

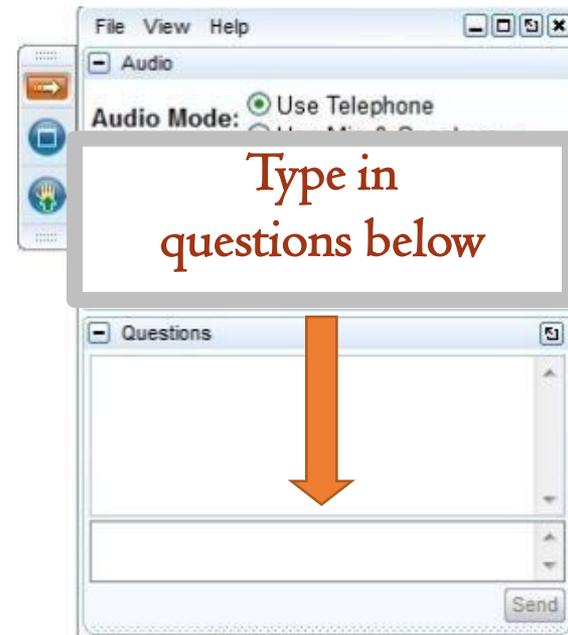


Addressing Vaccine Hesitancy and COVID-19

March 1, 2021

House Keeping

- Because this is a webinar, attendees are muted
- Please type any questions you have into the Questions Box
- We are recording this webinar and the recording and slides will be available in our Webinar Library.



Speakers

Marwan Haddad, MD, MPH, AAHIVS
Medical Director-Center for Key Populations
Community Health Center, Inc.

Kasey Harding, MPH
Director-Center for Key Populations
Community Health Center, Inc.

What you need to know about the Covid – 19 Vaccine

Marwan Haddad MD, MPH, AAHIVS
Kasey Harding MPH



Who We Are: CHC, Inc.



CHC Profile:

- Founding year: 1972
- Locations: 14
- Patients/year: 100,000

THREE FOUNDATIONAL PILLARS

1 Clinical Excellence	2 Research and Development	3 Training the Next Generation
--------------------------	-------------------------------	-----------------------------------

CHC Locations in Connecticut



Who We Are: CKP



The Center for Key Populations (CKP) is first center of its kind that focuses on key groups who experience health disparities secondary to stigma and discrimination and who belong to communities that have suffered many barriers to healthcare.

The Center brings together healthcare, training, research, and advocacy for: **People who use drugs, the LGB and Transgender populations, the homeless and those experiencing housing instability, the recently incarcerated, and sex workers.**



HIV Primary Care & Testing

Hepatitis C Screening and Treatment

Medication Assisted Treatment for Substance Use Disorders

Health Care for the Homeless

LGBTQ-focused Health Care

Community Drop-In Center

HIV PrEP (Pre-Exposure Prophylaxis and PEP Post-Exposure Prophylaxis)

Sexually Transmitted Infections

CENTER FOR KEY POPULATIONS — *Reimagining Primary Care*



Vaccine Hesitancy: Definition

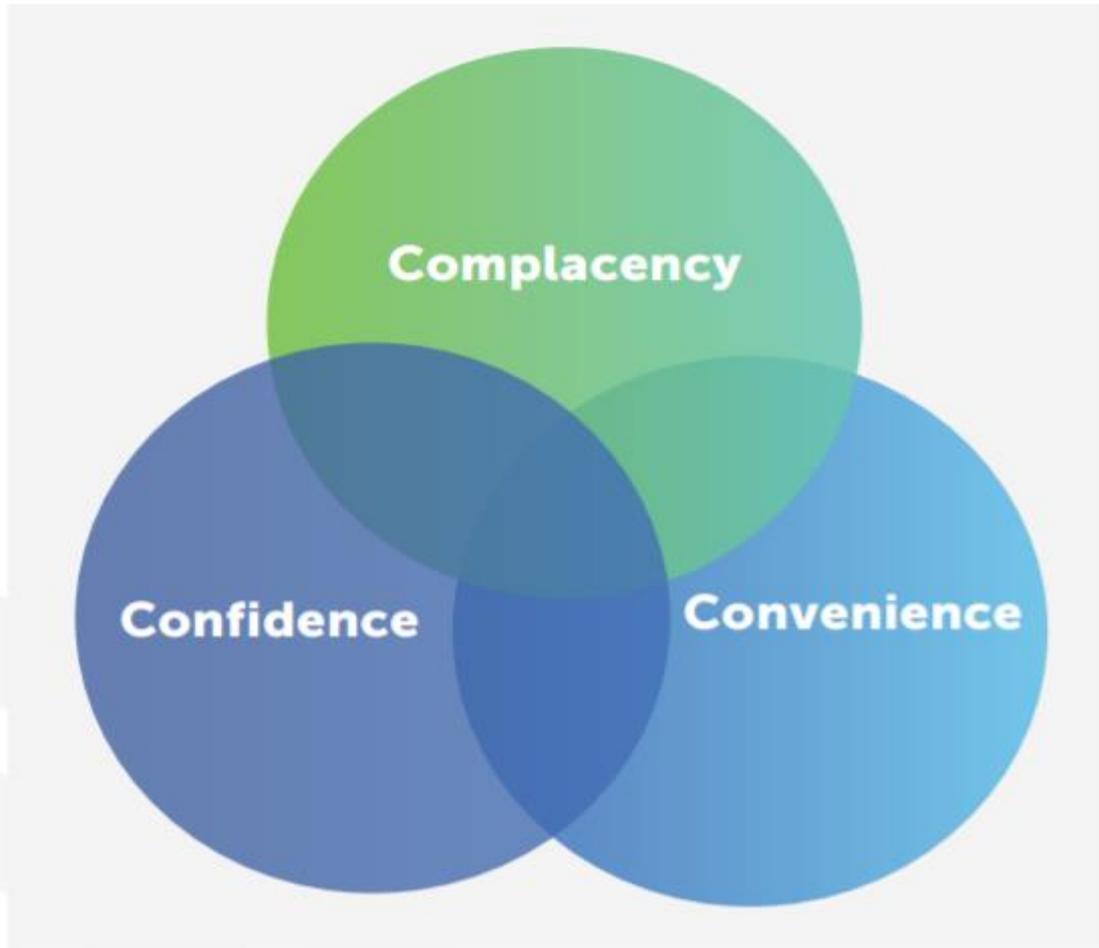
- A term used to describe the range of feelings that patients have about vaccines and the concerns they experience around accepting them.
- WHO Expert Panel Definition¹:
“Delay in acceptance or refusal of vaccines despite availability of vaccination services” in which “complacency, convenience and confidence” play a role.



