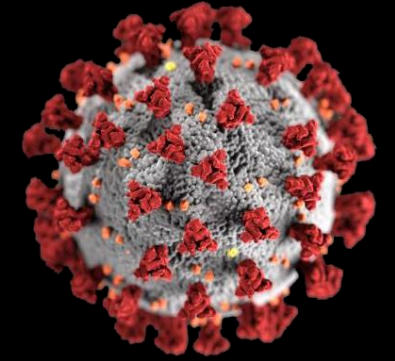




COVID-19 VACCINES

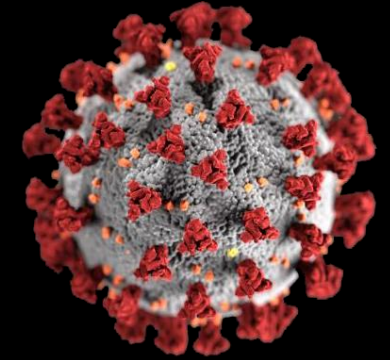
**Christine Pontus, MS, RN, COHN-S/CCM
Kevin Kavanagh, MD, MS**

INTRODUCTION



- Who we are
- Objectives of presentation
- Inform about the benefits of the vaccine
- Summarize adverse effects of these vaccines
- Offer resources
- Answer questions

OVERVIEW



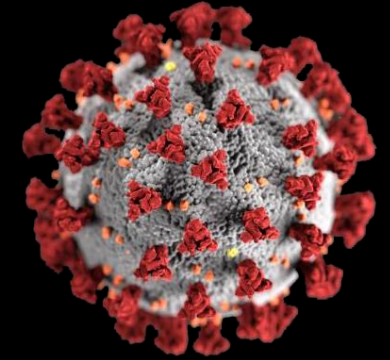
The FDA issued Emergency Use Authorizations for 2 COVID-19 vaccines:
Pfizer-BioNTech BNT162b2: 2 intramuscular doses \geq 21 days apart

Moderna messenger RNA (mRNA)-1273: 2 intramuscular doses \geq 28 days apart

Get the vaccine when available; participate in v-safe; help the CDC monitor for any AEs after vaccination

Share your experience with and answer questions for co-workers, friends, and family

ABOUT THE VACCINE



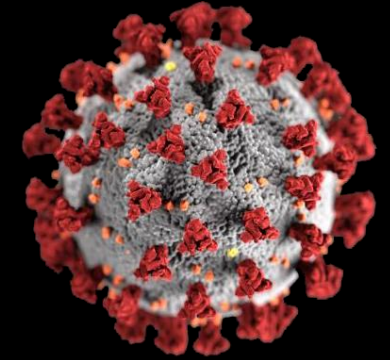
Fast-tracking COVID-19 vaccines involved starting manufacturing during ongoing clinical trials and prioritized FDA/CDC review and authorization.

COVID-19 vaccines adhere to the same safety standards as all vaccines,

Careful FDA review of all clinical trial safety data and close FDA/CDC monitoring of vaccine safety.

An Adverse Events process was established after vaccine authorization, utilizing new and existing systems (eg, Vaccine Adverse Event Reporting System).

MORE ABOUT THE VACCINE

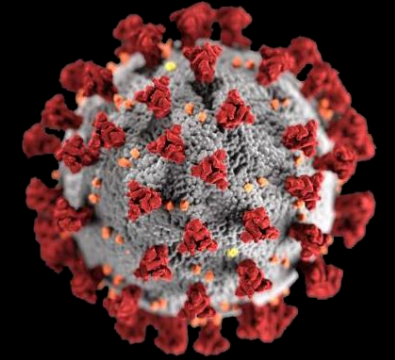


Both are mRNA vaccines

As mRNA vaccines do not contain live SARS-CoV-2, they cannot cause infection affect or interact with host DNA.

Works by enabling host cells to synthesize a harmless spike protein fragment for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and display it on their surface, stimulating immune response by protective antibodies.

