

# **SVH TownHall**

## **COVID-19**

### **Current State: Fall 2021**

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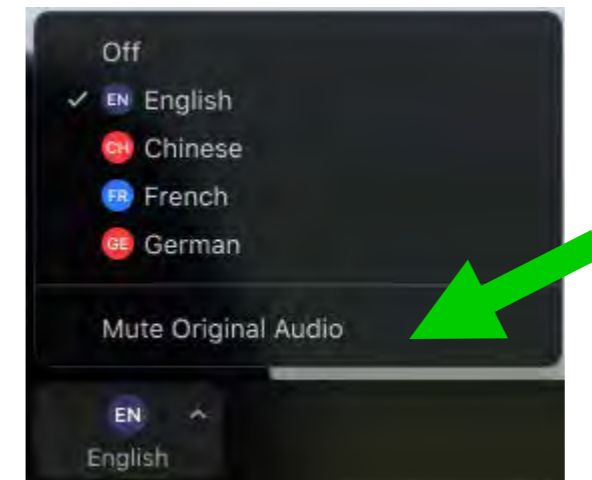
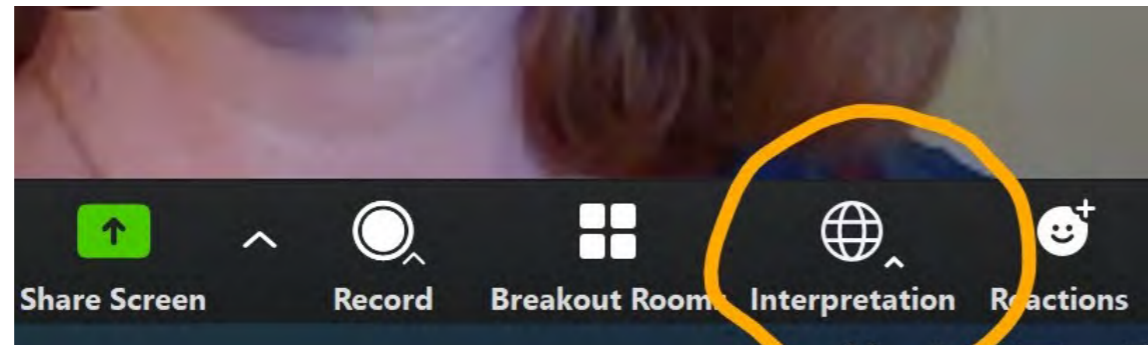
**CMO & UCSF Medical Director**

**Sonoma Valley Hospital**

**September 21, 2021**

# ZOOM Webinar Tips

- ▶ Please select your language
  - ▶ English or Spanish
  - ▶ If Spanish, mute the original audio



- ▶ All questions will be taken at the end of the presentation
  - ▶ Use Chat or Q&A feature to ask a questions

# Overview

- ▶ Current State of COVID-19
- ▶ Vaccines & Vaccine Myths
  - ▶ mRNA: 60 years in the making & how they work
  - ▶ Third doses & Booster Shots
  - ▶ Kids
  - ▶ J&J
- ▶ The Variants
- ▶ Vaccine Mandates
- ▶ Game Plan
- ▶ Q&A

# COVID-19 Current State: National

## United States

### Vaccination rate for the U.S.



Source: Centers for Disease Control and Prevention. Percentages are the share of a population that is fully vaccinated.

### Case details

The average number of new cases in the United States fell to **150,366** yesterday, a **1 percent decrease** from the day before. Since January of last year, at least **1 in 8** people who live in the United States have been infected, and at least **1 in 495** people have died.

[U.S.A. maps & charts](#)

	ON SEPT. 16	7-DAY DAILY AVG.	PER 100,000	14-DAY CHANGE	TOTAL REPORTED
<b>Cases</b>	154,897	150,366	45	-9%	41,790,700
<b>Deaths</b>	3,415	1,969	0.59	+29%	670,231
<b>Hospitalized</b>	—	97,424	29	-5%	

# COVID-19 Current State: Sonoma County

## Sonoma County, Calif.

### Vaccination rate for Sonoma County, Calif.



### Vaccination rate for California



Source: Centers for Disease Control and Prevention. Percentages are the share of a population that is fully vaccinated.

