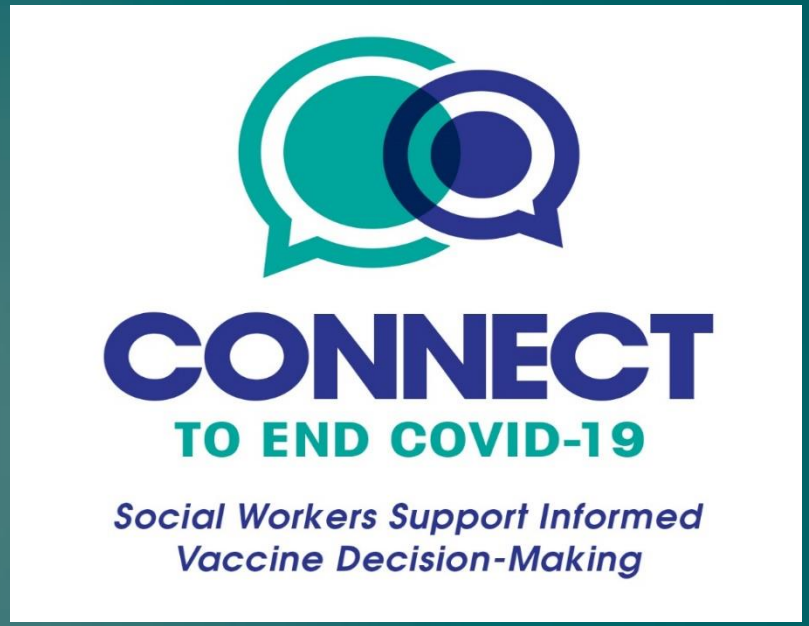
Covid-19: New Vaccines, Boosters and Living With a (Controlled) Pandemic

September 29, 2022



NASW
National Association of Social Workers

Presenters

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University of Texas at Austin

Agenda

- Welcome and introductions
- Current Covid-19 vaccination landscape
- New vaccines, updated booster
- Q and A

Today's program is made possible through a vaccine confidence initiative undertaken by:

- NASW
- NASW Foundation
- The University of Texas at Austin Steve Hicks School of Social Work

Funded by the Centers for Disease Control and Prevention

Pillars:

1) NASW chapter-hosted trainings on motivational interviewing and Screening, Brief Intervention and Referral to Treatment modalities to support clients in informed vaccine decision making
2) Communications campaign
3) Mobile smartphone app

CONNECT
TO END COVID-19
Social Workers Support Informed Vaccine Decision-Making

Social Work Opportunity/Role

Social workers can play a crucial role in *supporting informed client decision making* about vaccination. We practice in a broad range of settings, are often trusted messengers in communities and bring a distinctive skill set reflecting:

- Person in the environment framework
- Patient/client-centered care approach
- Trauma-informed care models
- Cultural competence
- Public/population health and prevention expertise
- Disaster response expertise
- Commitment to health equity, access and social justice

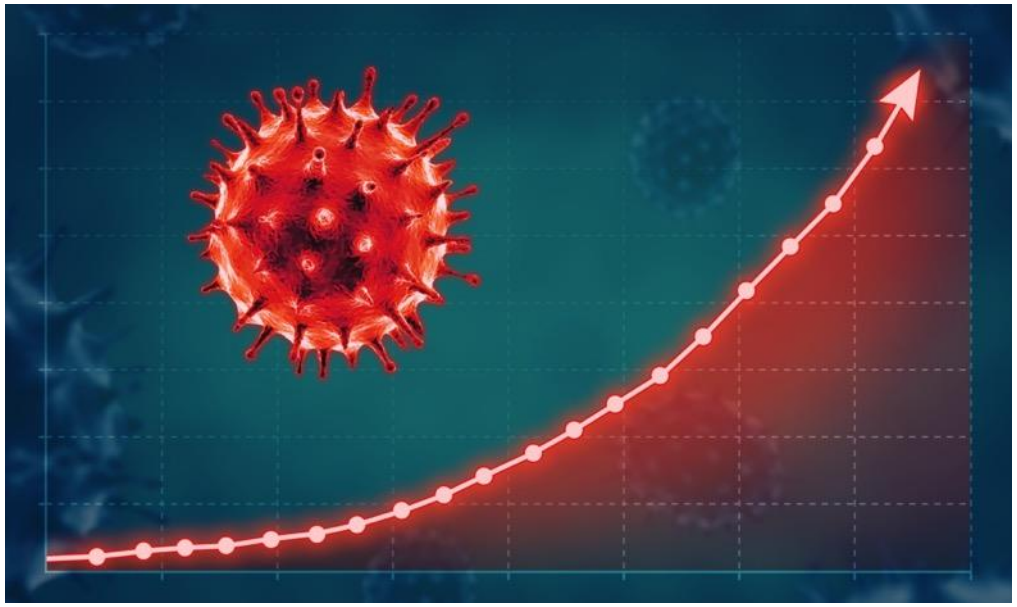
https://www.socialworkers.org/Practice/Infectious-Diseases/COVID-19-Vaccine-Confidence

General NASW COVID-19 resources:

https://www.socialworkers.org/Practice/Infectious-Diseases/Coronavirus

COVID-19: Context

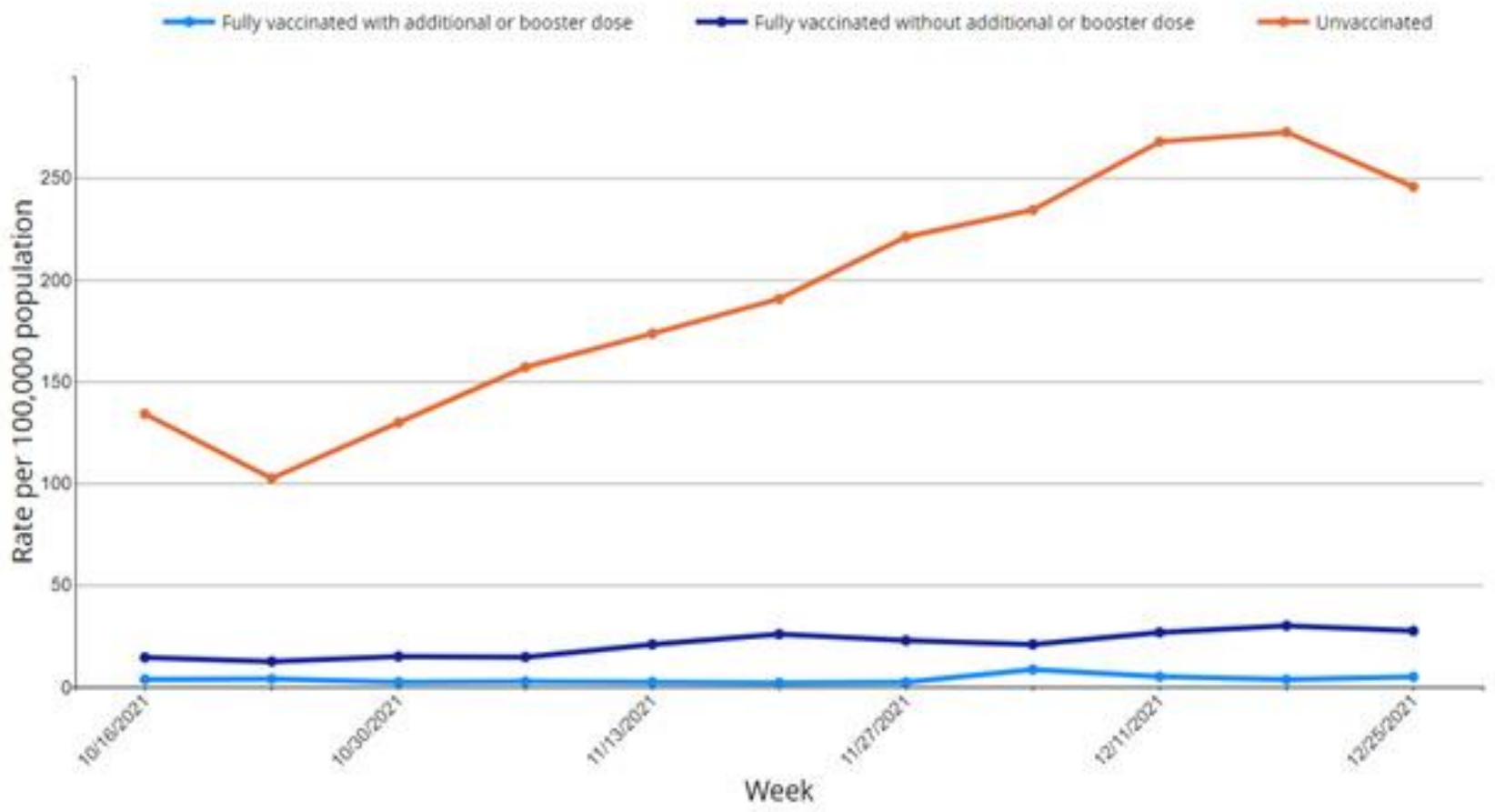
- To date, over 1.05 million lives lost in the U.S. due to COVID-19 infection
- 3rd leading cause of death
- Highly contagious BA5 is the predominant variant as of today; still surging in many communities
  - *370 lives lost per day to COVID-19 as of this week*



