UPDATE ON LOCAL EPIDEMIC
DECEMBER 15, 2020

Dr. Sara Cody
COVID-19 Epidemic, Santa Clara County, Jan. 27 – Dec. 13, 2020:
Case count has been increasing since early October, with rapid increase since early November

Figure: Lab-confirmed COVID-19 cases stratified by Long-Term Care Facility, outbreak, and community, reported by date of specimen collection

*91 cases not populated in graph due to missing specimen collection dates. Counts for Other Outbreak and LTCF cases for the past two weeks are preliminary; data are updated when case investigation is complete and the case is closed.

Source: California Reportable Disease Information Exchange (CalREDIE), Data retrieved 0700 December 14, 2020.
COVID-19 Epidemic, Santa Clara County, Sept. 8 – Dec. 7, 2020: Disparities in case rates by county section have increased since November

Figure: Daily rolling average rate of lab-confirmed COVID-19 cases by county section by specimen collection date Sept. 8 – Dec. 7, 2020

Source: California Reportable Disease Information Exchange (CalREDIE), Data retrieved 0700 December 14, 2020.
California Blueprint for a Safer Economy, Santa Clara County

Unadjusted and adjusted case rates are increasing rapidly

Figure: Unadjusted and adjusted case rate per 100,000 residents (7-day average, 7-day lag until 11/9; 4-day lag from 11/16)

Source: https://covid19.ca.gov/safer-economy/ as of 12/1/2020
COVID-19 Epidemic, Santa Clara County, Hospitalizations, Apr 1 – Dec 13, 2020: Number of COVID+ hospitalized patients has been increasing rapidly since early November.

Figure: Number of COVID+ hospitalized patients per day, Santa Clara County.
No Asian subgroups are overrepresented in cases relative to their share of the County’s population.

However, some Asian subgroups represent a larger proportion of cases than other Asian subgroups.

Case rates among all racial and ethnic groups are rising. Rates among Vietnamese and Filipino residents are rising faster than those of other Asian subgroups.
Figure: Percentage of total lab-confirmed COVID-19 cases by Asian subgroup, Jun. 1 – Dec. 3, 2020

Source: California Reportable Disease Information Exchange (CalREDIE), Data retrieved 0700 December 10, 2020.

Note: Uses data from June 01 to December 03 due to a lag of 7 days.
Vietnamese and Filipino residents are disproportionately affected by COVID-19 among Asian subgroups

Figure: Percentage of lab-confirmed COVID-19 cases (Asian cases only) by subgroup, Jun. 1 – Dec. 3, 2020

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Percent of Asian Cases</th>
<th>Percent of Asian Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnamese</td>
<td>28.1</td>
<td>19.3</td>
</tr>
<tr>
<td>Filipino</td>
<td>21</td>
<td>13.3</td>
</tr>
<tr>
<td>Chinese</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Indian Asian</td>
<td>13.2</td>
<td>25.4</td>
</tr>
<tr>
<td>Korean</td>
<td>1.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Japanese</td>
<td>0.8</td>
<td>4</td>
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<tr>
<td>Other</td>
<td>4.2</td>
<td>5.7</td>
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<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: California Reportable Disease Information Exchange (CalREDIE), Data retrieved 0700 December 10, 2020.

Note: Uses data from June 01 to December 03 due to a lag of 7 days.
Case rates are higher among Vietnamese and Filipino residents relative to other Asian subgroups, but lower than other populations.

Figure: Cumulative rate of lab-confirmed COVID-19 cases by race/ethnicity and Asian subgroup, Jun. 1 - Dec. 3, 2020

*Native Hawaiian or Other Pacific Islander

Source: California Reportable Disease Information Exchange (CalREDIE), Data retrieved 0700 December 10, 2020
Case rate has been rapidly increasing among Vietnamese and Filipinos since early November

Figure: Daily rolling average rate of lab-confirmed COVID-19 cases by race/ethnicity and specimen collection date, Jun. 1 - Dec. 7, 2020

Note: Uses data from June 01 to December 07 due to a lag of 7 days.
OVERVIEW

- COVID-19 hospitalizations are continuing to increase significantly in both ICU and non-ICU beds.
- For now, hospitals have compensated by:
  - Adding surge beds
  - Deferring elective surgeries (e.g., joint replacement, heart valve replacement, kidney transplant).
- However, hospitals’ ability to further compensate is limited.
Ability to stretch is determined by:
- Volume of patients
- Rate of increase
- Staffing
- Supplies
COVID HOSPITALIZATIONS CONTINUE TO INCREASE

