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Get the Facts: COVID-19 Vaccines

MOStopsCovid.com/facts

Making sure you have the facts about the COVID-19 vaccine is important. Your choice to be vaccinated can make a positive impact not only for you and your family, but your entire community. We are stronger together.

Safety

How do I know that a COVID-19 vaccine will be safe?

Millions of Americans have received a both doses of the Pfizer and Moderna mRNA vaccines, with the vast majority experiencing minor, temporary side effects. As an additional layer of checks and balances, an external advisory board made up of medical and research professionals using additional public health data have reviewed final COVID-19 vaccine data and recommended the Pfizer, Moderna and Janssen vaccines be made available for emergency use.

America's best medical and research professionals have been working for years on coronavirus vaccines for SARS and MERS. SARS and MERS are different than COVID-19 but belong to the coronavirus family. The lessons learned through those developments are being applied today. Specifically, the effort to develop a COVID-19 vaccine began more than one year ago.

Clinical trials are an important part of determining vaccine safety and efficacy. Pfizer, Moderna and Janssen have completed Phase 3 clinical trials involving tens of thousands of participants. The purpose of clinical trials is to generate scientific data and other information for the Food and Drug Administration to review and base their recommendations on.

Vaccine safety monitoring systems are in place to collect side effect data. If an unexpected adverse event is seen, experts quickly study it further to assess whether it is a true safety concern. Experts then decide whether changes are needed in U.S. vaccine recommendations. This monitoring is critical to help ensure that the benefits continue to outweigh the risks for people who receive vaccines.

How did we get a vaccine for COVID-19 so fast?

Although the timeline has been accelerated, it doesn't mean we skipped the integrity of the trial and approval processes. Scientists have had a jump on developing the COVID-19 vaccine, using their experience from previous coronavirus vaccine efforts. Another way scientists preserved safety and saved time was by working on efforts simultaneously, rather than one after another like the traditional process. For example, COVID-19 vaccines were in Phase III clinical trials at the same time they were being manufactured. When it was proven safe and effective, the manufactured vaccines were deployed. If the vaccines don't pass the approval process, which is verified by an independent committee of health experts, the unproven vaccines won't be used.

Can you get this vaccine if you are in quarantine due to an exposure with a positive COVID-19 case?

You should delay your vaccination if you have had a known SARS-CoV-2 (virus that causes COVID-19) exposure until your quarantine period has ended, unless residing in a congregate setting (health care/long-term care facility, correctional facility, homeless shelter, etc.).

Should you have a pregnancy test or antibody test prior to receiving the vaccine?

Routine testing for pregnancy or antibody tests is not recommended in relation to vaccine use.

Can you get the COVID-19 vaccine at the same time as another immunization?

COVID-19 and other vaccines may now be administered without regard to timing. This includes simultaneous administration of COVID-19 and other vaccines on the same day.

Do I have to get the same vaccine for the first and second doses?

Yes, patients must receive the same vaccine for both the first and second doses of Pfizer or Moderna. Your vaccination provider will give you a vaccine card stating the manufacturer name and other critical information you will need for a second dose.

While vaccine supply is still very limited, it is also important to return to the same provider/location for your second **dose**.

Who is not recommended for the COVID-19 vaccines?

Pfizer's vaccine was approved for those age 12 and older. Moderna and Janssen's vaccines have been approved for those 18 and older.

The Pfizer and Moderna vaccines are not recommended for individuals who have experienced a serious reaction (e.g., anaphylaxis) to a prior dose of a COVID-19 vaccine or to any of its components. Those who have had a severe allergic reaction to any ingredient of the Janssen vaccine should not receive the Janssen vaccine. For information on vaccine components, refer to the manufacturers' package inserts from [Pfizer](#), [Moderna](#), and [Janssen](#).

What ingredients are used in the COVID-19 vaccines?

The ingredients used in the mRNA vaccines developed by Pfizer and Moderna are simple. They contain mRNA, as well as lipids to ensure safe delivery of the mRNA that will initiate an immune response.

Ingredients of the Janssen COVID-19 vaccine include: recombinant, replication-incompetent adenovirus type 26 expressing the SARS-CoV-2 spike protein, citric acid monohydrate, trisodium citrate dihydrate, ethanol, 2-hydroxypropyl- β -cyclodextrin (HBCD), polysorbate-80, sodium chloride.

