

# FAQ's on COVID-19 Vaccines, Variants and Boosters

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COVID-19 ECHO  
September 16, 2022

# FAQ's on COVID-19 Vaccines, Variants and Boosters

Friday, September 16<sup>th</sup>, 2022

*Please don't forget to register attendance/claim credit using "CME Credit via TEXT"!*

**Activity Code:**

*\*If you have not already registered your e-mail address, please do so. See instructions below.*

**Step 1:** Text your email address to **844-502-1338** to link your responses to your existing account in the UT Health SA - CME database

**Step 2:** Text **Attend** plus the **8-digit Activity Code** to register your attendance (i.e. Attend 12345678)

*\*If you have any issues or questions, please email the Office of CME at [cme@uthscsa.edu](mailto:cme@uthscsa.edu) for assistance.*

# Disclosures

- I receive funding from:
  - NIH/NIAID as a part of the COVID-19 Prevention Network, which funds COVID-19 vaccine trials
  - IAVI for a Phase 1 mRNA HIV Vaccine Trial

Also

- Gilead Sciences for observational research on HIV and hepatitis B coinfection (not relevant to this talk)

# Objectives

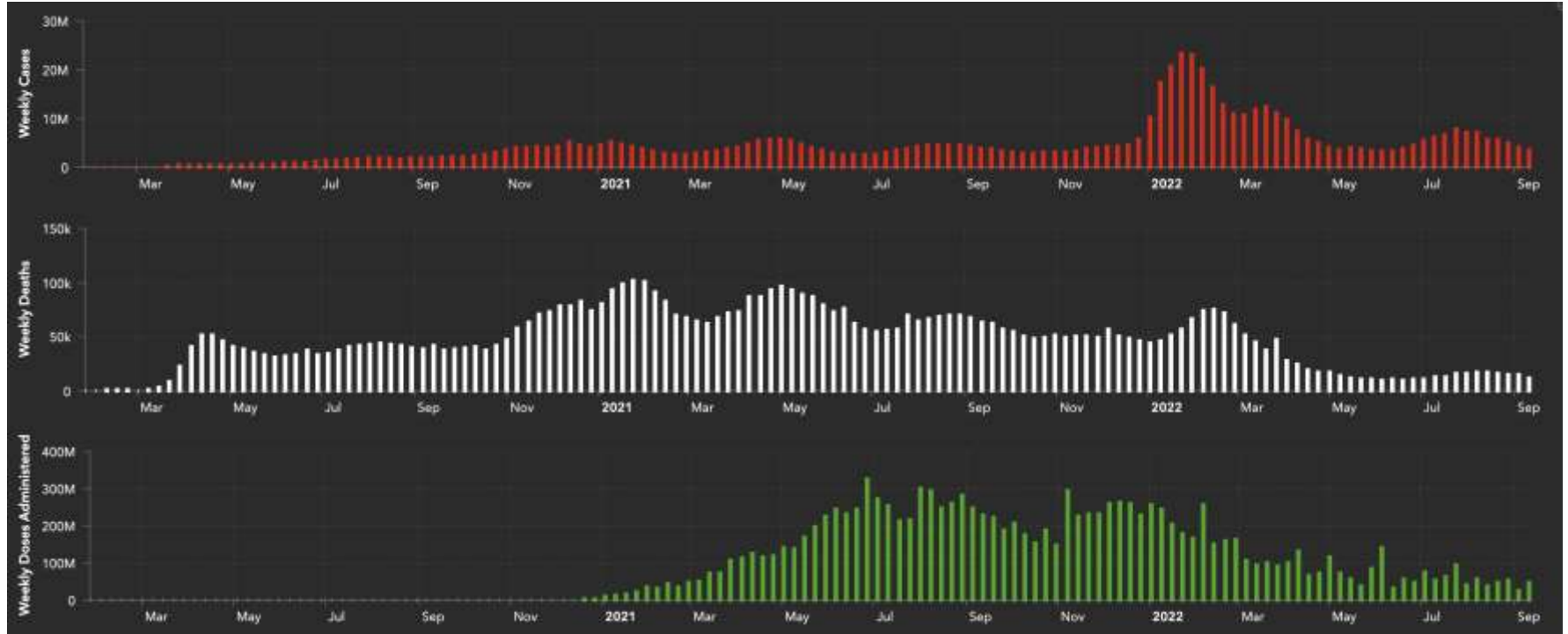
1. Be familiar with current COVID-19 variants and likelihood of future variants
2. Be aware of current vaccine uptake and challenges with hesitancy
3. Understand current recommendations regarding COVID-19 vaccine boosters

