San Francisco Village

COVID – 19
Research and Advisory Team:
Report and Recommendations #33
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SFV Members:
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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.

RECENT FINDINGS

1) The false promise of herd immunity

The plans for herd immunity suggested letting most of society return to normal, while taking some steps to protect those who are most at risk of severe disease. That would essentially allow the coronavirus to run its course, proponents said.

In early October, a libertarian think tank and a small group of scientists released a document called the Great Barrington Declaration. In it, they call for a return to normal life for people at lower risk of severe COVID-19, to allow SARS-CoV-2 to spread to a sufficient level to give herd immunity. People at high risk, such as elderly people, it says, could be protected through measures that are largely unspecified. Typically, herd immunity is discussed as a desirable result of wide-scale vaccination programs. High levels of vaccination-induced immunity in the population benefits those who can't receive or sufficiently respond to a vaccine, such as people with compromised immune systems.

But epidemiologists have repeatedly smacked down such ideas. "Surrendering to the virus" is not a defensible plan, says Kristian Andersen, an immunologist at the Scripps Research Institute in La Jolla, California. Such an approach would lead to a catastrophic loss of human lives without necessarily speeding up society's return to normal, he says. "We have never successfully been able to do it before, and it will lead to unacceptable and unnecessary untold human death and suffering." In the US, probably one to two million people would die. Deaths are only one part of the equation. Individuals who become ill with the disease can experience serious medical and financial consequences, and many people who have recovered from the virus report lingering health effects.

2) Older patients, women and those with variety of early symptoms most at risk of 'long Covid,'

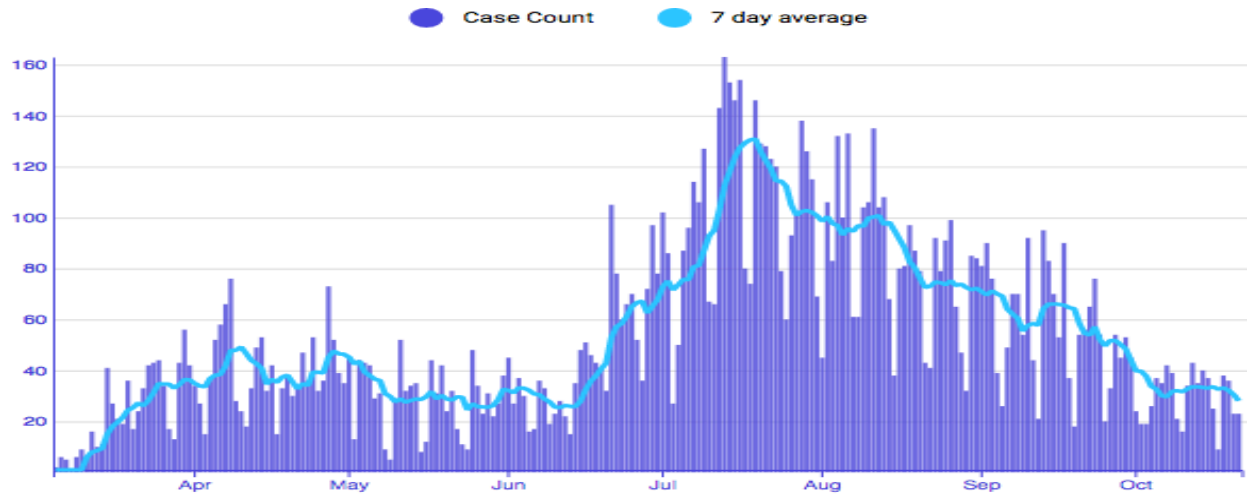
Older people, women and those with a wide range of symptoms in the first week of their illness appear to be most likely to develop "long Covid," according to a preprint paper posted online by researchers at King's College London on Wednesday. The paper defines "long Covid" as having symptoms persist for more than four weeks, while a short duration of Covid was defined as less than 10 days, without a subsequent relapse.

