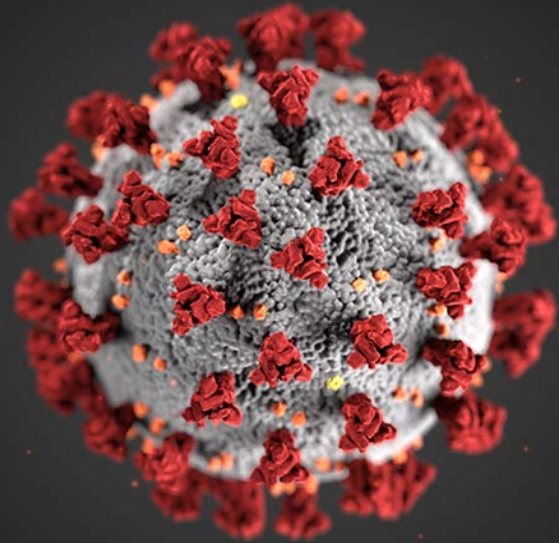# The Facts on the COVID-19 Vaccine
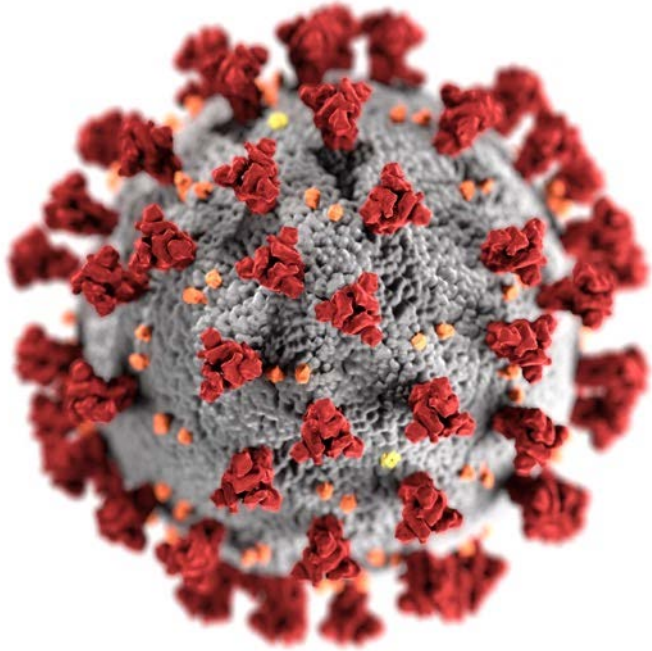
Cottage
Center for
Population Health

About COVID-19

- COVID-19 is an infectious disease caused by a novel coronavirus (SARS-CoV-2)
- The pandemic currently continues in our community and around the world
- Vaccines are now widely available, and they are safe and effective

COVID-19 Variants: Delta

- Delta has become the most common variant causing COVID-19

- Delta is very contagious

- Our current vaccines continue to work well against the Delta Variant

COVID-19 Variants: Omicron
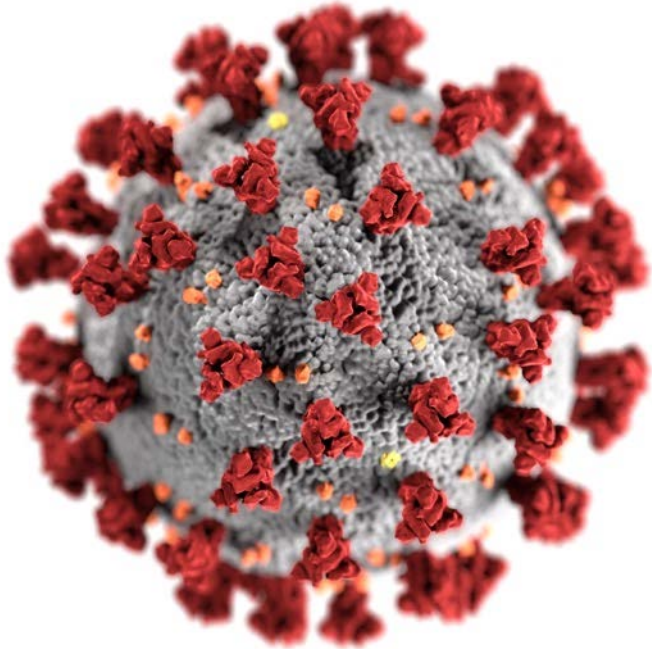
- New Variant of Concern identified by the World Health Organization

