



COVID-19 VIRUS & VACCINES

UPDATES

PRESENTERS:

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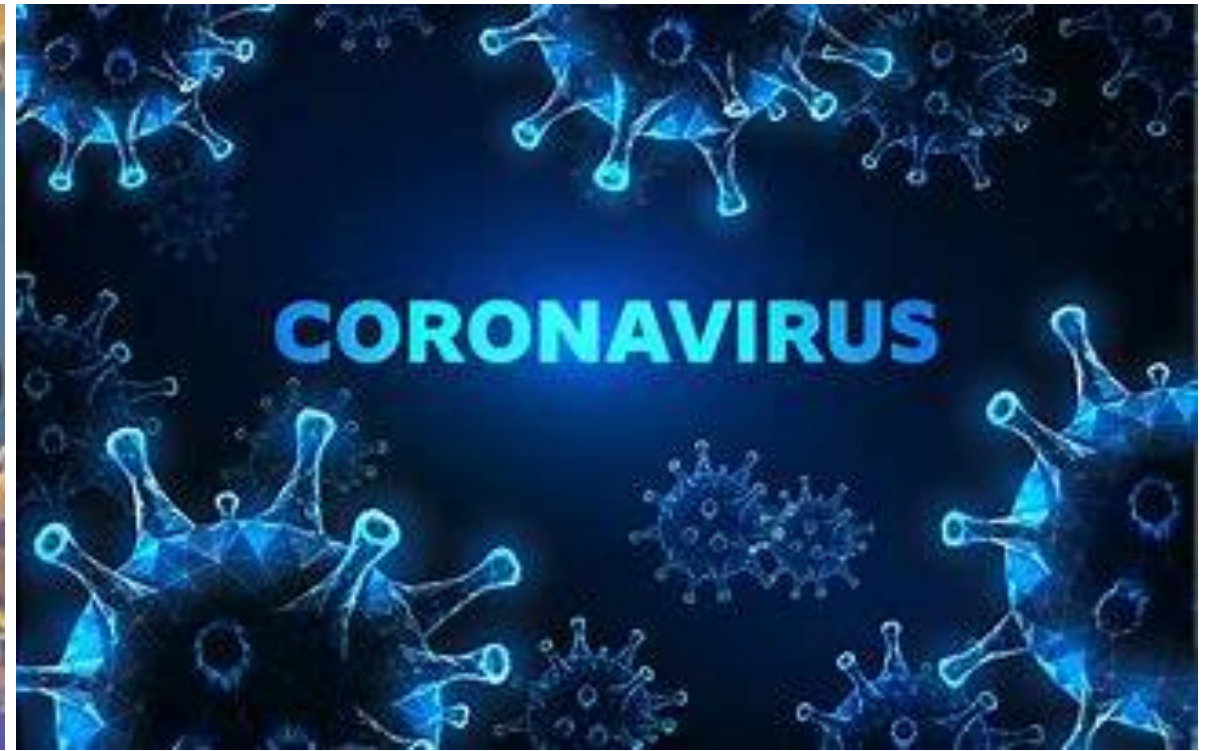