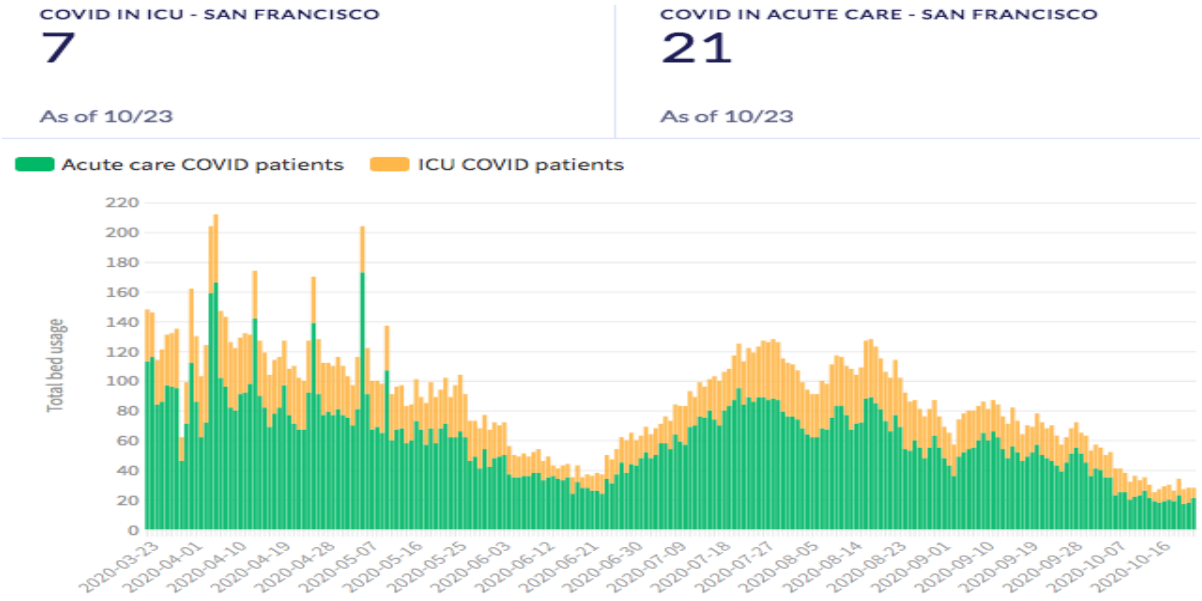
About 1 in 20 people with Covid-19, or 4.5%, are likely to experience symptoms for eight weeks or more. The research identified two main groups of long Covid sufferers. One group experienced mainly respiratory symptoms, such as a cough and shortness of breath, plus fatigue and headaches. The other group experienced "multi-system" symptoms in many parts of the body, such as heart palpitations, gut issues, pins and needles or numbness, and "brain fog." Long Covid sufferers were also twice as likely to report a relapse after they recovered compared with those who had "short Covid" (16% vs 8.4%).

About 1 in 5 adults older than 70, or 21.9%, who tested positive for coronavirus developed long Covid, compared with about 1 in 10 18- to 49-year-olds, the study found. Women were more likely to suffer from long Covid than men -- at 14.9% of women compared to 9.5% of men -- but only in the younger age group. People who developed long Covid also had a slightly higher average BMI than those with short Covid, according to the paper. The researchers also found that people with asthma were more likely to develop long Covid, but found no clear links to any other underlying health conditions.

SAN FRANCISCO

Total Cases: 12,103
Deaths: 140





1) San Francisco enters least-restrictive tier in California's reopening system. San Francisco on Tuesday became the first major jurisdiction in California to advance into the state's least-restrictive yellow reopening tier, Dr. Mark Ghaly, the Secretary of Health and Human Services, said in a series of announcements. An adjusted case rate of 1.5/100K and a positivity rate of 0.8% paved the way for SF to enter yellow tier.