- Omicron variant is very contagious

- Continued monitoring and prevention efforts are critical

Who is Most at Risk for COVID-19?

Unvaccinated people are the most at risk of COVID-19, including the Delta Variant

- Unvaccinated communities, families, or households could experience outbreaks

- Vaccination is the best protection against Delta

How do the Vaccines Work? What is mRNA?

COVID-19 vaccines encourage the body to create copies of the spike protein found on the coronavirus's surface

This "teaches" the body's immune system to fight the virus that has that specific spike protein on it

mRNA = messenger RNA

- Teaches our bodies to recognize and fight COVID-19

- Cannot change your DNA

- Stays in the body for 1-3 days then dissolves

COVID-19 Vaccines and Boosters

Pfizer	Moderna	Johnson & Johnson
2 doses	2 doses	1 dose
3 weeks apart	4 weeks apart	-
5+	18+	18+
mRNA Vaccine	mRNA Vaccine	Viral vector
Booster at 6 months	Booster at 6 months	Booster at 2 months

As of November 30, 2021

Have the COVID-19 Vaccines Received Full FDA Approval?

Yes, the Pfizer COVID-19 vaccine now has full FDA approval for ages 16+

- Moderna and Johnson & Johnson vaccines have been approved by the FDA under Emergency Use Authorization

- For the full approval of Pfizer vaccine, the FDA conducted extensive data review on safety and effectiveness, inspection of manufacturing facilities, and a comprehensive review of all clinical and real-world use

Are the COVID-19 Vaccines Safe?

Yes, COVID-19 vaccines are safe and effective

- Very good safety monitoring and reporting programs are in place

- CDC and FDA monitor safety and the systems have worked well when there has been concern of a new or severe side effect

Do I need the Vaccine and a Booster if I have had COVID-19?

- Some natural protection after recovery from COVID-19
  - Even if you have already had COVID-19, you should still get the vaccine and booster to protect you from getting the virus again in the future

- COVID-19 can cause severe illness and death

- COVID-19 vaccination and boosters build immunity without the risk of severe illness

Does the COVID-19 Vaccine Affect Fertility?

The COVID-19 vaccine will not affect fertility for men or women

Medical organizations serving people of reproductive age, including adolescents, emphasize that there is no evidence COVID-19 vaccination causes a loss of fertility

Should You Get the Vaccine if You are Pregnant?

- COVID-19 vaccines are strongly recommended for all pregnant women

- Studies have confirmed vaccine safety and have shown just how dangerous COVID-19 can be during pregnancy

  – Pregnant women are at increased risk for COVID-19 and challenges during pregnancy

  – There is no evidence that COVID-19 vaccination causes problems with pregnancy, but COVID-19 infection during pregnancy is dangerous

Does the Vaccine Cause Miscarriage or Birth Defects?

No, COVID-19 vaccines do not increase the risk of miscarriage or birth defects

In research studies, the rates of miscarriage and birth defects are no different in women who have received the COVID-19 vaccine in comparison to women who have not received the vaccine

Are COVID-19 Vaccines Safe for Kids?

Yes, the Pfizer COVID-19 vaccine is approved for children ages 5 and older

A research study of more than 2,000 kids age 5-11 years old showed that vaccinated children had:

- 90% fewer infections than unvaccinated children
- Very high COVID-19 antibody levels, which means high levels of protection from the virus

Do Young Kids Need to be Vaccinated?