# Global COVID Pandemic as of September 14, 2022



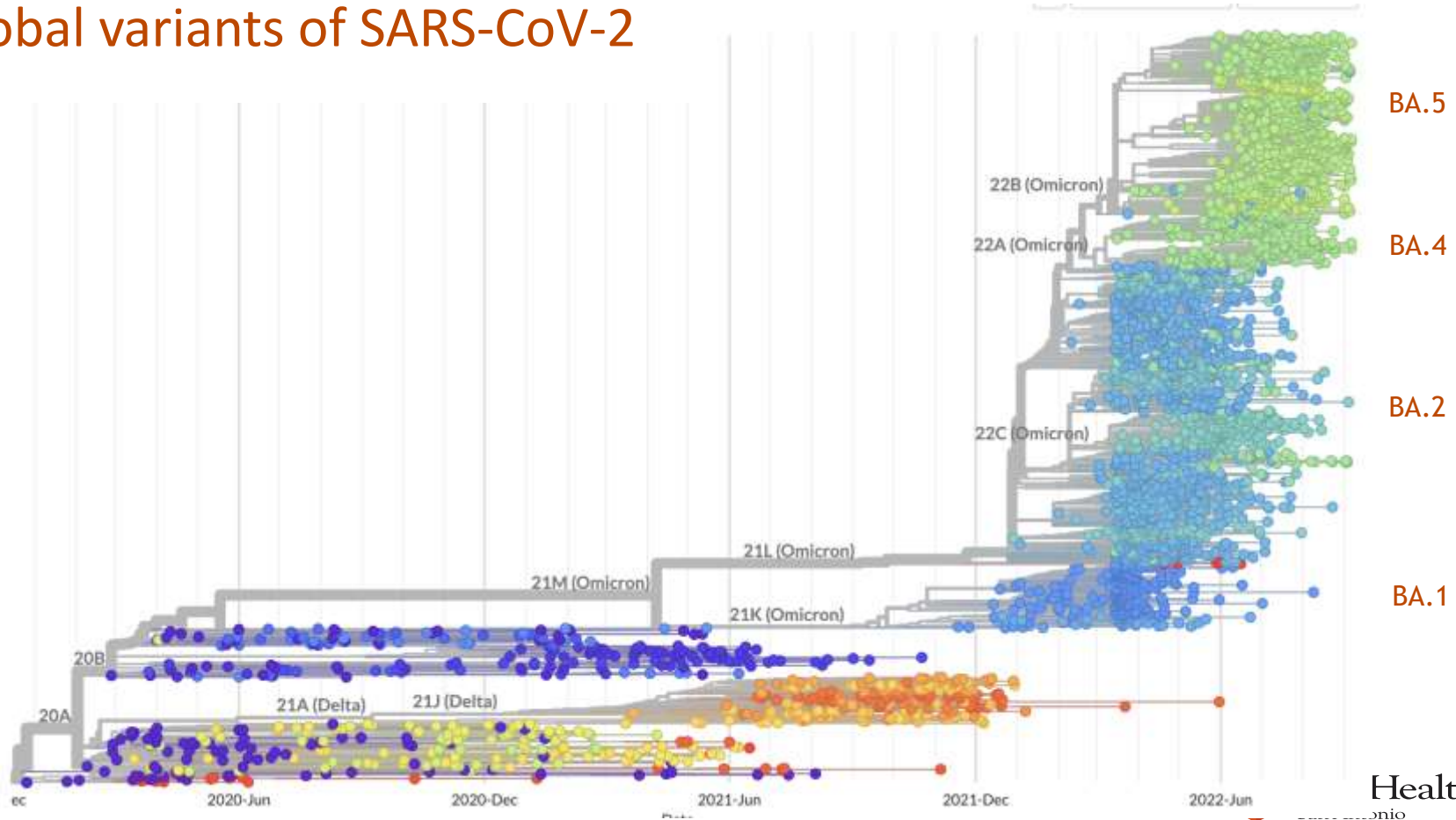
28-day cases

# Global COVID Pandemic as of September 14, 2022

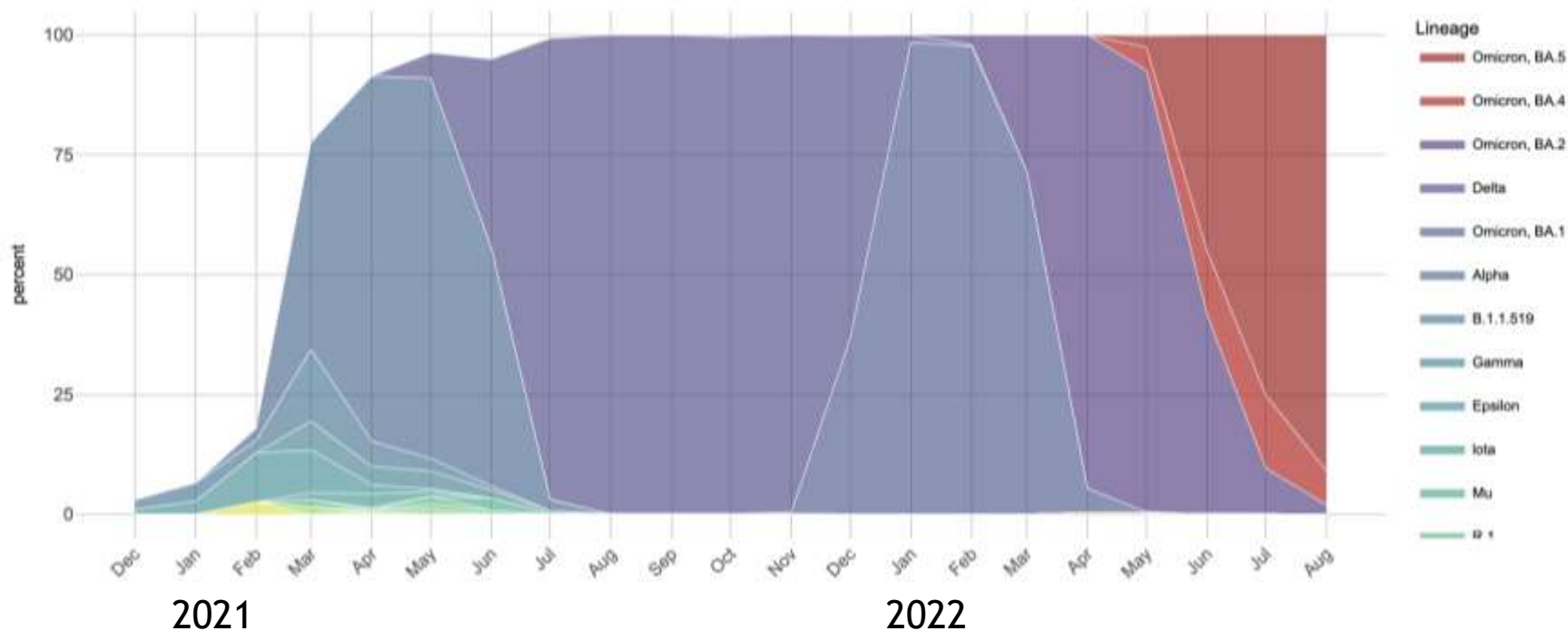


Weekly cases, mortality, and vaccinations over time

# Global variants of SARS-CoV-2



# Variants of SARS-CoV-2 in Bexar County

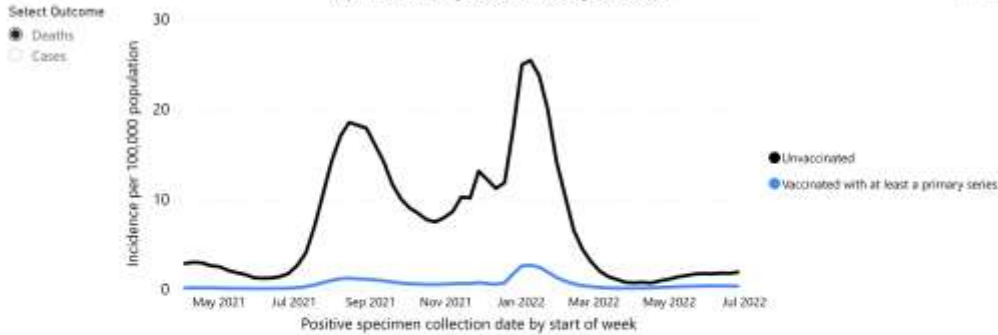




