What is a vaccine?

Vaccines contain the same germs that cause disease but the germs have been either killed or weakened to the point that they don't make you sick. Some vaccines contain only a part of the disease germ. A vaccine stimulates your immune system to produce antibodies, exactly like it would if you were exposed to the disease. After getting vaccinated, you develop immunity to that disease, without having to get the disease first.
This is what makes vaccines such powerful medicine. Unlike most medicines, which treat or cure diseases, vaccines prevent them.

Can mRNA vaccines change the DNA of a person?

No, mRNA is active only in a cell's cytoplasm and DNA is located in the nucleus, mRNA vaccines do not operate in the same cellular compartment that DNA is located.

When can I get vaccinated?

Because the supply of COVID-19 vaccine in the United States is expected to be limited at first, CDC recommends that initial supplies of COVID-19 vaccine be allocated to healthcare personnel and long-term care facility residents. CDC made this recommendation on December 3, 2020, and based it on recommendations from the Advisory Committee on Immunization Practices (ACIP), an independent panel of medical and public health experts. The goal is for everyone to be able to easily get a COVID-19 vaccination as soon as large quantities of vaccine are available. As vaccine supply increases but remains limited, ACIP will expand the groups recommended for vaccination. We hope to get everyone vaccinated as quickly as possible.

When we are able to be vaccinated, can my children get it?

Pfizer: The U.S. Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) to permit the emergency use of the unapproved product, Pfizer-BioNTech COVID-19 Vaccine, for active immunization to prevent COVID-19 in individuals 16 years of age and older.

Moderna: The U.S. Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) to permit the emergency use of the unapproved product, MODERNA COVID-19 VACCINE, for active immunization to prevent COVID-19 in individuals 18 years of age and older.

Are the COVID-19 vaccines being studied to use on children?

Yes. Studies of COVID-19 vaccines in children have started. The Pfizer mRNA vaccine was tested in some 16- to 18-year olds and has been approved for teens in this age group. As more information becomes available in younger children and teens, the age-related recommendations will be adjusted.
It is important that COVID-19 vaccines be thoroughly tested in children younger than 18 years of age before they are given in this group because we cannot assume that they will act the same way in children. This will be particularly important since we have seen that children are not affected in the same way by COVID-19 infections. Most vaccines are tested with adults first.

Will there be enough vaccine for everyone?

While the newly approved vaccines will have limited quantities in the beginning, 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, health departments and federally qualified health centers.

If it is not my turn to get the vaccine, will I be turned away at vaccination sites?

Yes. All vaccine providers will be prioritizing who receives the vaccine based on the federal and state schedule plan.

How much does the vaccine cost?

The plan is for vaccine doses purchased with U.S. taxpayer dollars will be given to the American people at no cost. You could be billed for an office visit or administration fee for administration of the vaccine, however, you cannot be turned away from receiving the vaccine due to lack of payment.

Is the vaccine safe?

Safety is a top priority. COVID-19 vaccines are being held to the same standards as other vaccines to make sure they are safe. For all vaccines in the United States, there is an extensive development and approval process and no safety steps were skipped during the development of these vaccines.

What steps are taken to ensure safety after a vaccine is approved?

After a vaccine is approved and distributed, vaccine monitoring systems are used to watch for possible side effects. If an unexpected side effect is seen, experts study it to determine whether changes are needed in vaccine recommendations. The Vaccine Adverse Event Reporting System (VAERS) is a national vaccine safety surveillance program of the FDA and CDC. VAERS collects and analyzes information from reports of adverse events (e.g., side effects) that occur after a vaccine has been approved and distributed. Anyone can submit a report to VAERS by going to this link: https://vaers.hhs.gov/reportevent.htmlThere is a new application being introduced for the COVID-19 vaccines. **V-safe** is a smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after you receive a COVID-19 vaccination. Through **v-safe**, you can quickly tell CDC if you have any side effects after getting the COVID-19 vaccine. Depending on your answers, someone from CDC may call to check on you and get more information. And **v-safe** will remind you to get your second COVID-19 vaccine dose. To learn more: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafe.html

Can I get COVID-19 from the vaccine?

No, it is not possible to get COVID-19 from vaccines. To trigger an immune response, many vaccines put a weakened or inactivated germ into our bodies. Not mRNA vaccines. Instead, they teach our cells how to make a protein—or even just a piece of a protein—that triggers an immune response inside our bodies. That immune response, which produces antibodies, is what protects us from being infected if the real virus enters our bodies.