¹ MacDonald & the SAGE Working Group on Vaccine Hesitancy, 2015



The 3 C's of Vaccine Hesitancy: Confidence, Complacency, and Convenience



- Confidence
Trust in vaccine or provider
- Complacency
Lack of perception of need for the vaccine or its value.
- Convenience
Access to the vaccine (affordability, availability, health literacy)

Vaccine, 2015

Source: World Health Organization, 2014; Report of SAGE.

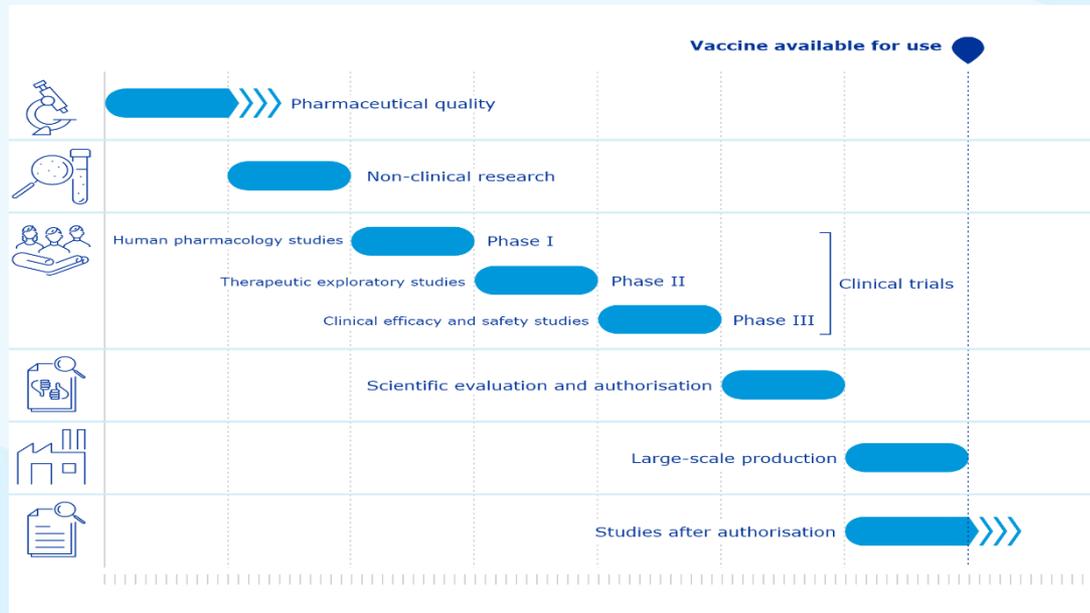
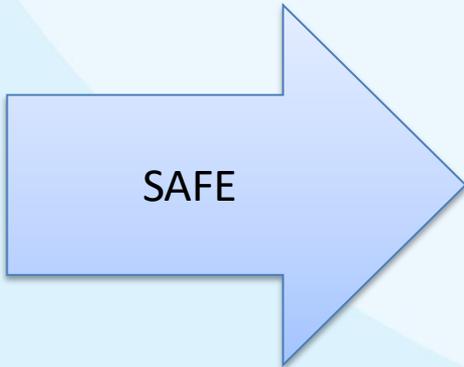


What do you need to know to feel CONFIDENCE?