### Case details

The average number of new cases in Sonoma County fell to **81** yesterday, a **4 percent decrease** from the day before. Because of high spread, the C.D.C. recommends that even vaccinated people wear masks here. Since January of last year, at least **1 in 13** people who live in Sonoma County have been infected, and at least **1 in 1,329** people have died.

[Local maps & charts](#)

[California maps & charts](#)

	ON SEPT. 16	7-DAY DAILY AVG.	PER 100,000	14-DAY CHANGE	TOTAL REPORTED
<b>Cases</b>	48	81	16	-62%	39,114
<b>Deaths</b>	—	1	0.20	—	372

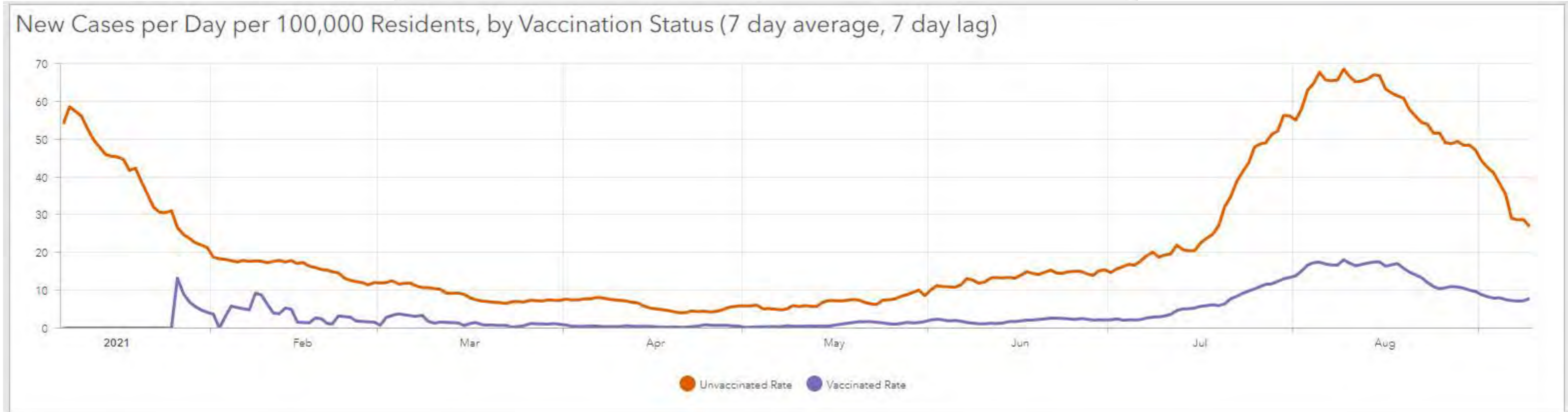
Note: No new deaths were reported in Sonoma County yesterday.

