Board of Supervisors
The Novel Coronavirus (COVID-19)
December 14, 2021
Briefing Topics

- Current rates
- Vaccination & booster data
- CDPH guidance
- Omicron variant
## Santa Barbara County By the Numbers

### December 13, 2021

**Updated M-F except holidays**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
<th>Change</th>
<th>2 Week Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Cases</strong></td>
<td>21</td>
<td>↓ -71%</td>
<td>73</td>
</tr>
<tr>
<td><strong>Active Cases</strong></td>
<td>416</td>
<td>↑ 6%</td>
<td>391</td>
</tr>
<tr>
<td><strong>Hospitalized</strong></td>
<td>39</td>
<td>↑ 11%</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total Cases</strong></td>
<td>46,655</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Deaths</strong></td>
<td>554</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Test Positivity</strong></td>
<td>3.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Case Rate per 100k as of December 9, 2021: 12.8*

*Test Positivity as of December 9, 2021: 3.5%*
Case Rates by Vaccination Status

Daily Case Rate of Unvaccinated vs Vaccinated in Santa Barbara County

Unvaccinated
- Max: 24.1
- Min: 6.2

Vaccinated
- Max: 13.1
- Min: 3.4

Countywide
- Max: 24.1
- Min: 6.2
Hospitalization

Adult COVID-19 Patients Hospitalized

- COVID-19 Hospitalized
- COVID-19 ICU

Reporting Date

November
- Nov 11
- Nov 14
- Nov 17
- Nov 20
- Nov 23
- Nov 26
- Nov 29
- Dec
- Dec 5
- Dec 8
- Dec 11

Hospitalized
- 29
- 5
- 11

Total 39
### CDC Level of Community Transmission

<table>
<thead>
<tr>
<th>Community Transmission Levels</th>
<th>Low Transmission</th>
<th>Moderate Transmission</th>
<th>Substantial Transmission</th>
<th>High Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total new cases per 100,000 persons in the past 7 days</td>
<td>0-9.99</td>
<td>10-49.99</td>
<td>50-99.99</td>
<td>≥100</td>
</tr>
<tr>
<td>Percentage of NAATs that are positive during the past 7 days</td>
<td>0-4.99%</td>
<td>5-7.99%</td>
<td>8-9.99%</td>
<td>≥10.0%</td>
</tr>
</tbody>
</table>

- **Current SBC daily case rate:** 12.8/100,000
  - or 89.6/100,000 for 7 days
- **SBC has substantial transmission per CDC standards**
Vaccination Data
SBC Vaccination Rates

% of SB County Fully Vaccinated

63.8%

% of Eligible Fully Vaccinated

67.8%

County residents 5+ years old
Vaccination Rates Among 5-11 Years Old

- At Least One Dose:
  - Santa Barbara Co.: 15.3%
  - CA: 16.4%
  - U.S.: 17.2%

- Fully Vaccinated:
  - Santa Barbara Co.: 4.2%
  - CA: 2.3%
  - U.S.: 5.9%
Vaccination Rates Among 5-11 Years Old

- American Indian/Native Alaskan: 12.9% At Least One Dose, 4.5% Fully Vaccinated
- Asian: 15.7% At Least One Dose, 3.6% Fully Vaccinated
- Black/African American: 9.4% At Least One Dose, 1.6% Fully Vaccinated
- Hispanic/Latino: 8.6% At Least One Dose, 3.0% Fully Vaccinated
- Multiple Races: 7.5% At Least One Dose, 3.0% Fully Vaccinated
- White: 19.1% At Least One Dose, 7.5% Fully Vaccinated
Vaccination Rates Among 5-11 Years Old

- North County: 1.0% At Least One Dose, 0.2% Fully Vaccinated
- Central County: 1.0% At Least One Dose, 0.3% Fully Vaccinated
- South County: 1.7% At Least One Dose, 0.5% Fully Vaccinated
Boosters Among Fully Vaccinated

- Total: 23.2% Santa Barbara Co., 21.2% U.S., 23.8% CA
- 18+ Years of Age: 25.1% Santa Barbara Co., 22.8% U.S., 23.2% CA
- 50+ Years of Age: 39.8% Santa Barbara Co., 33.2% U.S., 34.3% CA
- 65+ Years of Age: 53.1% Santa Barbara Co., 44.7% U.S., 45.2% CA

Santa Barbara County, U.S., California
Percent Boosters Among Fully Vaccinated

- American Indian/Native Alaskan: 19.3%
- Asian: 26.0%
- Black/African American: 21.9%
- Hispanic/Latino: 12.6%
- Multiple Races: 37.2%
- Native Hawaiian/Pacific Islander: 21.3%
- White: 36.2%
Percent Boosters of Fully Vaccinated

North County: 16.7%
Central County: 22.3%
South County: 27.3%
CDPH Guidance
New CDPH Guidance

➢ Universal indoor masking statewide, effective 12/15 until 1/15

➢ Events with more than 1,000 people: Proof of vaccination or negative test
  ▪ 48 hours before event with PCR test
  ▪ 24 hours before event with antigen test

➢ Testing recommendation for all travelers to CA or returning to CA: within 3 to 5 days upon arrival
Omicron

WHAT WE KNOW AND WHAT WE DO NOT KNOW
Mutations in Omicron

➢ At least 50 mutations, many of them new
➢ Some of these mutations likely lead to more rapid spread
➢ As many as 30 or more mutations on the Spike protein section
➢ Changes in the Spike protein configuration has the potential to make the virus less vulnerable to antibodies (from vaccine or from previous infection)
Mutations in Omicron

Delta

18 aa mutated residues in the Spike protein
8 residues in >60% of available sequences

Omicron

43 aa mutated residues in the Spike protein
34 residues in >60% of available sequences

The structure of SARS-CoV-2 spike protein showing the active site in orange and the residues coloured against different mutational rate.
Omicron Transmissibility

- Doubling time 2-3 days (vs Delta 4-5 days)
- More contagious than Delta
- Higher rate of breakthrough cases than Delta
- Requires 3rd vaccine dose (vs Delta requires 2nd dose) for protection against more severe disease
- Yet unclear if morbidity and mortality less severe than Delta
Omicron in UK

➢ UK currently has by far most confirmed Omicron cases worldwide.
➢ Omicron is apparently causing a new surge in the UK.
➢ Already 40% of new infections in the UK are due to Omicron.
➢ It clearly has the potential to replace Delta due to speed of transmission (doubling time about 3 days compared to 4 1/2 days with Delta).
➢ The rate of breakthrough infections so far seems to be greater than with Delta.
➢ At this point it is not possible to determine if the level of need for hospitalization is decreased with Omicron compared to Delta.
➢ A few small studies out of South Africa, Israel, as well as from Pfizer report that a 3rd vaccine dose improves the protection against Omicron greatly.
➢ Given that we usually trail the UK by 6-8 weeks, we will only be dealing mainly with Delta for the next 2 months.
Multiple Layers of Protection

How to Stop COVID-19: The Swiss Cheese Model

- Good Ventilation
- Hand Hygiene
- Face Masking
- Physical Distancing
- Fully Vaccinated

The more steps you take, the safer you are against COVID-19.
Happy Holidays!

A big THANK YOU

to our amazing businesses and
our valued community during the pandemic.

We appreciate your dedication and commitment
to doing your part to stop the spread of COVID-19.

This holiday season let's...

Be Safe...by taking precautions
Be Smart...by staying informed
Be Kind...by supporting each other