COMMON SIDE EFFECTS OF THE VACCINE



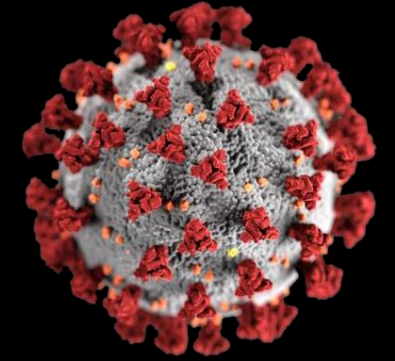
Side Effects of Covid-19, last about a day and appear more likely after the second dose. Early reports suggest some people might need to take a day off from work after receiving the second dose.

In the Pfizer study, about half developed fatigue.

Other side effects occurred in at least 25 to 33 percent of patients including:

- Pain or soreness at the injection site,
- Fever, chills, and
- Muscle pain.

BENEFITS OF VACCINE

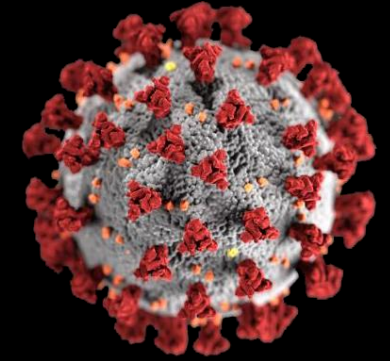


The COVID-19 vaccines help create an antibody immune response without risk for severe illness, reduce risk for infection and transmission, and protect from severe COVID-19.

COVID-19 vaccination is a safer way to build immunity than becoming infected, which has an unknown duration of protection.

Risks for severe COVID-19 illness and mortality far outweigh any benefits of natural immunity

CONTINUE WITH OTHER PRECAUTIONS



Although COVID-19 mRNA vaccines are highly effective,

They do not replace additional measures to limit transmission:

Proper mask wearing,

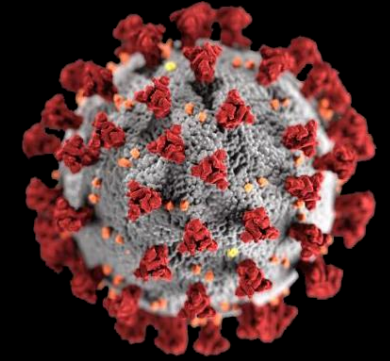
Avoiding close contact,

Social distancing,

Cleaning, disinfecting, and handwashing.

As immune response after vaccination takes several weeks to develop, a person could be infected with SARS-CoV-2 just before or just after vaccination and get sick.

COMMON QUESTIONS



Should I take the vaccine if I had Covid.

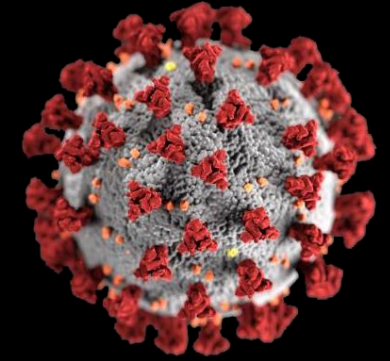
People who contracted SARS-CoV-2 may still benefit from vaccination, as reinfection may occur, and duration of immunity after recovery is unclear.

COVID-19 mRNA vaccination does not cause positivity on viral tests but might do so on some antibody tests, suggesting triggering of an immune response and some protection against the virus

Will the vaccine change my DNA? No it does not have the ability to change DNA.

Will the vaccine make me sterile? No studies show a greater risk without the vaccine.

CONSULT WITH YOUR HEALTHCARE PROVIDER TO DISCUSS THE RISKS AND BENEFITS



Individuals with a history of severe allergy to any vaccine or injectable medication

Pregnant women

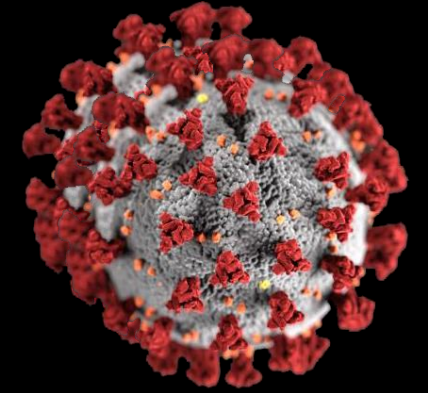
People with certain immune-compromising or autoimmune conditions