Will COVID-19 vaccines cause me to test positive on COVID-19 tests?

No. These vaccines will not cause you to test positive on viral tests, which are used to see if you have a current infection.

Are we going to be required to take the COVID-19 vaccine?

At this time there is no state or federal requirement for the vaccine. As the vaccine becomes more readily available it's possible that businesses and other employers may choose to add a vaccine requirement.

Should I get the vaccine if I am pregnant or currently breastfeeding?

There are no data on the safety of COVID-19 vaccines in lactating women or the effects of mRNA vaccines on the breastfed infant or milk production / excretion. mRNA vaccines are not considered live virus vaccines and are not thought to be a risk to the breastfeeding infant. If a lactating woman is part of a group (e.g., healthcare personnel) who is recommended to receive a COVID-19 vaccine, she may choose to be vaccinated. However, we recommend you seek guidance from your provider regarding your specific medical situation.

If I already had COVID-19 and recovered, will I still need a vaccine?

Vaccination should be offered to persons regardless of history of prior symptomatic or asymptomatic SARS-CoV-2 infection. Vaccination of persons with known current SARS-CoV-2 infection should be deferred until the person has recovered from the acute illness (if the person had symptoms) and criteria have been met for them to discontinue isolation. While there is otherwise no recommended minimum interval between infection and vaccination, current evidence suggests that reinfection is uncommon in the 90 days after initial infection. Thus, persons with documented acute SARS-CoV-2 infection in the preceding 90 days may delay vaccination until near the end of this period, if desired. *Persons who previously received passive antibody therapy for COVID-19:* Vaccination should be deferred for at least 90 days.

How long will vaccine immunity last?

We do not yet know how long immunity lasts after infection or vaccination:

- Infection - Scientists are working to learn more about immunity following infection. While some people have been re-infected after recovering from COVID-19, the number of people who have experienced this is small compared with the total number of people who have been infected. Likewise, although the virus has been changing since it was first recognized, antibodies from people who were sick early during the pandemic are still effective against the slightly modified version. For these reasons, scientists are hopeful that people will be protected for one or more years.
- Vaccination - Clinical trial participants will be monitored to understand how long immunity lasts after vaccination.

Will I still have to wear a mask and social distance after I've received both doses of the 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, like covering your mouth and nose with a mask, washing hands often, and staying at least 6 feet away from others.

It is clear the vaccines prevent significant illness, but we don't know yet if they will prevent vaccinated people from picking up the virus and spreading it to others. Experts need to understand more about the protection that COVID-19 vaccines provide before deciding to change recommendations on steps everyone should take to slow the spread of the virus that causes COVID-19. Other factors, including how many people get vaccinated and how the virus is spreading in communities, will also affect this decision.

Once I have been vaccinated, can I ignore any lockdown restrictions?

Everyone will still need to practice recommended public health measures for a while because it will take some time to slow or stop the spread of the virus. The vaccines have a high efficacy rate around 95% but they do not have a 100% efficacy. Two other factors are important for understanding why:

- While the vaccines are highly effective at preventing disease, it might not prevent asymptomatic infection, meaning vaccine recipients might still be able to be infected, but not have symptoms and, therefore, unwittingly spread the virus. The vaccine manufacturers are conducting additional studies to clarify.
- Scientists estimate that to control COVID-19, about 7 or 8 of every 10 people will need to be immune. Given that the U.S. population is more than 330 million people, this means that almost 250 million of them will need to be immune to reach this goal. Between March and November 2020, almost 12 million people in the U.S. were found to be infected, although estimates from antibody studies suggest that the number might be 3-7 times greater. This reflects how important vaccines are in controlling the spread because more than 250,000 people died as a result of COVID-19 infections between March and November 2020.

Therefore, please follow important safety measure such as masks, social distancing, and other public health measures, will be required to slow or stop the spread of the virus. And, because we won't know who might still be able to be infected after vaccination or previous illness, everyone will be asked to comply.

How many doses of COVID-19 vaccine will be needed?

The mRNA vaccines require two doses. For the Pfizer vaccine, doses should be separated by 3 weeks. For Moderna's vaccine, doses should be separated by 28 days. The two mRNA vaccines are not interchangeable. A person should be sure they know which one they got as the first dose and be clear about when they should return for the second dose, particularly because the vaccines require both doses to have the best protection.

