



San Francisco Village

COVID – 19
Research and Advisory Team:
Report and Recommendations #19
July 19, 2020

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This report contains a summary of the key updates on the status of Covid-19 that are more evident since our last report (June 14), along with our current recommendations for actions for SFV to consider taking. Sources include: CDC, WHO, SFDPH, CA DPH, Science Journal, Nature Journal, New England Journal of Medicine, Journal of the American Medical Association, Scripps Research Institute, Johns Hopkins Coronavirus Resource Center, UCSF Medical Grand Rounds, STAT, Institute for Health Metrics & Evaluation, the Covid Tracking Project, other clinical journals, reports from public health professionals, and news media.

NOTE: In this report we focus on the areas of New Findings, San Francisco updates, and California updates.

RECENT FINDINGS

1) Immunity to Covid-19 could be lost in months

People who have recovered from Covid-19 may lose their immunity to the disease within months, according to research suggesting the virus could reinfect people year after year, like common colds.

In the first longitudinal study of its kind, scientists found levels of antibodies that can destroy the virus peaked about three weeks after the onset of symptoms then swiftly declined. Blood tests revealed that while 60% of people marshaled a “potent” antibody response at the height of their battle with the virus, only 17% retained the same potency three months later. Antibody levels fell as much as 23-fold over the period. In some cases, they became undetectable. Antibody levels rose higher and lasted longer in patients who were severe cases. This may be because the patients have more virus and churn out more antibodies to fight the infection.

The study has implications for the development of a vaccine, and for the pursuit of “herd immunity” in the community over time. The immune system has multiple ways to fight the coronavirus but if antibodies are the main line of defense, the findings suggested people could become reinfected in seasonal waves and that vaccines may not protect them for long. Vaccines will need to do better than natural infection, providing consistent responses in the majority of individuals and sustained levels of protective antibodies. Ultimately this may require the use of annual boosting immunizations, particularly for the most vulnerable. This could be delivered alongside annual influenza immunizations.

2) How effective does a vaccine need to be?

In a study published July 15 in the *American Journal of Preventive Medicine*, a computer simulation of every person in the country was used to show how effective a vaccine would have to be and how many people would have to get vaccinated to end the pandemic. Scientists found that a coronavirus vaccine’s effectiveness may have to be higher

than 70% or even 80% before Americans can safely stop relying social distancing. By comparison, the measles vaccine has an efficacy of 95%-98%, and the flu vaccine is 20%-60%.

Different vaccines may offer different levels of protection. Scientists talk about this as the vaccine's efficacy or effectiveness. If 100 people who haven't been exposed to the virus are given a vaccine that has an efficacy of 80%, that means that on average 80 of them would not get infected.

If the COVID-19 pandemic was just beginning and the population infected was close to 0%, the simulations show that vaccine efficacy would have to be at least 60% to stop the coronavirus if the entire population was vaccinated. Given the number of susceptible people who couldn't be vaccinated because of age or health problems and the number who would refuse to be vaccinated, that's probably impossible. With fewer people protected, a vaccine would have to have an efficacy of at least 80% to be able to stop the pandemic by itself, meaning social distancing could be completely relaxed.

When 5% of the population has already been infected with the virus, the best that you can do is reduce the peak by around 85%. The difference between 0% and 5% can add up to millions of infections.

3) Older Children Spread the Coronavirus Just as Much as Adults

The study of nearly 65,000 people in South Korea suggests that school reopenings will trigger more outbreaks. Children younger than 10 transmit to others much less often than adults do, but the risk is not zero. And those between the ages of 10 and 19 can spread the virus at least as well as adults do.