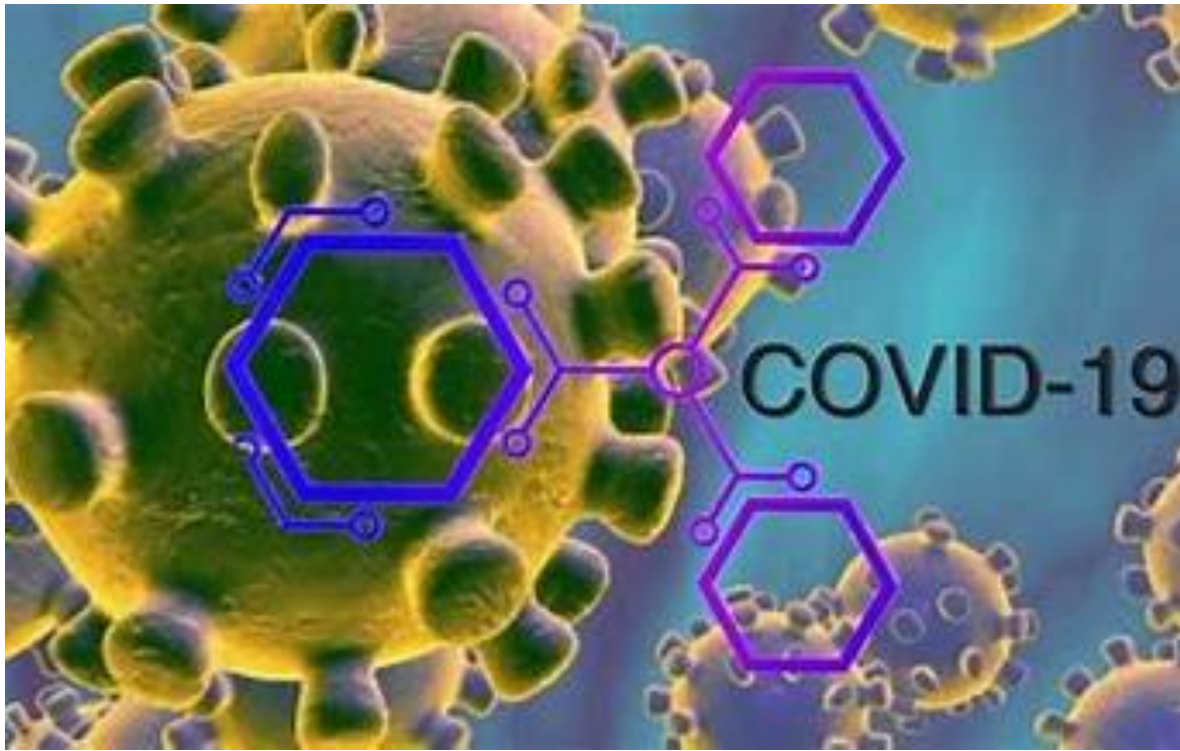
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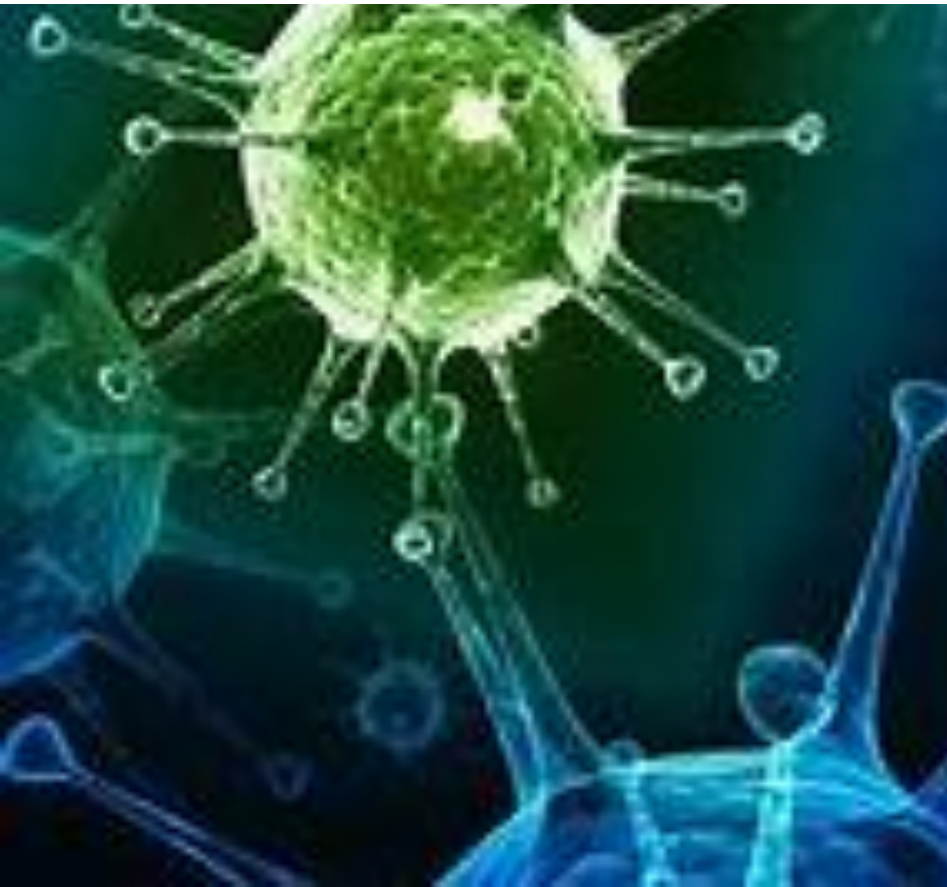


