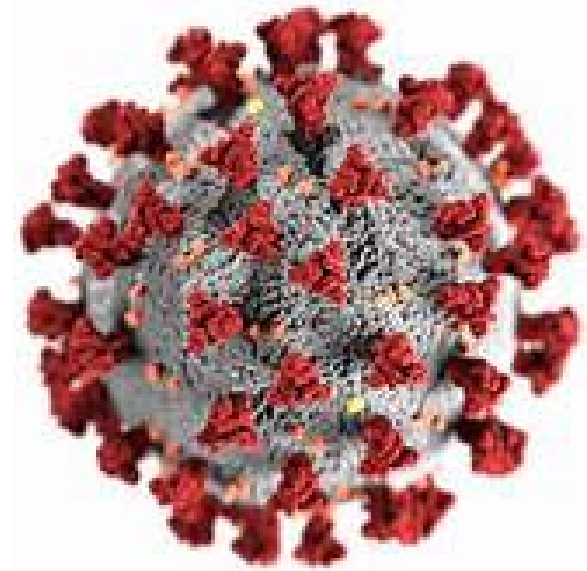


*Vaccine 101: History of
Vaccines and
Dispelling Myths*

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Learning Objectives:

1. Describe differences in types of vaccines and how the COVID-19 vaccine was developed.
2. Explain common vaccine myths
3. Describe bloom taxonomy of COVID – how changing factors can lead to the need for booster vaccines
4. Apply strategies for communicating uncertainty to patient populations

History of COVID-19

- Infectious disease caused by the recently discovered virus SARS-CoV-2 or coronavirus.
- Before the virus originated in Wuhan, China in December 2019, there was no information about this virus.
- Oldest common ancestor of coronavirus dates to the 9th century BC.
- The Great Flu Pandemic of 1918 was an exceptionally deadly global influenza pandemic caused by the H1N1 influenza A virus.
- 4 successive waves, infecting 1/3 global population-500 million; Estimates of deaths range from 17 million to 50 million, and possibly as high as 100 million, making it the 2nd deadliest pandemic after the Black Death bubonic plague of 1346–1353.

SYMPTOMS OF COVID-19



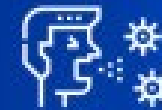
HIGH FEVER

The body temperature can exceed 37.3 Celsius degrees or 99 Fahrenheit degrees



TIREDNESS

The body feels completely tired and without energy to perform normal tasks

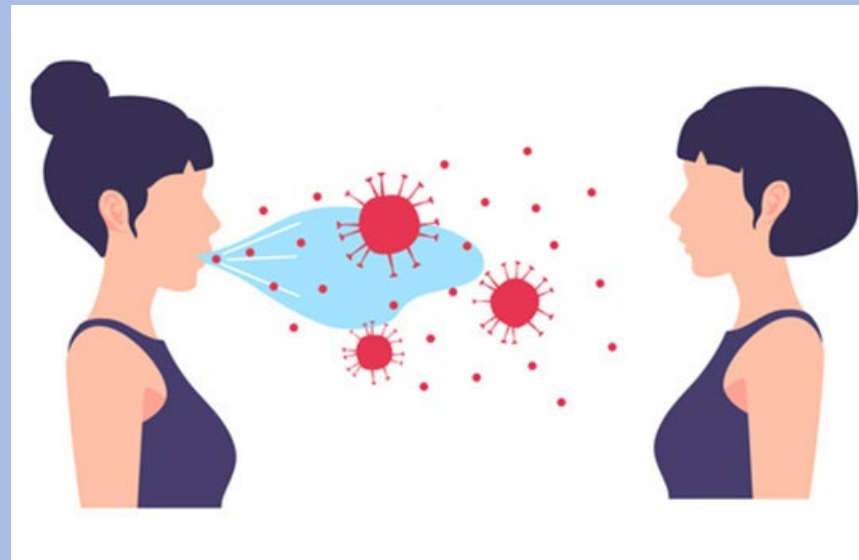


DRY COUGH

Irritation and constant coughing without expelling any mucus

Transmission: Social Distancing, Handwashing & Masks

- Spread from person-to-person through small droplets from the nose or the mouth when an infected person coughs, sneezes or exhales.
- Droplets land on surfaces, which means any person that touches the surfaces and then their eyes, mouth or nose can become infected.