What if I miss my second dose?

It is important that you receive your second dose. The COVID-19 vaccines that require two doses are not completely effective unless you receive the second dose. Your second dose will be scheduled at the time

you receive your initial dose. If you miss your second dose, reach out to the provider for recommendation of next steps.

Will the covid-19 vaccine be an annual shot?

We don't know yet. Scientists are still studying this and will determine this once the vaccine is distributed and more data becomes available.

How many people need to receive the vaccine before we achieve herd immunity?

Experts do not know what percentage of people would need to get vaccinated to achieve herd immunity to COVID-19. Herd immunity is a term used to describe when enough people have protection—either from previous infection or vaccination—that it is unlikely a virus or bacteria can spread and cause disease. As a result, everyone within the community is protected even if some people don't have any protection themselves. The percentage of people who need to have protection in order to achieve herd immunity varies by disease.

What are the side effects?

The side effects will vary slightly from person to person and depending on which vaccine you receive. Most reported side effects are consistent with other vaccines. For example, vaccine injections may cause mild flu-like side effects — including soreness at the injection site, headaches, muscle aches and fever.

These symptoms do not mean you have been infected with COVID-19, but they do indicate your immune system has begun working to make the cells and proteins necessary to protect you from severe illness if you are exposed to COVID.

What if I am concerned about my side effects?

If you experience severe side effects, please seek medical attention immediately. If you would like to report your side effects to the federal reporting system please visit: https://vaers.hhs.gov/reportevent.html

If I have an autoimmune or immune-compromising condition, can I be vaccinated?

People with immune-compromising conditions may get the COVID-19 vaccine as long as they are not in one of the following categories:

- Severe allergy to a vaccine component (i.e., one that causes anaphylaxis or requires medical intervention)
- History of severe allergy to any vaccine or injectable medication

However, it is recommended that individuals with compromised immune systems discuss their personal risks and benefits with a healthcare provider to determine whether to receive the vaccine. Data about how well the vaccine works and its safety in immune-compromised individuals are not currently available, so it is possible that these individuals could have a lower immune response to vaccination. On the other hand, persons with these conditions may also be at higher risk of severe disease due to COVID-19. Therefore, the CDC recommended that people who are immune-compromised or taking

immunosuppressive medications could receive the vaccine if they wanted as long as they do not have other contraindications.

Knowing the potential for a lower immune response, if someone with an immune-compromising condition decides to get vaccinated, it will be important to get both doses and practice other public health measures until more is known about their protection against SARS-CoV-2, the virus that causes COVID-19.Post-licensure monitoring systems, like the Vaccine Adverse Events Reporting System (VAERS) and the Vaccine Safety Datalink (VSD), will be used to allow for real-time monitoring of these sub-groups.

Will I be able to receive the COVID-19 vaccine at the same time as other vaccines?

People should separate their COVID-19 vaccinations by at least 14 days from any other vaccine (before or after). This recommendation is based on the fact that we currently do not have data regarding whether the COVID-19 vaccines will affect, or be affected by, other vaccines. Studies to determine whether COVID-19 vaccines can be given with the flu vaccine or the shingles vaccine will be completed; these types of studies are called “concomitant use studies.”

Were steps skipped to provide these vaccines faster?

Even though the COVID-19 vaccines were developed quicker than has ever been done in the past, the speed did not decrease safety, or integrity of the vaccines in any way.

Do the COVID-19 vaccines contain a microchip?

COVID-19 vaccines do not contain microchips. This idea is based on a false narrative and misinformation campaign waged online.

If I cannot take a flu shot due to an egg allergy, can I receive the Covid-19 vaccine (either Pfizer or Moderna)?

Both brands (Pfizer and Moderna) are cell-based vaccines (RNA). Therefore, they do not contain any human or animal cells in their development. Since they aren’t grown in eggs like some flu vaccines, you should be safe. However, if your employee has experienced an allergic reaction other than a rash, they should discuss with their provider and receive the vaccine in a setting that is prepared for medical intervention (doctor’s office, etc.)if .

Recipient Fact Sheets
Moderna: https://www.modernatx.com/covid19vaccine-eua/eua-fact-sheet-recipients.pdf
Pfizer: https://selfservehosteu.pfizer.com/pfrrdownload/file/fid/77411