



COVID-19 Vaccine

Answers to Your Questions

December 23, 2020



adopted from

THE SOCIETY
FOR POST-ACUTE AND
LONG-TERM
CARE MEDICINE™

Lots of Common Questions

- How do we know it's effective and safe?
- Is new vaccine technology is being used?
- What's a vaccine Emergency Use Authorization (EUA)?
- How long will protection last?
- What side effects to expect?
- What if I've already had COVID-19?
- Does the vaccine use live virus?
- Do I still need to wear a mask?

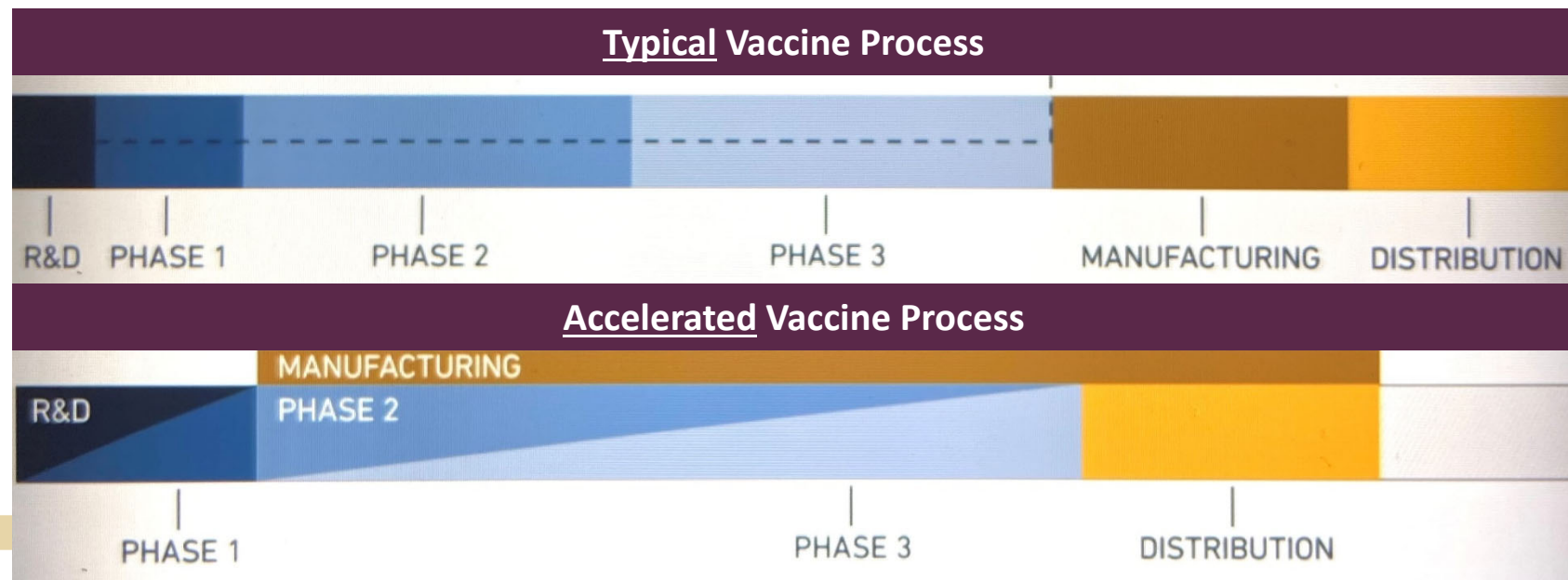


What to Know About the Vaccine

- 1st two are: Pfizer (BNT162b2) and Moderna (mRNA-1273)
- They do not contain the virus that causes COVID-19.
- **They are “mRNA” COVID-19 Vaccines.**
 - mRNA technology is new in vaccine production but is already being used in cancer treatment. It has been studied for more than 10 years.
 - mRNA vaccines give instructions for our cells to make a **harmless protein** found on the surface of the virus that causes COVID-19.
 - Our bodies recognize that this protein should not be there, so build antibodies that will remember how to fight the virus that causes COVID-19 if we are infected in the future.
- **Can mRNA vaccine give me COVID-19? NO**
- **Can mRNA vaccine change my DNA? NO**

What is an “Emergency Use Authorization” “EUA”?

