give vaccinations, which puts them at risk. Even if you test negative and can end quarantine early to return to work or school, you need to wait at least 14 days before you get vaccinated.

Can residents of long-term healthcare facilities get vaccinated while they're quarantined?

Yes. In most situations, you should wait to get vaccinated until you've finished the 14-day quarantine period. However, you can get vaccinated even if you were exposed to someone who tested positive for COVID-19 and are quarantined if you live in a long-term healthcare facility. You don't need to wait 14 days after being exposed.





COVID-19 spreads easily in these types of living environments. Getting vaccinated while you're quarantined won't hurt you or cause any side effects, but it puts other people at risk. Since long-term healthcare facilities already take extra precautions when healthcare workers come into close contact when they enter residents' rooms or provide treatment, it would not cause an additional exposure for healthcare workers to give a vaccination.

Can residents of other congregate settings (such as correctional and detention facilities, homeless shelters, etc.) get vaccinated while they're quarantined?

It depends. In most situations, you should wait to get vaccinated until you've finished the 14-day quarantine period. However, you can get vaccinated even if you were exposed to someone who tested positive for COVID-19 and are quarantined if you live in a congregate setting (such as correctional and detention facilities, homeless shelters, etc.). You don't need to wait 14 days after being exposed.

COVID-19 spreads easily in these types of living environments. COVID-19 spreads easily in these types of living environments. You should get vaccinated as soon as you can. Even if you were exposed, you don't want to wait or miss the opportunity to be vaccinated if you can be.

Getting vaccinated while you're quarantined won't hurt you or cause any side effects, but it puts other people at risk. Facilities with congregate living settings should take extra precautions and try not to mix people who have been exposed to COVID-19 with other residents or staff. Facility staff should follow infection and control procedures if they are giving vaccinations to people who were exposed to the virus.

You should wait until your test results come back to get vaccinated if you likely have COVID-19. For example, if you have symptoms or were in close contact with someone who has the virus.

Can residents who live in long-term care facilities or congregate settings get vaccinated while they wait for COVID-19 test results?

It depends. Most of the time, we don't recommend you get vaccinated while you wait for COVID-19 test results. However, there are certain situations where it may be okay for you to get vaccinated if you live in a congregate living setting (this includes both healthcare and non-healthcare settings), even if you've had a possible exposure and are waiting for test results.

COVID-19 spreads very easily in these types of living situations, so a facility may decide to hold a facility-wide testing event and test everyone who lives or works in the facility, just to be safe. It may be a good idea to get vaccinated before your test results come back if the provider giving the test thinks it's unlikely you have COVID-19 (because you don't have symptoms and weren't in close contact with someone who does). You don't miss an opportunity to be vaccinated if you can be.





You should wait until your test results come back to get vaccinated if the provider giving the test thinks you do have COVID-19 (because you have symptoms and were in close contact with someone who does).

Can I get vaccinated if I got passive antibody therapy for COVID-19?

Yes, but you should wait at least 90 days. If you were treated for COVID-19 with monoclonal antibodies or convalescent plasma, you should wait at least 90 days after your treatment to get vaccinated. Right now, we don't have any data to know whether COVID-19 vaccines are safe or effective for people who have been treated for COVID-19 using these therapies. From what we know about the estimated half-life of these therapies, waiting at least 90 days will keep the antibody treatment from interfering with the immune responses created by the vaccine.

Can I get vaccinated if I have an underlying medical condition?

Yes. You can get a COVID-19 vaccine even if you have an underlying medical condition, as long as you don't have a contraindication to vaccination. A contraindication is a condition that puts you at an increased risk of severe adverse reactions from vaccinations.

You shouldn't get a vaccine while you have a contraindication (such as when you are severely immunocompromised). However, the majority of contraindications are temporary and you can get vaccinated when you don't have the condition that led to the contraindication anymore.

It is important to point out that some people don't get vaccinated because they think certain conditions are contraindications, but they actually aren't. Make sure you check with your doctor or healthcare provider if you have questions about whether or not you have a condition that would keep you from being vaccinated for COVID-19 or other diseases.

Can I get vaccinated if I am immunocompromised?

It depends. You may be at an increased risk for severe COVID-19 if you have HIV infection, other immunocompromising conditions, or if you take immunosuppressive medications or therapies. You can still get a COVID-19 vaccination if you are immunocompromised and don't have contraindications to vaccination. A contraindication is a condition that puts you at an increased risk of severe adverse reactions from vaccinations. However, we don't have enough data yet to know if COVID-19 vaccines are safe and effective for everyone with these medical conditions.