COVID-19: Context (cont'd)

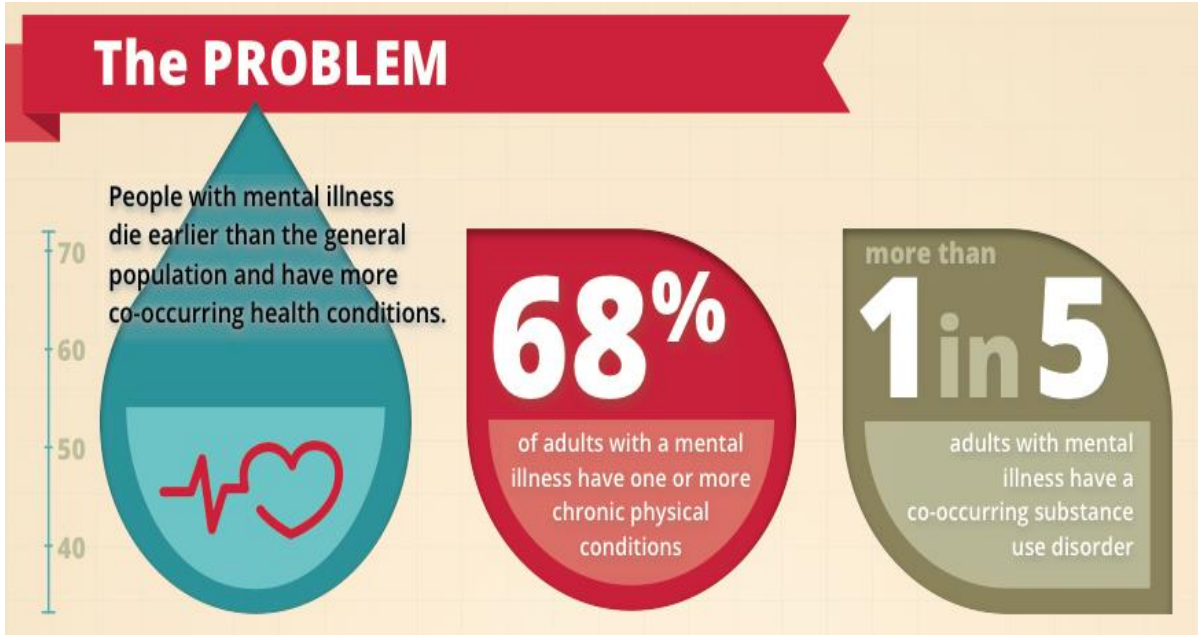
- Over half of deaths occurred *after* vaccines were available in early 2021
  - •Only 68% of Americans are fully vaccinated; of these, only 48% have received recommended booster; much lower in some states and localities
  - •Despite being at greater risk of severe illness and death, only 26% of people 65+ received the second recommended booster of the original booster formulation

Hospitalization Rates by Booster Status
(Adults Aged ≥ 65 Years)

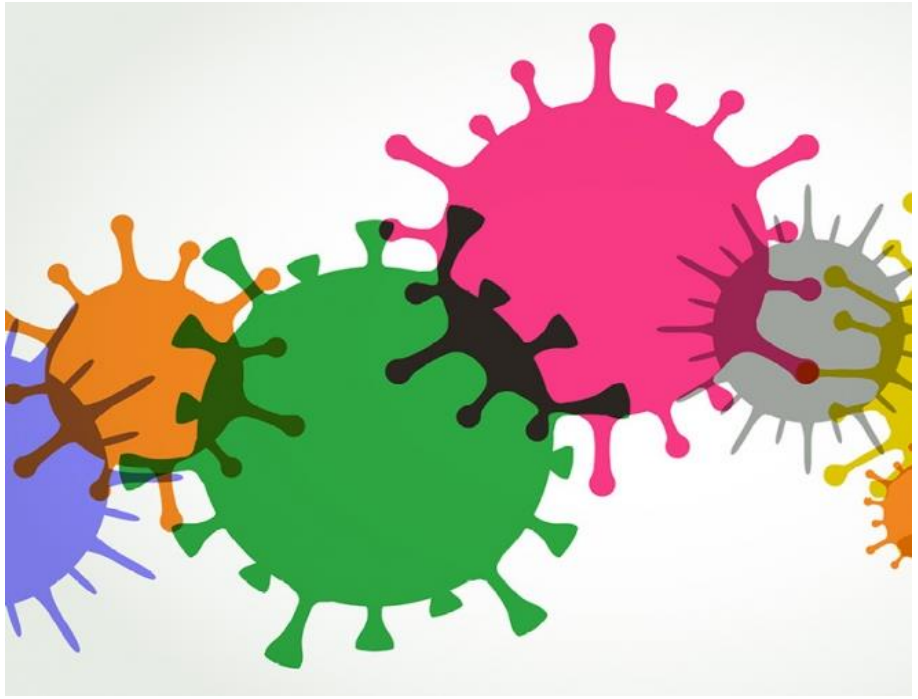


COVID-19: Context (cont'd)

- The risk of severe COVID-19 increases with the number of underlying medical conditions.
- Millions of Americans of all ages have multiple conditions, which can be further compounded by a mental health condition.



COVID-19: Context (cont'd)



- Certain mental health conditions are associated with more severe COVID-19 illness; CDC has added as "underlying medical conditions":
  - Mood disorders (including depression)
  - Schizophrenia
- Substance use disorders also increases risk of severe illness

COVID-19: Context (cont'd)

- The benefits of being vaccinated far outweigh the risks of severe illness, hospitalization, death, Long COVID, and other negative outcomes.
- Although people who are up to date on vaccinations can experience a breakthrough infection, they are much less likely to become severely ill or die of it.
- Vaccines have averted over 1 million deaths in the United States
- Getting coronavirus may offer some natural protection (a.k.a. immunity). But experts do not know how long this protection lasts.