Although FDA approved adjuvants (aluminum salts) and preservatives (ethylmercury) have a history of safe use in vaccines, they were not used by Pfizer, Moderna or Janssen.

What are the possible side effects of a COVID-19 vaccine?

After getting vaccinated, you might have some side effects, which are normal signs that your body is building protection. Common side effects are pain, redness, and swelling in the arm where you received the shot, as well as tiredness, headache, muscle pain, chills, fever, and nausea throughout the rest of the body. These side effects could affect your ability to do daily activities, but they should go away in a few days. Learn more about what to expect after getting a COVID-19 vaccine.

Can I get COVID-19 from the vaccine?

No. Every day, a healthy immune system successfully fights off thousands of germs. Antigens are parts of germs that cause the body's immune system to go to work to build antibodies, which fight off diseases. The antigens in vaccines come from the germs themselves, but the germs are weakened or killed so they cannot cause serious illness. Even if people receive several vaccinations in one day, vaccines contain only a tiny fraction of the antigens they encounter every day in their environment. Vaccines stimulate the immune system to produce antibodies to fight off serious vaccine-preventable diseases.

Who was represented in the clinical trials?

Pfizer's clinical trial enrolled 44,000+ participants with 42% globally having racially and ethnically diverse backgrounds. Of Moderna's 30,000 trial participants, 37% were from minority communities, including 6,000 Hispanic and 3,000 Black participants. Janssen's trial included 43,783 participants in the United States, Latin America and South Africa. AstraZeneca's initial trial data included participants from Brazil and the United Kingdom while the company continues to conduct trials in South Africa, Kenya, Latin America, Japan, Russia and the United States.

Should I continue to wear a mask, social distance, maintain good hygiene, and avoid large gatherings?

According to the CDC, people are considered fully vaccinated for COVID-19 ≥ 2 weeks after they have received the second dose in a 2-dose series (Pfizer-BioNTech or Moderna), or ≥ 2 weeks after they have received a single-dose vaccine (Johnson and Johnson (J&J)/Janssen).†

The following recommendations apply to non-healthcare settings. For related information for healthcare settings, visit [Updated Healthcare Infection Prevention and Control Recommendations in Response to COVID-19 Vaccination](#).

Fully vaccinated people can:

- Resume activities without wearing masks or physically distancing, except where required by federal, state, local, tribal, or territorial laws, rules and regulations, including local business and workplace guidance
- Resume domestic travel and refrain from testing before or after travel or self-quarantine after travel
- Refrain from testing before leaving the United States for international travel (unless required by the destination) and refrain from self-quarantine after arriving back in the United States
- Refrain from testing following a known exposure, if asymptomatic, with some exceptions for specific settings
- Refrain from quarantine following a known exposure if asymptomatic
- Refrain from routine screening testing if feasible

For now, fully vaccinated people should continue to:

- Get tested if experiencing [COVID-19 symptoms](#)
- Follow CDC and health department travel requirements and recommendations

Updated on May 17, 2021. To ensure you are viewing the latest federal guidance, please [click here](#). The CDC guidance will be updated and expanded based on the level of community spread of SARS-CoV-2, the proportion of the population that is fully vaccinated, and the rapidly evolving science on COVID-19 vaccines.

Do you still have to quarantine as a close contact after you receive both doses of the vaccine?

According to the CDC, people are considered fully vaccinated for COVID-19 ≥ 2 weeks after they have received the second dose in a 2-dose series (Pfizer-BioNTech or Moderna), or ≥ 2 weeks after they have received a single-dose vaccine (Johnson and Johnson (J&J)/Janssen).†

The following recommendations apply to non-healthcare settings. For related information for healthcare settings,

visit [Updated Healthcare Infection Prevention and Control Recommendations in Response to COVID-19 Vaccination](#).

Fully vaccinated people can:

- Visit with other fully vaccinated people indoors without wearing masks or physical distancing
- Visit with unvaccinated people from a single household who are at low risk for severe COVID-19 disease indoors without wearing masks or physical distancing
- Refrain from quarantine and testing following a known exposure if asymptomatic
- Resume domestic travel and refrain from testing before or after travel or self-quarantine after travel.
- Refrain from testing before leaving the United States for international travel (unless required by the destination) and refrain from self-quarantine after arriving back in the United States.

