

# Board of Supervisors The Novel Coronavirus (COVID-19)

August 16, 2021



## **Briefing Topics**

- ➤ COVID-19 data recap
- ➤ Booster shot
- > Delta variant
- Comments from local hospital providers

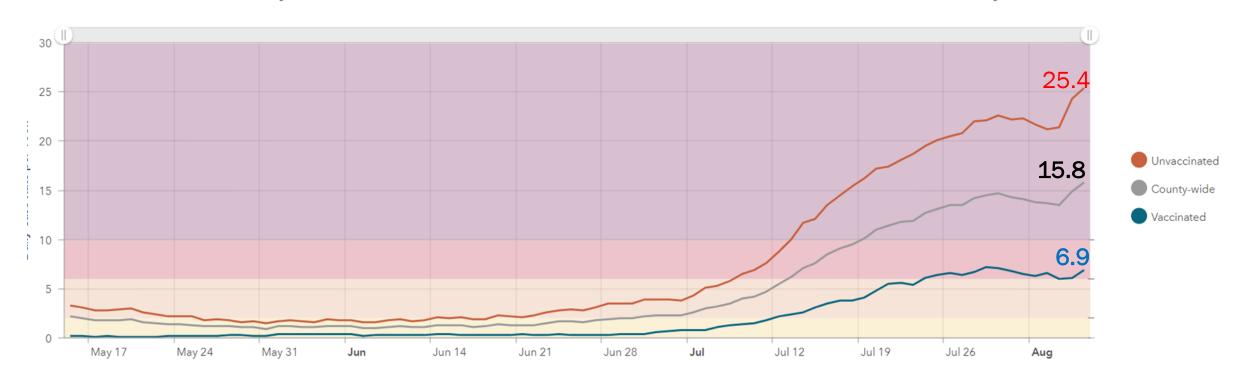


# COVID-19 Data Recap



## Case rates by vaccination status, 8/6

Daily Case Rate of Unvaccinated vs Vaccinated in Santa Barbara County

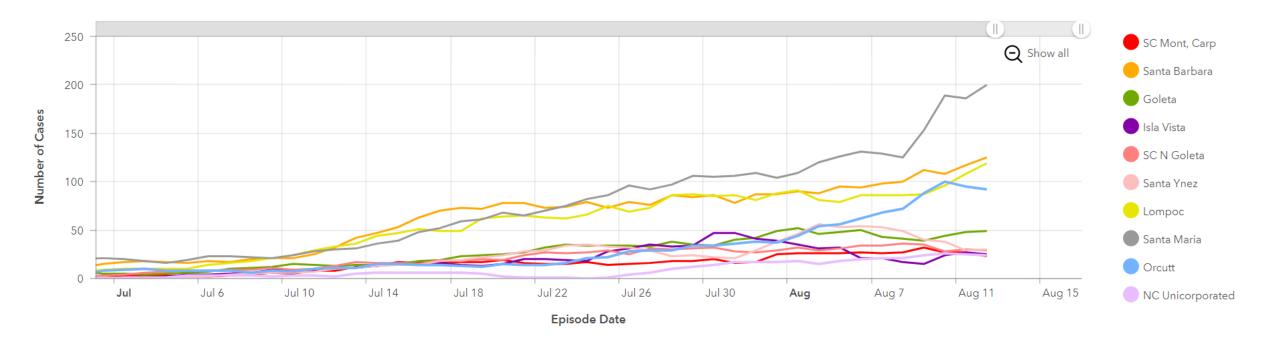




## Cases in Santa Barbara County

#### 7-Day Rolling Sum of New Cases by Area

Not including Lompoc Federal Correctional Complex





## Santa Barbara County by the Numbers, 8/16

**New Cases 71** 

**↓** 0% from 2 week avg of 104

**Active Cases 800** 

**1** 40% from 2 week avg of 573

**Total Cases** 

37,454

Case Rate per 100k as of August 12, 2021

23.3

New Deaths 0

Hospitalized 56

**1** 46% from 2 week avg of 38

**Total Deaths** 

470

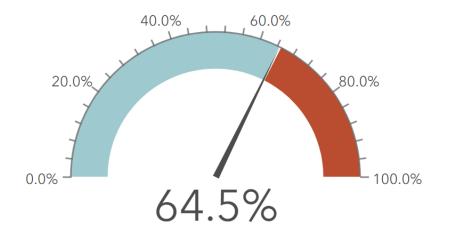
Test Positivity as of August 12, 2021

8.7%



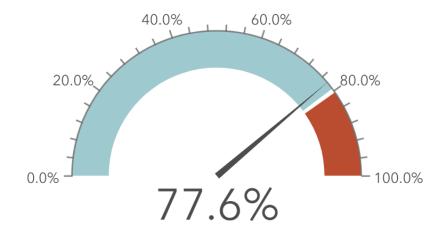
## Hospital Capacity, 8/16

% Hospital Beds in Use
Red Zone <35% available

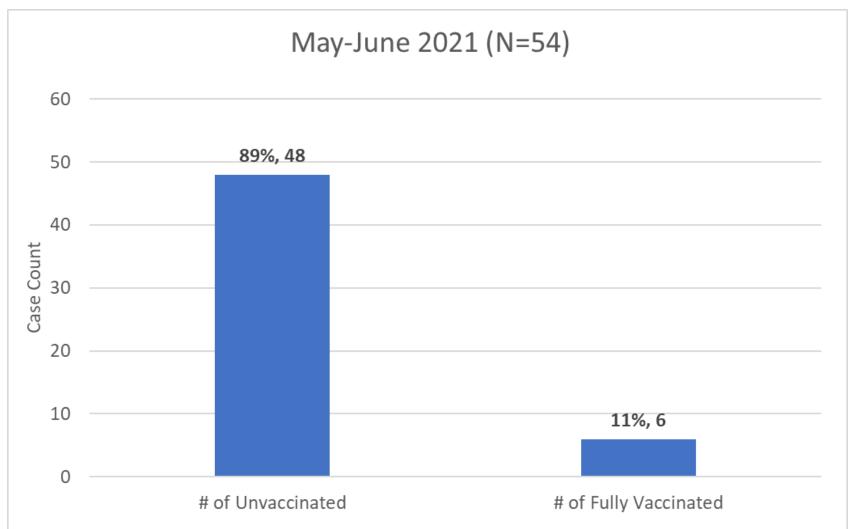


#### % Staffed Adult ICU Beds in Use

Does not include ICU Surge. Red Zone < 20% available



## **COVID-19 Hospitalization**





## Vaccination Rate, 8/16

% of Eligible SB County Fully Vaccinated



<u>142,006</u>

Eligible Santa Barbara County Residents are Unvaccinated



### Outbreaks

- >33 active
- >PH is monitoring to mitigate spread
- >Occurring in businesses, congregate settings, education



## **Booster Shot**



## **Booster Shot**

- > FDA approved for immune-compromised individuals.
- ➤ Booster available as 3<sup>rd</sup> shot for Pfizer & Moderna vaccines only
- ➤ Estimated 700,000 eligible in CA; ~13,500 in SBC
- Current vaccine providers and pharmacy sufficient to deliver booster
- > Self-attestation required:
  - Receiving active cancer treatment for tumors or cancers of the blood;
  - Received an organ transplant and taking medicine to suppress immune system;
  - Received a stem cell transplant within the last 2 years or taking medicine to suppress the immune system;