- 105 ICU
- 374 NON-ICU
- 479 TOTAL

+12 Pediatric cases
HOSPITALS ARE ADDING ICU SURGE CAPACITY

![Bar chart showing ICU capacity increase]

- Total ICU beds (Occupied + Unoccupied)
- Typically Operational ICU Beds

+32

[EMResource 12/10/20]
HOSPITALS ARE DEFERRING ELECTIVE CASES

Weekly average = 1,658

Weekly average = 1,552

- 104
BED AVAILABILITY REMAINS ~ 15%

ICU BEDS REMAINING

NON-ICU BEDS REMAINING

54 BEDS (16%)

303 BEDS (16%)
Hospitals' Occupancy Relative to Current Capacity
Last updated on December 14, 2020

Number of Non-ICU Beds Currently Available
(includes staffed surge beds)
303

Percent of Non-ICU Beds Currently Available
(includes staffed surge beds)
16%

Percent of Non-ICU Beds with COVID-19 Patients
19%

Current Non-ICU Bed Availability Trends
Displaying: ICU Beds Non-ICU Beds
Topic: Bed Availability Occupied Beds Time Frame: Past 30 days Historical
Hospitals' Occupancy Relative to Standard Maximum Capacity

Last updated on December 14, 2020

Non-ICU Beds Remaining Before Standard Maximum Capacity is Reached

138

Percent of Standard Capacity Non-ICU Beds Occupied

92%

Displaying:  ICU Beds Occupied  Non-ICU Beds Occupied

Time Frame:  Past 30 days  Historical

Standard Maximum Non-ICU Bed Capacity (754)
EFFORTS TO MAINTAIN STAFFING RATIOS

- Staffing continues to be the #1 issue facing hospitals
  - Staff exhaustion
  - Absenteeism due to illness and contacts with COVID+ persons outside of work
  - Unprecedented demand throughout the State and Nation for qualified nurses and HCW’s

- Process of applying for waivers
  - Hospitals submit applications to the State
  - State asks for County input
  - State approves or denies*

* AFL 20-26.4 released 12/11/20 allows for immediate implementation of limited waivers
CDPH WAIVER REQUIREMENTS

- Describe cancellation of non-emergent surgeries
- Describe transfers to other hospitals
- Describe efforts to obtain additional staff, including contacting staffing agencies
- Describe management of vacancies and lay offs
SUPPLIES: PPE

Goal: To ensure all HCW’s have access to PPE

N-95 Masks  Surgical Masks  Face shields  Gowns  Gloves
5 M  4.0 M  3.0 M  1.7 M  7.0 M

Significant requests; constantly being replenished

Number of requests filled in past 14 days

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Requests</th>
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<tbody>
<tr>
<td>Clinics</td>
<td>5</td>
</tr>
<tr>
<td>Hospitals</td>
<td>2</td>
</tr>
<tr>
<td>First Responder Agencies</td>
<td>1</td>
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<tr>
<td>SNF/LTCF</td>
<td>12</td>
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[Inventory Report 12/7/20]
[WebEOC 12/11/20]
### SUPPLIES: PPE

#### PPE / Testing Supplies Requests

<table>
<thead>
<tr>
<th>Entity Name</th>
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<td>ALF</td>
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By requesting PPE or other supplies from the Emergency Operations Center of the County of Santa Clara, I certify that on behalf of the above-named entity ("Entity") that:

1. The PPE requested will be used for a medical need/procedure that if not performed could result in serious injury or death.
   
   □ YES □ NO □ N/A

2. The Entity has completed the required PPE Survey (daily for hospitals, weekly for SNFs, one time for all others if quantity thresholds are met).
   
   □ YES □ NO □ N/A

3. The Entity has tried extensively through all known vendor options and has exhausted all possible PPE procurement options prior to making this request.
   
   □ YES □ NO □ N/A

4. The Entity understands that it may be billed, and the Entity agrees to pay the County’s costs for this PPE request in the future.
   