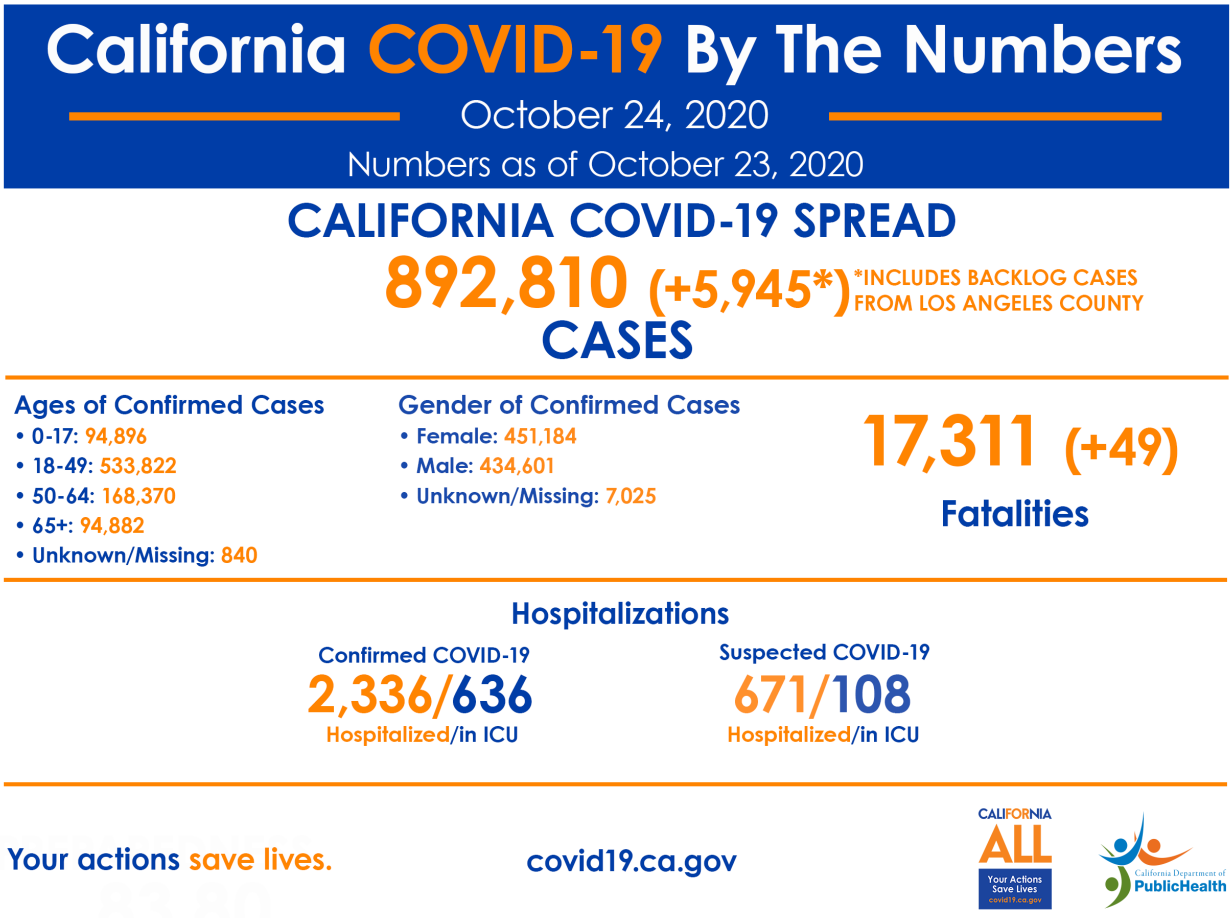
In a statement, Mayor London Breed said capacity at most already-open businesses could expand to 50% beginning Nov. 3, as well as a loosening of a number of other restrictions on the more immediate horizon. Offices will be permitted reopen at 25% capacity beginning Oct. 27, Breed said, and gyms that recently reopened could expand to that capacity, as well. Climbing gyms and other personal services will also be allowed to reopen, Breed said.