Catherine Sirangelo RN, CCRN-A, Associate Dean



COVID-19 VIRUS

DR. ABDULLAH



UNDERSTANDING COVID – 19:

- **What is it?**
 - Virus that has caused worldwide pandemic, call SARS-CO-V-2 or COVID-19
 - First identified in December 2019
- **How does it spread?**
 - Airborne virus spread person to person
- **Who is most at risk?**
 - Older individuals are most at risk due to less effective immune system
- **How to avoid being infected?**
 - Well fit mask, social distancing, washing hands

VIRUS VARIANTS

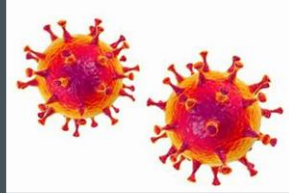
- Viruses constantly change through **mutation**, and new variants of a virus are expected to occur.
- Sometimes new **variants emerge and disappear**.
- Other times, new variants persist.
- Multiple variants of the virus that causes COVID-19 have been documented in the United States and globally during this pandemic.

■ CDC – June 2021

KNOWN VARIANTS

- United Kingdom B.1.1.7
- South Africa B.1.351
- Brazil P.1.
- California B.1.427 & B.1..429
- India (Delta) (Delta +)

VARIANTS.....



- Spread more easily from person-to-person
- Cause milder or more severe disease in people
- Are detected by currently available viral tests
- Respond to medicines currently being used to treat COVID-19
- Change the effectiveness of COVID-19 vaccines

■ CDC



VACCINES

- Overview of the different vaccines:
 - Pfizer: mRNA
 - Moderna: mRNA
 - Johnson & Johnson: Adenovector



MRNA

mRNA vaccine

SARS-CoV-2 virus



Spike protein

mRNA is made with instructions to make viral proteins

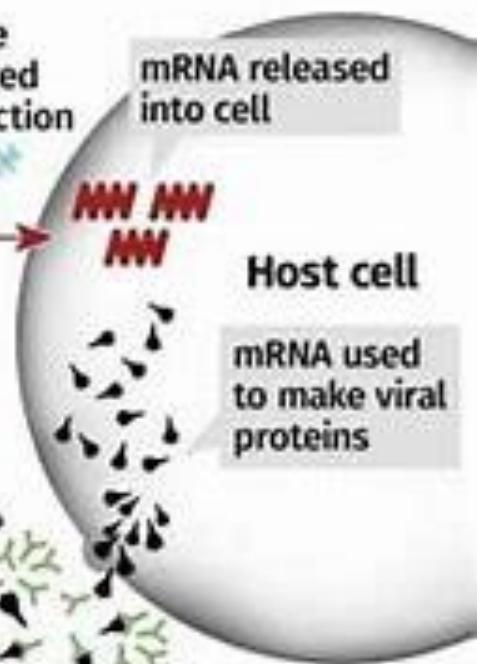
mRNA packaged in lipid nanoparticles



Vaccine delivered as injection



mRNA released into cell



Host cell

mRNA used to make viral proteins

Immune response



CBC NEWS

mRNA Vaccine

Components



mRNA (blueprint of protein)

Production



Faster because mRNA molecules are easier to produce

Process

Components are injected into the arm and serve as instructions for the body to make microbial protein

R & D

Antigen determined for immune stimulation



Result

Teaches the body to protect itself against a microbe



Traditional Vaccine

Components



Microbial protein or inactive microbe



Production

Slower and more difficult to produce the right type of protein

Process

Components are made in a lab and injected into the arm to stimulate immune response

NUMBERS COUNT

159 MILLION AMERICANS VACCINATED



- Nearly 84 million Americans have received the COVID-19 vaccine developed by **Pfizer** and **BioNTech**.
- More than 62 million Americans have received **Moderna's** vaccine.
- More than 12 million Americans have received the **Johnson & Johnson** vaccine.
- So far, the vaccines have appeared to be both highly effective and safe.