### Very High Covid-19 risk if unvaccinated



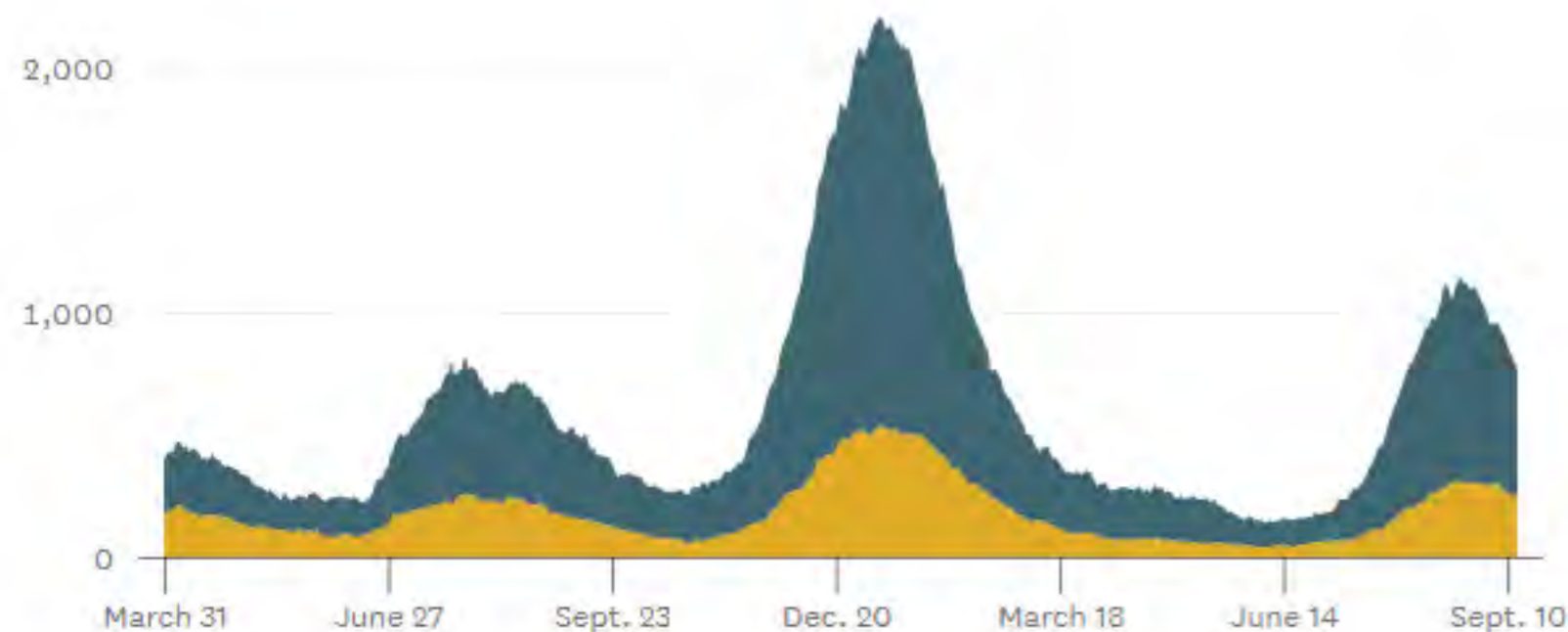
# Current State: Sonoma County

Sonoma County Cases			
<b>Active</b>	<b>Deaths</b>	<b>Recovered</b>	<b>Total</b>
<b>2759</b>	<b>376</b>	<b>35739</b>	<b>38874</b>
0.54% of Population	1% of Cases	92% of Cases	7.64% of Population



# Hospitalizations

Confirmed **ICU** and **non-ICU** COVID-19 patients in Bay Area hospitals



Source: California Department of Public Health

- **80% of COVID-19 Hospitalizations are among the UNVACCINATED**
- When Hospitals are forced to use resources for unvaccinated COVID-19 patients, there are **fewer resources for other routine conditions such as Heart Attacks, Strokes, and Traumas.**
- **COVID-19 affects ALL of us!**

# mRNA Vaccines (Pfizer/Moderna): 60 years in the Making

**1961**

## Discovery

Jacob, Brenner, and Meselson discover mRNA.

**1994**

## Self-Amplifying mRNA

SAM vaccines produce strong immune response.

**2007**

## Vaccine Stability

Engineering mRNA shown to help with stability.

**2017**

## Personalized Immunotherapy

Vaccine for melanoma shows promise.

**1990**

## Therapeutics

Scientists first express a therapeutic protein from mRNA.

**2003**

## Cancer Vaccine

First human trials show promise for immunotherapy.

**2010**

## Commercialization

Biotech company Moderna founded to commercialize mRNA research.

**2020**

## COVID-19

Two mRNA vaccines proven effective for COVID-19.



# Vaccines: How They Work...



# Third Doses vs Booster Shots

For Providers

## California COVID-19 Vaccination Program Update

### Additional (Third) Dose

- ▶ Recommended for Immunocompromised
  - ▶ mRNA Vaccines only (Pfizer/Moderna)
  - ▶ Moderately to severely immunocompromised
    - ▶ Individuals whose immune response following 2 shots is likely to be insufficient protection
  - ▶ At least 4 weeks after the initial 2-dose primary series

### Booster Dose

- ▶ **NOT YET AUTHORIZED OR RECOMMENDED**
  - ▶ Subject to to FDA authorization & CDC recommendation – still pending!
  - ▶ FDA Sept 17<sup>th</sup> meeting on boosters
    - ▶ **Recommended booster for Pfizer recipients who are 65 or older and/or high risk for severe COVID-19 infection.**
    - ▶ **Needs FDA approval then to CDC for recommendations**