# Vaccines vs variants

Rates of COVID-19 Deaths by Vaccination Status in Ages 5+ Years

April 04, 2021–July 02, 2022 (30 U.S. jurisdictions)



Unvaccinated people aged 5 years and older had:

2.1X

Risk of Testing Positive for COVID-19

AND

5X

Risk of Dying from COVID-19

in June 2022, and

2.4X

Risk of Testing Positive for COVID-19

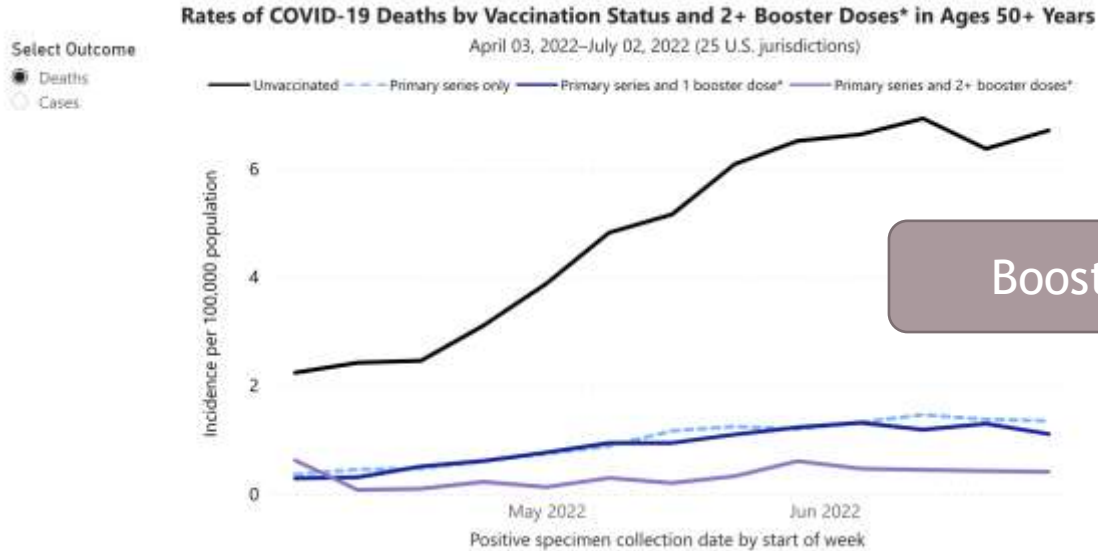
in July 2022, compared to people vaccinated with at least a primary series.

Source: CDC COVID-19 Response, Epidemiology Task Force, Surveillance & Analytics Team, Vaccine Breakthrough List

Vaccines remain protective against severe disease & death



# Boosters vs variants



Boosters are helpful!