For now, fully vaccinated people should continue to:

Take precautions in public like wearing a well-fitted mask and physical distancing

- Wear masks, practice physical distancing, and adhere to other prevention measures when visiting with unvaccinated people who are at increased risk for severe COVID-19 disease or who have an unvaccinated household member who is at increased risk for severe COVID-19 disease
- Wear masks, maintain physical distance, and practice other prevention measures when visiting with unvaccinated people from multiple households
- Avoid medium- and large-sized in-person gatherings
- Get tested if experiencing [COVID-19 symptoms](#)
- Follow guidance issued by individual employers
- Follow CDC and health department travel requirements and recommendations

Updated on April 2, 2021. To ensure you are viewing the latest federal guidance, please [click here](#). The CDC guidance will be updated and expanded based on the level of community spread of SARS-CoV-2, the proportion of the population that is fully vaccinated, and the rapidly evolving science on COVID-19 vaccines.

Is it safe to get my child vaccinated?

Yes. Pfizer's vaccine has been authorized for emergency use to vaccinate those ages 12 and up. The American Academy of Pediatrics (AAP) says it is essential for children to be vaccinated against COVID-19, and Missouri's chapter of the AAP encourages all families to schedule their children for the vaccine as soon as possible. Researchers continue to study COVID-19 vaccines in children under 12. While we wait for an authorized vaccine for this age group, children who are not eligible should continue to follow guidelines for masking and physical distancing. Moderna and Janssen's vaccines have been authorized for emergency use to vaccinate those ages 18 and up.

Is it safe for pregnant women to get vaccinated?

Yes. If you are trying to become pregnant now or want to get pregnant in the future, you may get a COVID-19 vaccine when one is available to you. There is currently no evidence that COVID-19 vaccination causes any problems with pregnancy, including the development of the placenta. In addition, there is no evidence that fertility problems are a side effect of any vaccine, including COVID-19 vaccines.

Like all vaccines, scientists are studying COVID-19 vaccines carefully for side effects now and will continue to study them for many years.

How are vaccinators vetted? Do they have to have medical experience?

States are required to verify that the vaccinators have licenses for the states they will be vaccinating in and that they are in good standing. The Bureau of Immunizations within DHSS will verify licenses utilizing professional boards of registration.

Why are medical professionals optimistic about this vaccine?

According to Dr. Anthony Fauci, the overwhelming majority of people who are infected by SARS-CoV-2, the virus that causes COVID-19, recover. That means most patients' immune response that's adequate to suppress the virus and eliminate it from their body. That gives medical professionals confidence that a vaccine could initiate a similar response.

We also had a jumpstart on the development of this vaccine. America's best medical and research professionals have been working for years on coronavirus vaccines for SARS and MERS. SARS and MERS are different than SARS-CoV-2 but belong to the coronavirus family. The lessons learned through those developments are being applied today. Specifically, the effort to develop a COVID-19 vaccine began months ago.

Does the Johnson & Johnson/Janssen vaccine require special precautions?

Yes, those who have or have a history of thrombocytopenia, who have or have a history of a low platelet count, prior surgery (cardiac, orthopedic, trauma), cardiovascular disease, oral contraceptive use or hereditary thrombophilia. If you experience any of the following symptoms seek medical attention right away: Shortness of breath, chest pain, leg pain or swelling, backache, persistent abdominal pain, severe and persistent headaches, visual changes or easy bruising or tiny blood spots under the skin beyond the site of the injection.

Why was the Johnson & Johnson's Janssen COVID-19 vaccine paused?

The federal government of the United States requested pause in the use of this vaccine out of an abundance of caution on April 13 and announced administration could resume on April 23.

Six reported U.S. cases of a rare and severe type of blood clot in individuals occurred after receiving the J&J vaccine. These adverse events are extremely rare. Nearly 7 million people in the United States had received Johnson & Johnson shots prior to the pause. Cases occurred among women between the ages of 18 and 48, and symptoms occurred 6 to 13 days after vaccination.

Is the Johnson & Johnson's Janssen COVID-19 vaccine safe?

Yes. Following a thorough safety review, including two meetings of the CDC's Advisory Committee on Immunization Practices, the U.S. Food and Drug Administration and the U.S. Centers for Disease Control and Prevention have determined that the recommended pause regarding the use of the Janssen (Johnson & Johnson) COVID-19 Vaccine in the U.S. should be lifted and use of the vaccine should resume.