- An **Emergency Use Authorization (EUA)** for a vaccine is based on the need to have a vaccine quickly to save lives during a public health emergency.
- An EUA does **NOT** imply authorization was done too quickly or the vaccine is not safe.
- EUA is a shorter process **but no steps are skipped in the safety evaluation process** and, in this case, many steps happened simultaneously.



Who was in the Vaccine Trials?

	Pfizer (BNT162b2)	Moderna (mRNA-1273)
# of people enrolled	Over 40,000	Over 30,000
Race and ethnicity of participants	Total 30% racially diverse 10% black 13% Hispanic	37% racially diverse 10% black 20% Hispanic/Latino
Older adults	45% were 56-85 years	23% were >65 years

(typical trials are *usually* 3,000-5,000)

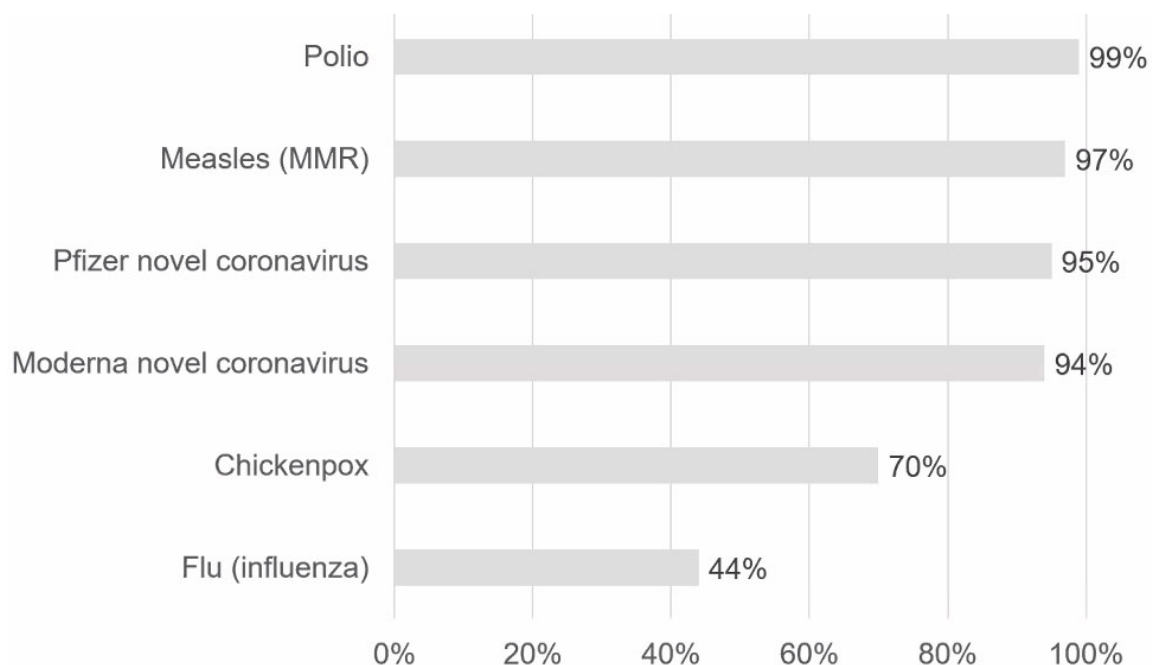
- **Notes:** Courtesy of Dr. Anuj Mehta, Data is accurate as of 11/18/2020. More information is constantly becoming available. Sub-group comparisons (e.g. comparisons about efficacy between races or age groups) may be less accurate due to smaller numbers. Sub-group numbers for the Pfizer vaccine are given for US participants with international percentages in parentheses.
- <https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine> <https://www.pfizer.com/science/coronavirus/vaccine>
- <https://investors.modernatx.com/news-releases/news-release-details/modernas-covid-19-vaccine-candidate-meets-its-primary-efficacy>
- https://www.modernatx.com/sites/default/files/content_documents/2020-COVID-Study-Enrollment-Completion-10.22.20.pdf

How Effective are the Vaccines?