# WHO Position on Booster Shots



Health Topics ▾

Countries ▾

Newsroom ▾

Emergencies ▾

- ▶ Boosters are NOT supported by the WHO
- ▶ Boosters will NOT stop the COVID-19 Pandemic
- ▶ Boosters WILL exacerbate global inequalities
- ▶ Boosters lack supporting evidence

## Conclusions

In the context of ongoing global vaccine supply constraints, administration of booster doses will exacerbate inequities by driving up demand and consuming scarce supply while priority populations in some countries, or subnational settings, have not yet received a primary vaccination series. The focus for the time being remains on increasing global vaccination coverage with the primary series (either one or two doses for current EUL vaccines).

Introducing booster doses should be firmly evidence-driven and targeted to the population groups in greatest need. The rationale for implementing booster doses should be guided by evidence on waning vaccine effectiveness, in particular a decline in protection against severe disease in the general population or in high risk populations, or due to a circulating VOC. To date, the evidence remains limited and inconclusive on any widespread need for booster doses following a primary vaccination series. WHO is carefully monitoring the situation and will continue to work closely with countries to obtain the data required for policy recommendations.

# Immunocompromised Qualifying Conditions

- ▶ mRNA Vaccines ONLY (no J&J)
- ▶ Age 12 and older ONLY
- ▶ Immunocompromised Conditions include:
  - ▶ Active treatment for cancer
  - ▶ History of solid-organ transplant
  - ▶ Immunosuppressive medications including chronic steroids (not short burst)
  - ▶ Stem cell transplant recipients (within 2 years)
  - ▶ Moderate or Severe Primary Immunodeficiency (DiGeorge Syndrome, Wiskott-Aldrich Syndrome)
  - ▶ Advanced or Untreated HIV infection

# Kids....

- ▶ Current Authorizations / Approvals
  - ▶ Full FDA Approval: Pfizer 16 & Older
  - ▶ FDA EUA Authorization: Pfizer / Moderna 12 & Older
- ▶ ETA: End of October 2021
  - ▶ 5-12 Pfizer FDA EUA Approval
- ▶ ETA: End of 2021
  - ▶ 2 & up FDA EUA Approval
- ▶ Under 2: Unknown



# J&J Vaccines...

The New York Times

## *The J.&J. Conundrum*

A guide to whether Johnson & Johnson vaccine recipients should get a booster shot — and how they might do so.

- ▶ Effectiveness:
  - ▶ Less effective than mRNA (Pfizer / Moderna) in both blocking infections and hospitalizations
  - ▶ Very effective against severe illness and death
- ▶ Boosters:
  - ▶ Not yet approved... need data
  - ▶ Mix & Match...done in Europe / Canada with AstraZeneca
    - ▶ No data for J&J or in US
  - ▶ Can You Get One Now?
    - ▶ Not approved
    - ▶ Maybe....

# COVID-19 Vaccine Myths



## MYTH #1



### The vaccine can affect my DNA

**Why it's false:** The genetic material in COVID-19 vaccines cannot interact with or change your DNA in any way.

## MYTH #5

COVID-19  
POSITIVE



### I don't need the vaccine because I've already had COVID-19

**Why it's false:** You may experience some level of immunity after having COVID-19, but it's unclear how long this protection might last.

## MYTH #2



### A vaccine developed so quickly can't be safe

**Why it's false:** Available vaccines have undergone thorough testing and external review. These vaccines may seem new, but there's decades of research behind them.

## MYTH #6



### I don't need the vaccine because I'm young and healthy

**Why it's false:** Even mild COVID-19 can cause uncomfortable and/or lingering symptoms. Plus, even those who are young and healthy must be vaccinated to achieve herd immunity.

## MYTH #3



### The vaccine can give me COVID-19

**Why it's false:** The mild side effects associated with the vaccines are a sign that your body is building immunity to the virus. These vaccines cannot give you COVID-19.

## MYTH #4



### The COVID-19 vaccine can affect my fertility

**Why it's false:** There's no data to suggest that these vaccines pose a risk to someone who is pregnant or wants to become pregnant.