The two agencies have determined the following:

- Use of the Janssen COVID-19 Vaccine should be resumed in the United States.
- The FDA and CDC have confidence that this vaccine is safe and effective in preventing COVID-19.
- The FDA has determined that the available data show that the vaccine's known and potential benefits outweigh its known and potential risks in individuals 18 years of age and older.
- At this time, the available data suggest that the chance of TTS occurring is very low, but the FDA and CDC will remain vigilant in continuing to investigate this risk.
- Health care providers administering the vaccine and vaccine recipients or caregivers should review the [Janssen COVID-19 Vaccine Fact Sheet for Healthcare Providers Administering Vaccine \(Vaccination Providers\)](#) and [Fact Sheet for Recipients and Caregivers](#), which have been revised to include information about the risk of this syndrome, which has occurred in a very small number of people who have received the Janssen COVID-19 Vaccine.

CDC's independent Advisory Committee on Immunization Practices [met to discuss](#) the latest data on TTS, hearing from the vaccine manufacturer Janssen and the COVID-19 Vaccine Safety Technical (VaST) Subgroup, as well as a risk benefit analysis. ACIP is committed to be vigilant and responsive to additional information that could impact the risk benefit

analysis of any of these vaccines. Vaccine safety monitoring will continue and any new information about TTS will be brought to ACIP as needed.

Is it true heparin should not be prescribed to treat blood clots associated with the Johnson & Johnson Janssen COVID-19 vaccine?

Treatment is different from what might typically be administered; while usually heparin is used to treat blood clots, it is dangerous to give heparin if someone has a blood clot from the Johnson & Johnson vaccine. If you have questions about your medications, please contact your health care provider.

Efficacy

Can I take over-the-counter pain relievers before my vaccination appointment?

At this time, [the CDC does not recommend](#) taking pain relievers before a COVID-19 vaccination appointment because there is not enough information to determine the impact the medications may have on the immune response. However, they may be used post-vaccination to ease discomfort.

If you have been vaccinated, can you stop from using other precautions?

According to the CDC, people are considered fully vaccinated for COVID-19 ≥ 2 weeks after they have received the second dose in a 2-dose series (Pfizer-BioNTech or Moderna), or ≥ 2 weeks after they have received a single-dose vaccine (Johnson and Johnson (J&J)/Janssen).†

The following recommendations apply to non-healthcare settings. For related information for healthcare settings, visit [Updated Healthcare Infection Prevention and Control Recommendations in Response to COVID-19 Vaccination](#).

Fully vaccinated people can:

- Resume activities without wearing masks or physically distancing, except where required by federal, state, local, tribal, or territorial laws, rules and regulations, including local business and workplace guidance
- Resume domestic travel and refrain from testing before or after travel or self-quarantine after travel
- Refrain from testing before leaving the United States for international travel (unless required by the destination) and refrain from self-quarantine after arriving back in the United States
- Refrain from testing following a known exposure, if asymptomatic, with some exceptions for specific settings
- Refrain from quarantine following a known exposure if asymptomatic
- Refrain from routine screening testing if feasible

For now, fully vaccinated people should continue to:

- Get tested if experiencing [COVID-19 symptoms](#)
- Follow CDC and health department travel requirements and recommendations

Updated on May 17, 2021. To ensure you are viewing the latest federal guidance, please [click here](#). The CDC guidance will be updated and expanded based on the level of community spread of SARS-CoV-2, the proportion of the population that is fully vaccinated, and the rapidly evolving science on COVID-19 vaccines.

Most people recover. Why do I need a vaccine?

COVID-19 is a deadly disease that causes severe illness – and in some cases, long term symptoms that we have yet to fully understand. The COVID-19 vaccine candidates have been created to decrease death and severe illness.

Although a high percentage of people recover from COVID-19, some are hospitalized and experience severe illness. It is also somewhat common to have the virus but never experience symptoms, and it is possible to spread the virus to others even when symptoms are not present. When you make the choice to be vaccinated, you are protecting not only you but also those around you from the chance of death and severe illness caused by COVID-19.

How effective will a COVID-19 vaccine be?

Both the Pfizer and Moderna vaccines have an approximate 95% efficacy rate and are highly effective in preventing severe disease. In December, the CDC published that the Pfizer and Moderna vaccines had a constant efficacy rate across age, sex and ethnicity categories, as well as among individuals with underlying medical conditions and those who have been previously infected by SARS-CoV-2. Additionally, initial clinical data showed protection is achieved 28 days after the initiation of the Pfizer vaccine, which consists of a 2-dose schedule.