   □ YES □ NO □ N/A

5. PPE will be used for the provision of clinical services in Santa Clara County.
   
   □ YES □ NO □ N/A
# COVID-19 Vaccine Update

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Type</th>
<th>Storage</th>
<th>Dosing</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Pfizer</td>
<td>mRNA</td>
<td>Ultra cold storage (-70°C)</td>
<td>2 doses, 21 days apart</td>
<td>12/11/20: EUA approved by FDA for patients 16+</td>
</tr>
<tr>
<td>Moderna</td>
<td>mRNA</td>
<td>Frozen (-20°C)</td>
<td>2 doses, 28 days apart</td>
<td>12/17/20: EUA review by FDA for patients 18+</td>
</tr>
<tr>
<td>Astrazeneca</td>
<td>Adenovirus</td>
<td>Refrigerated</td>
<td>2 doses, 28 days apart</td>
<td>Expect results in late-January and EUA application around that time</td>
</tr>
<tr>
<td>J&amp;J</td>
<td>Adenovirus</td>
<td>Refrigerated</td>
<td>1 dose 2 dose, 57 days apart</td>
<td>- Expect results in January; EUA application in Feb</td>
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<tr>
<td>Novavax</td>
<td>Recombinant Protein Nanoparticle</td>
<td>Refrigerated</td>
<td>2 doses, 21 days apart</td>
<td>11/30/20: completed enrollment of Phase III in UK; plans to start US trials soon</td>
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</tbody>
</table>
First Pfizer Vaccine Allocation

17,550 doses total

- Acute Care Hospitals: 11,700 doses
- SCC PHD: 5,620 doses
- San Benito County: 230 doses
Pfizer Vaccine Distribution

- **Estimated arrival:**
  - Local Health Department: December 15
  - Acute care hospitals: December 18

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<tr>
<th>Sunday</th>
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Skilled Nursing Facility staff working in County will be offered vaccination by PHD beginning this week.

Skilled Nursing Facility residents will be offered vaccination through federal program using retail pharmacies (begins wk. of 12/28)
First Moderna Vaccine Allocation

- Estimated arrival:
  - Public Health Department: December 22
- Re-distribute all 39,300 doses to acute care hospitals for continued vaccination of Phase 1A population

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Pfizer Vaccine Indications, Contraindications, Side Effects

- **Indications**
  - Approved for use in ages 16 years and older
  - Ok in persons with prior symptomatic or asymptomatic Covid-19 infection

- **Contraindications**
  - ACIP/CDC: Severe allergic reaction (anaphylaxis) to any vaccine or injectable therapy

- **Common side effects**
  - Injection site redness, swelling, pain
  - Fever, headache, tiredness
Pfizer Vaccine Administration

- 2-dose series administered intramuscularly approximately 3 weeks apart

- Administration of 2\textsuperscript{nd} dose within 4-day grace period (e.g. day 17-21) considered valid

- If >21 days since 1\textsuperscript{st} dose, 2\textsuperscript{nd} dose should be administered at earliest opportunity (no doses need to be repeated)

- Both doses are necessary for full protection
Local Partner Engagement

1. COVID-19 Vaccine Providers Taskforce

2. County of Santa Clara COVID-19 Vaccine Community Stakeholders Working Group
WASTEWATER PILOT UPDATE

Michael Balliet
Emergency Operations Center has been participating in local, state and national research and pilot programs on testing for SARS-CoV-2 in wastewater as an additional tool. The virus is primarily present in stool and can be detected in people who are asymptomatic. Represents a composite biological sample of an entire community. Currently working with Stanford University and all four Wastewater Treatment Plants (WWTPs) in Palo Alto, Sunnyvale, San Jose/Santa Clara, and Gilroy. Daily sampling and analysis is being performed with a 24-hour result provided to Public Health - started December 1st. Project is funded for 6 months by Stanford University and their partners, so there is no direct cost to the County. Data is being evaluated in conjunction with other Public Health data sources. The sampling and analysis procedures are still evolving regionally and nationally. Data is promising, as it appears to track with trends in the clinical data.
San Jose/Santa Clara Wastewater Treatment Plant

7-day ave case counts (within San Jose sewershed)  7-day ave case counts (County overall)  7-day Ave (N/PMMoV)  N/PMMoV  Non-Detects

Number of COVID-19 Cases

Specimen Collection Date

Mid-March  Late June & Early July  Early Nov

11/26 Thanksgiving Day
Data Trends Include:

- Historical wastewater data appears to be consistent with the three waves in mid-March, mid-June, as well as the recent surge since early November.
- Recent trends show much higher concentrations, consistent with the current surge.
Countywide Wastewater Data

Average of Three Genes / Normalized PMMoV gene copies/gram

San Jose / Santa Clara

Palo Alto

Gilroy

Sunnyvale
Countywide Wastewater Data

- Data analysis and interpretation is still evolving
- Data Trends:
  - Variability from day-to-day can be high
  - Important to looked at trend lines, and averages over a period of time
  - Data can be used to track relative virus concentrations within these four distinct geographic areas
  - When used in conjunction with other data, wastewater data can provide a glimpse of viral trends in the broader community