COVID-19: Context (cont'd)

- Being **Up To Date** on COVID-19 vaccination is the most effective way to prevent severe illness and death
- As of today, **Up To Date** means you have received:
  - All recommended doses in the primary series of the vaccine (a.k.a., "fully vaccinated"); for some vaccines, it is more than one dose/shot

  PLUS:

  - One booster of the new, updated multivalent booster, when eligible

COVID-19: Context (cont'd)

- CDC recommends that everyone age 12+ who is fully vaccinated receive the new, modified, bivalent booster aimed at combatting currently circulating Omicron subvariants
- CDC will soon be providing recommendations regarding bivalent boosters for people under age 12; until then, children ages 5 through 11 are recommended to receive the original, monovalent booster
- CDC booster chart:

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

Special Populations

Racial/ethnic disparities in vaccine rates have narrowed, but lower vaccination and booster rates present among:

- Children
- Adolescents and young adults
- Pregnant people
- People in rural areas
- Marginalized and vulnerable people

Vaccine Hesitancy

- Vaccines and vaccine boosters are highly safe and effective – but some people are “hesitant” to accept them
- World Health Organization definition (2015):

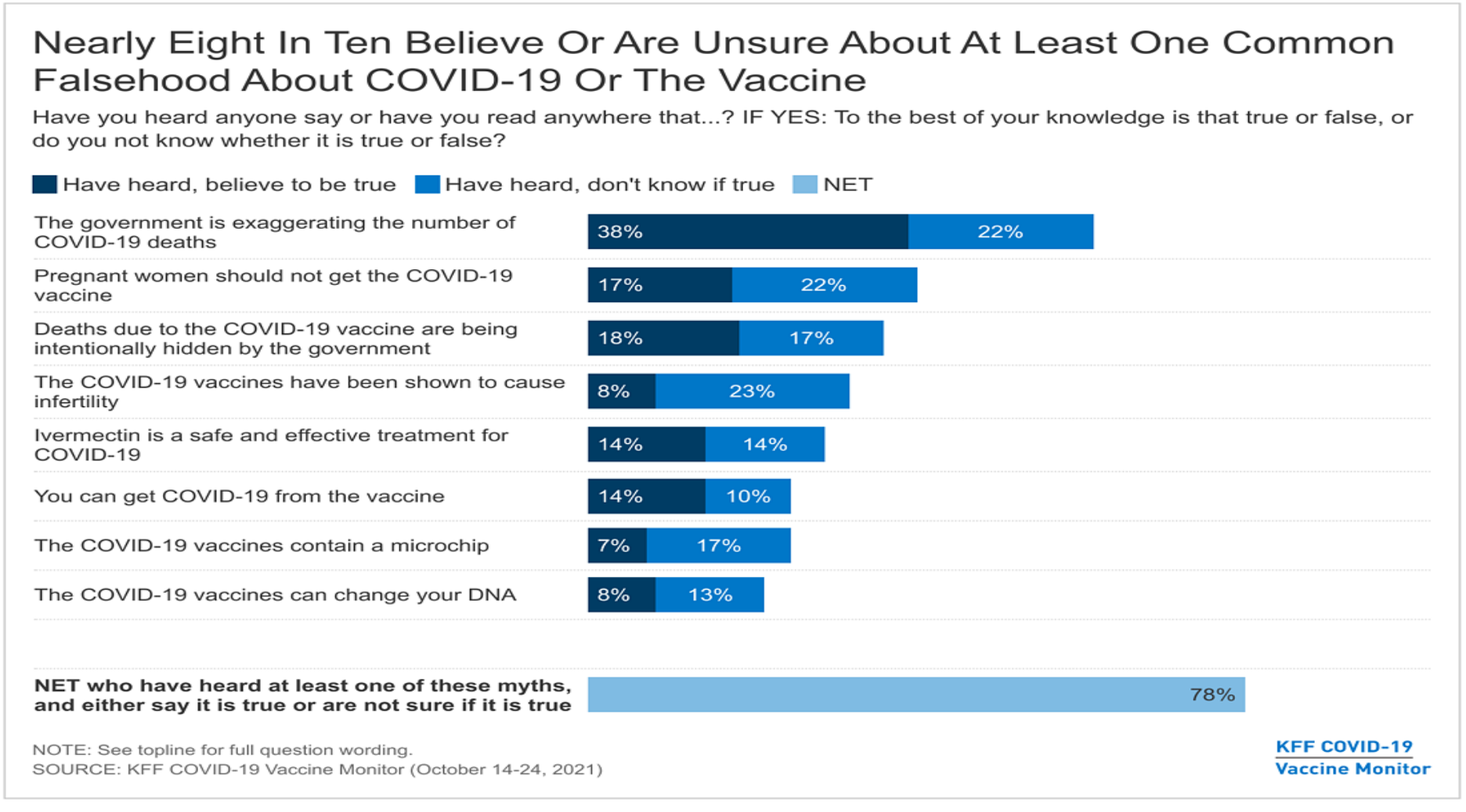
…(D)elay in acceptance or refusal of vaccination despite availability of vaccination services…It is influenced by factors such as complacency, convenience and confidence.

Vaccine Hesitancy (cont'd)

Vaccine hesitancy can reflect, among other things:

- Perceptions about personal level of risk
- Negative prior experiences with health care providers/systems/treatments
- Religious and/or philosophical beliefs
- Socio-political views
- Perceptions of vaccine development process
- Beliefs about health and prevention
- Social/peer group norms, perceptions
- Communication/media environment

Mis- and Disinformation



Long COVID

- “Second-order pandemic”
- Chronic, sometimes debilitating symptoms which present 4 to 8 weeks after acute COVID-19 illness; may disappear and reemerge
- No well-established definition but common symptoms are fatigue, shortness of breath, and/or cognitive problems (“brain fog”)
- Estimated to affect as many as 30% of people who have had COVID; *majority of people were not hospitalized or had mild COVID*
- Some studies show that being Up to Date on vaccination including any recommended boosters may prevent Long COVID

Long COVID (cont'd)

- Long COVID conditions and symptoms, including depression and anxiety, are real; patients benefit from validation of this fact and compassionate care
- School and workplace accommodations are available for those meeting eligibility requirements
- Racial and ethnic disparities in access to Long COVID care, due in part to lack of health insurance and/or relationship with a primary care provider

Long COVID (cont'd)

Services and Supports for Longer Term Impacts of COVID-19

(outlines federal supports in numerous areas)

https://www.covid.gov/assets/files/Services-and-Supports-for-Longer-Term-Impacts-of-COVID-19-08012022.pdf

National Research Action Plan on Long COVID

https://www.covid.gov/assets/files/National-Research-Action-Plan-on-Long-COVID-08012022.pdf

