

COVID-19 Vaccine FACT SHEET

To vaccinate or not to vaccinate? That is the first of many questions.

As the COVID vaccine becomes available to older adults, it's time to separate myth from fact. When you are armed with accurate information, you can make the best choice for yourself.

Here are the most frequently asked questions about the new COVID vaccine.

1. This vaccine seems rushed. It was developed in 10 months instead of 10 years. How could it possibly be safe? Did the drug companies cut corners?

This is a great question. With the speed this vaccine was developed, it might make some people feel nervous. Here's why we can be sure this vaccine wasn't rushed and that the speed of development is reasonable:

Traditional vaccines that you've had in the past, like the ones that protect you from measles, polio, or the flu, contain inactive forms of the pathogen. (You've probably

heard that the flu shot contains "dead flu virus," which is one way of describing it.) Your body attacks the inactive material as if it were alive, and your body learns how to develop a proper immune response without the flu virus actually multiplying and making you truly sick.

The COVID vaccines that have been developed use a different technology based on mRNA, which is short for Messenger-RNA. The COVID injection delivers an RNA string that your body can use as a "recipe" for how to fight the virus.

Your body makes copies of the "recipe" and then discards the genetic material in the shot, just as you would copy a recipe out of a magazine and then put the magazine in the recycling bin.

The mRNA technology we're using today is not new; it is the result of over a decade of solid research¹. Scientists were able to apply it to the new COVID virus quickly,

but the technology is mature, thoroughly studied, and safe.

Scientists are excited about how well mRNA vaccines are working to protect patients against COVID-19. They are studying data on vaccination against COVID so that they can update vaccines for other diseases with mRNA technology. We might even have mRNA vaccines to treat cancer in the near future!²

2. Can the vaccine change our DNA?

The short answer is no, definitely not. Messenger RNA is not the same as DNA. The mRNA strand is one small recipe that teaches your body how to process the coronavirus “spike protein.” It does not get anywhere near your DNA and absolutely cannot change your DNA in any way.³



This is like a chef carrying a recipe card into a decades-old restaurant. The restaurant staff now knows how to make the new recipe, but the building, plates, silverware, tablecloths, and parking lot are all unaffected. They would only make the recipe if someone orders it. This is similar to what your body does when exposed to vaccines or live viruses.

In other words, this vaccine teaches your body how to cook up its own defense whenever it needs to.

3. Why are different companies all making a different vaccine? Are they all the same?

There are four main companies working on COVID-19 vaccines right now: Pfizer (BioNTech), Moderna, AstraZeneca, and Johnson and Johnson.⁴

Pfizer and Moderna both use mRNA technology.⁵ On the other hand, AstraZeneca and Johnson and Johnson use something called adenovirus vaccine technology. Adenovirus vaccines use a harmless virus as a sort of Trojan horse to fight the COVID-19 spike protein.⁶

These vaccines are all similar in the way they work; they both show your immune system how to fight the virus.

The FDA has given emergency approval of these vaccines because they will all work well. These vaccines are all equivalent in effectiveness.^{7 8}

4. Who should receive the vaccine?

The vaccine is appropriate for nearly everyone, but if you have concerns, contact your health care provider. This is an especially important step if you have any food or drug allergies.⁹

5. Is the vaccine risky or dangerous?

All medical treatments have some risk. However, for a vast majority of people, the risks of contracting COVID-19 far outweigh the risks of receiving the vaccine.¹⁰

6. How can I expect to feel after receiving the vaccine?

The most commonly reported side effects

from the COVID vaccine include some aching and stiffness in the arm, as well as some mild flu-like symptoms in a small percentage of people. You might develop a mild fever, fatigue, or a headache; this can last for a few days.

These are good signs; these symptoms mean that your body is making the material necessary to fight COVID.