Yes, young children can get COVID-19, and vaccines can help to address risks

COVID-19 cases have increased nationally and locally among children

Children with COVID-19 are at risk of:
- Having a deadly complication called multisystem inflammatory syndrome (MIS-C)
- Transmiting the virus to adults, especially those who are elderly and/or immunocompromised
- Developing Long COVID

Will the COVID-19 Vaccine Cause Heart Inflammation?

- Myocarditis and pericarditis are inflammation in the heart

- Rare cases have been reported, after mRNA COVID-19 vaccination:
  - Especially in male adolescents and young adults
  - More often after the second dose
  - Usually within several days after vaccination

- Seek medical care if you experience chest pain, shortness of breath, or irregular heartbeat

- Patients can usually return to their normal daily activities after symptoms improve

Were the Vaccines Developed with Controversial Substances?
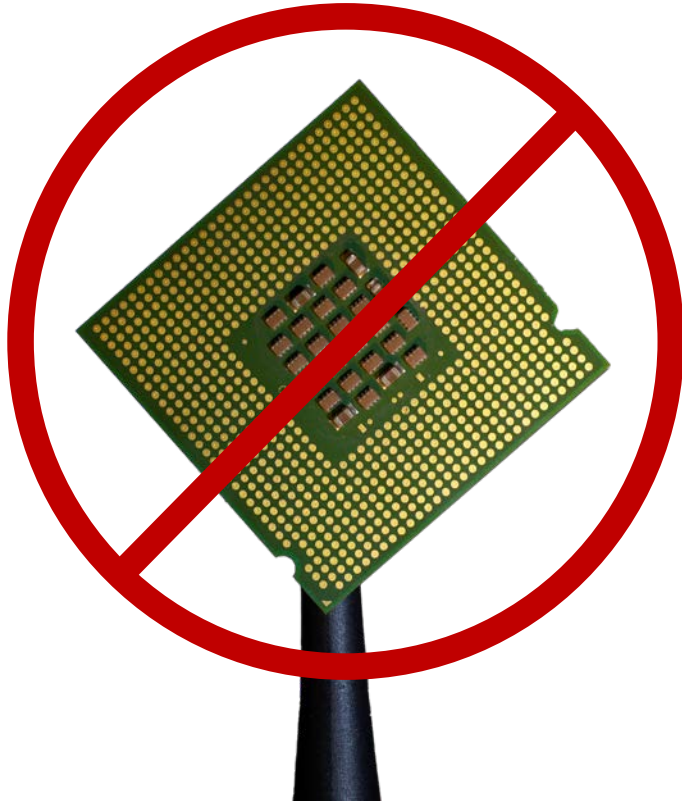
They do not contain any material, such as implants, microchips or tracking devices

The first two COVID-19 vaccines to be authorized by the FDA contain:
- mRNA
- other, normal vaccine ingredients, such as fats (which protect the mRNA), salts, as well as a small amount of sugar

These COVID-19 vaccines were not directly made or developed using fetal tissue

Source: hopkinsmedicine.org

What is a Booster Shot?

An additional dose of the vaccine boosts your immune response and protects you from the virus

Protection you get from a vaccine wears off over time for some viruses

Boosters are common for many vaccines

Who should get a COVID-19 Booster Dose?

People age 18 and older who received Pfizer or Moderna two-dose series at least 6 months ago

Everyone who received Johnson & Johnson single dose at least 2 months ago

For My COVID-19 Booster Dose, can I Mix and Match?

Mixing and matching is getting a different COVID-19 booster than your original vaccine

It is recommended to get the same booster as your initial vaccine, but you may mix and match based on your preference

Review & Questions

Presentation Sources

1. CDC: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/toolkits/community-organization.html
2. NEJM: *Addressing Vaccine Hesitancy in BIPOC Communities — Toward Trustworthiness, Partnership, and Reciprocity*
3. CDC: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html
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6. UC Health: https://www.uchealth.org/today/how-to-prepare-before-getting-a-covid-19-vaccine/
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