Long COVID Resources

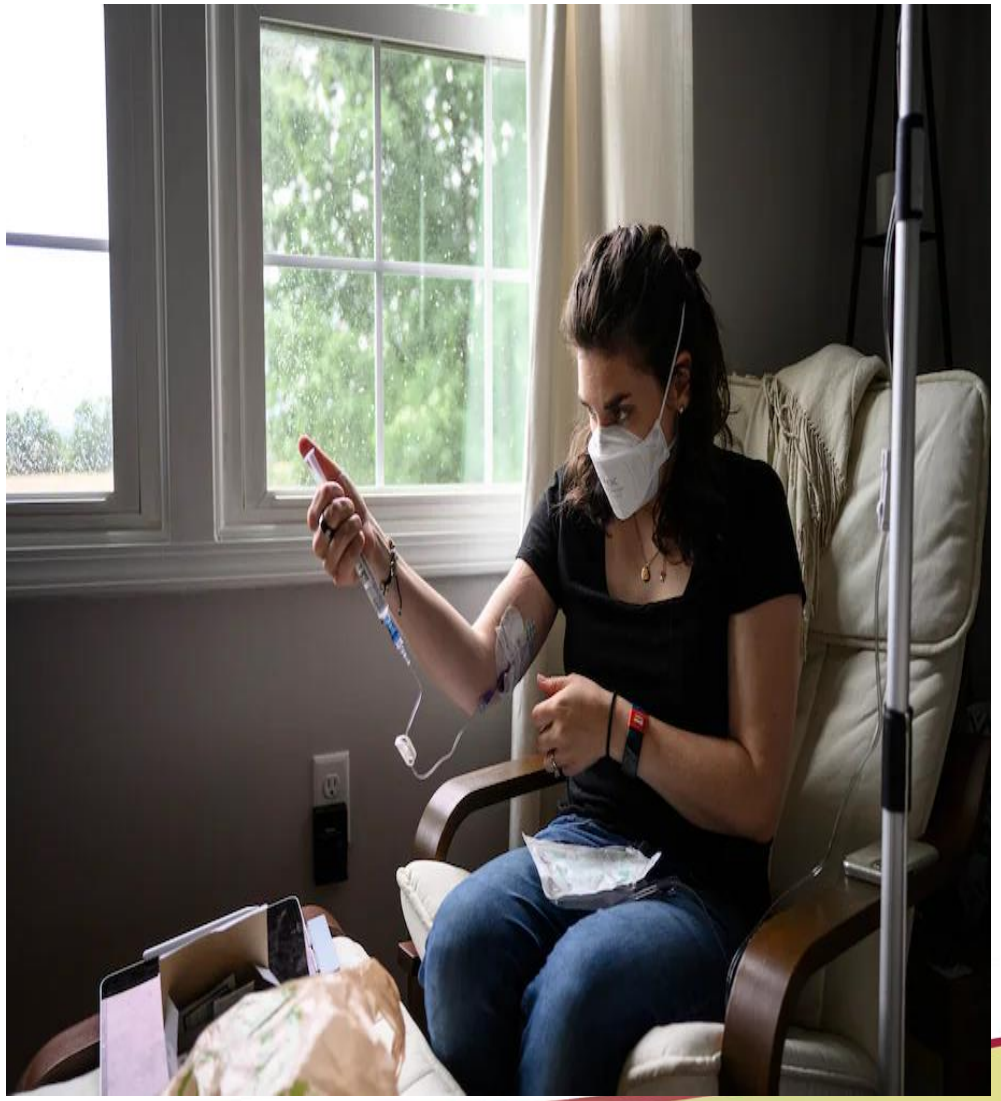
CDC: https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html

US Department of Education: https://sites.ed.gov/idea/files/ocr-factsheet-504-20210726.pdf

US Department of Labor: https://blog.dol.gov/2021/07/06/workers-with-long-covid-19-may-be-entitled-to-accommodations

SURVIVOR CORPS

Empathize • Organize • Mobilize



https://www.survivorcorps.com/pccc

COVID-19 and Risk of Mental Disorders

- Major new British Medical Journal (BMJ) study based on analysis of large US dataset found substantial *risks of new mental health disorders in COVID-19 survivors* even if they were not hospitalized, had a mild or asymptomatic infection.
  - anxiety
  - depression
  - stress and adjustment disorders
  - substance use disorders
  - cognitive decline
  - sleep disorders

BMJ 2022;376:e068993

COVID-19 and Risk of Mental Disorders (cont'd)

- The coronavirus can be found in the brain, including the amygdala and the hippocampus, which regulate moods and other functions related to mental health
- Identification and early treatment is crucial to prevent long-term mental health impacts of COVID-19
- Underscores the importance of vaccination in preventing infection and potential mental health impacts

COVID-19 Outcomes Among People with Severe Mental Illness

- People with severe mental illness (SMI) disproportionately impacted by the pandemic
- More likely to have comorbidities (e.g., obesity, cardiovascular disease, respiratory disease) that increase risk of severe infection
- *Even when controlling for comorbidities*, people with SMI, especially schizophrenia and substance use disorders, have higher risk of mortality due to COVID-19

Hassan, L., Peek, N., Lovell, K. *et al.* Disparities in COVID-19 infection, hospitalisation and death in people with schizophrenia, bipolar disorder, and major depressive disorder: a cohort study of the UK Biobank. *Mol Psychiatry* (2021). https://doi.org/10.1038/s41380-021-01344-2

COVID-19 and ACEs

- 2022 *British Medical Journal* study suggests that vaccine hesitancy may be linked to adverse childhood experiences (ACEs)
- Examples of ACEs: parental separation/divorce; abuse; neglect; parent with mental illness and/or substance use disorder
- Hesitancy 4 times higher among those with 4+ ACEs
- Over 50% of Americans have experienced at least one ACE; 5.7% have experienced 4+ ACEs

BMJ Open. 2022 Feb 1;12(2):e053915. doi: 10.1136/bmjopen-2021-053915.

Prior NASW National Webinars (*free CEUs provided*)

Webinar 1: **November 9, 2021**

(*COVID-19 Basics*, *Myths/Facts*)

Recording: https://bit.ly/3tbg3QG

Webinar 2: January 12, 2022

(Motivational Interviewing/SBIRT)

Recording: https://bit.ly/3sbidyW

Webinar 3: February 24, 2022

(Current Landscape, Special Populations)

- Recording: https://bit.ly/3c5R4I4

NASW Chapter Trainings: Motivational Interviewing and SBIRT (5 free CEU's provided)

NASW/West Virginia
Thursday, November 10, 2022
10:00 AM to 4:00 PM (ET)

NASW/Iowa
Thursday, December 8, 2022
9:00 AM to 3:00 PM (CT)

Additional trainings planned for 2023

SOCIAL WORK RESILIENCY

THROUGH THE COVID CONTINUUM

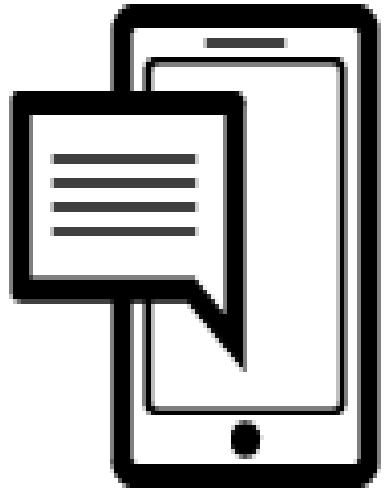
Virtual Forum

November 2-3, 2022
Up to 11.5 CE credits available

Registration:
https://naswvirtual.socialworkers.org/2022-virtual-forum

Mobile Application to Support Social Workers in COVID-19 Vaccine Conversations with Clients