Vaccines

- First, vaccines to fight infectious diseases have been used for generations.
- mRNA, what is it?
- Pfizer and Moderna: mRNA vaccines
- Johnson & Johnson: vector virus





Vaccine Schedules

- Pfizer

- 18 years and older
- Primary series: 2 doses, 3-8 wks apart
- 1st booster after 5 months
- 2nd booster after 4 months for 50 & over, other conditions

- Moderna

- 18 years and older
- Primary series: 2 doses 4-8 wks apart
- 1st booster after 5 months
- 2nd booster after 4 months for 50 & over, other conditions

An individual who received a Pfizer primary series can receive a Moderna booster; an individual who received a Moderna primary series can receive Pfizer booster.



Vaccine Schedules

- Pfizer

- 12-17 years
- Primary series: 2 doses, 3-8 wks apart
- One booster after 5 months

- Moderna

- 12-17 years
- Primary series: 2 doses 4-8 wks apart
- No booster recommended at this time

An individual who received a Pfizer primary series can receive a Moderna booster; an individual who received a Moderna primary series can receive Pfizer booster.

Vaccine Schedules

- Pfizer
 - 5- 11 years
 - Primary series: 2 doses, 3-8 wks apart
 - One booster after 5 months
- Moderna
 - 5-11 years
 - Not recommended



An individual who received a Pfizer primary series can receive a Moderna booster; an individual who received a Moderna primary series can receive Pfizer booster.

Vaccine Schedules

- Pfizer
 - 6 months to 4 years
 - Primary series: 3 doses,
 - 1st dose
 - 2nd dose 3-8 wks after 1st
 - 3rd dose 8 wks after 2nd
 - No booster recommended at this time

- Moderna
 - 6 months to 4 years
 - Not recommended



An individual who received a Pfizer primary series can receive a Moderna booster; an individual who received a Moderna primary series can receive Pfizer booster.

Common Vaccine Myths & Facts

MYTH: The ingredients in COVID-19 vaccines are dangerous.

FACT: Nearly all the ingredients in COVID-19 vaccines are also ingredients in many foods, fats, sugars, and salts.

MYTH: The natural immunity I get from being sick with COVID-19 is better than the immunity I get from COVID-19 vaccination.

FACT: Getting a COVID-19 vaccine is a safer and more dependable way to build immunity to COVID-19 than getting sick with COVID-19>



Common Vaccine Myths & Facts

MYTH: COVID-19 vaccines cause variants.

FACT: Vaccines do not create or cause variants of the virus that causes COVID-19. Instead, COVID-19 vaccines can help prevent new variants from emerging.

MYTH: The mRNA vaccine is not considered a vaccine.

FACT: mRNA vaccines work differently than other types of vaccines, but they still trigger an immune response inside the body. This type of vaccine is new, but research and development on it has been underway for decades.



Common Vaccine Myths & Facts



MYTH: COVID-19 vaccines contain microchips.

FACT: The vaccine DOES NOT contain microchips. Vaccines are developed to fight against disease and are not administered to track your movement.

MYTH: Receiving a COVID-19 vaccine can make you magnetic.

FACT: Receiving a COVID-19 vaccine will not make you magnetic, including at the site of vaccination which is usually your arm.

Common Vaccine Myths & Facts

MYTH: COVID-19 vaccines can alter my DNA.

FACT: Both mRNA and viral vector vaccines work by delivering instructions to our cells to start building protection against the virus. After the body produces an immune response, it discards all the vaccine ingredients just as it would discard any information that cells no longer need.

MYTH: A COVID-19 vaccine can make me sick with the virus.

FACT: The vaccines DO NOT contain the live virus, thus cannot make you sick with the virus. The immune process can cause symptoms, such as fever, very normal, sign that the body is building protection.



Common Vaccine Myths & Facts



MYTH: COVID-19 vaccines will affect my fertility.

FACT: No evidence shows that any vaccines, including COVID-19 vaccines, cause fertility problems. They are recommended for people who are pregnant, trying to get pregnant or may become pregnant in the future.

MYTH: Being near someone who received a COVID-19 vaccine will affect my menstrual cycle.

FACT: Your menstrual cycle cannot be affected by being near someone who received the vaccine. Many things affect cycles, including stress, changes in your schedule, problems with sleep and changes in diet/exercise.