In June 2022, among people ages 50 years and older, unvaccinated people had:

**14X**  
*Risk of Dying from COVID-19*

compared to people vaccinated with a primary series and two or more booster doses.\*

Among people ages 50 years and older, vaccinated people with a primary series and one booster dose had:

**3X**  
*Risk of Dying from COVID-19*

compared to people vaccinated with a primary series and two or more booster doses.\*

Source: CDC COVID-19 Response, Epidemiology Task Force, Surveillance & Analytics Team, Vaccine Breakthrough Unit

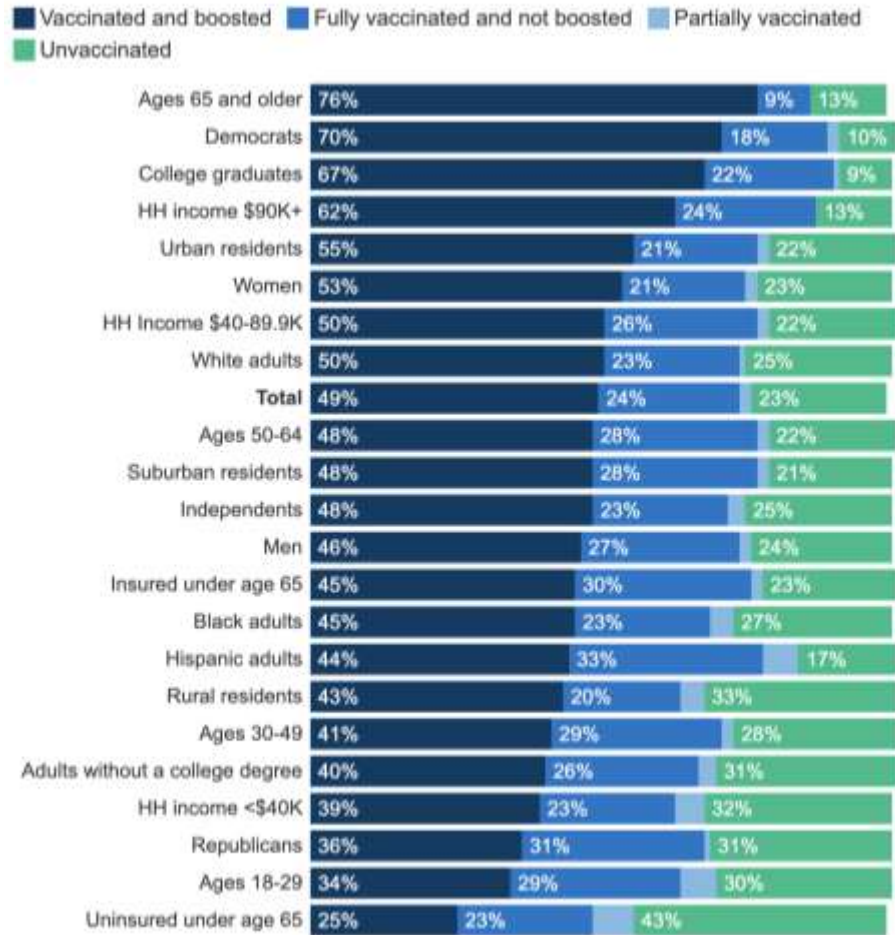
# Current Vaccine Uptake - Globally



Challenges in:

- Access
- Hesitancy
- Misinformation

# Demographic predictors of unvaccinated status in adults in the US



NOTE: See topline for full question wording.  
 SOURCE: KFF COVID-19 Vaccine Monitor (July 7-17, 2022) • PNG

KFF COVID-19  
 Vaccine Monitor

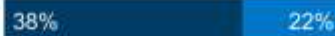


# Vaccine-related misinformation

Have you heard anyone say or have you read anywhere that...? IF YES: To the best of your knowledge is that true or false, or do you not know whether it is true or false?