- Introduces core Motivational Interviewing skills and Screening, Brief Intervention, and Referral to Treatment techniques to use in real time with clients around vaccine decision making
- Developed by NASW and the Health Behavior Research and Training Institute at The University of Texas at Austin, led by Drs. Mary Velasquez and Kirk von Sternberg
- Uses the Computerized Intervention Authoring System (CIAS), v. 3.0, developed by Dr. Steve Ondersma and his team at Michigan State University



The app has a dashboard with five hot-buttons:

Facts and Myths

Motivational Interviewing

COVID-19 Vaccine Resources

Special Populations: Barriers and Solutions

SBIRT

PERMANENTE MEDICINE®
Mid-Atlantic Permanente Medical Group

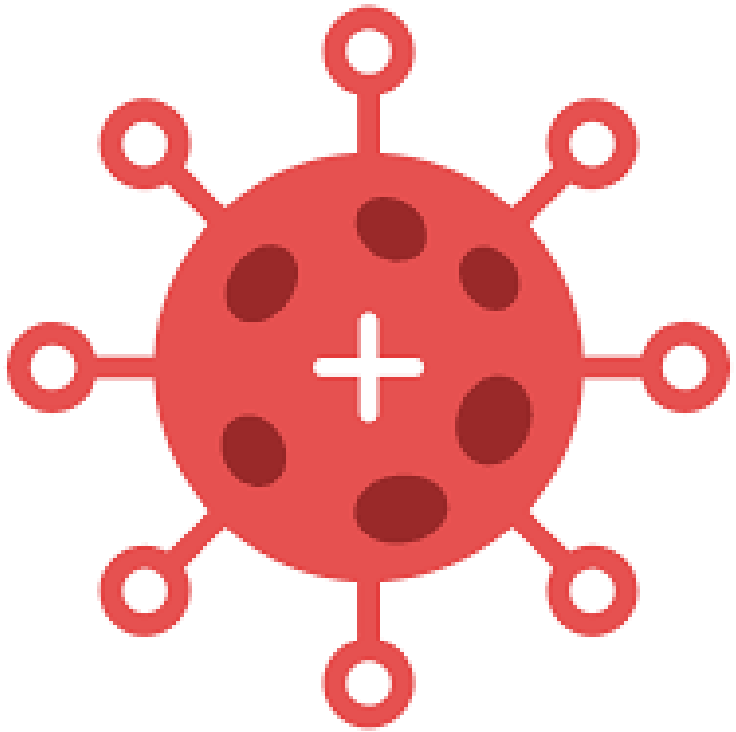
COVID Current State

What You Need To Know To Stay Safe

Dr. Mona K Gahunia
Associate Medical Director
Infectious Diseases/Internal Medicine
9/29/2022

KAISER PERMANENTE®

Agenda



- Current COVID Strain
- Vaccinations
- Treatment
- Future State

COVID-19 and Variants

- Viruses constantly change through mutation, and new variants of a virus are expected to occur over time.
- Multiple COVID variants have been documented in the US and globally during this pandemic.
- Variants become concerning if there is significant genetic mutation which changes the virus characteristics (e.g., some are more infectious/transmissible) and there is evidence of increasing global spread

VARIANT OF CONCERN

Omicron

Original Lineage: B.1.1.529

Currently Circulating Lineages: BA.2, BA.4 and BA.5

The Omicron variant, like other variants, is made up of a number of lineages and sublineages.

These lineages are often very similar to each other; however, there may be differences between lineages that affect the behavior of the virus. Visit CDC's COVID Data Tracker for the most current data on circulating variants.

Omicron spreads more easily than earlier variants, including the Delta variant.

Anyone with Omicron infection, regardless of vaccination status or whether or not they have symptoms, can spread the virus to others. Data suggest that Omicron can cause reinfection, even in people who have recovered from COVID-19.

Symptoms are similar to previous variants

COVID-19 vaccination status, other health conditions, age, and history of prior infection can affect the presence and severity of symptoms.

Omicron causes less severe illness and death in general, according to data

However, a surge in cases may lead to increases in hospitalizations and deaths.

Vaccines help prevent severe illness, hospitalizations, and death

Breakthrough infections in people who are vaccinated are expected. The emergence of the Omicron variant further emphasizes the importance of vaccination and boosters.

Antiviral treatments are effective

Some, but not all, monoclonal antibody treatments remain effective against Omicron. Public health agencies work with healthcare providers to ensure that effective treatments are used appropriately to treat patients.

https://www.cdc.gov/coronavirus/2019-ncov/variants/index.html\

Types of COVID-19 Vaccines Available

There are four approved or authorized vaccines in the United States.

- **Pfizer-BioNTech** and **Moderna** COVID-19 vaccines are mRNA vaccines.
- **Novavax** COVID-19 vaccine is a protein subunit vaccine.
- **Johnson & Johnson's Janssen** (J&J/Janssen) COVID-19 vaccine is a viral vector vaccine and can be given in some situations.

mRNA vaccines teach our cells how to make a protein—or even just a piece of a protein—that triggers an immune response inside our bodies. The mRNA from the vaccines is broken down within a few days after vaccination and discarded from the body.

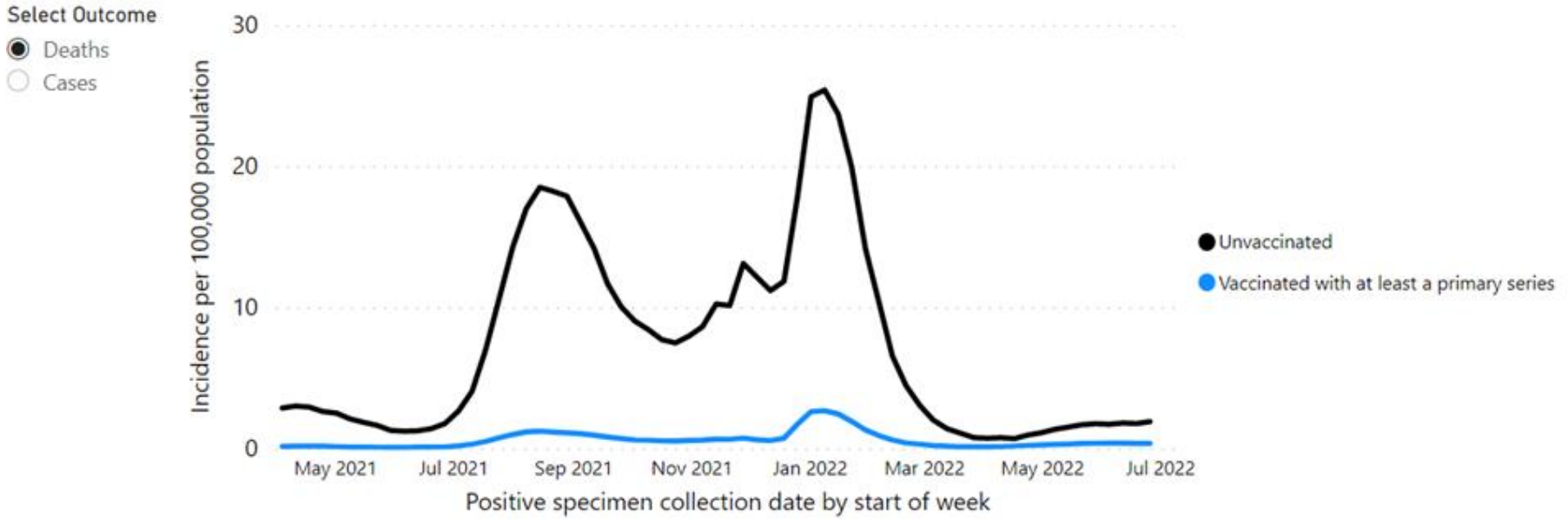
Protein subunit vaccines contain pieces (proteins) of the virus that causes COVID-19. The virus pieces are the spike protein. The Novavax COVID-19 vaccine contains another ingredient called an adjuvant. It helps the immune system respond to that spike protein. After learning how to respond to the spike protein, the immune system will be able to respond quickly to the actual virus spike protein and protect you against COVID-19.