Breastfeeding women

People on anticoagulants

<https://media.chop.edu/data/files/pdfs/vaccine-education-center-covid-qa.pdf>

ADVERSE EVENTS



Adverse Events are rare

Clinical trial data (≥ 8 weeks) identified no significant safety concerns;

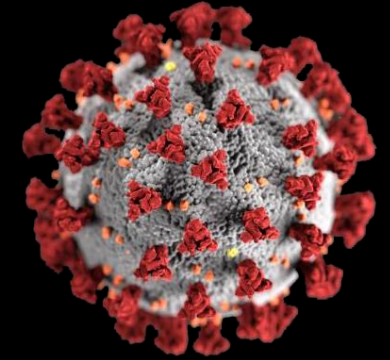
Adverse Events seldom appear > 8 weeks after vaccination

Occur more often after the second dose is given

More often in people with a history of allergic reaction and anaphylaxis

Severe allergic reaction to any ingredient in COVID-19 vaccine should not get vaccinated,

ADVERSE REACTIONS



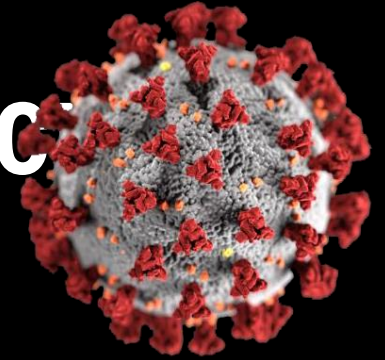
People with severe allergic reaction to other vaccines or injectable therapies should seek medical guidance.

During December 14–23, 2020, monitoring by the Vaccine Adverse Event Reporting System detected 21 cases of anaphylaxis after administration of a reported 1,893,360 first doses of the Pfizer-BioNTech COVID-19 vaccine (11.1 cases per million doses);

71% of these occurred within 15 minutes of vaccination.

DOI: <http://dx.doi.org/10.15585/mmwr.mm7002e1>

SHARPS SAFETY AND SAFE INJECTION PRACTICES



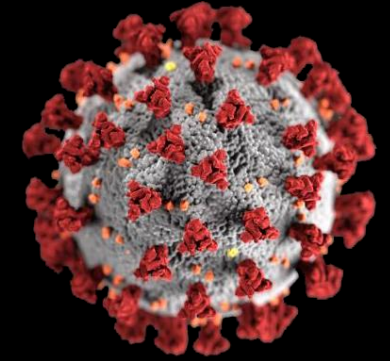
Employers must comply with OSHA's Bloodborne Pathogens Standard, 29 CFR 1910.1030 found at <https://www.osha.gov/laws-regs/regulations/standard-number/1910/1910.1030>

The standard requires, but is not limited to, the following:

Assess the risk of NSIs and blood exposures with frontline vaccinators at each vaccination location and document the assessment in the Exposure Control Plan.

Determination of exposure through a hazard assessment that evaluates the work environment and work practices conducted before the vaccination program is launched.

SHARPS SAFETY AND SAFE INJECTION PRACTICES CONTINUED



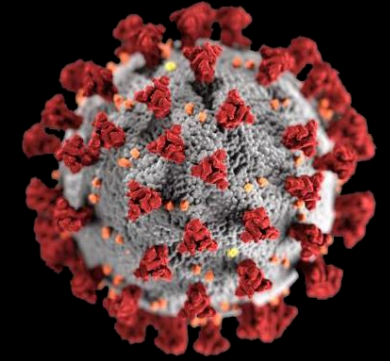
Engineering controls, ensuring that devices with sharps injury prevention features are evaluated, selected, and used.

Safe work practices are being used, such as immediate disposal of used needles and other sharps and prohibiting recapping.

Vaccinators are wearing appropriate gloves and other PPE based on the hazard assessment.

The Exposure Control Plan is available for all workers to access at any time during their shift.

RESOURCES



- Stop COVID-19 – Vaccine education and outreach materials
- Vaccine need-to-know fliers and posters
- Fliers about the distribution timeline
- Post-vaccine information from Pfizer and Moderna.
- Social media graphics

<https://www.mass.gov/info-details/stop-covid-19-vaccine-education-and-outreach-materials>

<https://www.cdc.gov/niosh/docs/97-111/default.html>

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7361071/>