

## VACCINE HESITANCY IN HCP: IS THERE A SOLUTION?

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Statewide Program for Infection Control and Epidemiology
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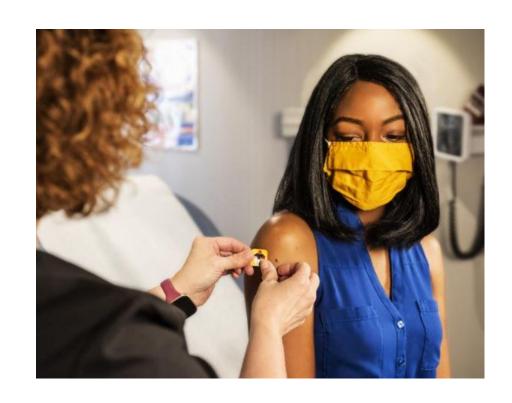
https://spice.unc.edu/ https://spice.unc.edu/ask-spice/ https://spice.unc.edu/webinar

## PRESENTATION OBJECTIVES

► Discuss Pfizer and Moderna mRNA COVID-19 vaccines

► Recognize factors leading to HCP hesitancy to receive the vaccine

► Discuss strategies for motivating HCP to get vaccinated



**CDC/Lauren Bishop** 



## **COVID-19 VACCINES IN THE UNITED STATES:**

► The First two Covid-19 Vaccines released by FDA, Emergency Use Authorizations (EUA), both 2 dose vaccines:

▶ Pfizer-BioNTec

► Moderna







## **COMPARISON OF MRNA VACCINES**

	Pfizer & BioNTech	Moderna	
Туре	mRNA (virus genetic code)	mRNA (virus genetic code)	
Antigen	Spike protein, 30 μg	Spike protein, 100 μg	
Doses	Two injections, 21 days apart	Two injections, 28 days apart	
Study participants	~44,000	~30,000	
Age	≥16 years	≥18 years	
Effectiveness	~95% (~50% after 1 dose)	ose) ~95%	
Long-term storage	-75 °C	-20 °C (up to 6 months)	
Administration	Intramuscular (IM)	Intramuscular (IM)	
Stability when mixed	6 hours	6 hours	

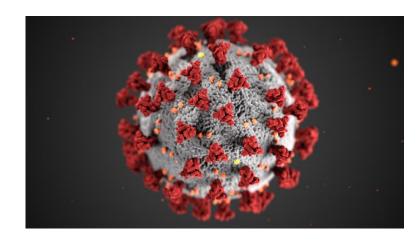


## WHAT ARE mRNA VACCINES?

► mRNA vaccines carry genetic material that teach our bodies to make a <a href="https://example.com/harmless">harmless</a> piece of "spike protein" which is found on the SARS-COV-2 Virus

 Our bodies recognize this protein and trigger an immune response (making antibodies against the virus)

► mRNA vaccines can't change DNA, do not enter the cell nucleus and do not cause COVID-19





## PHASED ALLOCATION OF COVID-19 VACCINES

## **Work Group considerations: Balancing Goals**

	Prevention of Morbidity and Mortality	Preservation of Societal Functioning
1a	LTCF residents	Health care personnel
1b	Persons 75 years and older	Frontline Essential Workers
1c	Persons 65-74 years; and Persons 16-64 with high risk medical conditions	Other Essential Workers

- Insure safety and effectiveness of COVID-19 vaccines
- Insure equity in vaccine allocation and distribution



## COVID-19 VACCINE PRIORITIES, NC DHHS, 14 JANUARY

## Group 1: Health care workers fighting COVID-19 & Long-Term Care staff and residents



Health care workers with in-person patient contact

Long-term care staff and residents—people in skilled nursing facilities, adult care homes and continuing care retirement communities

#### **Group 2: Older adults**



Anyone 65 years or older, regardless of health status or living situation

#### **Group 3: Frontline essential workers**

The CDC defines frontline essential workers as workers who are in sectors essential to the functioning of society and who are at substantially higher risk for exposure to COVID-19

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## Group 4: Adults at high risk for exposure and increased risk of severe illness