According to Moderna's website, initial trial data was used to estimate a vaccine efficacy of 94.5%. Initial data from Moderna also shows the vaccine may provide some protection against asymptomatic SARS-CoV-2 infection.

AstraZeneca estimates a 90% efficacy rate from a specific 2-dose schedule.

Janssen's clinical trials showed an 85% efficacy rate in preventing hospitalization and complete protection against death caused by SARS-CoV-2.

All authorized vaccines are highly effective. The different types of vaccines were not studied in head-to-head comparisons or trials; therefore, they should not be compared to each other.

Does the vaccine prevent against asymptomatic infection?

Initial data from Moderna shows the vaccine may provide some protection against asymptomatic SARS-CoV-2 infection.

How long will immunity last if I get vaccinated?

There is no definitive data on how long immunity will last with a vaccine. A COVID-19 vaccine will trigger an immune system response to develop active immunity. Active immunity results when exposure to a disease organism triggers the immune system to produce antibodies to that disease. If an immune person comes into contact with that disease in the future, their immune system will recognize it and immediately produce the antibodies needed to fight it. Although we don't know exactly how long immunity will last for the specific vaccines in trial, active immunity can be long-lasting.

How many doses should I expect?

Two of the three COVID-19 vaccines approved for use require two doses. Janssen's vaccine requires one dose.

It is important that patients return for the second dose to develop the highest level of protection from SARS-CoV-2. Patients who do not receive the second Pfizer vaccination dose at 21 days or the Moderna vaccination at 28 days should still receive that second dose as soon as possible thereafter.

Why is a vaccine necessary?

A vaccine is necessary to help you and your community shape a new normal. Stopping a pandemic requires using all the tools available. Vaccines boost your immune system so it will be ready to fight the virus if you are exposed. Other steps, like masks and social distancing, help reduce your chance of being exposed to or spreading the virus.

If I've recovered from COVID-19, do I still need to get vaccinated?

Yes. We are seeing evidence of reinfection in patients. Early evidence suggests natural immunity from SARS-CoV-2 may not last very long, but more studies are needed to better understand this. Vaccination should not occur until the patient has met criteria to discontinue isolation.

If I miss receiving the second dose of the Pfizer or Moderna vaccine at the recommended time, do I have to start the process over?

Patients who do not receive the second vaccination dose at 21 days for Pfizer or 28 days for Moderna should still receive that second dose as soon as possible thereafter. However, if it is not feasible to adhere to the recommended interval and a delay in vaccination is unavoidable, the second dose of Pfizer-BioNTech and Moderna COVID-19 vaccines may be administered up to 6 weeks (42 days) after the first dose. There are currently limited data on efficacy of mRNA COVID-19 vaccines administered beyond this window. If the second dose is administered beyond these intervals, there is no need to restart the series.

New variant strains of SARS-CoV-2 are now in the United States. Will a vaccine still be effective?

Scientists are working to learn more about these [variants](#) to better understand how easily they might be transmitted and whether currently authorized vaccines will protect people against them; however, early evidence suggests the vaccines remain effective against the variant. Currently, there is no evidence that these variants cause more severe illness or increased risk of death. New information about the virologic, epidemiologic, and clinical characteristics of these variants is rapidly emerging. The Missouri State Public Health Laboratory, in collaboration with the CDC, is monitoring the situation closely.

I was vaccinated, but an antibody/serology test reveals I have no antibodies. Why is that?

Antibody testing is [not currently recommended](#) to assess for immunity to COVID-19 following COVID-19 vaccination or to assess the need for vaccination in an unvaccinated person. Since vaccines induce antibodies to specific viral protein targets, post-vaccination serologic test results will be negative in persons without history of previous natural infection if the test used does not detect antibodies induced by the vaccine.

Documentation

I lost my vaccination card. Can I get a replacement?

DHSS is not offering replacement cards; however you can complete a [Request for Official State of Missouri Immunization Records form](#), and DHSS can send you a copy of the immunization record on file in ShowMeVax, the statewide immunizations registry. Submit the completed form to have your request processed, either by email or fax: ImmunizationRecordRequests@health.mo.gov / 573-526-0238 (fax).

What will I need to provide to get vaccinated?

This may vary for each vaccinator. Just like a regular doctor's appointment, we recommend you call ahead to ask what you will need to provide. Examples may include a driver license and insurance provider information, if applicable. COVID-19 vaccinations are completely free for all individuals, regardless of residency or insurance status.