Vaccine options are safe.

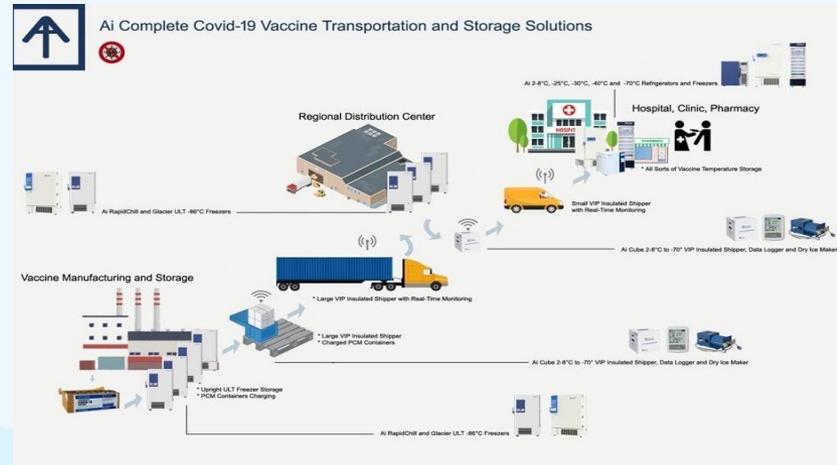
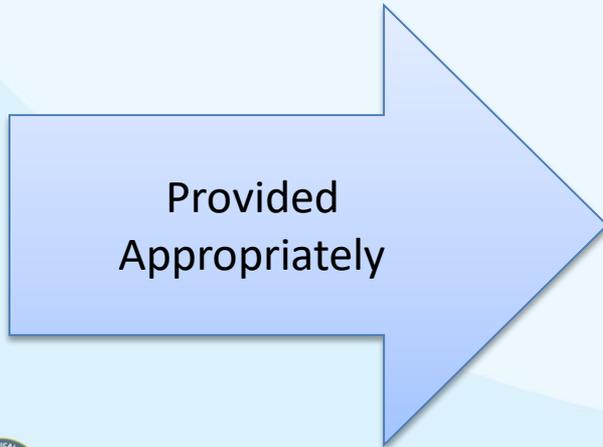
Vaccine options have been proven effective.

Vaccine options are provided appropriately.



How coronavirus vaccines compare to vaccines for other viruses

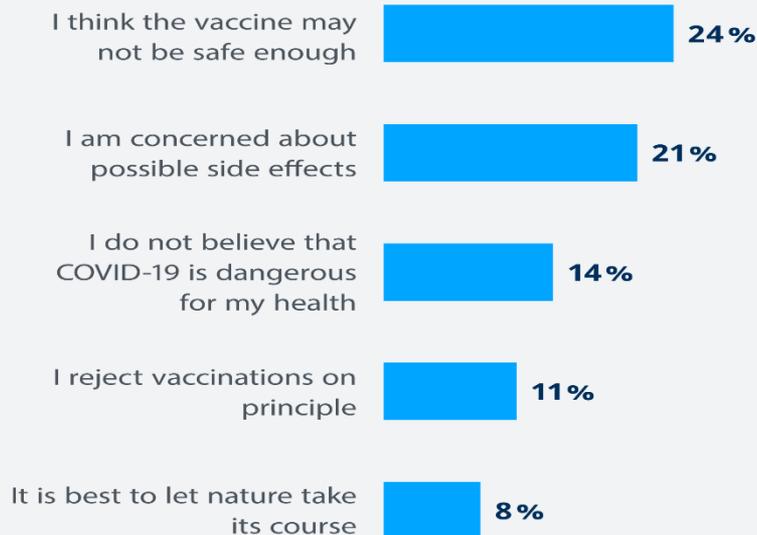
VACCINE	VACCINE EFFECTIVENESS	RECOMMENDED DOSES
Flu (Influenza)	44.0%	1
AstraZeneca novel coronavirus	70.0%	2
Chickenpox (Varicella)	92.0%	2
Moderna novel coronavirus	94.1%	2
Pfizer novel coronavirus	95.0%	2



COMPLACENCY

Do you think you need the vaccine?

The most common reasons for opposing a COVID-19 vaccination*



Source: HCHE/ Uni Hamburg 2020 *Survey in DE, FR, NL, PT, IT, UK, DNK

It protects you.
It protects your family.
It protects your community.



Accessibility: Connecticut Phase 1A

Connecticut Phase 1A

Healthcare Personnel
with potential for
exposure

Long Term Care
Facility residents

First Responders with
potential for
exposure

This phase includes all of the following;
Doctors, nurses, allied health professionals, pharmacists,
pharmacy techs, custodians, dietary, administrative and support
staff in patient care settings, police, fire, ems, school nurses, home
health providers, homemaker companions, dentists, hygienists,
laboratory staff, clinical students, death care workers entering
healthcare facilities, homes or with exposure to descendants.