Source: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/overview-COVID-19-vaccines.html?s_cid=11758:novavax%20covid%20vaccine:sem.ga:p:RG:GM:gen:PTN:FY22

Overall | Age Group | Vaccine Product

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**

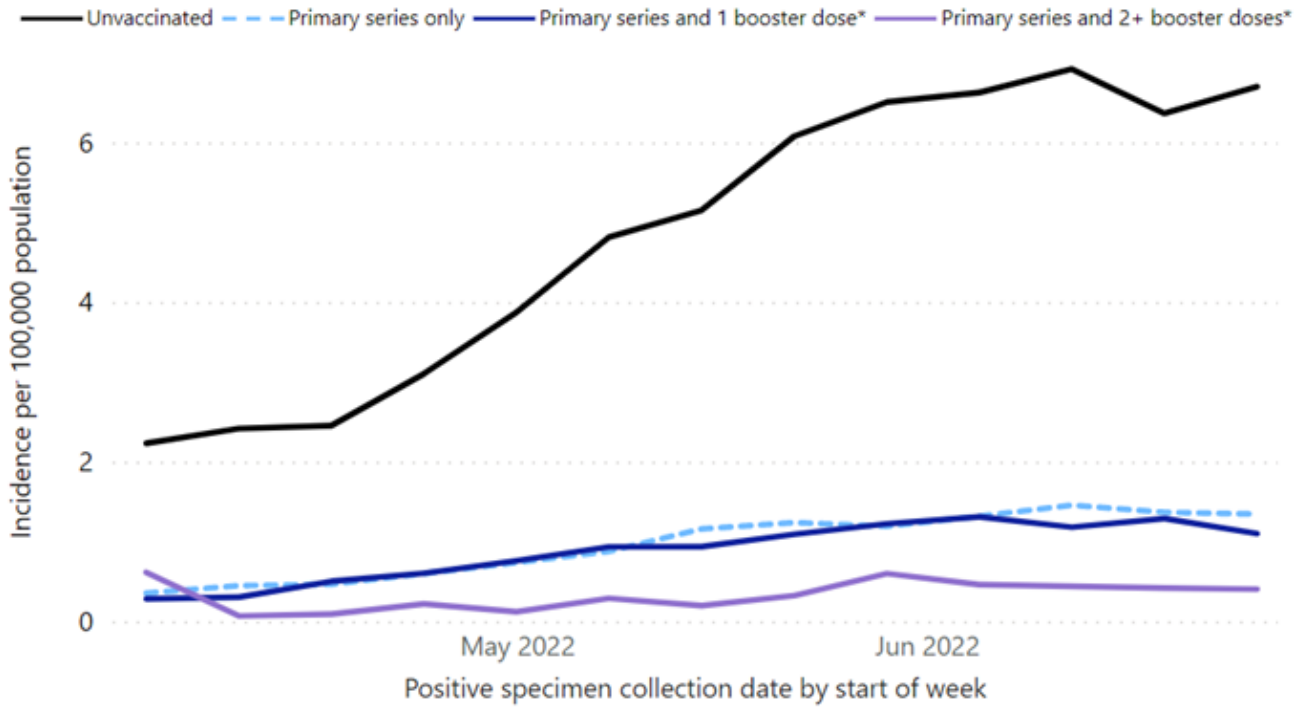
2.4X *Risk of Testing Positive for COVID-19* **in July 2022, compared to people vaccinated with at least a primary series.**

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

Rates of COVID-19 Deaths by Vaccination Status and 2+ Booster Doses* in Ages 50+ Years

April 03, 2022–July 02, 2022 (25 U.S. jurisdictions)

Select Outcome
- (●) Deaths
- ( ) Cases



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.*

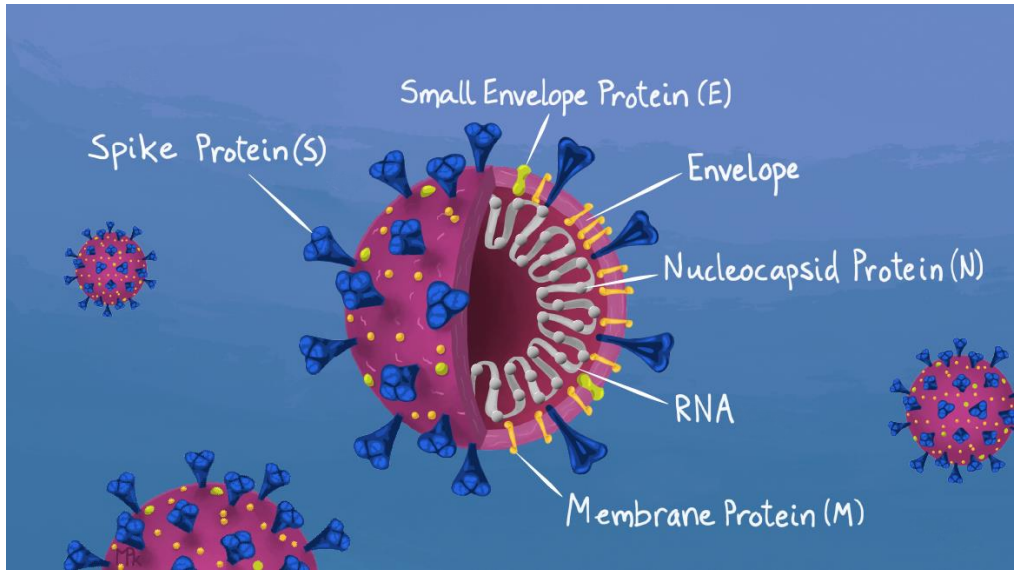
Among people ages 50 years and older, vaccinated people with a primary series and one booster dose had:

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

What are these new COVID-19 boosters, and how do they differ from the existing ones?



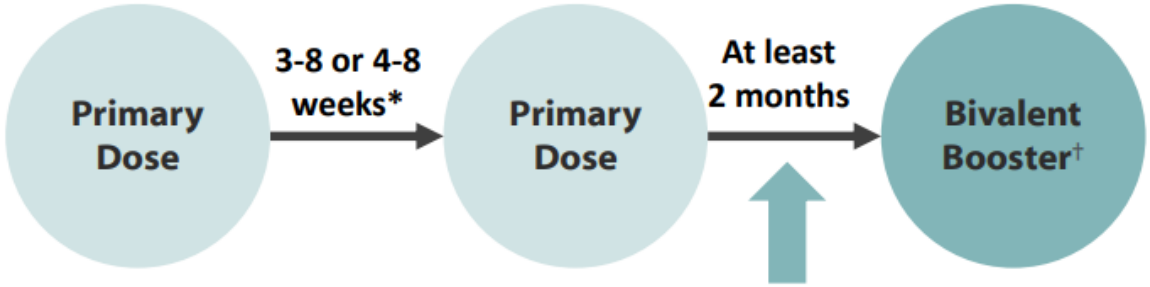
- A booster shot is recommended due to concern that the effectiveness of the vaccine decreases over time and may not protect against new strains.
- Until now, COVID-19 booster shots have been **monovalent** or **univalent**.
  - That means they only contained one version of the mRNA sequence for the spike protein that came from the original strain of the virus which emerged in late 2019 in Wuhan, China.
- The boosters that just got approved are considered **bivalent** vaccines. That means they contain the mRNA sequence for the spike protein of two strains of SARS-CoV-2:
  - The original SARS-CoV-2 strain, and
  - One in common between the two current predominant subvariants of Omicron, BA.4 and BA.5.