At 0.8%, the positivity rate in San Francisco is one of the lowest in California. The city is also testing more of its residents per-capita than any other jurisdiction in the state. That allowed it to further reduce its case rate, using a modifier in the state's calculation, from 2.5/100K to 1.5/100K, according to data from CDPH. Dr. Erica Pan, California's public health officer, said San Francisco benefited from the new health equity metric, which requires the positivity rates in the most disadvantaged communities to be within a certain percentage of the countywide average.

Although San Francisco is now allowed the widest reopening under the state's guidelines, so far officials there have resisted reopening to the extent allowed by the state, even as it moved through the tier system faster than almost any other county.

After the latest update Tuesday, there were 12 counties — including Los Angeles, Riverside, San Bernardino and Sonoma — stuck in the most restrictive purple tier. There are now 23 counties in the red, or "substantial" tier; 14 counties in the orange, or "moderate" tier; and nine counties, including San Francisco, in the yellow, or "minimal" tier.

CALIFORNIA



1) Coronavirus: New cases increasing slightly in California along with hospitalizations and ICU bed usage.

For the second day in a row, California counties reported more new COVID-19 cases than they had in any single day since Aug. 31, matching small upticks in hospitalization and intensive care unit bed usage late last week.

On Friday, California counties reported 5,676 new cases, the second day of well-above-average new cases after counties reported 6,359 cases on Thursday. That brought the seven-day average of new cases to 3,998 daily cases, a 26 percent increase from a week ago. The seven-day average of new cases in the nine-county Bay Area, plus Santa Cruz County, also ticked up slightly on Friday to 533 daily cases, up 20 percent from a week before.

The state has reported 892,810 COVID-19 cases since the start of the pandemic, although the true number of infections is likely higher because of a lack of testing and asymptomatic patients that never get tested. Nearly half of the new cases statewide — 2,756 of them — were in Los Angeles County, which has long been a hotspot for the virus. Next was San Diego County with 430 cases and Riverside County with 371 cases. They were followed by Santa Clara, San Bernardino and Sacramento counties.

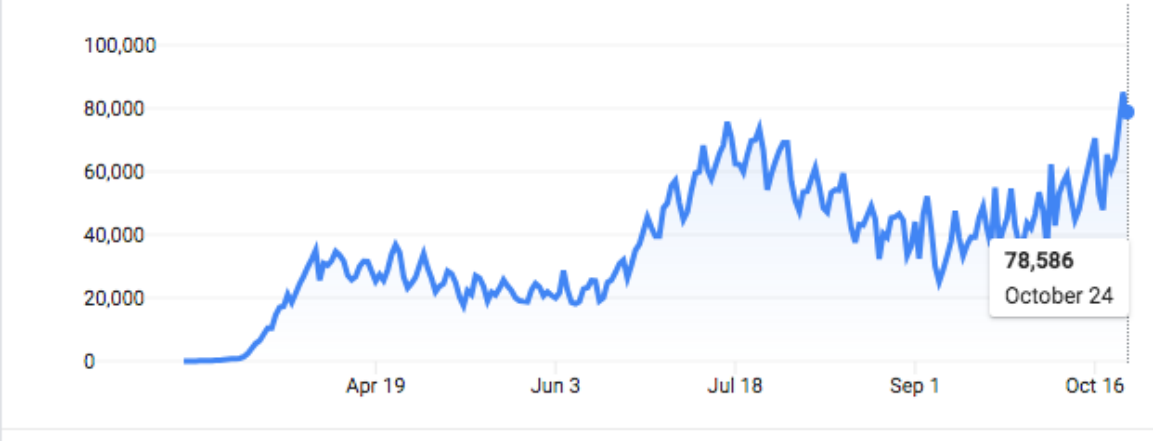
In the Bay Area, Conta Costa County on Friday reported 110 new cases and one new death for a total of 18,523 cases and 241 deaths since the start of the pandemic. San Mateo County reported 41 new cases on Friday, enough to reach 11,002 cases. The county's two deaths brought its total during the pandemic to 159. Both counties are in California's red reopening tier, the second most restrictive level indicating "substantial" spread of coronavirus in the community.