Accessibility: Connecticut Phase 1B

Connecticut
Phase 1B

Adults 75+

All Congregate
Settings

Adults 65+



Accessibility: Next Phases in 1B

Connecticut Phase
1B

Educators
Child Care
Providers

Adults 55+
As of March 1,
2021

Adults 45+
As of March 22,
2021



Mistrust of the Medical Establishment among Communities of Color

Slavery in 19th Century

- Slaves were used as subjects of abusive, involuntary medical experimentation.

Tuskegee Syphilis Study

- A forty year study (1932-1972) which recruited African American men in Alabama, offering free healthcare for treatment of “bad blood”.
- No informed consent was obtained for any participant.
- 600 men participated: 399 with syphilis and 201 without syphilis
- Penicillin became available and as established treatment for syphilis in 1947.
- No one in the study was offered the treatment.
- About 130 men died from syphilis or its complications; many more suffered.
- At least 40 spouses became infected; 19 children born with congenital syphilis.

Persistent Health Disparities

- Structural racism continues to date and fuels the glaring health disparities brought even more to light by the COVID pandemic.



COVID-19 Cases, Hospitalizations, and Deaths, by Race/Ethnicity

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases ¹	1.8x	0.6x	1.4x	1.7x
Hospitalization ²	4.0x	1.2x	3.7x	4.1x
Death ³	2.6x	1.1x	2.8x	2.8x

Race and ethnicity are risk markers for other underlying conditions that affect health, including socioeconomic status, access to health care, and exposure to the virus related to occupation, e.g., among frontline, essential, and critical infrastructure workers.

How to Slow the Spread of COVID-19



Wear a mask



Stay 6 feet apart



Wash your hands



References on back

[cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)

CS319360-A 11/30/2020

Black/African American, Hispanic/Latinx, American Indian/Alaska Native are all disproportionately affected by COVID.



Vaccine Hesitancy in Communities of Color

- Influenza Vaccination
 - The Role of Risk Perception and Race in Flu Vaccination Behavior (Freirnuth et al, 2015)
 - Blacks were most likely compared to Hispanics and Whites (and Hispanics were more likely than Whites) to perceive higher risk of disease, higher risk of vaccine side effects, and have more mistrust of medical establishment.
 - Kaiser Permanente study of members in DC, Virginia, and Maryland (Vupputuri et al, 2014-2015)
 - Blacks had 42% lower odds of being vaccinated than Whites.
- Vaccination Rates from the National Health Interview Survey, 2011-2016
 - Blacks 24% lower rates than Whites
 - Hispanics 19% lower rates than Whites
 - Lower rates in males, younger, uninsured (regardless of race/ethnicity)



Kaiser Family Foundation COVID Vaccine Survey

- N = 1,563 respondents
- N = 310 Black (164 women and 146 men)
 - 297 did not get the vaccine; 4% vaccinated
- N=306 Hispanic

Figure 1

One In Five Black Women Say They Will Definitely Not Get The COVID-19 Vaccine

Have you personally received at least one dose of the COVID-19 vaccine, or not? When an FDA approved vaccine for COVID-19 is available to you for free, do you think you will...?

■ Already vaccinated ■ Get it as soon as you can ■ Wait and see ■ Get it only if required ■ Definitely not get the vaccine

Total Black adults



Black men



Black women



NOTE: See topline for full question wording.
SOURCE: KFF COVID-19 Monitor (Jan. 11-18, 2021)

[KFF COVID-19
Vaccine Monitor](#)