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-moderna-pfizer-biontech-bivalent-covid-19-vaccines-use#:~:text=The%20bivalent%20vaccines%2C%20which%20we,of%20SARS%2DCoV%2D2.

COVID-19 Vaccination Schedule for People who are NOT Moderately or Severely Immunocompromised

People ages 12 years and older

Moderna, Novavax, or Pfizer-BioNTech Primary Series



People ages 18 years and older

Janssen Primary Series Dose

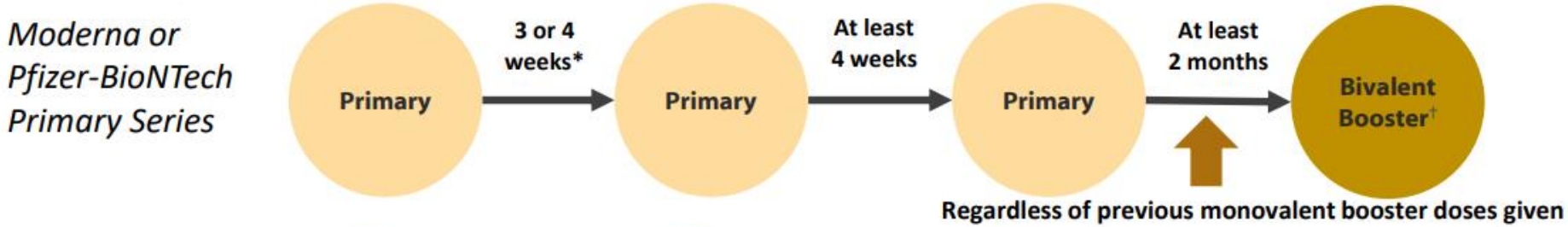
*3-8 interval for Novavax and Pfizer-BioNTech; 4-8 interval for Moderna

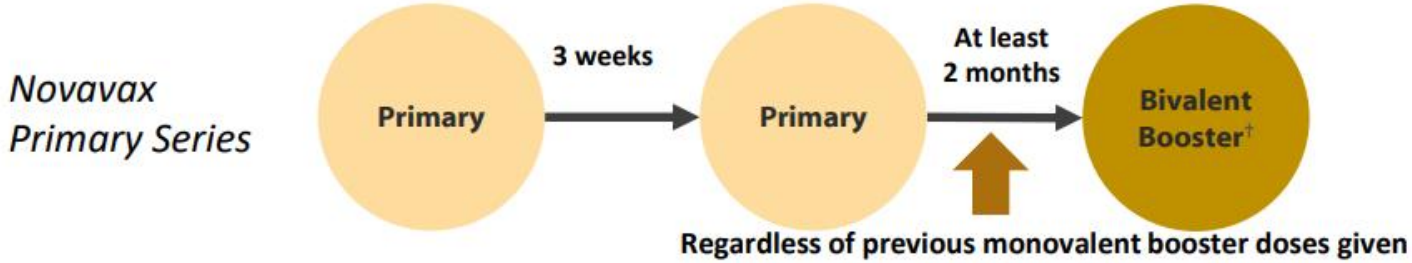
†The bivalent booster dose is administered at least 2 months after completion of the primary series.

For people who previously received a monovalent booster dose(s), the bivalent booster dose is administered at least 2 months after the last monovalent booster dose. The bivalent booster should be age appropriate; Pfizer-BioNTech is authorized for people ages 12 years and older and Moderna is authorized for people ages 18 years and older.

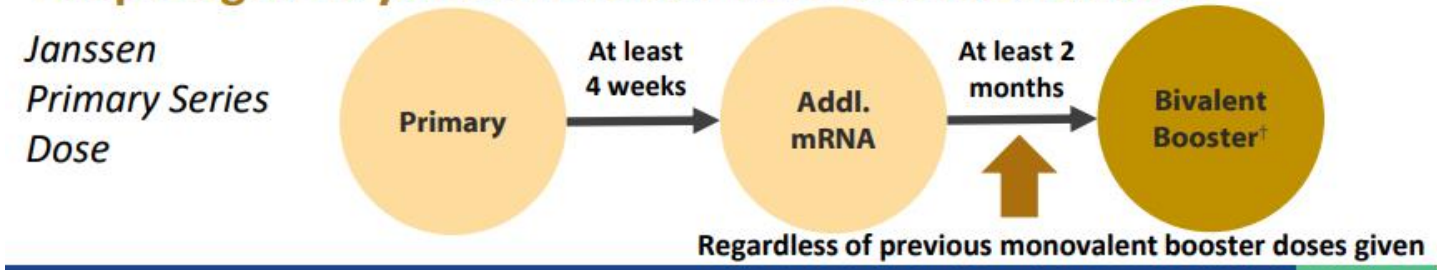
COVID-19 Vaccination Schedule for People who ARE Moderately or Severely Immunocompromised

People ages 12 years and older





People ages 18 years and older who received Janssen



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Impact of COVID-19 Pandemic on Children

- Children can get COVID-19 just like adults
- Children can spread COVID-19 to others
- Children are at risk of severe illness from COVID-19
  - Hospitalization
  - MIS-C
  - Death
- Children can experience short and long term post-COVID conditions
- Worsening of mental or emotional health
- Widening of existing education gaps
- Decrease in physical activity
- Decrease in health care utilization
- Decrease in routine immunizations
- Increase in Adverse Childhood Experiences (ACEs)
- Loss of caregivers

Percent of People Receiving COVID-19 Vaccine by Age and Date Administered, United States

December 14, 2020 – September 14, 2022

	<2 yrs	2-4 yrs	5-11 yrs	12-17 yrs	18-24 yrs	25-49 yrs	50-64 yrs	+65 yrs
At Least One Dose	4.4%	7.1%	38.3%	70.8%	80.0%	83.5%	94.1%	95.0%
Fully Vaccinated	1.1%	2.0%	31.2%	60.6%	65.0%	70.6%	82.4%	92.2%