There are specific requirements for minors (under age 18) getting vaccinated:

- Minors under the care of a parent/guardian must have:
 - a parent/guardian present at the time of vaccination who is willing to sign the requisite paperwork; or
 - notarized written consent in cases where the parent/guardian is not present at the vaccination; or
 - un-notarized written consent, if verbal confirmation can be obtained by telephone, in cases where the parent/guardian is not present at the vaccination.
- If the minor is under the care of:
 - a relative caregiver, a “relative caregiver” affidavit must be provided for the minor to receive the vaccination.
 - the Department of Social Services, written consent from Children’s Division (or designee) or Division of Youth Services must be provided for the minor to receive the vaccination.

- If the minor is married, pregnant, or a minor parent, documentation of this should be shown at the time of the vaccination.
- If the minor is homeless, such documentation may be letters from persons/entities such as (but not limited to): a director or designee of a governmental or nonprofit agency that receives public or private funding to provide services to homeless persons; a location education agency liaison for homeless children and youth; a school social worker/counselor; or a licensed attorney representing the minor in any legal matter.

How will my information be used?

Missourians' healthcare information is, and will continue to be, safe. We will never use individual patient information that you provide in unethical ways. Limited data is reported from your local vaccination site to state and federal government.

Cost + Insurance

What will be the cost of getting vaccinated?

Nothing. The federal government is providing the vaccine free of charge to all people living in the United States, regardless of their immigration or health insurance status.

COVID-19 vaccination providers cannot:

- Charge you for the vaccine
- Charge you directly for any administration fees, copays, or coinsurance
- Deny vaccination to anyone who does not have health insurance coverage, is underinsured, or is out of network
- Charge an office visit or other fee to the recipient if the only service provided is a COVID-19 vaccination
- Require additional services in order for a person to receive a COVID-19 vaccine; however, additional healthcare services can be provided at the same time and billed as appropriate

COVID-19 vaccination providers can:

- Seek appropriate reimbursement from the recipient's plan or program (e.g., private health insurance, Medicare, Medicaid) for a vaccine administration fee
 - However, providers cannot charge the vaccine recipient the balance of the bill
- Seek reimbursement for uninsured vaccine recipients from the [Health Resources and Services Administration's COVID-19 Uninsured Program](#)

Individuals aware of any potential violations of these requirements are encouraged to report them to the Office of the Inspector General, U.S. Department of Health and Human Services, by calling 1-800-HHS-TIPS or the website [TIPS.HHS.GOV](https://www.hhs.gov/tips).

If I'm uninsured, can I get vaccinated?

No resident may be charged for the COVID-19 vaccine, so uninsured Missourians cannot be denied vaccination based on their health insurance status.

Rumor Control

There is no evidence that the mRNA vaccine causes autoimmune disorders.

Rumor: COVID-19 vaccines causes autoimmune disorders.

Fact: The mRNA in the COVID-19 vaccines is heavily modified to not trigger the immune system in a way that would cause autoimmunity as a complication. Currently, many studies are underway to investigate safety and risk of disease flare after administering COVID-19 vaccines in patients with autoimmune diseases. Modified mRNA vaccines have been already used for several years for other indications, and there is no data indicating that mRNA vaccine can cause an autoimmune disease. Overall, vaccine experts and physician scientists agree that the benefits of vaccines outweigh the potential risks.

The COVID-19 vaccine will be released only when it's proven safe and effective.

Rumor: The vaccine was rushed, so it can't possibly be safe.

Fact: No corners have been cut in developing a COVID-19 vaccine. Scientists have had a jump on developing the COVID-19 vaccine, using their experience from previous coronavirus vaccine efforts. Another way to preserve safety and save time is by working on efforts simultaneously, rather than one after another. For example, COVID-19 vaccines were in phase 3 clinical trials at the same time they were being manufactured. When their safety and efficacy was proven, manufactured vaccines could be used. If they didn't pass the approval process, the unproven vaccines wouldn't have been used.

You cannot get COVID-19 from the vaccines.

Rumor: The vaccines can give you COVID-19.

Fact: You cannot get COVID-19 from the vaccines. None of the authorized and recommended COVID-19 vaccines (or others currently in development) contain the live virus that causes COVID-19. This makes it impossible to get COVID-19 from the vaccine. The vaccines teach our immune systems how to recognize and fight the virus that causes COVID-19.