Anyone 16-64 years old with high-risk medical conditions that increase risk of severe disease from COVID-19 such as cancer, COPD, serious heart conditions, sickle cell disease, Type 2 diabetes, among others, regardless of living situation

Anyone who is incarcerated or living in other close group living settings who is not already vaccinated due to age, medical condition or job function

Essential workers not yet vaccinated. The CDC defines these as workers in transportation and logistics, water and wastewater, food service, shelter and housing (e.g., construction), finance (e.g., bank tellers), information technology and communications, energy, legal, media, public safety (e.g., engineers) and public health workers

Group 5: Everyone who wants a safe and effective COVID-19 vaccination



## **POTENTIAL SIDE EFFECTS**

- Inform about the potential side effects and that they are normal
- Potential Side Effects:
  - Local: pain, redness, swelling at the injection site
  - Systemic: fever, muscle or joint aches, malaise
- ▶ Generally occur within 1-3 days following vaccine and resolve within 1-3 days of onset
- May be more pronounced after the second dose

### Reactogenicity reported to v-safe

Local and systemic reactions, day 0-7*,†	All vaccines %	Pfizer- BioNTech dose 1 %	Pfizer-BioNtech dose 2 %	Moderna dose 1 %
Pain	70.7	67.7	74.8	70.1
Fatigue	33.4	28.6	50.0	29.7
Headache	29.4	25.6	41.9	26.0
Myalgia	22.8	17.2	41.6	19.6
Chills	11.5	7.0	26.7	9.3
Fever	11.4	7.4	25.2	9.1
Swelling	11.0	6.8	26.7	13.4
Joint pain	10.4	7.1	21.2	8.6
Nausea	8.9	7.0	13.9	7.7

<sup>\*</sup>v-safe data lock point 1/14/2021, 5:00 AM ET



<sup>&</sup>lt;sup>†</sup> Reported on at least one health check-in completed on days 0-7 after receipt of vaccine

## PREVIOUS COVID-19 INFECTION AND VACCINE

- ► The CDC recommends that all eligible people receive the COVID-19 vaccine regardless of having prior infection
- ► Clinical trials showed antibody response to vaccine <u>was superior</u> to having the infection

- ▶ If you have recently been diagnosed/tested positive, you should wait until you have recovered from COVID-19 (precautions have been discontinued, per CDC guidelines)
  - ▶ If treated with monoclonal antibodies or convalescent plasma, should wait 90 days



### **VACCINE UNKNOWNS AT THE PRESENT TIME:**

- ▶ 1) Safety and efficacy in subgroups (children, pregnant and lactating women, immunocompromised persons)
- ▶ 2) Duration of protection
- ▶ 3) Effectiveness when co-administered with other vaccine (separate vaccines by 2 weeks)
- ▶ 4) Impact of prior receipt of monoclonal antibodies (avoid vaccine for 90 days)
- ► 5) Long term safety
- ▶ 6) Potential requirement for booster doses or new vaccines at some future time

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## **AFTER THE VACCINE: WHAT HAPPENS?**

- Limited information on how much the vaccine might reduce transmission and how long protection lasts
- ► CDC continues to recommend vaccinated persons should continue to follow <u>current</u> <u>guidance</u> to protect themselves and others, including wearing a mask, staying at least 6 feet away from others, avoiding crowds, avoiding poorly ventilated spaces, covering coughs and sneezes, and washing hands often.
  - ► However, vaccinated persons with an exposure to someone with suspected or confirmed COVID-19 are not required to quarantine if they meet CDC criteria
- ► Added, as contingency strategies options to allow (2/14)
  - Symptomatic fully vaccinated HCP who have had a higher-risk exposure to SARS-CoV-2 but are not known to be
    infected to continue to work onsite throughout their 14-day post-exposure period.