Talk to your doctor or healthcare provider if you are immunocompromised and have questions about whether or not you should get the COVID-19 vaccination. Your doctor will be able to explain the things we don't know yet about vaccine safety and effectiveness for people who are immunocompromised, and any safety precautions you'll need to take in case your immune system doesn't respond well to the vaccine.





People with stable HIV infection were included in the later phases of the clinical trials, but we don't have any specific data for this group yet.

Will I be required to get the vaccine?

You will not be required to get the vaccine, this is voluntary. However, there is no way to know in advance how COVID-19 will affect you. Based on what we know about vaccines for other diseases, experts believe that getting a COVID-19 vaccine may help keep you from getting seriously ill even if you do get COVID-19.

COVID-19 can have serious, life-threatening complications. And if you get sick, you could spread the disease to friends, family, and others around you. Getting vaccinated for COVID-19 will be a safer way to help build protection. The vaccine will help keep you from getting COVID-19.

Can employers legally require their employees to get the vaccine?

We can only provide you with very general information and are unable to provide answers to legal questions for specific situations. We do not know whether or not this general information would apply to your specific situation. If you have employment-related questions, you should talk to your human resources department or visit <u>https://jobs.utah.gov/employer/legal.html</u> for more information.

In most cases, employers can set conditions of employment that include a required vaccination. However, there are exceptions.

Exceptions would be if the individual has a medical condition or disability that prevents him or her from getting the vaccine (protection offered under the Affordable Care Act) or sincerely held religious beliefs against vaccines (protection offered under the Civil Rights Act). In such cases, an employer can require alternatives such as working from home, wearing a mask with physical distancing, etc.

Does immigration status affect my ability to get the vaccine?

No. Immigration status is not an obstacle to get vaccinated. Personal information is confidential and protected by law. If you qualify under one of the risk categories groups currently being vaccinated, contact your employer or your local health department for additional information. You may need proof of current, active employment.

How do I get documentation verifying my vaccinated status?

Most providers will provide a CDC proof of vaccination card when the vaccines are administered. However, there are several different ways to get additional, or replacement, documentation. Visit <u>https://immunize.utah.gov/usiis/usiis-parents-individuals/</u> to learn more. This process is the same for getting proof of any vaccination.



How much will the COVID-19 vaccine cost?

COVID-19 vaccine doses purchased with U.S. taxpayer dollars will be given to everyone at no cost. If you have insurance, vaccine providers may bill your insurance an administrative fee for giving, or administering, the vaccine. But nobody should be denied a vaccine if you can't afford to pay or are uninsured.

Where can I get a vaccination?

Right now, there is not enough vaccine for everyone who wants it. Healthcare workers and people who live or work in a long-term care facility will be the first people to get the vaccine first. As more vaccines become available in the coming weeks and months, other people will be able to get it.

Vaccines will be given to hospitals, local health departments, doctors' offices, pharmacies, Tribal public health, and community partners (like Community Nursing Services). Local health departments will provide vaccine clinics for specific groups of people, such as school staff and first responders.

You'll be able to get vaccinated at these locations as soon as vaccines are being given to the public. Immigration status is not an obstacle to get vaccinated. For information about where you can get vaccinated, visit<u>https://vaccinefinder.org/.</u>

Will I need more than one dose of the vaccine?

Most COVID-19 vaccines require more than one dose.

Right now, the COVID-19 vaccine is a 2 shot series.

- The first shot starts building protection. This is called "primer" dose.
- A 2nd shot is needed a few weeks later to get the most protection the vaccine has to offer. This is called a "booster" dose.

Clinical trials show the vaccines that have been developed start creating an immune response after the first dose. After two doses, the vaccine provides the most protection and is the most effective. For the Pfizer vaccine, the first dose is about 52% effective and 95% effective after the second dose.

Everyone in the clinical trials got 2 doses of the vaccine, so we don't know how long the protection would last with only one dose. This is why it's important for everyone who gets the first dose to also make sure you get the 2nd dose. **You need 2 doses of the vaccine to get the most protection.**

There may be other vaccines developed later on that only need one shot.





How long can I wait to get my 2nd dose of the vaccine?