Some individuals may contract COVID-19 after being vaccinated because they may have been exposed to COVID-19 prior to being vaccinated or before they obtain their second dose of vaccine. After receiving two doses of the Pfizer or Moderna vaccines, individuals could have 94-95% protection from contracting COVID-19 (based on clinical trial efficacy). Janssen's clinical trial data show an estimated 85% efficacy rate against severe forms of COVID-19. If an individual still contracts COVID-19 after being fully vaccinated, the person will most likely have extremely mild symptoms or be asymptomatic.

There is no reason to believe that the COVID-19 vaccines will not be effective against additional strains of SARS-CoV-2.

Rumor: There are new strains of SARS-CoV-2 in the United Kingdom and South Africa, so the new vaccines won't be effective.

Fact: : According to medical experts, including current and former U.S. Surgeon Generals, there is no firm reason to believe that the vaccines that have been developed and approved in the U.S. will not be effective against new strains of the virus.

Bell's palsy is not a side effect of the COVID-19 vaccine.

Rumor: You can get Bell's palsy from the COVID-19 vaccines.

Fact: Bell's palsy is not considered to be a side effect of the vaccines. Cases of Bell's palsy, a temporary condition, were reported in few participants in the mRNA COVID-19 vaccine clinical trials. However, the Food and Drug Administration (FDA) does not consider these to be above the rate expected in the general population. They have not concluded these cases were caused by vaccination. Additionally, those who have previously had Bell's palsy may receive a Pfizer, Moderna or Janssen COVID-19 vaccine.

You cannot get HIV from the COVID-19 vaccine.

Rumor: I can get HIV from the COVID-19 vaccines.

Fact: You cannot get HIV from any of the COVID-19 vaccines. Both Pfizer and Moderna vaccines are mRNA vaccines encoding spike protein specific only to the virus causing COVID-19, and only contain necessary ingredients to ensure a safe delivery of the mRNA to initiate an immune response. Participants in the clinical trial of the Australian COVID-19 vaccine (not Pfizer or Moderna) developed positive HIV tests, but those were all false positive tests. The Australian vaccine was using sequences similar to the tiny part of the HIV virus to stabilize their vaccine to improve delivery, and all participants were informed that they may develop false positive HIV test.

The COVID-19 vaccines will not cause you to test positive on COVID-19 viral tests.

Rumor: I can test positive for COVID-19 after being vaccinated.

Fact: Vaccines currently in clinical trials in the United States won't cause you to test positive on viral tests, which are used to see if you have a current infection. This rumor is false even for the Janssen vaccine, which uses viral vector (carrier) technology aided by a modified adenovirus. Adenoviruses cause the common cold and differ greatly from coronaviruses. Additionally, the adenovirus used as a carrier in Janssen's vaccine has been modified to ensure no illness will result. 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 indicate you had a previous infection and that you may have some level of protection against the virus. Experts are currently looking at how COVID-19 vaccination may affect antibody testing results.

The COVID-19 vaccines will not make you test positive on a diagnostic COVID-19 test (e.g., PCR or antigen test).

Rumor: If I get vaccinated and am then tested for COVID-19, I will receive false positive results.

Fact: Receiving the COVID-19 vaccine will not affect your PCR or antigen test results since these tests check for active disease, not immunity. There is no live virus present in any of the COVID-19 vaccines.

The vaccine is intended to induce an immune response, so a serology test (antibody test) may be positive in someone who has been vaccinated.

The flu vaccine will not protect you from coronavirus.

Rumor: The flu vaccine will also work against coronavirus.

Fact: Influenza and COVID-19 (SARS-CoV-2) belong to two different RNA virus families, so one vaccine is not interchangeable for another. Influenza belongs to the Orthomyxoviridae family, while SARS-CoV-2 is classified in the Coronaviridae family. Further, both the Influenza and SARS-CoV-2 rely on different protein layers to initiate responses. Influenza uses two surface antigens, while SARS-CoV-2 uses spike proteins, so their immunization approaches are different.

However, it is important that you also consider getting the flu vaccine this year. In a typical year, more than 100,000 Missourians become sick from the flu and some are hospitalized. To ensure Missouri has the capacity to care for COVID-19 patients, we need to do whatever we can to prevent additional strains on our healthcare system.

The COVID-19 vaccines do not alter your DNA.

Rumor: The COVID-19 vaccines will tamper with your DNA.