Pfizer (BNT162b2)	Moderna (mRNA-1273)
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95% protection from having an infection	94.1% protection from having an infection
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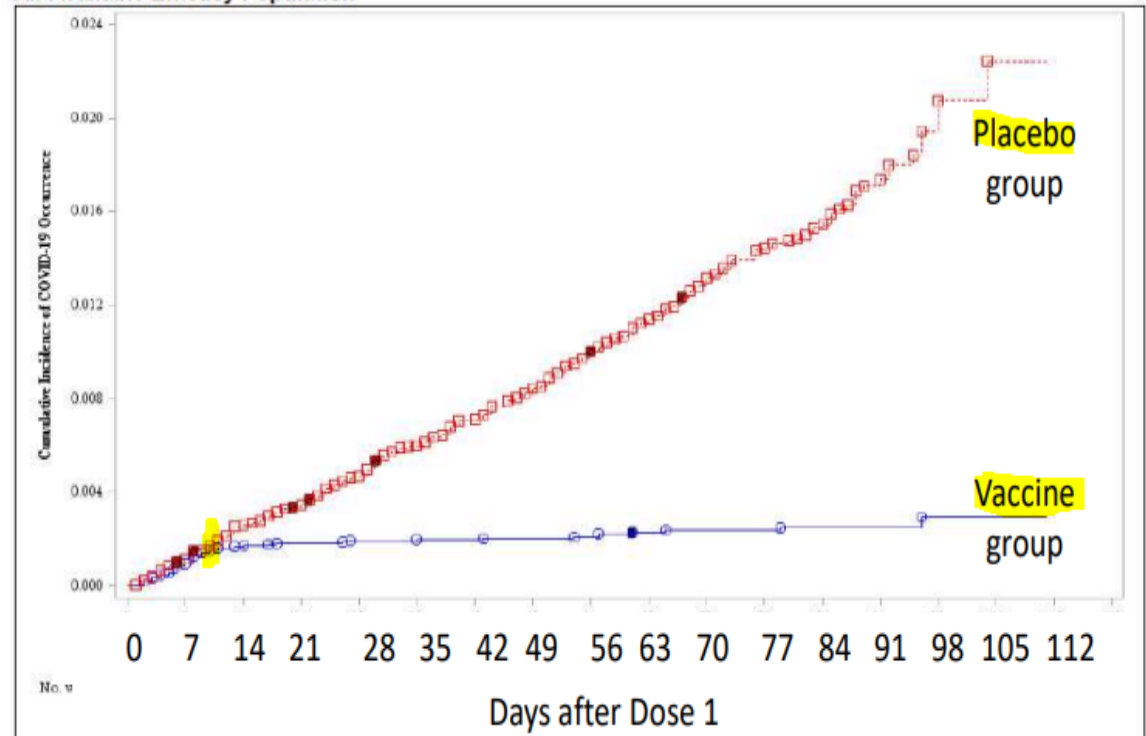
**Similar efficacy with
different race, ethnicity,
and age**



Days to Effectiveness?

- About 10-14 days after the 1st dose, rates of COVID in the placebo group continue to grow, the vaccine group goes flat. (Full protection 1-2 wks after 2nd dose.)