MYTHS VS. FACTS

1. **MYTH: COVID VACCINES WERE RUSHED, SO THEY COULD STILL BE UNSAFE.**
 - **FACT:** The speed of the vaccine creation was unprecedented but that doesn't mean researchers skipped steps. There were over 40,000 participants in each vaccine study.
2. **YOU CAN GET COVID-19 FROM THE VACCINE.**
 - **FACT:** The mRNA vaccines do not contain any part of the virus. You **CANNOT** get the virus from the vaccine.
3. **THE VACCINES CAN CHANGE YOUR DNA**
 - **FACT:** mRNA vaccines do not interact with a person's DNA. mRNA does not enter the nucleus of the cell...where DNA is located.

MYTHS VS FACTS

4. THE VACCINE CAN CAUSE INFERTILITY

- **FACT:** There is no evidence that getting vaccinated causes infertility.

5. YOU DON'T NEED THE VACCINE IF YOU HAVE ALREADY HAD THE VIRUS

- **FACT:** Those who have had COVID can still benefit from the vaccine.
 - CDC recommends waiting 30 to 90 days after recovery.

MYTH VS FACT

6. ONCE VACCINATED, YOU CAN'T SPREAD THE VIRUS.
 - **FACT:** Vaccine takes about 21 days to become effective. It is still unknown if the vaccine prevents the spread of the virus.
7. SEVERE REACTIONS ARE COMMON
 - **FACT:** Severe reactions are UNCOMMON. Mild reactions can be expected. Fever, body aches, mild rash, headache, pain at injection site.
8. YOU SHOULD WAIT AND CHOOSE THE VACCINE YOU WANT
 - **FACT:** There is no significant differences between Pfizer and Moderna. Whatever is available, you should get. Don't wait.

CAROL FASANO

- Anyone 12 years old or older who lives, works or studies in New Jersey can get a COVID-19 vaccine NOW.



GETTING THE VACCINE....

- Walgreens, CVS, Rite-Aid, and many other sites.
- VACCINE IS FREE.
- Bring ID
- Common side-effects