  - Moderate or severe primary immunodeficiency (such as DiGeorge syndrome, Wiskott Aldrich syndrome);
  - Advanced or untreated HIV infection;
  - Active treatment with high-dose corticosteroids or other drugs that suppress immune response



## Delta Variant



### **Delta Variant**

- ➤ Delta variant has shorter incubation period: infection to viral shedding (3-4 days)
- Even in vaccinated persons the Delta locks onto the nasal mucosa cells very rapidly and starts to replicate at enormous speed, outpacing mucosal immune response.
- ➤Once systemic immune response (antibodies and T-cells) kick in, the replication gets hampered and the viral load diminishes rapidly
- ➤ Viral shedding may be longer in unvaccinated (10 days +)
- > Higher ct values compared to alpha type (B.1.117) (as surrogate for viral load)



## **Delta in SB County**

- >~May 1: First 2 cases in travelers from India (both vaccinated with AZ)
- > June: Over 50% of sequenced samples were Delta- few alpha, rare gamma, no more epsilon (CA type), which was predominant still in May
- >July: Delta made up >95% of sequenced samples in SBC
- ➤ Breakthrough cases no longer rare





## Delta Epi

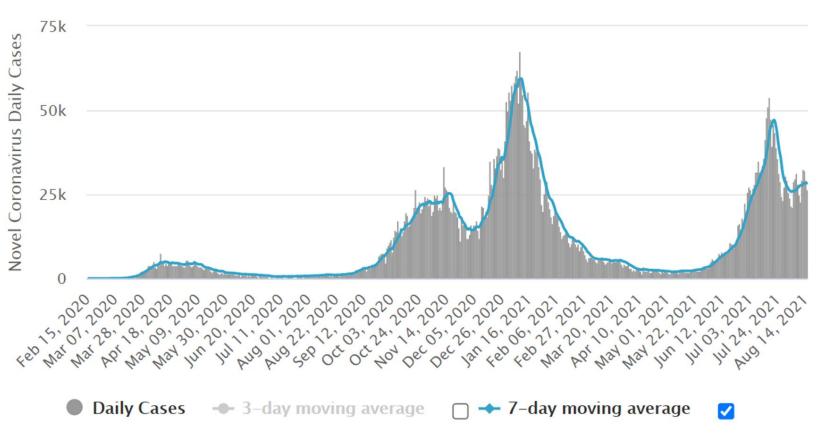
- Duration of viral shedding longer, generation/serial time which is time from one infection until another person caught the infection seems to be shorter. Tighter bonds to ACE2 receptors on mucosa cells, less neutralization at Ab binding sites:
- Combined these factors make for a more infectious virus:
  - •R-0 is at least 5-6 for Delta, might be as infectious as chickenpox R-0 of 8.
  - Alpha and ancestral strains had R-0 of 2-3
- ➤ Vaccine is still effective at keeping people alive and out of the hospital, even as we are seeing more breakthrough cases



## Cases from UK

#### **Daily New Cases**

Cases per Day Data as of 0:00 GMT+0





# Hospital Providers



## Comments from local providers

➤ Chuck Merrill, MD

**Chief Medical Officer** 

Dignity Health, Marion Regional Medical Center

➤ Lynn Fitzgibbons, MD
Infectious Diseases, Internal Medicine, Medical Education
Santa Barbara Cottage Hospital