4) Coronavirus Drug and Treatment Tracker

For those who are interested, the New York Times maintains an updated list of drugs and treatments

<https://www.nytimes.com/interactive/2020/science/coronavirus-drugs-treatments.html>

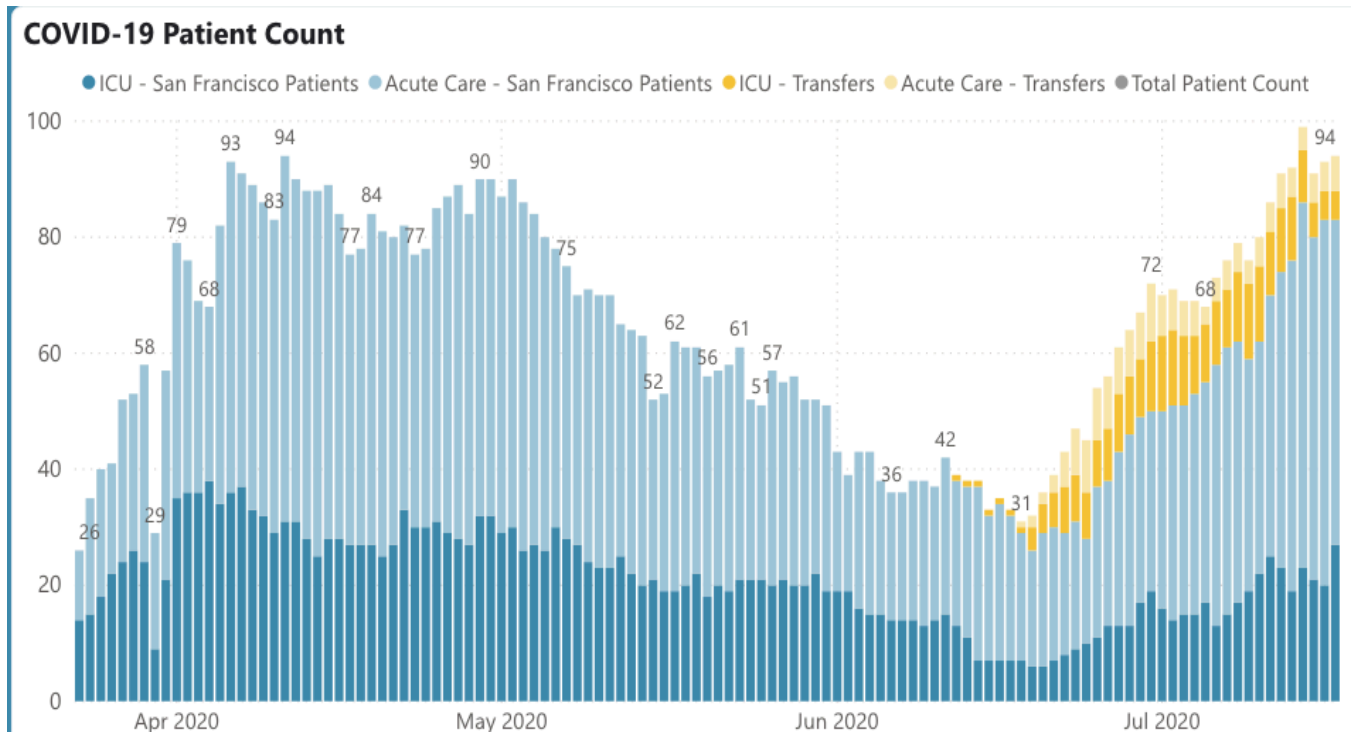
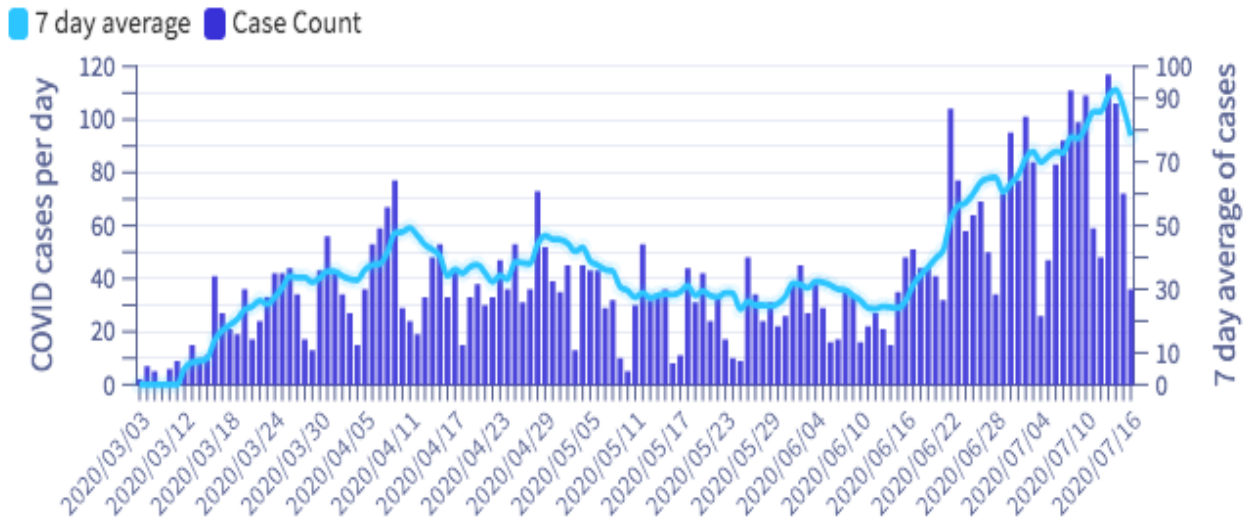
SAN FRANCISCO

