

# What You Should Know About the COVID-19 Vaccines

---

PRESENTED BY

DR. OTIS W. KIRKSEY

DIRECTOR OF PHARMACY SERVICES  
NEIGHBORHOOD MEDICAL CENTER

## COVID-19 Virus

The **severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)**” This name was chosen because the virus is genetically related to the coronavirus responsible for the SARS outbreak of 2003.

# COVID-19 Virus Stats

- **29,705,573 Cases in the U.S.**
- **537,936 Deaths**
- **20,337,959 Recovered**

# Those at High Risk for COVID-19 Infections

- People aged 65 years and older.
- People who live in a nursing home or long-term care facility.
  - Other high-risk conditions could include:
    - People with chronic lung disease or moderate to severe asthma.
    - People who have serious heart conditions.
    - People who are immunocompromised including cancer treatment.
    - People of any age with severe obesity (body mass index [BMI] >40) or certain underlying medical conditions, particularly if not well controlled, such as those with diabetes, renal failure, or liver disease might also be at risk.

# COVID-19 Vaccines

- COVID-19 vaccines help our bodies develop immunity to the virus that causes COVID-19 without us having to get the illness.
- Different types of vaccines work in different ways to offer protection, but with all types of vaccines, the body is left with a supply of “*memory*” T-lymphocytes as well as B-lymphocytes that will remember how to fight that virus in the future.

# COVID-19 Vaccines

- It typically takes a few weeks for the body to produce T-lymphocytes and B-lymphocytes after vaccination.
  - Therefore, it is possible that a person could be infected with the virus that causes COVID-19 just before or just after vaccination and then get sick because the vaccine did not have enough time to provide protection

# COVID-19 Vaccines

- **mRNA vaccines** (*Pfizer and Moderna*) contain material from the virus that causes COVID-19 that gives our cells instructions for how to make a harmless protein that is unique to the virus.
- **Protein subunit vaccines** include harmless pieces (proteins) of the virus that cause COVID-19 instead of the entire germ. Once vaccinated, our immune system recognizes that the proteins don't belong in the body and begins making T-lymphocytes and antibodies. If we are ever infected in the future, memory cells will recognize and fight the virus.
- **Vector vaccines** (*Johnson & Johnson, Astra*) 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 our cells, genetic material gives cells instructions to make a protein that is unique to the virus that causes COVID-19

# COVID-19 Vaccines

There are three available COVID-19 vaccines currently available in the U.S.

- Pfizer-BioNTech, requires 2-shot series 3 weeks apart.
- Moderna requires a 2-shot series 28 days apart, 94.1% effective in preventing COVID confirmed illness, 95% effective
- Johnson & Johnson, requires only one shot, 85% effective in preventing severe disease

# COVID-19 VACCINE SAFETY

Over 90 million injections of COVID-19 Vaccine have been given to over 30 million people. The most common side effects include:

- Pain or swelling on the arm where you received the shot
  - Fever
  - Chills
  - Tiredness
  - Headache
- 
- Severe Allergic Reactions (very limited number)

# COVID-19 Vaccine

## The Bottom Line

- People are still dying from COVID-19 Virus
- Black people account for 25 percent of those who have tested positive and 39 percent of the COVID-related deaths, while making up just 15 percent of the general population.
- It is critical that you take the necessary steps to protect yourself and other's from COVID-19.
  - .These steps include social distancing, wearing appropriate face mask, washing your hands, and avoiding large crowds (particularly indoors).
  - ***A major source of protection is getting vaccinated.*** Remember, all drugs have side effects, and you must weigh the benefits over the risks. The benefits of the COVID-19 vaccine far exceed the potential risk of experiencing its side effects.

## CDC Guidance: *What you can do if fully vaccinated*

### What's changed

1. You can gather indoors with fully vaccinated people without wearing a mask.
2. You can gather indoors with unvaccinated people from one other household (for example, visiting with relatives who all live together) without masks, unless any of those people or anyone they live with has an increased risk for severe illness from COVID-19.
3. If you've been around someone who has COVID-19, you do not need to stay away from others or get tested unless you have symptoms.
  - However, if you live in a group setting (like a correctional or detention facility or group home) and are around someone who has COVID-19, you should still stay away from others for 14 days and get tested, even if you don't have symptoms.

CDC  
Guidance:  
*What you can  
do if fully  
vaccinated*

## What's not changed

You should still take steps to protect yourself and others in many situations, like wearing a mask, staying at least 6 feet apart from others, and avoiding crowds and poorly ventilated spaces. Take these precautions whenever you are:

- In public
- Gathering with unvaccinated people from more than one other household
- Visiting with an unvaccinated person who is at increased risk of severe illness or death from COVID-19 or who lives with a person at increased risk

You should still avoid medium or large-sized gatherings.

You should still delay domestic and international travel. If you do travel, you'll still need to follow CDC requirements and recommendations.

You should still watch out for symptoms of COVID-19, especially if you've been around someone who is sick. If you have symptoms of COVID-19, you should get tested and stay home and away from others.

You will still need to follow guidance at your workplace.

---

# Questions