Figure 2. Cumulative Incidence Curves for the First COVID-19 Occurrence After Dose 1, Dose 1 All-Available Efficacy Population



What to Expect for Side Effects



- Side effects are okay! Your body is making antibodies.
- **Most felt no side effects** (except temporary injection-site pain).
- Likely side effects are mild-moderate and short term (24-48 hrs).
- Older adults had *fewer* side effects.
- **What *might* they be?** Some may have one or more of the following, more likely at 2nd dose:
pain at injection site, fatigue, muscle ache, headache, chills, fever, joint pain
 - Not a side effect: vomiting, diarrhea
 - No one had serious adverse effects and no effect that required going to a hospital
- Side effects could cause you to fail our regular screenings – so we will be thoughtful about the timing and how to screen post-vaccine.
- It will not cause you to test positive for COVID-19.

What to Expect for Side Effects

18-55 years						
	Dose 1			Dose 2		
	Mild	Moderate	Severe	Mild	Moderate	Severe
fever	6% (100.4° or+)			31% (100.4° or+)		
fatigue	6%	7%	1%	9%	23%	4%
muscle ache	4%	6%	1%	10%	17%	2%
headache	5%	3%	–	10%	15%	3%
chills	5%	2%	–	14%	15%	2%
joint pain	2%	2%	–	7%	9%	1%
pain at injection site	38%	31%	1%	38%	26%	1%

*CDC data here is for Pfizer and 'above placebo', meaning if the vaccine group has 1 and the placebo group had 1, there was 0% of that side effect being vaccine-related because it happened just as often whether you had the vaccine or the saline shot – so it was not determined to be vaccine-associated.

What to Expect for Side Effects

55 years and greater						
	Dose 1			Dose 2		
	Mild	Moderate	Severe	Mild	Moderate	Severe
fever	2% (100.4° or+)			21% (100.4° or+)		
fatigue	7%	5%	–	11%	20%	3%
muscle ache	4%	2%	–	9%	14%	1%
headache	6%	1%	–	15%	9%	–
chills	3%	1%	–	10%	9%	1%
joint pain	2%	1%	–	8%	7%	–
pain at injection site	47%	15%	–	40%	18%	1%

*CDC data here is for Pfizer and 'above placebo', meaning if the vaccine group has 1 and the placebo group had 1, there was 0% of that side effect being vaccine-related because it happened just as often whether you had the vaccine or the saline shot – so it was not determined to be vaccine-associated.

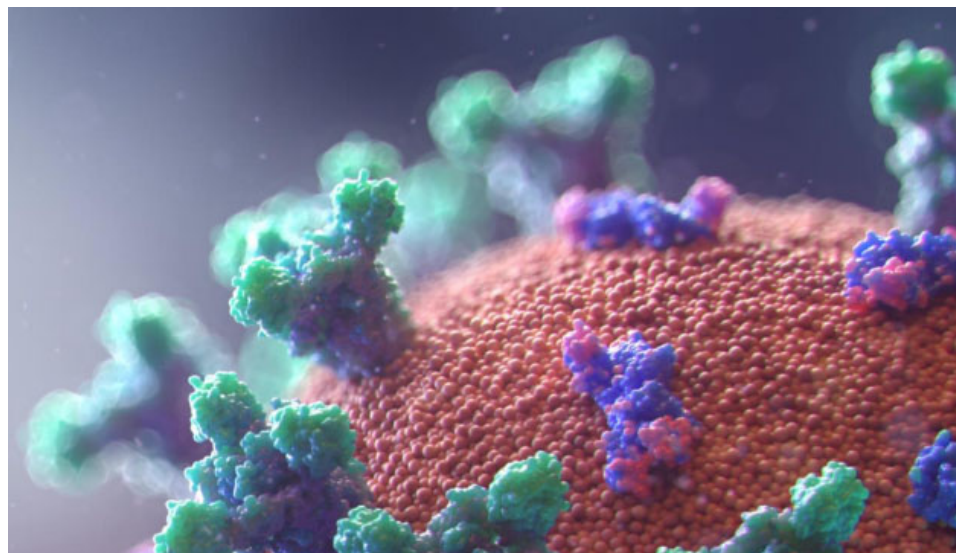
When and How Long Will it Work?