## MYTH #7



### I don't need to wear a mask after being vaccinated

**Why it's false:** Until herd immunity is reached, wearing a mask and social distancing continue to be important safety measures.

# Vaccines & Pregnancy

- ▶ CDC: The COVID-19 vaccines are Safe and Encouraged for:
  - ▶ Pregnant women
  - ▶ Breastfeeding women
  - ▶ Those thinking about becoming pregnant
- ▶ NO increased risk of miscarriage with the vaccines.
- ▶ NO Safety Concerns with the vaccines and pregnancy.
- ▶ Risk of Pregnancy & COVID-19 Infection:
  - ▶ More SEVERE illness for pregnant and recently pregnant women
  - ▶ HIGHER risk of preterm birth





# Vaccines & Religion

- ▶ Many religious organizations, including the Catholic Church, The Vatican, The Jewish Orthodox Union, and The Rabbinical Council of America have encouraged vaccination despite any connection to fetal stem cells.
- ▶ Remote use of stem cells ONLY in the TESTING of Pfizer & Moderna.
- ▶ NO fetal / stem cells used in the production of Pfizer / Moderna vaccines.
- ▶ No pork products are part of the Pfizer, Moderna, or Astra-Zeneca vaccines.

# Variants of Concern

- ▶ All viruses mutate. These mutations lead to slightly different strains of the same virus called variants. Some variants may be more transmissible, may cause more severe illness, or may be more resistant to vaccines.

Variant	First Identified	Transmission	Illness Severity	Vaccine Effectiveness
Alpha B.1.1.7	UK	50% increased	Potentially increased	Minimal impact
Beta B.1.351	S. Africa	50% increased		Reduced ?
<b>Delta B.1.617.2</b>	<b>India</b>	<b>200% increased</b>	<b>Similar</b>	<b>Reduced, but highly effective</b>
Gamma P.1	Japan / Brazil			Reduced ?

**The Delta variant spreads more easily than previous variants—it may cause more than 2x as many infections**

ORIGINAL COVID-19 STRAIN      DELTA VARIANT

Vaccines protect you from hospitalization, severe infections, and death

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

CS 32241-AA 09/25/2021

# Variants... how to slow them down

- ▶ **STOP TRANSMISSION**

- ▶ More cases = More variants
- ▶ Fewer cases = Fewer variants

- ▶ **VACCINES: The MOST EFFECTIVE WAY TO STOP COVID-19 (and the variants)**

- ▶ Masks: effective, but not sustainable, compliance issues
- ▶ Physical Distancing: effective, but not sustainable, compliance issues
- ▶ Ventilation: effective, but not sustainable in all locations

# Important Mandates

## ▶ **Mandatory Vaccination Requirements**

- ▶ All California Healthcare Providers
- ▶ All teachers
- ▶ First Responders / Law Enforcement
- ▶ All employees of facilities that participate in Medicare / Medicaid
- ▶ All Federal employees
- ▶ All US Armed Forces
- ▶ All employees of businesses with >100 workers

## ▶ **Hospital Visitors**

- ▶ Full vaccination or Negative Test within 72 hours of each visit

## ▶ **San Francisco, Contra Costa County, Berkeley**

### ▶ **Proof of Full Vaccination REQUIRED**

- ▶ Restaurants (indoor dining)
- ▶ Bars & Clubs
- ▶ Gyms
- ▶ Large Indoor events
- ▶ Any business or event serving food or drink indoors

# Game Plan: Get Vaccinated



... and WEAR A MASK!

# Community Resources

- ▶ Sonoma Valley Hospital: <https://www.sonomavalleyhospital.org>
- ▶ **Sonoma Valley Health Partners:** <https://www.svhpvaccines.org>
- ▶ Sonoma Valley Community Health Center: <https://svchc.org>
- ▶ **City of Sonoma:** <https://www.sonomacity.org>
- ▶ Sonoma County Emergency: <https://socoemergency.org>
- ▶ **Schedule Your Additional Dose (immunocompromised):** <https://myturn.ca.gov>
- ▶ Need A Copy of Your Vaccination Record: <https://cairweb.org>
- ▶ **UCSF Covid-19 Resources:** <https://coronavirus.ucsf.edu>

# QUESTIONS?