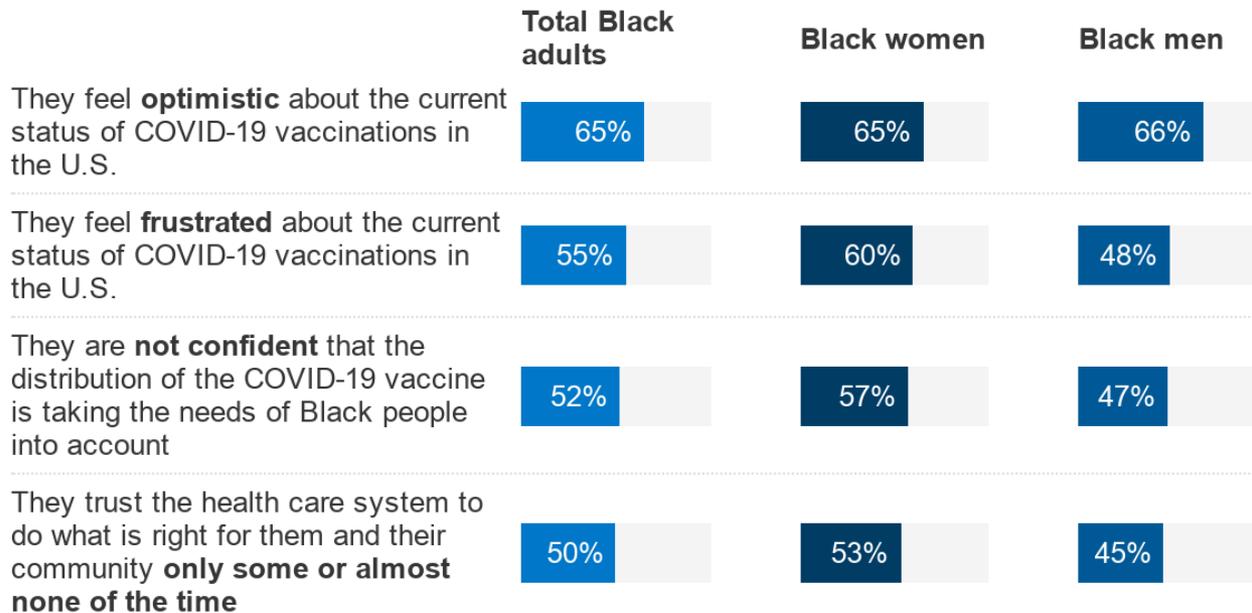


Kaiser Family Foundation COVID Vaccine Survey

Figure 2

Despite Optimism Over COVID-19 Vaccine, Majorities Of Black Women Lack Confidence And Trust In Health Care System

Percent who say each of the following:



NOTE: See topline for full question wording.
SOURCE: KFF COVID-19 Monitor (Jan. 11-18, 2021)

[KFF COVID-19 Vaccine Monitor](#)

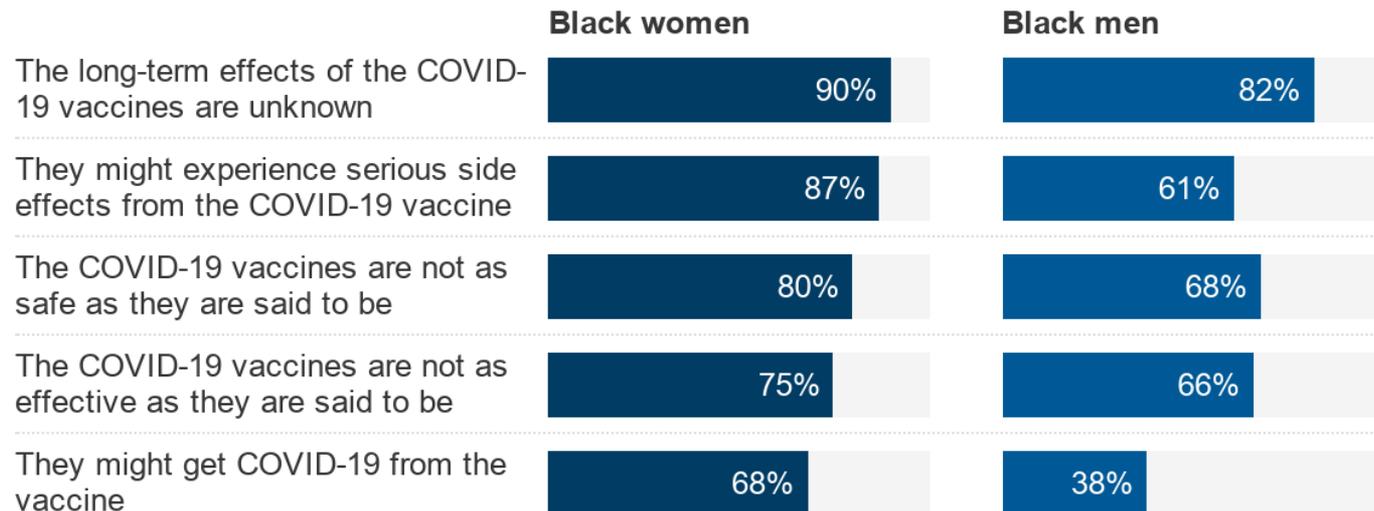


Kaiser Family Foundation COVID Vaccine Survey

Figure 3

Majorities Of Black Women Express Concerns Over Safety, Effectiveness And Possible Side Effects Of Vaccine

Percent who say they are **concerned** about each of the following:



NOTE: Among those who have not been vaccinated against COVID-19. See topline for full question wording.