Fact: : That rumor is baseless. mRNA provides a set of instructions to your cells to create an immune response specific to COVID-19. Medical doctors independent of the vaccine development teams have verified that using mRNA will not alter the DNA of our body's cells. The COVID-19 vaccines were created through mRNA technology. They do not introduce DNA into your body.

This rumor is false even for the Janssen vaccine, which uses viral vector (carrier) technology aided by an modified adenovirus. The vector used in Janssen's vaccine is a harmless adenovirus (like the common cold) that has been modified so it won't be able to replicate or cause illness.

The COVID-19 vaccine doesn't cause female sterilization.

Rumor: The vaccine contains Syncytin-1, which is vital for the formulation of human placenta in women.

Fact: Medical professionals have called this "an utterly bizarre claim." None of the COVID-19 vaccines contain Syncytin-1. Furthermore, there are no protein-based vaccines among the candidates in phase 3 clinical trials for COVID-19. Scientifically, there is no sequence homology between SARS-CoV-2 and Syncytin-1, so any immune response initiated by the vaccine against SARS-CoV-2 would not affect Syncytin-1.

The COVID-19 vaccine process does not involve political figures.

Rumor: The vaccine was rushed for political reasons.

Fact: The approval process does not include approval from any elected official. Scientific data and information generated



by large-scale clinical trials is reviewed by the U.S. FDA, medical and public health experts from the Advisory Committee on Immunization Practices and the CDC before a vaccine will be made available. The federal effort called Operation Warp Speed has no formal oversight of or control over the vaccine approval process that determines safety and efficacy.

Bill and Melinda Gates are not collecting your biometric data.

Rumor: Bill & Melinda Gates will use the COVID-19 vaccine to collect human biometric data that will then be uploaded to a cloud environment and connected with cryptocurrency.

Fact: There is no tracking chip technology involved in the COVID-19 vaccine, or any vaccine. Although the Bill and Melinda Gates Foundation has been involved in philanthropy and public health for years, there is no truth in this rumor.

Mercury has not been confirmed as an ingredient in the COVID-19 vaccines. There is no evidence that ethylmercury used in previous vaccines have caused harm to the human body.

Rumor: Mercury will be present in the COVID-19 vaccines and is dangerous.

Fact: Pfizer and Moderna's vaccines do not contain mercury. Also, mercury is not a confirmed ingredient in any other COVID-19 vaccines at this time, but has been safely used in extremely small amounts to prevent dangerous germs, like bacteria and fungi, from growing in multi-dose vaccine vials. By preventing that harmful bacteria growth, residents see fewer severe local reactions.

Mercury is a naturally occurring element in the world. There are two primary types of mercury that humans may come into contact with: methylmercury and ethylmercury. Methylmercury can be toxic to humans in high doses and is not used in vaccines. Ethylmercury is used in extremely small amounts to prevent harmful bacteria from growing in vaccines and is quickly cleared from the human body. The ethylmercury medical product Thimerosal has a record of being very safe. Data from many studies show no evidence of harm caused by the extremely small amounts used in vaccines.

Residents will not be used as "guinea pigs" if they choose vaccination.

Rumor: The government just wants to use me as a "guinea pig."

Fact: All residents that have participated in clinical studies thus far have volunteered to do so and residents who choose vaccination will not be considered a test subject. Vaccinators will be required to track severe reactions to the vaccine, which is standard protocol for all vaccines.

COVID-19 and the vaccine are not a hoax.

Rumor: The virus is a hoax.

Fact: COVID-19 is not a hoax and neither is the vaccine. It is recommended by medical professionals that you consider getting vaccinated.

The COVID-19 vaccine will not have a tracking chip inside of it.

Rumor: Microchip hardware will be used in a vaccine to track Americans.

Fact: There will not be any tracking mechanisms inside of a COVID-19 vaccine.

You can still donate blood after receiving COVID-19 vaccines.

Rumor: Getting a COVID-19 vaccines will stop you from donating blood.

Fact: According to the [American Red Cross](#), receiving the Pfizer, Moderna or Johnson & Johnson COVID-19 vaccines will not affect your eligibility to donate blood. You may donate blood, with no waiting period, even after you have been fully vaccinated. Individuals who have received a COVID-19 vaccine are not eligible to donate convalescent plasma for COVID-19 patients.

For additional resources related to these questions, please visit [MOStopsCovid.com/facts](https://moplastscovid.com/facts).