Many people experience no side effects at all, or side effects so mild, they barely notice them.¹¹

7. Is there a tracking device in the vaccine injection?

This is a myth that has no basis in reality. Tracking chips like that exist in movies, but the reality is that GPS devices need a source of power. There are no nano-tracking abilities. Even if there were such a technology available to the mass market, it would be much too expensive for such widespread use.¹²

**For a vast majority of people,
the risks of contracting
COVID-19 far outweigh the
risks of receiving the vaccine.**

8. Can I stop wearing a mask and practicing social distancing after I receive the vaccine?

Unfortunately, we can only pack our masks away when our communities reach “herd immunity.” This will require about 75% of people to receive the shot or otherwise



become immune. That will take several months. As of early 2021, scientists expect that we will reach herd immunity by autumn of 2021.¹³

WHAT TO DO NEXT

If you want to move forward and be vaccinated, you will need to make an appointment. Appointments are being made available as our health care facilities and health departments receive doses.

STEP 1: If you have questions or concerns, contact your health care provider. They can also assist you in getting signed up for the vaccine through their partnerships.

STEP 2: Monitor the CRIS Facebook pages (search for CRIS Healthy Aging Center to find your county's page).

You can also visit your County Health Department's website:

CHAMPAIGN: c-uphd.org
(click on “Vaccine”)

VERMILION: vchd.org

STEP 3: Keep your appointment, and be sure you return for your second dose.

As always, stay safe, keep social distancing, and wear your mask!

IN CHAMPAIGN COUNTY:

CRIS Healthy Aging Center
1606 Willow View Rd, Suite 1E
Urbana, Illinois 61802
(217) 355-1543
facebook.com/
CRISHealthyAging
CenterofChampaign

AgeStrong.org

IN VERMILION COUNTY:

CRIS Healthy Aging Center
309 North Franklin Street
Danville, Illinois 61832
(217) 443-2999
facebook.com/CRISHealthyAging
CenterofVermilionCounty

Resources Cited

- 1 Understanding mRNA COVID-19 Vaccines. Dec 18, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/mrna.html>
- 2 Fiedler K, Lazzaro S, Lutz J, Rauch S, Heidenreich R. mRNA Cancer Vaccines. Recent Results Cancer Res. 2016;209:61-85. doi: 10.1007/978-3-319-42934-2_5. PMID: 28101688.
- 3 Jackson NAC, Kester KE, Casimiro D, Gurunathan S, DeRosa F. The Promise of mRNA Vaccines: A Biotech and Industrial Perspective. Npj Vaccines. 2020;5(1):1–6.
- 4 Coronavirus vaccine frontrunner Pfizer delivers key trial data – here’s where the other vaccines stand. November 10, 2020. <https://www.cnn.com/2020/11/09/coronavirus-vaccine-where-the-frontrunners-including-pfizer-stand.html>
- 5 Pfizer-BioNTech And Moderna Covid-19 Vaccines: Here Are 5 Differences. December 19, 2020. <https://www.forbes.com/sites/brucelee/2020/12/19/pfizer-biontech-and-moderna-covid-19-vaccines-here-are-5-differences/>
- 6 How the Johnson & Johnson Vaccine Works. Jonathan Corum, Carl Zimmer. Jan. 13, 2021. <https://www.nytimes.com/interactive/2020/health/johnson-johnson-covid-19-vaccine.html>
- 7 <https://www.statnews.com/2020/12/19/a-side-by-side-comparison-of-the-pfizer-biontech-and-moderna-vaccines/>
- 8 Oxford–AstraZeneca COVID-19 vaccine efficacy. December 8, 2020. [https://doi.org/10.1016/S0140-6736\(20\)32623-4](https://doi.org/10.1016/S0140-6736(20)32623-4)
- 9 Who should and shouldn’t get the COVID vaccine. <https://yalehealth.yale.edu/who-should-and-shouldnt-get-covid-19-vaccine>
- 10 Is the COVID Vaccine Safe? Lisa Lockerd Maragakis, M.D., M.P.H., Dr. Gabor David Kelen, M.D. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/is-the-covid19-vaccine-safe>
- 11 What to expect after getting the COVID vaccine. January 11, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/expect-after.html>
- 12 COVID-19 Vaccines Don’t Have Patient-Tracking Devices. Saranac Hale Spencer. December 15, 2020. <https://www.factcheck.org/2020/12/covid-19-vaccines-dont-have-patient-tracking-devices/>
- 13 Frequently Asked Questions about COVID-19 Vaccination. January 25, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html>



CRIS HEALTHY AGING CENTER
1606 WILLOW VIEW ROAD
SUITE 1E
URBANA, IL 61802