Santa Clara County reported 202 new cases and three deaths, for a total of 23,881 cases and 388 deaths. Alameda County reported 132 new cases and no new deaths, for a total of 23,133 cases and 456 fatalities. Both counties are in California's orange reopening tier, indicating "moderate" spread of the virus in the community.

UNITED STATES

Total Cases: 8.64M
Deaths: 225K

Daily New Cases



1) CDC expands definition of 'close contacts,' after study suggests Covid-19 can be passed in brief interactions.

Previously, the CDC described a close contact as someone who spent 15 minutes or more within six feet of someone who was infectious. Now, the agency says it's someone who spent a cumulative 15 minutes or more within six feet of someone who was infectious over 24 hours, even if the time isn't consecutive, according to an agency spokesperson. Close contacts are those who are tracked down during contact tracing and are recommended to quarantine. The announcement from the CDC comes as scientists described in a new study how a correctional officer in Vermont appears to have contracted the coronavirus during "multiple brief encounters" with six incarcerated people who had Covid-19.

Experts have long noted that the 15-minute, within-six-feet rule was not some sort of threshold that needed to be hit for transmission to occur. So much about whether spread happens depends on how infectious a person is, how well-ventilated the room that people are in is, how the virus might move through the air in a particular setting, whether people are wearing masks, and more. The 15-minute window had just been used as a benchmark to prioritize who should be followed up with for contact tracing and quarantine.
One reason why the length of interactions might matter, experts think, is because people need to be exposed to a certain level of virus if they're going to

get infected. Researchers still aren't sure what that "infectious dose" is — and if a higher dose corresponds to how sick people are likely to get — but the thought is that the longer someone is around someone else who is infectious, the higher level of virus they will be subjected to, and the more likely they are to get Covid-19.

2) Studies Point To Big Drop In COVID-19 Death Rates.

Two new peer-reviewed studies are showing a sharp drop in mortality among hospitalized COVID-19 patients. The drop is seen in all groups, including older patients and those with underlying conditions, suggesting that physicians are getting better at helping patients survive their illness. Doctors have gotten better at quickly recognizing when COVID-19 patients are at risk of experiencing blood clots or debilitating "cytokine storms," where the body's immune system turns on itself and have developed standardized treatments that have been promulgated by groups such as the Infectious Diseases Society of America.

The study, which was of a single health system, finds that mortality has dropped among hospitalized patients by 18 percentage points since the pandemic began. Patients in the study had a 25.6% chance of dying at the start of the pandemic; they now have a 7.6% chance. That's a big improvement, but 7.6% is still a high risk compared with other diseases, and researchers caution that COVID-19 remains dangerous.

Studying changes in death rate is tricky because although the overall U.S. death rate for COVID-19 seems to be dropping, the drop coincides with a change in whom the disease is sickening. The people who are getting hospitalized now tend to be much younger, tend to have fewer other diseases and tend to be less frail than people who were hospitalized in the early days of the epidemic.

Researchers looked at more than 5,000 hospitalizations in the NYU Langone Health system between March and August. They adjusted for factors including age and other diseases, such as diabetes, to rule out the possibility that the numbers had dropped only because younger, healthier people were getting diagnosed. They found that death rates dropped for all groups, even older patients by 18 percentage points on average.

3) The US just reported its highest number of Covid-19 infections in one day since the pandemic's start

The US reported more than 80,000 new coronavirus infections Friday -- the highest daily case number since the pandemic began. That comes amid other bleak patterns including rising hospitalizations and daily death tolls across the country, with experts warning that the worst is yet to come.

Friday's case count of at least 80,005 surpasses the country's previous one-day high of 77,362, reported July 16, according to Johns Hopkins University. US Surgeon General Dr. Jerome Adams cautioned earlier Friday that hospitalizations are starting to go up in 75% of the jurisdictions across the country, and officials are concerned that in a few weeks, deaths will also start to increase. The number of people hospitalized has increased by 33% since the beginning of October. Dr. Anthony Fauci, the nation's leading infectious disease expert, said Friday that he's concerned about a massive surge in Covid-19 cases across the country and urged people to "double down" on measures to prevent the spread of the virus.