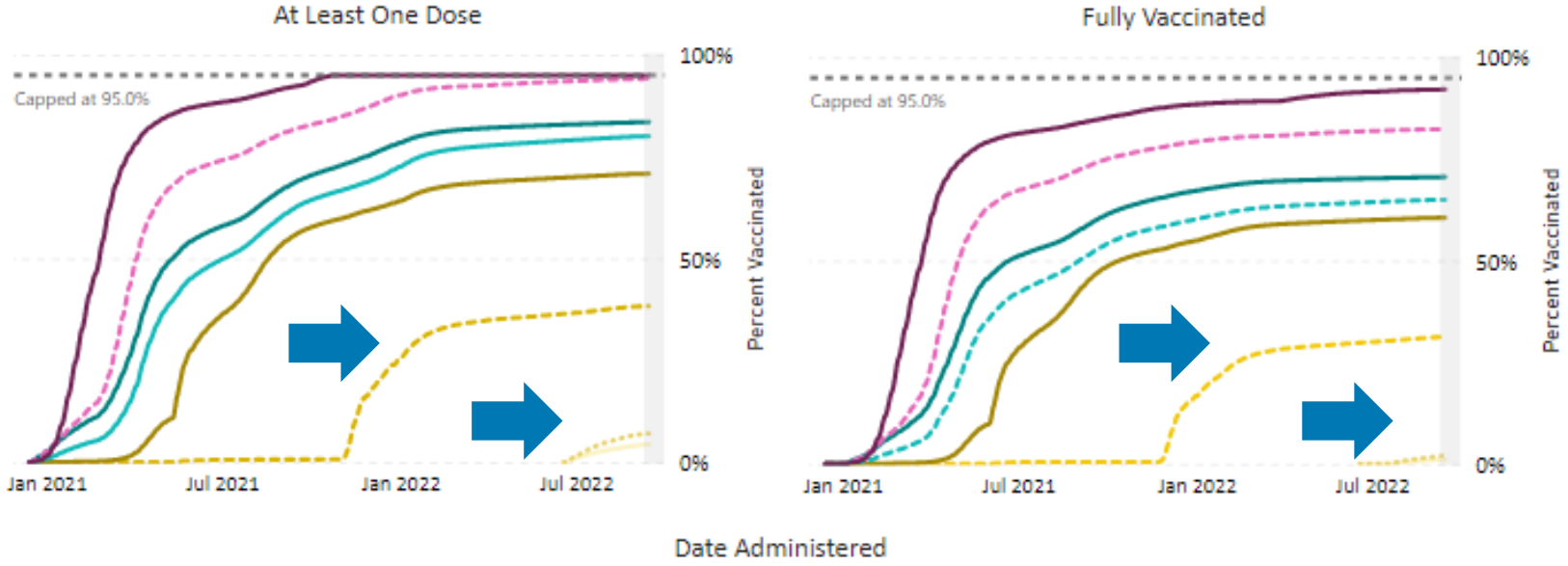
Location

United States

12/14/2020 9/14/2022

Vaccinations

- Sex
- Age
- Females by Age
- Males by Age



People receiving at least one dose; total count represents the total number of people who received at least one dose of COVID-19 vaccine. People fully vaccinated; total count represents the number of people who have received a dose of a single-shot COVID-19 vaccine or the second dose in a 2-dose COVID-19 vaccine series. Due to the time between vaccine administration and when reported to CDC, vaccinations administered during the last 5 days may not yet be reported. This reporting lag is represented by the gray, shaded box.

Last Updated: Sep 14, 2022

Data source: VTrcks, IIS, Federal Pharmacy Program, Federal Entities Program, U.S. Census Bureau 10-year July 2019 National Population Estimates; Visualization: CDC CPR DEO Situational Awareness Public Health Science Team

Source: https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends

Treatment for COVID-19

If you test positive for COVID-19 and are more likely to get very sick, treatments are available that can reduce your chances of hospitalization and death.

Don’t delay if you are above 50 or have an underlying condition: Treatment must be started within days after you first develop symptoms to be effective.

Other medications, such as Tylenol® or Advil ® can help reduce symptoms and help you manage your illness.

The Treatment Locator (hhs.gov) can help you find a location that offers testing and treatment or a pharmacy where you can fill your prescription.

There are two types of treatment available:

1. **Antiviral treatments** target specific parts of the virus to stop it from multiplying in the body, helping to prevent severe illness and death.
2. **Monoclonal antibodies** help the immune system recognize and respond more effectively to the virus.

Source: https://www.cdc.gov/coronavirus/2019-ncov/your-health/treatments-for-severe-illness.html

Treatment	Who	When	How
Nirmatrelvir with Ritonavi (Paxlovid) *Antiviral*	Adults; children ages 12 years and older	Start as soon as possible; must begin within 5 days of when symptoms start	Taken at home by mouth (orally)
Remdesivir (Veklury) *Antiviral*	Adults and children	Start as soon as possible; must begin within 7 days of when symptoms start	Intravenous (IV) infusions at a healthcare facility for 3 consecutive days
Bebtelovimab *Monoclonal antibody*	Adults; children ages 12 years and older	Start as soon as possible; must begin within 7 days of when symptoms start	Single IV injection
Molnupiravir (Lagevrio) *Antiviral*	Adults	Start as soon as possible; must begin within 5 days of when symptoms start	Taken at home by mouth (orally)

Source: https://www.cdc.gov/coronavirus/2019-ncov/your-health/treatments-for-severe-illness.html

Future State

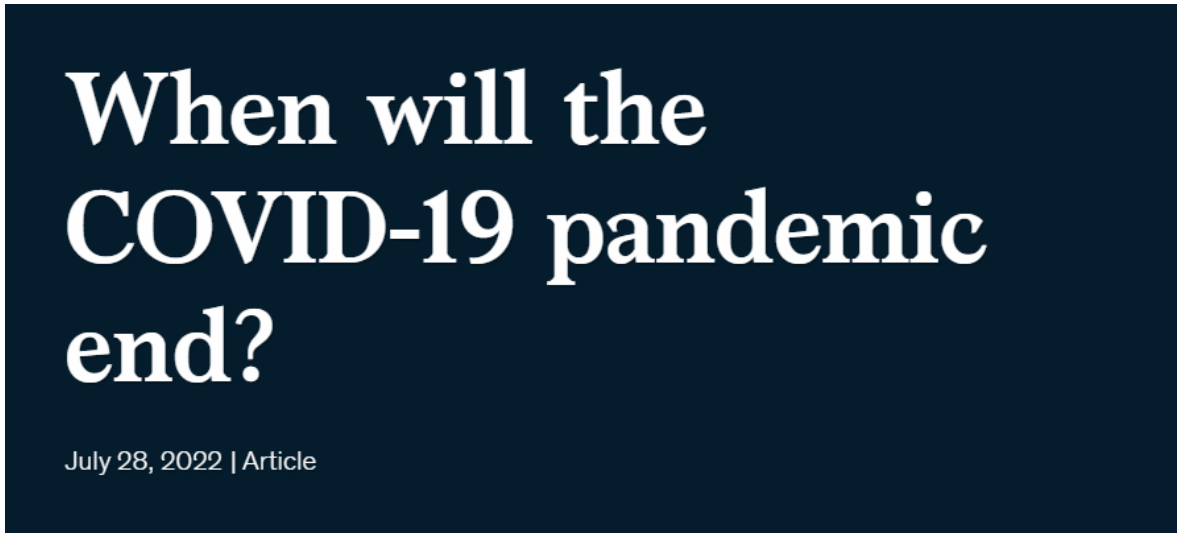
The risk that COVID-19 poses to a community at any point in time is a function of the immunity of its members. Immunity is gained through:

- Vaccination (primary series and boosters),
- Infection with COVID-19, or
- Both

Immunity is lost gradually with the passage of time AND/OR when a new variant emerges that evades previous immunity.

What does this mean for you?

- Continue to test for COVID-19 to help prevent spread & seek treatment if above 50 or have other risk factors
- COVID shots possibly every year – likely combined with flu – will be important to keep immunity levels amongst the population high.
- Keep up to date with the scientific news - monitor for new variants
- Take precautions during periods of high community transmission



Source: https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/when-will-the-covid-19-pandemic-end

Questions?