HOW AND WHERE TO MAKE AN APPOINTMENT

www.Hudsoncovidvax.org

- <https://covid19.nj.gov/>



COMMON SIDE-EFFECTS

- Pain or swelling at the injection site
- Mild Fever
- Headache

SOME COMMON SIDE-EFFECTS YOU MIGHT EXPERIENCE AFTER GETTING THE COVID-19 VACCINE



MILD
HEADACHES



PAIN OR
SWELLING
AT THE
INJECTION
SITE



MILD
FEVER



IRRITABILITY



HEALTH DISPARITIES & COVID VACCINE

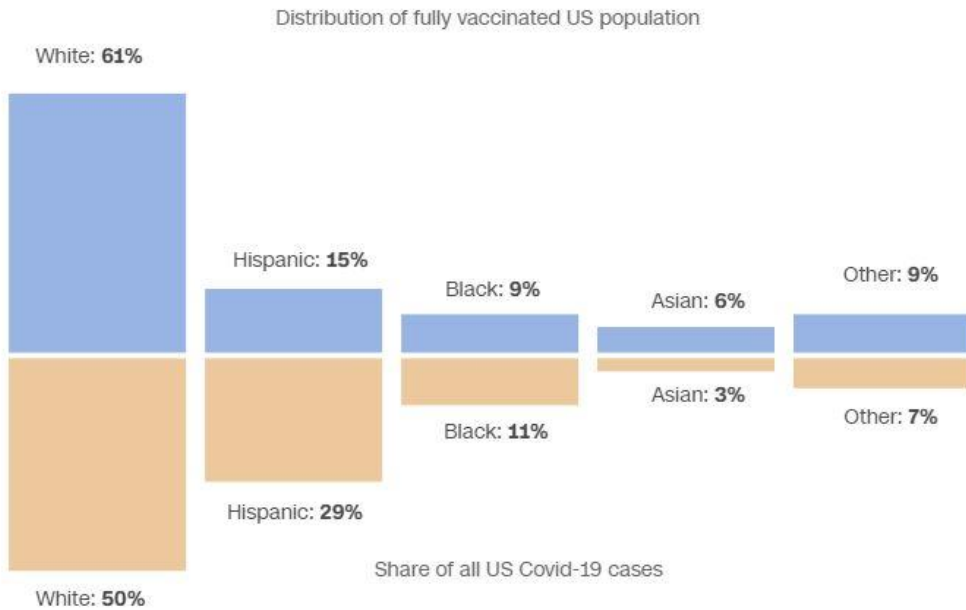
- WHO
 - WHY
 - WHAT CAN WE DO TO HELP
-
- Kathleen Smith-Wenning



HEALTH DISPARITIES DEFINITION

- Health disparities are **preventable differences** in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by **socially disadvantaged racial, ethnic, and other population groups, and communities.**

VACCINE DISPARITIES



Black and Hispanic communities have been particularly hard hit by the pandemic. About 29% of Covid-19 infections in the US were among Hispanic people, more than their 17% share of the total population — but Hispanic people have only received 15% of vaccinations. Similarly, more than 11% of Covid-19 cases have occurred among Black people, who make up 9% of all vaccinations.

WHAT CAN WE DO?

- Knowledge is power
 - Know the facts
 - Know your risks
 - Take control



MORBIDITY – POST COVID SYNDROME – NUMBERS HARD TO COUNT

- Common lingering symptoms that can linger include:
 - Fatigue
 - Difficulty breathing – shortness of breath impedes activities of daily living
 - Joint pain
 - Chest pain
 - Brain fog, including an inability to concentrate and impaired memory
 - Loss of taste and/or smell
 - Sleep issues
- Knowledge is power
 - Know the facts
 - Know your risks
 - Take control – wear a mask, social distance, wash hands and **get vaccinated**



FREQUENTLY ASKED QUESTIONS?

- Is one vaccine better than another?
- Can I choose which vaccine to get?
- Will a booster shot be needed every year?
- Do I still have to wear a face mask and social distance once I get a vaccine?
- Are vaccines effective against the variants of the virus?