There have been discussions about only receiving 1 dose of the vaccine or changing the time when a person receives their 2nd dose of teh vaccine. Right now, we only know the vaccines are effective if you get 2 doses at the time which the vaccines were approved. For the Pfizer vaccine, you need to get the 2nd dose 21 days after your 1st dose. For the Moderna vaccine, you need to get the 2nd dose 28 days after your 1st dose. Changing this timing is not supported by scientific evidence and may be harmful to public health. Until vaccine manufacturers have data and science supporting a change, we strongly recommend that the FDA-authorized dosing schedule for each COVID-19 vaccine is followed.

Read more about this on the FDA website:

https://www.fda.gov/news-events/press-announcements/fda-statement-following-authorized-dosing-sc hedules-covid-19-vaccines

Will getting vaccinated make me test positive for COVID-19?

No. A viral test is used to find out if you have COVID-19 or not. Right now, the vaccines in clinical trials won't cause you to test positive on viral tests.

If your body develops an immune response, which is the goal of vaccination, there is a possibility you may test positive on some antibody tests. Antibody tests see if you've ever had a previous infection and may have some level of protection against the virus. Experts are currently looking at how COVID-19 vaccination may affect antibody testing results.

How long will COVID-19 vaccine immunity last?

People who test positive for COVID-19 are believed to have about 90 days of immunity. Right now, we don't know how long someone is immune to COVID-19 after they get the vaccine. We only have information about the length of immunity for the length clinical trials. For example, if the first people in the study were vaccinated in July 2020 and the vaccine was approved in December 2020, we will only have information about the immune response up to 5 months after vaccination. The vaccine manufacturer will continue to monitor people who got the vaccine for several months or more. The CDC will also do many types of real-world assessments to find out how effective the vaccine is at protecting you from getting COVID-19. This information will help us be better able to understand whether you will need a COVID-19 vaccination every year.

There are many things that affect how long you will be protected after you get a vaccine, such as which types of vaccine you are given, what part of your immune system responds to the vaccine, and the level of immunity that is generated by the vaccine.





Does your natural immunity after you get COVID-19 last longer than protection from COVID-19 vaccines?

The protection you get after you have a virus (called natural immunity) is different for each disease and can be different from person to person. People who test positive for COVID-19 are believed to have about 90 days of immunity. We don't know enough yet about COVID-19 to know how long vaccine immunity might last compared to natural immunity.

Both natural immunity and vaccine-induced immunity are important aspects of COVID-19 that experts are trying to learn more about. The Utah Department of Health and the CDC will keep you informed as new evidence becomes available and we know more.

Can I still get COVID-19 even if I'm vaccinated?

We don't know yet if COVID-19 will completely prevent you from ever getting the virus. The clinical trials measured the number of people who got symptoms or got sick after being vaccinated. The trials showed the vaccines were very effective in preventing people from getting sick with COVID-19. According to the <u>FDA</u>, most vaccines that protect you from viral illnesses are also effective at preventing the spread of the virus. It is likely the COVID-19 vaccines will do the same. However, we still need to learn more about whether or not people who have been vaccinated can still spread the virus. COVID-19 vaccination helps protect you by creating an antibody response without having to get sick. If you do get the virus, it will likely keep you from getting sick. If you do get sick after being vaccinated, it will most likely be mild and much less severe than had you not been vaccinated.

Will I need a COVID-19 vaccine every year?

Right now, we don't know. The vaccine manufacturer will continue to monitor vaccine recipients for several months or more. The CDC will also do many types of real-world assessments to find out how effective the vaccine is at protecting you from getting COVID-19. This information will help us be better able to understand whether you will need a COVID-19 vaccination every year.

Do vaccines work?

What is herd immunity?

Herd immunity is a term we use to describe when a virus or bacteria is unlikely to spread and cause disease because enough people have protection. There are 2 ways you can be protected from a virus or bacteria:





- You have natural immunity from being infected with a virus or bacteria before.
- You have immunity because you were vaccinated.

When enough people are protected, everyone in the community is protected, even if some people don't have any protection at all.



What percentage of the population needs to get vaccinated to have herd immunity to COVID-19?

Experts do not know what percentage of people would need to get vaccinated to achieve herd immunity to COVID-19. The percentage of people who need to have protection in order to achieve herd immunity is different for every disease. The more contagious a disease is, the more people who need to have immunity to it to stop it from spreading. Right now, some studies predict we would need 60-80% of the population to be immune to COVID-19 to achieve herd immunity¹. However, if new variants of the virus are discovered to be more transmissible, meaning they can spread more easily to other people, we may need an even higher percentage of a population to choose to get vaccinated to achieve herd immunity in a safe way.