SOURCE: KFF COVID-19 Monitor (Jan. 11-18, 2021)

[KFF COVID-19 Vaccine Monitor](#)

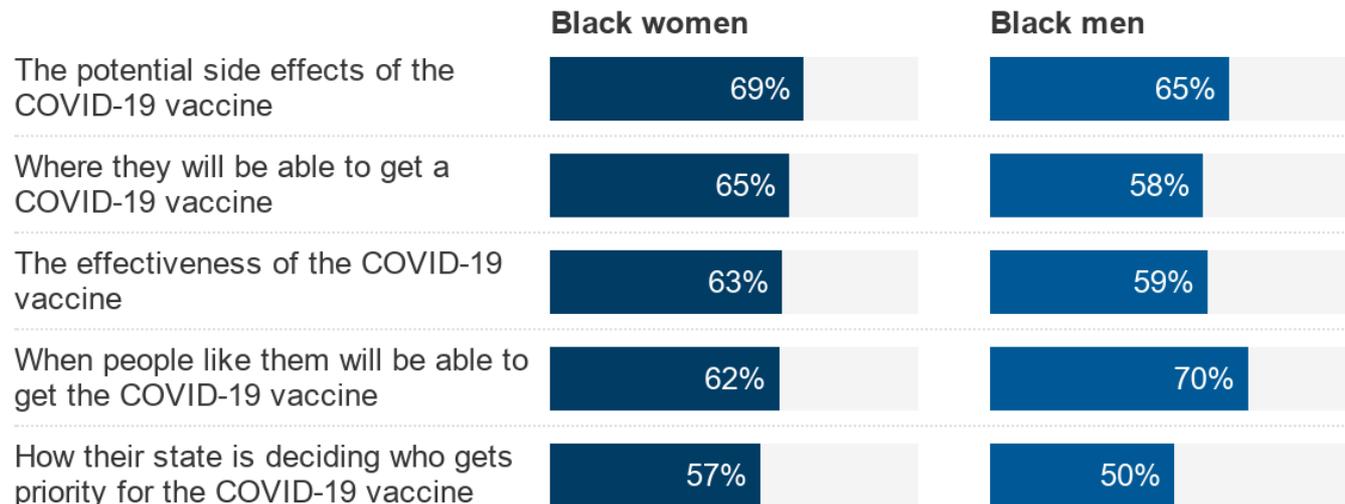


Kaiser Family Foundation COVID Vaccine Survey

Figure 4

Majorities Of Black Women And Men Say They Do Not Have Enough Information About Various Aspects Of The COVID-19 Vaccine

Percent who say they **do not have enough information** about each of the following:



NOTE: Among those who have not been vaccinated against COVID-19. See topline for full question wording.

SOURCE: KFF COVID-19 Monitor (Jan. 11-18, 2021)

[KFF COVID-19 Vaccine Monitor](#)



Convenience: Socioeconomic and Racial/Ethnic Differences in H1N1 Vaccinations

- Online survey of 1569 respondents age 18, and older in U.S.
- High representation from minority ethnic/racial groups and those living under the federal poverty level.
- Results: H1N1 vaccine uptake associated with sociodemographic factors, H1N1-related beliefs, and seasonal vaccination.
- H1N1 vaccination is strongly associated with age, urbanicity, perceiving the vaccine as safe, and seasonal flu vaccine uptake.
 - Perceptions of safety and season flu vaccination strongest associations.
- Black participants were the most likely ethnic/racial group to report having tried to get the vaccine but found it unavailable.



Common concerns around vaccines

- Safety
 - Too many vaccines; pain with injections; severe adverse reactions
- Necessity
 - Disease is "natural"; disease is rare, gone, or not that severe
- Distrust
 - Vaccines aren't well tested; research inadequate; medical mistrust in health system/provider
- Lack of Information
- Societal Influence
 - Other children/people unvaccinated; social norm
- Religious / Personal Choice
 - Right to choose; parent knows what is best; disallowed by religion; previous experience with vaccines;



