

The Road to the COVID-19 Vaccine Development

The COVID-19 vaccine was created thanks to 15 years of research on coronaviruses. After many animal and human studies showed that the vaccine worked and was safe, it was approved for use.

Human studies happen in PHASES to make sure that vaccines are safe.



VACCINE DEVELOPMENT

- Making a vaccine starts in the lab
- It is tested on animals first
- If it's safe for animals, then we can test it on people



CLINICAL TRIAL PHASE 1

- Safety is most important
- Tested in a small group of volunteers
- What is the right amount of vaccine to use? (Dosage)
- Does the vaccine do anything we don't want it to do? (Side effects)
- If there are no serious side effects, we can go to Phase 2



CLINICAL TRIAL PHASE 2

- Tested in 100+ volunteers
- How much vaccine keeps us safe?
- What are the side effects we've seen so far?

CLINICAL TRIAL PHASE 3

- Tested in 1000s of volunteers
- Some people get the real vaccine
- Some people get a pretend vaccine (Placebo)
- We compare these two groups to make sure the vaccine is safe and that it works



FDA REVIEW

The Food and Drug Administration (FDA)

- The FDA makes sure the clinical trials were safe and done the right way according to the law
- The FDA looks at the results of the trials and makes sure the vaccine is safe and that it works

APPROVED VACCINE

FDA scientists and doctors look at all the information. If they decide the vaccine works and can be made safely, then the FDA approves the vaccine for everyone to have.



Did You Know?

1

Vaccines work!

They work with the body's natural defenses to help make you safe from the disease.

2

Some vaccines use an alive or dead virus. The COVID-19 vaccine does NOT use the virus – it just uses the **part** of the germ that makes our body recognize and fight off the virus.

3

Getting the COVID-19 vaccine will keep you safe from COVID in the future. Once 75% of our community receives the vaccine, the virus will stop spreading.

4

You can get information on COVID-19 studies that are happening at the University at Buffalo here: research.buffalo.edu/portal/clinicaltrial/

Information from www.cdc.gov/vaccines

Questions to Ask Your Provider or Pharmacist



Patient Voices
NETWORK

Brought to you by the Patient Voices Network

What are the side effects of this vaccine?

How often do I need to get this vaccine?

What are the ingredients of this vaccine?

Where can I get a vaccination?

What are the risks if I don't want to get the vaccine?

Does getting the vaccine make it safer for you to be around others who have COVID?

Clinical and Translational Science Institute

Clinical and Translational Research Center

875 Ellicott Street Buffalo, NY 14203 (716)-888-4850 ctsi@buffalo.edu

This program is supported by the National Center for Advancing Translational Sciences of the National Institutes of Health under award number UL1TR001412 to the University at Buffalo. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.