- The 1st dose *primes* the body, but it's effective about 1-2 weeks *after* the 2nd dose.
- We will not know how long the vaccine will be protective until more time passes in the current research, but we know that *right now* it is 94-95% effective.



What if I've Already had COVID-19?

- Vaccination is still *highly* recommended and will help with strong and long-term protection.



Will I Still Need to Wear a Mask?

- We will continue most of our COVID-19 precautions for the time being.
- As with other vaccines, a large number of people in the community will need to get vaccinated before transmission drops enough to stop the use of masks.
- It *may* be possible to be infectious to an unvaccinated person as your body successfully fights the virus in future.



Is it Safe?

- Safety is the *most important criteria* for vaccine approval. The FDA is using the same strict standards used for decades. No steps/phases were “skipped.”
- 2 separate **independent advisory boards** review the data and make recommendations. Committee members have no conflict of interest and aren’t associated with manufacturers.
- It will not cause you to test positive on PCR tests.
- **You cannot get COVID-19 from the vaccine.**
- There is no egg component used, so no egg-allergy concerns.
- There *may* be medical reasons the vaccine would ***not*** be recommended. These should be individually ‘risk/benefit’ reviewed with a person’s health care provider. Examples: Pregnant/breastfeeding – until more info is available, it may not be recommended. The Pfizer vaccine is recommended for 16yrs and up. Some people have medical histories of severe vaccine reactions. Active or very recent COVID cases will have waiting windows.
- We will monitor for side effects.

How Was it Developed so Fast?

Major reasons:

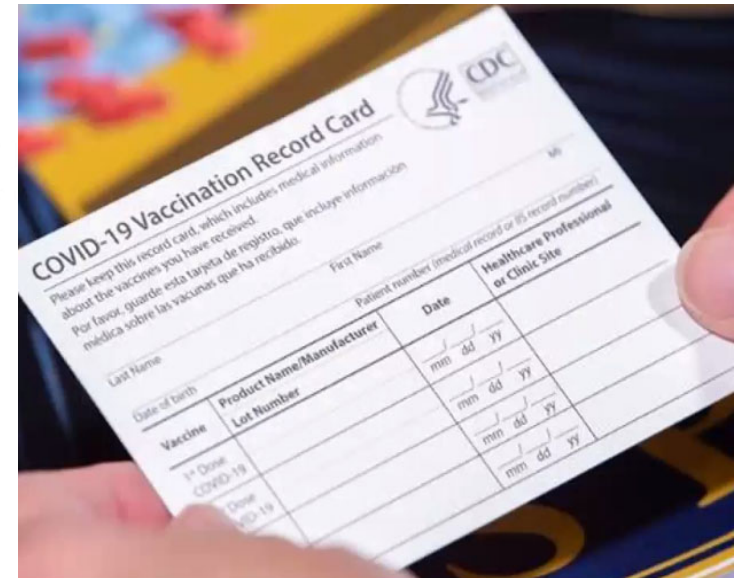
- Global effort with the world's leading scientists focused on a single task.
- Nearly unlimited resources (money, knowledge, manpower, technology).
- Existing research and tested mRNA design.
- A large pool of diverse adult volunteer trial participants.





Why Should I get Vaccinated?

- Escalating local COVID-19 spread.
- Most transmissions are by a/pre-symptomatic individuals.
- Severe risk to our residents and immune-compromised.
- To protect you and your loved ones and coworkers and residents.
- To set the example as a member of the health care community.
- To take advantage of our on-site clinic dates to make it as quick and convenient as possible.





That's All Folks!

Thank you for your time!

"If I really want to improve my situation, I can work on the one thing over which I have control - myself."

— **Stephen Covey**