## **STILL IMPORTANT!**

## Remember the 3 W's









cdc.gov/coronavirus

CS319747-B 08/31/2020

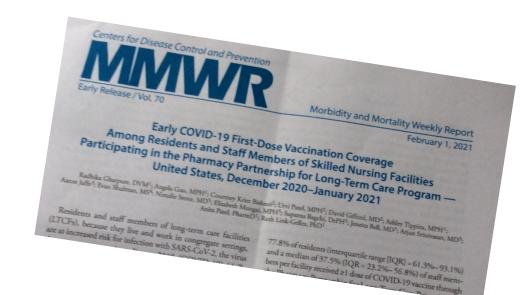


## Vaccine Hesitancy among HCP



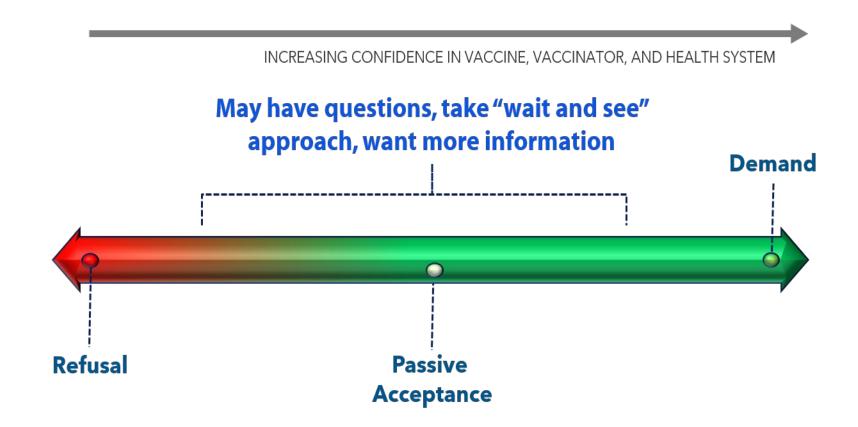
## **VACCINE HESITANCY IS REAL**

- ▶ Published February 1<sup>st</sup>, 2021
- Studied receipt of vaccine in first month of Pharmacy Partnership for LTC Program with data from NHSN and CMS
- ▶ 77.8 % of residents and 37.5% of staff members per facility received ≥1 dose of vaccine through Pharmacy Partnership for LTC Program





## **VACCINE HESITANCY**



https://www.cdc.gov/vaccines/covid-19/health-systems-communication-toolkit.html#slides



## **EXPLANATIONS FOR HESITANCY**

- ► First line..."guinea pig"
  - ▶ HCP in first group to receive the vaccine due to their essential role in fighting the pandemic, risk for getting COVID-19 and potentially spreading to others including patients, residents, family, friends and those in the community
- ► Vaccines were rushed
- ► Uncertain if vaccine works, long term effects ("wait and see how others do")
- ► Uncertain of side effects, out of work
  - ▶ Out of work



## **EXPLANATIONS FOR HESITANCY**

- ► Related political, cultural, social, and historical reasons
  - ▶ Disparities due to where one may live, access to health care, internet access, access to the vaccine, lack of trust in the system
- ► Not known how long protection lasts

- ► Social media, misinformation
  - ► <u>Myths</u>: alters my DNA, made from fetal tissue, government has it microchipped, affects fertility- currently no evidence to support



"You have a system of checks and balances and there are guidelines, there's ethical standards, there's review boards, there's the FDA that has to approve of everything that has been done."

> Dr. Ernest Grant, president of the American Nurses Association, participating in the COVID-19 vaccine phase three clinical trials hosted by UNC researchers. UNC SCHOOL OF MEDICINE

https://www.newsobserver.com/news/local/article247776740.html





## Durham's Miss Marcella becomes first in the country to get COVID-19 Vaccine from Walgreens

Marcella Thompson, "Miss Marcella," recently received first dose on Good Morning America. Well known and respected African American community leader best known for her leadership in the Mustard Seed Project.

### Her message to her community:

"If they see Miss Marcella doing this, Miss Marcella who they know, Miss Marcella who they respect is getting this vaccination, then we can save a lot of people."