Total tested: 211,512

Confirmed cases: 5,202 — up by 86 (1.7%) since 7/18

Hospitalized: 103 — up by 2 as of 7/17, with 29 in ICU beds

Deaths: 52 — up by 0 since 7/18



1) San Francisco numbers are on the rise

The city has seen 5,205 confirmed coronavirus cases and 52 related deaths. It took more than a month for the number of reported cases to climb from 2,000 to 3,000 — but it has taken 13 days for the count to go from 4,000 to nearly 5,000. The southeast part of the city has been hit especially hard. The city's Latinos continue to make up about 50% of the positive cases even though Latinos represent only 15% of the city's population. The average age of people hospitalized with COVID-19 is 41.

Dr. Colfax, Director of Health, explained that the virus would have burned out in the City, if it had stayed at May's low reproductive rate, which was .85. Right now, researchers believe that for every one person infected with COVID-19 in San Francisco, he or she spreads it to 1.25 people on average. That may not seem like a lot, but that rate of infection has the potential to land San Francisco in a scenario like New York saw in March and April. At the current rate of spread, the city is projected to see 830 hospitalizations by the end of the year. The worst-case scenario shows hospitalizations peaking at 6,000 by the end of the year.

2) Reopenings on hold

San Francisco Mayor London Breed said Friday the city has now been added to the state's watch list because of rising hospitalizations for the coronavirus and implored residents to avoid gathering with others outside their households. She said the city's reopening has been put on hold indefinitely, and if conditions fail to improve, the city may close more businesses and activities.

3) Key strategies to curb spread

Key strategies include increasing public outreach to change San Franciscans' behavior, focusing on communities most impacted by the virus, and expanding access to testing.

It has taken longer for people to access testing appointments and receive their results. In an effort to address this challenge, the City will issue a Health Order on Monday requiring private health care providers to increase their testing services by providing same-day testing for patients with symptoms and close contacts of confirmed COVID cases.

Additionally, private hospitals and clinics must provide testing to asymptomatic workers in jobs where they have more risk of exposure, such as health care, first responders, and jobs with frequent public interactions at less than six-feet apart. Staff and residents of congregate settings also must be provided testing if requested.

In order to slow the spread of COVID-19 in the short-term and adapt to living with the virus until there is a vaccine, San Franciscans need to redouble their efforts to consistently wear face coverings and limit gatherings with people not in their household. Research shows that if the vast majority of people wear masks that cover their nose and mouth, San Franciscans can effectively slow the spread of the virus and save lives. Many of the new cases of COVID-19 that are part of the current surge are the result of social gatherings among family members and friends, so it is important that San Franciscans limit such gatherings as much as possible. In addition to these behavioral changes, everyone must continue practicing social distancing, hand washing, and staying home as much as possible.

San Francisco will continue to focus on the communities most impacted by the virus, especially members of the Latino community, people who must leave home to work, Black and African American residents, and the eastern and southeastern neighborhoods. This focus includes expanding access to COVID-19 testing and conducting targeted community outreach in impacted communities. For example, this week, San Francisco opened a new testing site at the Potrero Hill Health Center, adding to a recent expansion of testing options in the Tenderloin, Mission, Sunnydale and Bayview.