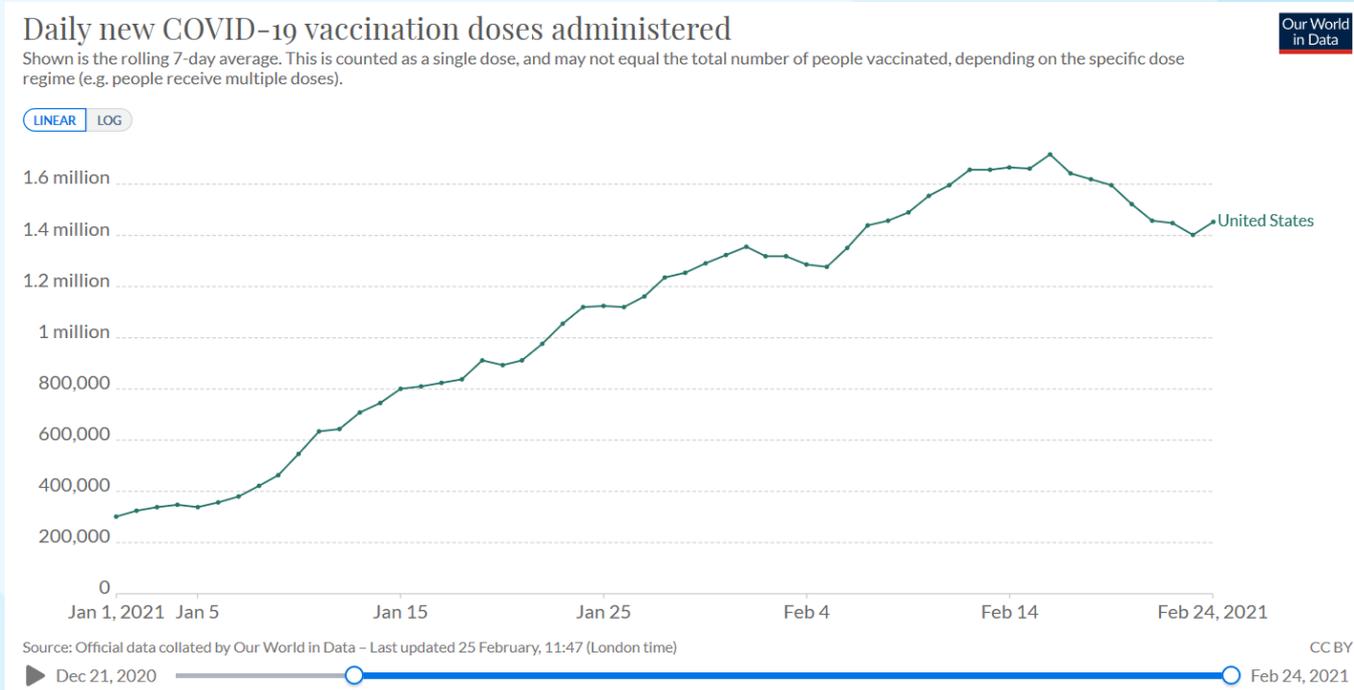
Tips on Discussing Vaccines

Try not to always come from a position of authority

- Acknowledge concerns constructively
 - Remain nonjudgmental and open to concerns
 - Vaccine Hesitancy Does NOT equal lack of information
 - Highlight thoughtful decision making as an option “Perhaps today is not the day to get the vaccine but can we continue to talk about it together?”
- Be knowledgeable
 - Give regular updated training to medical providers and program staff about vaccine efficacy, incidence of adverse effects and herd immunity
 - Provide updated science / evidence-based information often
 - Discuss relevant risk / benefit
 - Train staff regularly on positive messaging and motivational interviewing strategies to encourage open discussion and questions



Covid Vaccine Data United States



1.45 million vaccinations
Daily average as of February 24, 2021



Covid Vaccines Data (CDC) As of Wednesday, February 24, 2021

45.2 million people

in the US have received at least one COVID-19 shot.

20.6 million people

in the US have received both doses of the vaccine.

17%

of Connecticut residents have received at least one dose of Covid shot.

8.0%

of Connecticut residents have received both doses of Covid shot.



More Covid Data (CDC)

83%

of Covid vaccines distributed to Connecticut have been used.

75%

of Covid vaccines distributed in US have been used.

7,595

individuals have died of Covid – 19 in Connecticut.

503,000

individuals have died of Covid – 19 in the US.



COVID Vaccines Authorized for Emergency Use by FDA

Moderna – mRNA vaccine: 2 doses 28 days apart

- Over 30,000 participants
- 47% women, 25% age 65 and older, 10% Black or African American, 5% Asian, 0.8% American Indian or Alaska Native, and 20% Hispanic or Latinx;
- 25% healthcare worker; 22% had one high risk condition and 4% had 2 or more high risk conditions.
 - High risk conditions included about 5% chronic lung disease, 5% cardiac disease, 6.5% severe obesity, 9.4% diabetes, 0.6% liver disease, and 0.6% with HIV.

Pfizer– mRNA vaccine- 2 doses 21 days apart

- Over 40,000 participants
- 49.4% women, 81.9% white, 9.8% Black or African American, 4.4% Asian; 26.2% Hispanic/Latinx; 0.6% American Indian or Alaska Native; 21.4% 65 and older.
- High risk conditions: 46% had co morbidities
 - Obesity 35%, diabetes 8.4%, pulmonary disease 7.8%.



COVID Vaccines Authorized for Emergency Use by FDA Efficacy, Safety, & Side Effects :

Moderna

- 95.6% effective in preventing COVID-19 in people aged 18-64 years.
- 86.4% effective in preventing COVID-19 in people aged 65 years and older.
- Side Effects- injection site pain (91.6%), headache (63.0%), fatigue (68.5%), muscle (59.6%) and joint (44.8%) aches; and chills (43.4%).
Lymphadenopathy in the axillary area of the vaccination arm can also occur.
- Allergic reactions including anaphylaxis in first 20 days of administration of first dose (n=4,041,396): 43 cases of non-anaphylactic allergic reactions and 10 cases of anaphylaxis or 2.5 cases per million; 90% occurred within 15 minutes.¹



¹Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Moderna COVID-19 Vaccine — United States, December 21, 2020–January 10, 2021. MMWR Morb Mortal Wkly Rep 2021;70:125–129.