Another important thing to know about herd immunity is what happens when not enough people in a community are protected. When the percentage of people who are protected against a virus is too low, suddenly lots of people are at risk of getting the disease. If this happens, many people could get sick with COVID-19 at once and overwhelm our healthcare system. Natural immunity is very different from person

¹<u>https://www.nature.com/articles/d41586-020-02948-4</u>





to person; but even with vaccinations, everyone does not get the same level of protection. There are many things that can affect how much protection someone gets from a vaccination, such as how healthy the person was when they got it, how the vaccine was stored or administered, if the vaccine was old, and many other things.

People who may have had only a little protection were safe when many people in the community were protected. However, without herd immunity, they may no longer be safe from the disease. This is why it is very important to get the recommended vaccines. It not only protects you, it helps protect everyone else as well.

Are vaccines dangerous?

Vaccines are very safe. Data show that the current U.S. vaccine supply is the safest in history. Today, most Americans no longer have first-hand knowledge of diseases like polio and measles. We tend to take our prevention success for granted and forget the tremendous suffering these diseases can cause. We must not let our success stop us from continuing to immunize.

Vaccines in the United States are held to the highest standard of safety and are continually monitored for safety and effectiveness. Yet, like any medication, vaccines can cause side effects. Almost all vaccines can cause symptoms such as pain, redness, or tenderness at the site of injection.

Hundreds of thousands of infants, children, and adults in the U.S. used to be infected with diseases like whooping cough, polio, measles, Haemophilus influenzae, and rubella. Thousands died every year from them. Today, most of them are nearly gone from our country because vaccines were developed and are widely used.

Almost everyone in the United States got measles before there was a vaccine, and hundreds died from it each year. Today, most doctors have never seen a case of measles.

- More than 15,000 Americans died from diphtheria in 1921, before there was a vaccine. Only 2 cases of diphtheria have been reported to the CDC between 2004 and 2014.
- An epidemic of rubella (German measles) in 1964-65 infected 12½ million Americans, killed 2,000 babies, and caused 11,000 miscarriages. Since 2012, only 15 cases of rubella were reported to the CDC.

You may wonder why we need to keep vaccinating against diseases that we will probably never see. This is because vaccines don't just protect you. Most vaccine-preventable diseases are spread from person to person. If you get an infectious disease, you can spread it to others who are not immune. You can't get that disease and spread it to others if you are immune because you were vaccinated. The more people who are vaccinated, the fewer opportunities a disease has to spread.

If 1 or 2 cases of disease come into a community where most people are not vaccinated, outbreaks will happen. There were many measles outbreaks around the country in 2013. These outbreaks mostly





happened in groups with low vaccination rates. If vaccination rates dropped to low levels nationally, diseases could become as common as they were before vaccines.

Diseases haven't disappeared. The United States has very low rates of vaccine-preventable diseases, but this isn't true everywhere in the world. Only one disease — smallpox — has been totally erased from the planet. Polio is close to being eliminated, but still exists in several countries. More than 350,000 cases of measles were reported from around the world in 2011, with outbreaks in the Pacific, Asia, Africa, and Europe. In that same year, 90% of measles cases in the United States were associated with cases imported from another country. The only thing that kept these clusters from becoming an epidemic was that most Americans are vaccinated against measles. Disease rates are low in the United States today. But if we let ourselves become vulnerable by not vaccinating, a case of a disease that is currently under control, could become an outbreak or epidemic.

I hear about people who don't believe in vaccines. Is there any scientific evidence to support this point of view?

Vaccines have led to some of the most remarkable public health success stories in history. Thanks to vaccines, smallpox has been eradicated (gotten rid of completely) and cases of polio have nearly been eliminated around the world. Many people who believe vaccines make people sick base their opinion off <u>fraudulent and discredited</u> research. In fact, research shows the opposite. Vaccines save lives.

Someone I know told me never to get a flu shot, because the one time she did, she ended up getting the flu. Will a flu vaccine give me the flu?