At least 34 states reported more new Covid-19 cases in the last week than the week prior, according to Johns Hopkins data.

- In Georgia, health officials reported their highest one-day case count Friday since early September.
- Ohio health officials reported a record-high of daily new cases for the third day in a row.
- Oklahoma, officials reported more than 1,000 new infections for the fourth consecutive day.
- New Jersey Gov. Phil Murphy on Saturday reported an additional 1,994 coronavirus cases -- the highest single-day total since May.
- In Florida, health officials on Saturday reported 4,471 additional cases and 77 new resident deaths. That's the third day this month the state has reported more than 4,000 new cases in a single day. Florida has had a total of 776,251 Covid-19 cases and 16,417 state residents have died, the health department said.
- Pennsylvania, as of Saturday, saw 2,043 new cases, bringing the statewide total to 192,622.
- Michigan, with 3,338 new cases Saturday, marked its highest single-day total during the pandemic,. The state also reported 35 new deaths.
- On Saturday, Illinois reported 6,161 new cases, the highest number since the pandemic began. More than 4,000 new cases have been reported in the

state for six of the last nine days, according to health department data. There were 63 new deaths for a total of 9,481.
- In Tennessee, hospital officials said new cases in metro Nashville have increased 50% in the last two weeks, and hospitals in the area saw a 40% increase in patients over the same time period.

A new modeling study from the forecasting team at the University of Washington's Institute for Health Metrics and Evaluation shows if 95% of Americans wore masks in public, more than 100,000 lives could be saved through February.

4) U.S. faces half a million COVID-19 deaths by end-February, study finds
More than a half million people in the United States could die from COVID-19 by the end of February, but around 130,000 of those lives could be saved if everybody were to wear masks, according to estimates from a modelling study on Friday. The estimates by researchers at the University of Washington's Institute for Health Metrics and Evaluation showed that with few effective COVID-19 treatment options and no vaccines yet available, the United States faces "a continued COVID-19 public health challenge through the winter." "We are heading into a very substantial fall/winter surge," said IHME Director Chris Murray, who co-led the research.

He said the projections, as well as currently rising infection rates and deaths, showed there is no basis to "the idea that the pandemic is going away," adding: "We do not believe that is true."

5) US gives full approval to antiviral remdesivir to treat COVID-19
The US Food and Drug Administration on Thursday granted full approval to the antiviral drug remdesivir as a treatment for patients hospitalized with Covid-19, after conditional authorization was given in May. Remdesivir, which is administered by an injection, was one of the first drugs to show relative promise in shortening the time to recovery in some coronavirus patients. Antivirals like remdesivir are most effective early on during the progression of Covid-19, when most of the damage is being done by the virus itself. It's less effective in later stages, when the problem isn't just the virus.

But its efficacy in reducing the mortality rate is unproven. The FDA based its decision on three randomized controlled trials. (The largest of those looked at 1,062 hospitalized patients.) The trials' results showed that

remdesivir reduced the length of hospital stays in some Covid-19 patients.

However, shortly before the approval was granted, a study from the World Health Organization announced preliminary results that found the drug had no effect on mortality and — unlike the FDA's findings — negligible effects on how long patients were in hospitals. The study, known as the Solidarity Trial, recruited almost 12,000 patients, making it the largest Covid-19 treatment study in the world thus far. Researchers say the findings should have given the FDA pause.

With remdesivir now as the only fully approved drug, it becomes much more difficult to conduct studies on other therapies because they now have to be compared against remdesivir, the new standard treatment, as well as a placebo. That raises the cost and complexity of trials, delaying results. Such comparisons are worthwhile if the standard of care is effective, but it adds unnecessary complications if it's not. It also makes it harder to recruit people for subsequent clinical trials of the drug to better validate its effectiveness. People may be more reluctant to sign up for a trial where they could get a placebo when they know they could get the actual drug.

RECOMMENDATIONS

We have no new recommendations at this time.