CALIFORNIA

California cases to date: 384,692 — up from 375,686, or 1.5%

California currently hospitalized: 6,899 — up from 6,808 (+1.3%)

California deaths: 7,685 — up by 82, or 1.1%

California COVID-19 By The Numbers

July 19, 2020

Numbers as of July 18, 2020

CALIFORNIA COVID-19 SPREAD

384,692 (+9,329)

TOTAL CASES

Ages of Confirmed Cases

- 0-17: 32,913
- 18-49: 231,171
- 50-64: 74,999
- 65+: 45,166
- Unknown/Missing: 443

Gender of Confirmed Cases

- Female: 191,173
- Male: 191,472
- Unknown/Missing: 2,047

7,685 (+90)

Fatalities

Hospitalizations

Confirmed COVID-19
6,899/1,921
Hospitalized/in ICU

Suspected COVID-19
1,499/186
Hospitalized/in ICU

For county-level
hospital data:
bit.ly/hospitalsca

Your actions **save lives.**

For county-level data:
data.chhs.ca.gov
covid19.ca.gov



1) Rise in cases, hospitalizations, and deaths

Since California began reopening in May, hospitalizations have more than doubled, deaths have nearly tripled and the state has surpassed 350,000 COVID-19 cases. California reported its third-highest daily total of additional coronavirus cases, with nearly 10,000 cases and 130 deaths. Over the past two weeks, more than 1,200 people have died from the virus. More than 30 of California's 58 counties are now on the watch list, which looks at hospitalizations and virus transmissions, as well as hospital capacity.

On Thursday, Los Angeles County reported more than 4,500 new coronavirus cases, shattering the record for the highest single-day increase in new infections. The rate of hospitalization rose among younger people between 18 and 40 years old was at a higher rate than seen at any point in this pandemic. Over the last two weeks, Orange,

Riverside and San Bernardino counties are reporting higher coronavirus case rates per capita than L.A. County

2) Many schools will be virtual

With the surge comes the news that most California schools will not reopen when the academic year begins, relying instead on full-time distance learning. Under statewide rules announced Friday by Gov. Newsom, schools will remain closed in 32 counties on the state's COVID-19 monitoring list. New state guidelines say districts can't reopen classrooms until a county is off the watch list for 14 days, a threshold major counties aren't likely to meet soon. At schools that can open, all staff and students in third grade and above must wear masks.

RECOMMENDATIONS

SFV will need to continue to be alert to members' potentially increasing concerns about the escalation of the virus, given the following:

- The ongoing rise in cases, hospitalizations, and deaths nationally, in California, and now in San Francisco (although SF is not seeing a large increase in deaths).
- The fact that 40% of cases are asymptomatic and spread the virus "silently."
- Vaccine effectiveness and availability are uncertain, and repeated vaccinations each year may be necessary.
- Antibody immunity following infection is of relatively short duration.
- The virus is understood to be a whole system disease with the possibility of debilitating symptoms continuing for months.
- Minorities carry a disproportionate share of the health burden and economic pain.
- Younger people are getting infected at increasing rates and some suffer serious symptoms for prolonged periods.
- The ongoing recommendation that older adults and those with chronic conditions maintain high levels of precautions, including sheltering in place.

SFV can also remind members that:

- The prevention approaches - shelter in place, physical distancing, wearing a mask – while no guarantee of safety, have been shown to be very effective.
- For some, outdoor exercise and only having small, outdoor social “bubble” gatherings while using the prevention measures of distancing and masking, may have relatively low levels of risk.
- While there is no vaccine or cure – doctors are learning about a few treatments that can mitigate some of the worse symptoms.
- The search for vaccines and treatments is a global effort with many candidates already in clinical trials.

Very importantly, given that prolonged social distancing can have health consequences, the community to be found through SFV (events, Circles, intergenerational conversations, volunteers, etc.) is increasingly vital.

It is now over 4 months since the initial shelter in place order in San Francisco. SFV could consider developing plans over the next two months (with Kate & staff determining the need, the timing, and resource availability) for having volunteers do targeted phone outreach to members thought to be more isolated or at risk. Volunteers could also conduct phone polls of additional members to ask how they are currently engaging with SFV and what could SFV offer that would be of additional value to them.