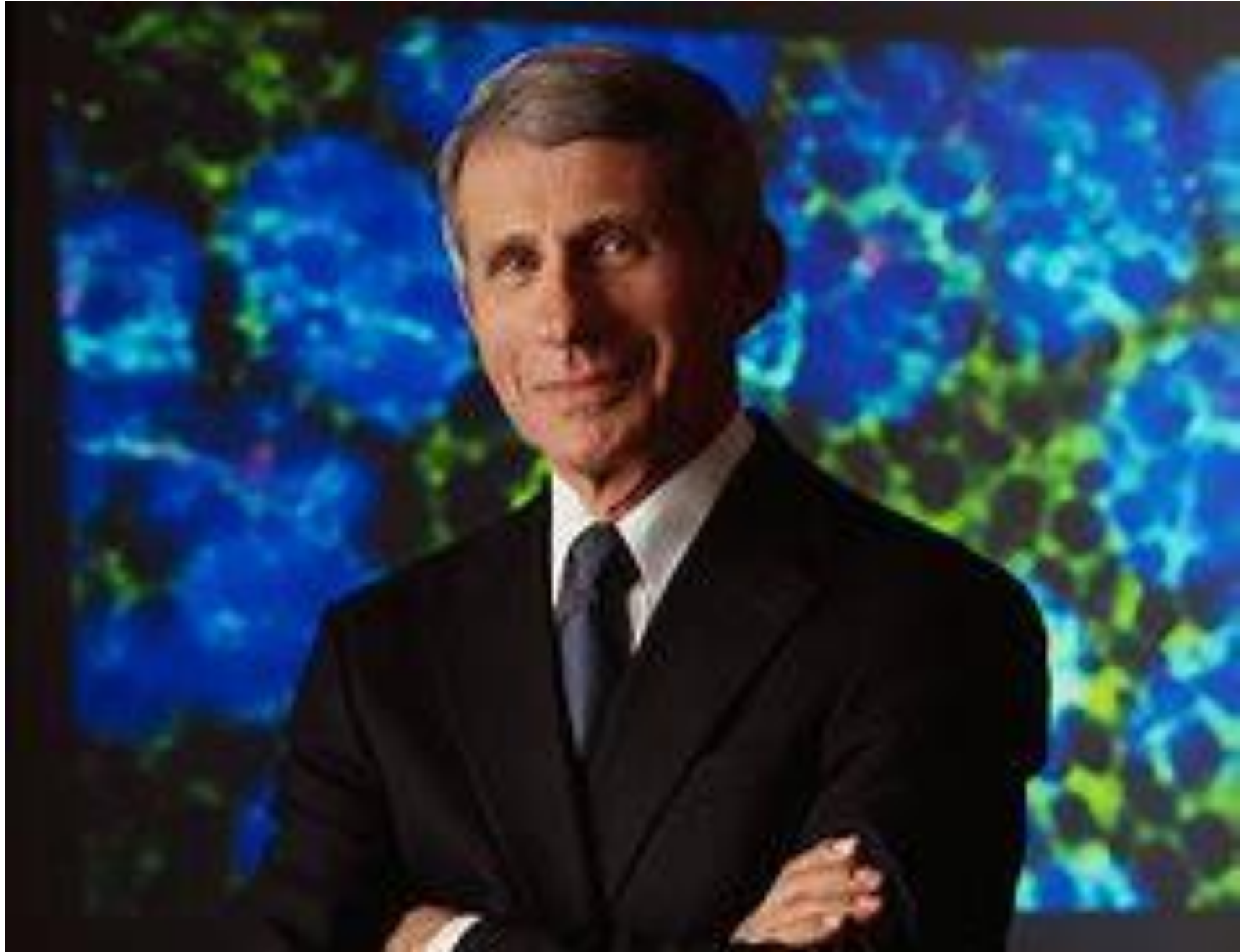
ONCE VACCINATED, THEN WHAT?

- How long does it take to become immunized?
- Can I still get COVID virus once vaccinated?
- Do I have to quarantine if I am exposed to COVID positive person?
- What is HERD immunity?



RESOURCES FOR INFORMATION

- www.Hudsoncovidvax.org
- WWW.CDC.GOV
 - [Frequently Asked Questions about COVID-19 Vaccination | CDC](#)
 - [8 Things to Know about the U.S. COVID-19 Vaccination Program | CDC](#)
- <https://covid19.nj.gov/>
 - [New Jersey COVID-19 Information Hub \(nj.gov\)](#)



CONTINUE TO STOP THE SPREAD

1

**WASH YOUR
HANDS
FREQUENTLY**

2

**WEAR A MASK
IF
UNVACCINATED**

3

**BE MINDFUL
OF PERSONAL
SPACE**

4

**STAY HOME IF
FEELING ILL**

WHAT WILL HCCC CONTINUE TO DO.....



Encourage

Encourage EVERYONE to be vaccinated

Masks

Provide masks for those who are unvaccinated or those who still wish to use a mask

Maintain

Maintain air quality; air purification and filtration

Provide

Provide hand sanitizers

RETURN TO CAMPUS TASKFORCE

- AFTER JULY 6TH, 2021
- NO MASK FOR THOSE WHO ARE VACCINATED
- NO SOCIAL DISTANCING REQUIREMENT



I GOT THE VACCINE.....ASK ME WHY.....

To protect myself.....

To protect my family.....

So I don't get so sick that I am hospitalized.....

So I can travel.....

So I can see my extended family.....

Because I want to do sports.....

<https://youtu.be/StKPZXHDtB0>