■ Have heard, believe to be true ■ Have heard, don't know if true ■ NET

The government is exaggerating the number of COVID-19 deaths



Pregnant women should not get the COVID-19 vaccine



Deaths due to the COVID-19 vaccine are being intentionally hidden by the government



The COVID-19 vaccines have been shown to cause infertility



Ivermectin is a safe and effective treatment for COVID-19



You can get COVID-19 from the vaccine



The COVID-19 vaccines contain a microchip



The COVID-19 vaccines can change your DNA



**NET who have heard at least one of these myths, and either say it is true or are not sure if it is true**

78%

NOTE: See topline for full question wording.

SOURCE: KFF COVID-19 Vaccine Monitor (October 14-24, 2021)

# Six Communication Skills



**SETTING THE  
TONE**



**ACTIVE  
LISTENING**



**USE PLAIN  
LANGUAGE**



**ACKNOWLEDGE  
DIFFERENT  
PERSPECTIVES**



**BRIDGE  
RESPECTFULLY**



**USE TEACH-  
BACK TO CHECK  
FOR  
UNDERSTANDING**



## Helpful tools...

# What's in my mRNA vaccine?

<b>Nutrition Facts</b>	
Up to 6 doses per container	
<b>Serving Size</b>	<b>2 doses</b>
% by weight*	
Active Ingredients	0.2 - 0.3%
<b>mRNA</b> ( <i>messenger RNA</i> ) Help the body to build antibodies against virus	
Inactive Ingredients	99.7 - 99.8%
<b>Lipids</b> ( <i>cholesterol</i> ) Protect and deliver the mRNA to the cell	
<b>Salts</b> ( <i>table salt</i> ) Balance acidity/pH in your body	
<b>Acids and acid stabilizers</b> ( <i>found in vinegar</i> ) Help maintain pH and stability of vaccine	
<b>Sugars</b> ( <i>table sugar</i> ) Help maintain shape of molecules during freezing	

\* The % by weight is the mass of ingredient divided by the total mass of the solution multiplied by 100.

NO PRESERVATIVES

SUPPORTS IMMUNE HEALTH

EGG FREE

Vanderbilt Institute for Infection, Immunology, and Inflammation

# Revised booster recommendations!

Population	Vaccine status	Bivalent booster?
Under 12	Primary series done*	No booster recommended
12-17yo	Primary series done	Pfizer bivalent booster >2months after last shot
12-17yo	Primary series done <i>and</i> boosted	Pfizer bivalent booster >2months after last shot
18 and over	Primary series done	Any bivalent booster >2months after last shot
18 and over	Primary series done <i>and</i> any number of boosters	Any bivalent booster >2months after last shot

\* If primary series is *not* complete, do that first!

For individualized recommendations, go to:

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html>

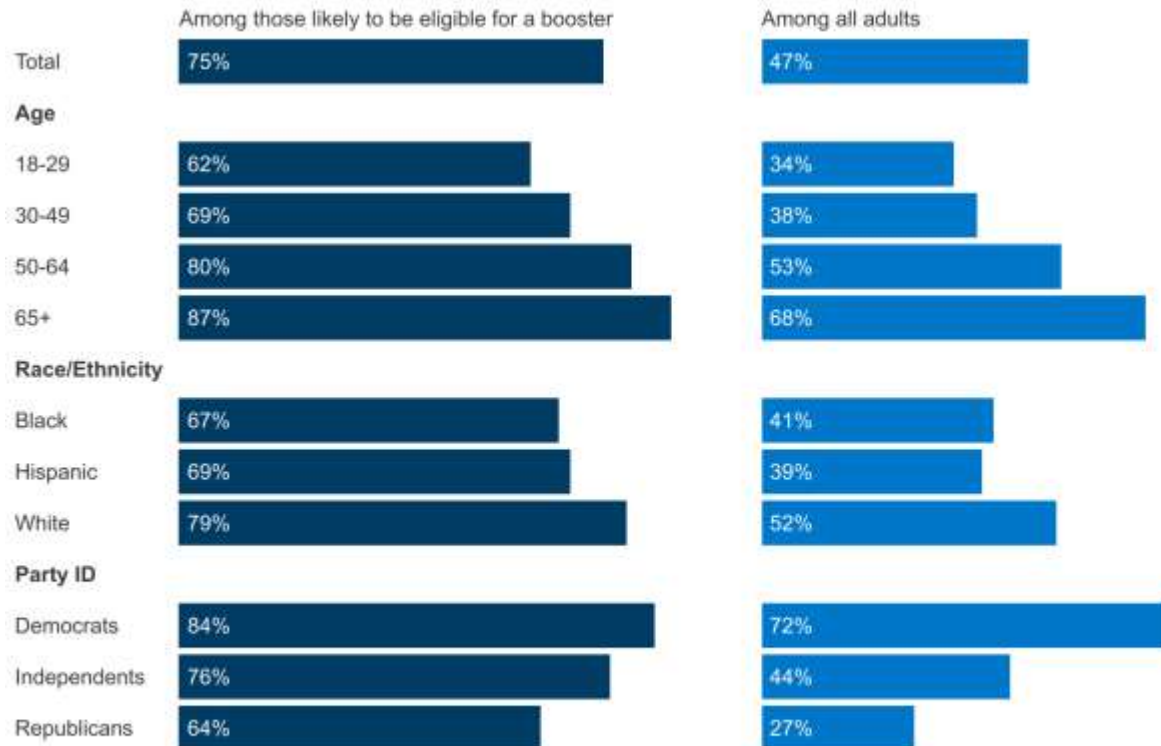


# Revised booster recommendations – FAQ

- Simplest version of the recommendation:
  - Anyone 12yo or over who has received their first COVID vaccination series (1 or 2 shots) and is >2 months after their last shot should get a bivalent booster
    - Regardless of age, immunosuppression, etc...
- Can you get this along with the flu shot?
  - YES! Please encourage people to get both.
- Will these recommendations change?
  - Probably! We'll have more data on bivalent boosters soon in all age groups.
  - COVID is constantly changing, so we will continue to adapt recommendations as new vaccines become available and new variants circulate

# Disparities in boosters

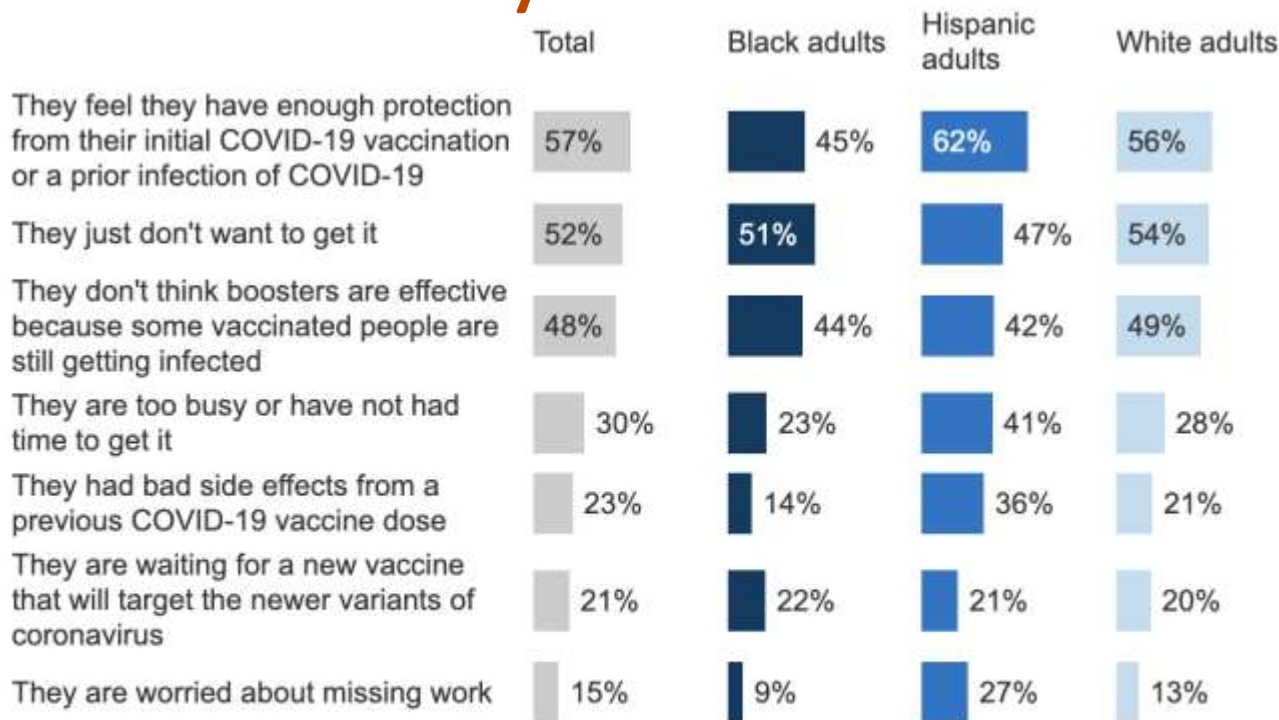
Percent who report getting a COVID-19 booster shot:



NOTE: Receiving a booster dose defined as receiving at least 3 shots or at least 2 shots if one was Johnson & Johnson. Likely to be eligible for a booster defined as having received a booster or completing full initial course of vaccination 6 months ago or longer. See topline for full question wording.

SOURCE: KFF COVID-19 Vaccine Monitor (February 9-21, 2022)

# Booster hesitancy



NOTE: Asked of those who are fully vaccinated but have not received a booster. See topline for full question wording.

SOURCE: [KFF COVID-19 Vaccine Monitor \(July 7-17, 2022\)](#) • PNG

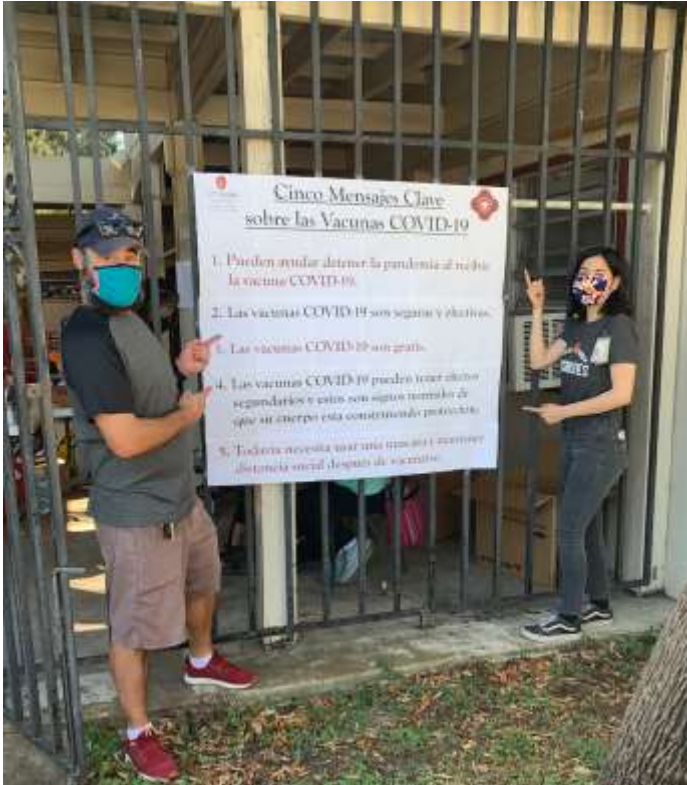
# Practice Takeaways



- Risk of COVID in our community remains high
  - <https://covid19.sanantonio.gov/Home>
- Omicron transmission likely to continue through the fall and boosters can make a difference
- Expect misinformation, remember the six communication skills!
  - Set the tone, active listening
- Be honest about uncertainty

Thank you!

# 5 Key Messages on COVID-19 Vaccines



You can help stop the pandemic by getting the COVID-19 vaccine

COVID-19 vaccines are safe and effective

COVID-19 vaccines are free

COVID-19 vaccines may have some side effects and these are normal signs that your body is building protection

You still need to wear a mask and practice social distancing after getting vaccinated