"You must protect yourself. If you don't want to get it for you, get it for your auntie, get it for your mama, your cousin. Get it for me."

https://www.msn.com/en-us/news/us/durham-s-miss-marcella-becomes-first-in-the-country-to-get-covid-19-vaccine-from-walgreens/ar-BB1dCOBS?ocid=spartan-dhp-feeds



# Strategies For Motivating HCP To Get Vaccinated



## STRATEGIES FOR MOTIVATING HCP TO GET VACCINATED



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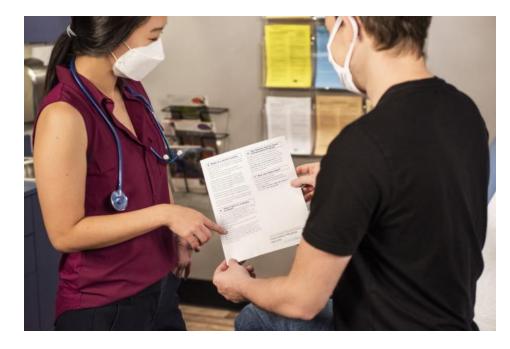
- ► <u>Leaders, managers, administrators</u> get vaccinated to protect yourself and others from the virus
  - ▶ Set example, share your reasons and encourage others to do so
  - ► Honest discussions that vaccine, protects you, family, keeps patients/residents safe/help stop spread in the community
  - Work with representatives from all departments for sharing of ideas
- ▶ Identify "<u>vaccine champions</u>" in your facility to promote the vaccine
  - Positive and energetic
  - ► Tell their reasons why they got vaccinated
  - Who they are protecting
- Infection Preventionist of facility get vaccinated and promote with photos, news articles



## **COMMUNICATION**



- ► Key to gaining trust and understanding
  - Worries/concerns about the vaccine often impact people's willingness to get vaccinated so <u>address them fully in a</u> <u>respective manner</u>
  - Ask, listen, acknowledge fears, lack of confidence
  - Address questions, use accurate sources, relate what is true
  - Communicate regarding updates, any news
  - ► Educate on other key concerns, details of how and when to get vaccine, no cost



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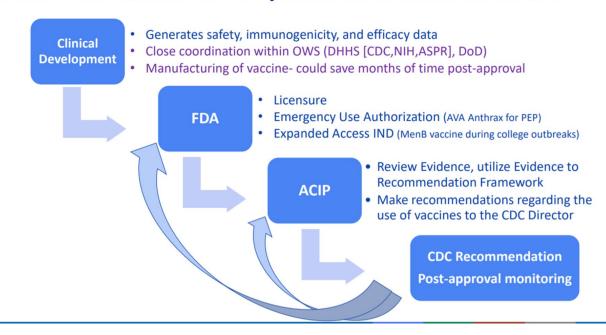
Photo Credit: Lauren Bishop



## **EDUCATION**

- Educate HCP about COVID-19 vaccines
- How developed and monitored for safety
- Address questions, use good sources, what is true
- ► Feedback
- Know your audience, how they best learn, what is affective within your facility

#### Path from clinical development to recommendation



K. Dooling, ACIP 6/24/2020



## STRATEGIES TO IMPROVE COMPLIANCE

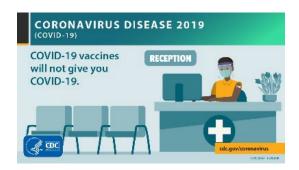
- ▶ Strategies from NC facilities and HCP, what has helped:
  - ► FAQs sheets for staff, key details
  - ▶ One-on-one education at time of vaccination
  - ▶ Posters/ educational materials from CDC, NCDHHS
  - Photo gallery of staff who have received vaccine
  - Staff meetings recognition and acknowledgment of vaccination
  - ▶ Buttons, lanyards
  - Small tokens (ice cream lollipops)





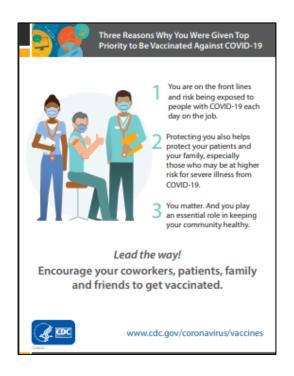


## **CDC TOOLS AND RESOURCES**









https://covid19.ncdhhs.gov/vaccines/covid-19-vaccine-communications-toolkit



## COVID -19 Vaccinations Perspectives from a Nursing Home CNA













### REFERENCES

https://www.cdc.gov/vaccines/covid-19/

https://covid19.ncdhhs.gov/dashboard

https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines

https://www.vaccines.gov/diseases/covid/8-things



## Questions??