No. We have all heard stories like these, but they just aren't true. These types of stories come from a misunderstanding of how vaccines work. **Flu vaccines cannot cause flu illness. Vaccines do not cause the illness they protect against. The flu vaccine does not increase your risk of COVID-19.** The misunderstanding comes when someone gets sick or has flu-like symptoms, even after getting vaccinated. This makes many people think the vaccination gave them the disease.

What really happens is quite the opposite. The flu shot actually protected the person from getting a more severe illness than she would have gotten if she had not been vaccinated.

- Some people may experience muscle aches or a fever for a day or two after getting a flu vaccine. These are normal side effects as your body builds up protective antibodies to protect you from the flu.
- It can take up to 2 weeks for your body for the flu shot to take full effect and protect you. If you are exposed to the flu virus during this time, you could still get sick with the flu.
- Some years the flu vaccine isn't a good match for the viruses that are circulating during that flu season. If this happens, your flu shot may be less effective, but it still provides some protection.
- Many other illnesses, like the common cold, also have symptoms like the flu. You may think you have the flu when in fact you have a different illness.





You still need to take safety precautions after you get vaccinated.

Will the vaccine mean the pandemic is over?

If effective vaccines become available AND if most people choose to get the vaccine, infections will become fewer and life will gradually return to normal. Vaccines will not eliminate the risk of COVID-19 completely. There may still be outbreaks of COVID-19 in areas where fewer people are vaccinated.

If I am vaccinated against COVID-19, can I still spread the virus to other people?

Some vaccines do not prevent you from getting the virus, but can keep you from getting sick if you get it. This means you would be able to still spread the virus to other people. We don't know yet how well the COVID-19 vaccines will prevent you from spreading the virus, or if they will just keep you from getting sick.

If vaccines protect against infection, this means you will not spread the virus to someone else. However, some COVID-19 vaccines may protect against severe infection, but not prevent infection. If this is the case, you could spread the virus to someone else if you were infected, even if you had been vaccinated.

That is why it's important right now for you to continue to practice the health behaviors we know prevent COVID-19, like wearing a mask and physical distancing.

If I get symptoms of COVID-19 after I get vaccinated, do I still need to get tested?

If you have not received 2 doses of the vaccine and you have symptoms of COVID-19, you should get tested.

Talk to a doctor or a healthcare provider if you have COVID-like symptoms after getting 2 doses of the vaccine. It is likely that something other than COVID is causing your symptoms. However, your doctor may want you to get tested for COVID-19. The Pfizer and Moderna vaccines do not interfere with the accuracy of the COVID test.

Right now, we know COVID-19 vaccines keep you from getting sick or having severe illness. However, we don't know yet if the vaccine will keep you from getting the virus altogether. This means there may be a chance you could still get the virus and spread the virus to other people. If you were exposed to the virus before you had the chance to receive your 2nd dose of the vaccine or were exposed before your body developed full immunity, you can still get sick with COVID-19. It is likely that recommendations on testing, isolation, and quarantine will change as we learn more about the COVID-19 vaccines.





Do I need to wear a mask after I get a COVID-19 vaccine?

Yes. While experts learn more about the protection that COVID-19 vaccines provide under real-life conditions, it will be important for everyone to continue using all the tools available to us to help stop this pandemic: wear a mask, stay 6 feet apart from people who don't live in your home, wash your hands often, and stay home when you're sick. Once most people are vaccinated, life can start getting back to normal.

If I test positive for COVID-19 after I get vaccinated, do I still need to isolate?

Yes. You should isolate if you test positive for COVID-19 even if you have received 1 or 2 doses of the vaccine. Right now, we know COVID-19 vaccines keep you from getting sick or having severe illness. However, we don't know yet if the vaccine will keep you from getting the virus altogether. This means there may be a chance you could still get the virus and spread the virus to other people, even if you never get symptoms.

The COVID-19 vaccine is not a cure and won't lower your risk right away. It usually takes 1-2 weeks after you get a vaccination for your body to start to create an immune response. Your body starts to create an immune response after the first dose of a vaccine, but you need 2 doses to be completely protected. This means that it is still possible you could be infected with COVID-19 just before or after you are vaccinated, or between doses, and you could get sick because the vaccine did not have enough time to protect you. It is likely that recommendations on isolation, quarantine, and testing will change as we learn more about the COVID-19 vaccines.

If I'm exposed to someone who tests positive for COVID-19 after I'm vaccinated, do I still need to quarantine?