COVID Vaccines Authorized for Emergency Use by FDA Efficacy, Safety, & Side Effects :

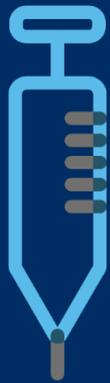
Pfizer

- 95% effective in preventing COVID-19 in people aged 16 years and older
- Side Effects: injection site pain 84%; fatigue 63%, headache 55%, muscle pain 38%, chills 32%, joint pain 24%, fever 14%.
- Allergic reactions including anaphylaxis in first 10 days of administration of first dose (n=1,893,360): 86 cases of non-anaphylactic allergic reactions and 21 cases of anaphylaxis or 11.1 cases per million; 71% occurred within 15 minutes and 86% within 30 minutes of vaccination.¹



¹Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine — United States, December 14–23, 2020. MMWR Morb Mortal Wkly Rep 2021;70:46–51.





COVID-19 VACCINE

HOW IT WORKS



1) INSTRUCTION MANUAL

The COVID-19 vaccine does not contain a dead or weakened virus, but a genetic instruction manual that tells your immune system how to respond and protect you from exposure to the actual virus.

2) MESSENGER RNA

The technology used in the vaccines is not new. Called mRNA, or messenger RNA, it has been around for decades. This is the first time mRNA has been used in a vaccine, but the effect is the same as other vaccines.

3) EFFECTIVE PROTECTION

Your body gets protection without the serious consequences of a severe illness due to COVID-19 exposure. The Pfizer vaccine is taken in two doses, and is safe and more than 94% effective in preventing COVID-19.



Myths around the Vaccine

COVID-19 Vaccines
DEBUNKING THE MYTHS

SANFORD HEALTH

VACCINE MYTH	VACCINE FACT
 It was rushed and isn't safe	Researchers took no safety shortcuts. Large studies show the vaccine is safe.
 It changes your DNA	It's impossible for the vaccine to change your DNA.
 It can give you COVID-19	The vaccine doesn't contain a live virus strain.
 It contains egg protein	It doesn't contain egg proteins and can be given to people with egg allergies.
 It causes severe side effects	For most, the vaccine causes mild side effects that resolve in a few days.
 It makes women infertile	There is no evidence that the vaccine causes infertility.



Other Issues/Concerns About COVID Vaccine

- Pregnancy/breastfeeding: not studied; weigh risk/benefit.
- Immunocompromised/living with HIV: may not mount same response.
- Children: Pfizer authorized for 16 and older; Moderna for adults only
- Already had COVID infection: still get the vaccine; can get it as soon as acute illness is over and no longer isolating; can delay up to 90 days.
- Vaccine won't turn COVID PCR/Ag tests positive.
- Missed second dose: take it as soon as you can; same vaccine as first.
 - CDC states if circumstances dictate can give up to 6 weeks after first dose; give booster with same type of vaccine e.g. mRNA vaccines



COVID Variants

- Multiple variants:
 - U.K. (B.1.1.7)
 - South Africa (B.1.351)
 - Brazil (B.1.1.28.1 or P.1)
- More infectious; spreads more easily and faster leading to more people sick.
- To date, not seem to be more severe or deadly.
- Concern would be if some of the mutations that develop, not affected or less affected by antibodies produced from previous COVID infection or current vaccines.



COVID Variants

- Moderna and Pfizer tested neutralizing effect of antibodies from small number of people who received their vaccines against UK and South Africa mutations.
 - Found fully effective against UK variant.
 - Some decrease in neutralization against South Africa variant.
 - Still above threshold needed to protect.
 - Considerations may be to give booster 6-12 months after second shot; adjust vaccine to target variants.



Other COVID Vaccines on the Horizon

- Johnson & Johnson (FDA EUA pending)
 - Single dose vaccine, viral vectored (adenovirus carrying spike protein)
 - 44,000-person trial; 18+; multiple countries
 - Overall 66% protective against moderate to severe COVID 14-28 days after shot, regardless of age, race, ethnicity, co morbidities.
 - Tested when new variants had emerged
 - 85% effective in protecting against severe disease
 - 72% effective in US, 66% in South America, 57% in South Africa
 - No hospitalizations or deaths among those in vaccine arm
 - Storage—regular refrigeration up to 3 months



Other COVID Vaccines on the Horizon

- AstraZeneca
 - Trial still ongoing in U.S.; approved in U.K. and other countries
 - Two-dose one month apart, viral vectored (adenovirus carrying DNA for spike protein)
 - Overall, 70% effective against COVID
 - 90% effective with first shot at half dose
 - 62% effective with two full doses
 - Longer interval between shots (3 months) may increase efficacy
 - One shot may be 76% effective for 3 months
 - Early reports showing that asymptomatic infection is decreased by 67% after first dose.
 - Storage– regular refrigeration up to 6 months



THANK YOU!

Marwan Haddad MD, MPH, AAHIVS
haddadm@chcl.com

Kasey Harding MPH
hardink@chcl.com



Questions?

Marwan Haddad MD, MPH, AAHIVS
haddadm@chc1.com

Kasey Harding MPH
hardink@chc1.com

For any additional questions:
training@cceh.org