You are considered immune 2 weeks after you receive your 2nd dose of the Pfizer or Moderna vaccine. You do not need to quarantine if you are exposed and it has been at least 2 weeks since your 2nd shot. However, if you are exposed before this time, you need to quarantine. It is likely that recommendations on quarantine, isolation, and testing will change as we learn more about the COVID-19 vaccines.

Why do we need a vaccine if we can take other safety precautions to keep the virus from spreading?

Stopping a pandemic requires using all the tools available. Vaccines work with your immune system so your body will be ready to fight the virus if you are exposed. Other steps, like wearing masks and physical distancing, help reduce your chance of being exposed to the virus or spreading it to others. Getting





vaccinated and following the Utah Department of Health's recommendations to protect yourself and others will offer the best protection from COVID-19.

Do I need to wear a mask if I have received 2 doses of the vaccine?

Yes. Experts need to understand more about the protection that COVID-19 vaccines provide before they decide to change recommendations on mask use. Other factors, including how many people get vaccinated and how the virus is spreading in communities, will also affect this decision.

It is important for everyone to keep using all the tools available to us to help stop this pandemic while experts learn more about the protection that COVID-19 vaccines provide in real life conditions. You should still take safety precautions: wear a mask, wash your hands often, and physical distance. Vaccination and following the Utah Department of Health's recommendations for how to protect yourself and others are the best ways to keep from getting and spreading COVID-19.

Do not wear a mask if you are younger than 2 years of age, have trouble breathing, or are unable to remove a mask without help.

When can I stop wearing a mask after I have been vaccinated?

Experts need to understand more about the protection that COVID-19 vaccines provide before they decide to change recommendations on mask use. Other factors, including how many people get vaccinated and how the virus is spreading in communities, will also affect this decision.

Sometimes people can still get a disease, even if they have been vaccinated. Based upon what we know about other diseases, experts believe your illness will be far less severe if you are vaccinated.

Even when the vaccine is available to the public, it will be important for all of us to keep practicing the health behaviors we know reduce the spread of COVID-19 until it is safer.

- Wear a mask that covers your nose and mouth when you are in close contact with anyone who doesn't live in your home, especially indoors.
- Wash your hands often with soap and water for 20 seconds.
- Try to keep at least 6 feet or 2 meters between you and people who don't live in your home, especially indoors.
- Stay home if you are sick.

Do not wear a mask if you are younger than 2 years of age, have trouble breathing, or are unable to remove a mask without help.





COVID-19 vaccination and other vaccines

Can I have flu and COVID-19 at the same time?

Yes. You can have COVID-19, the flu, as well as other respiratory illnesses, all at the same time. Health experts are still studying how common this is. However, there are many FDA-licensed influenza vaccines available to keep you from getting the flu. A flu vaccine will protect you against the 3 or 4 flu viruses that scientists anticipate will be going around this year.

The COVID-19 vaccine may not be available to everyone until we are well into flu season, so it is more important than ever to get your flu vaccine.

What is the difference between the flu shot and the COVID-19 vaccine?

Everyone age 6 months and older should have a flu vaccine each flu season. The COVID-19 vaccine may not be recommended for children right at first. The protection from a flu vaccination gets weaker over time, so you need one each flu season. That is why it is more important than ever to get your flu vaccine this year. We don't know yet if you will need to get vaccinated from COVID-19 every year like the flu vaccine.

The flu vaccine is only one dose. Right now, the COVID-19 vaccines in development and closest to being approved will require two doses a few weeks apart.

Are there other vaccines that can help prevent me from getting COVID-19?

Right now, there are no other vaccines available to prevent COVID-19.

Is it safe to get the COVID-19 vaccine at the same time as other vaccines?

Right now, the CDC recommends you should wait 14 days after getting another vaccine to get the COVID-19 vaccine. You should also wait 14 days after you get the COVID-19 vaccine before getting any other vaccinations. If you inadvertently get the mRNA COVID-19 vaccine (Pfizer or Moderna) within 14 days of another vaccine, doses do not need to be repeated for either vaccine. Talk to your doctor about any concerns you have about getting different vaccines at or near the same time as the COVID-19 vaccine.





What should I do if I can't get vaccinated because of a health condition?

I have a health condition that prevents me from getting other vaccines. What should I do?

When vaccines are licensed, part of the information that will be provided will include who should or should not get each vaccine. You should talk to your doctor about which vaccine will be the best one for you to get, given your medical history.

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