San Francisco Village

COVID – 19
Research and Advisory Team:
Report and Recommendations #32
October 18, 2020

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) COVID-19 can survive for 28 days on surfaces

The coronavirus that causes Covid-19 can survive on items such as banknotes and phones for up to 28 days in cool, dark conditions, according to a study by Australia's national science agency. Researchers at CSIRO's disease preparedness centre tested the longevity of SARS-CoV-2 in the dark at three temperatures, showing survival rates decreased as conditions became hotter.

The scientists found that at 20 degrees Celsius (68 degrees Fahrenheit), SARS-CoV-2 was "extremely robust" on smooth surfaces — like mobile phone screens — surviving for 28 days on glass, steel and plastic banknotes. At 30 degrees Celsius (86 degrees Fahrenheit), the survival rate dropped to seven days and plunged to just 24 hours at 40 degrees Celsius (104 degrees Fahrenheit). The virus survived for shorter periods on porous surfaces such as cotton — up to 14 days at the lowest temperatures and less than 16 hours at the highest — the researchers said.

This was "significantly longer" than previous studies which found the disease could survive for up to four days on non-porous surfaces, according to the paper published in the peer-reviewed Virology Journal.
This doesn't mean to say that that amount of virus would be capable of infecting someone. However, if a person was careless with these materials and touched them and then licked your hands or touched your eyes or your nose, you might well get infected upwards of two weeks after they had been contaminated.

2) Remdesivir and interferon fall flat in WHO's megastudy of COVID-19 treatments

One of the world's biggest trials of COVID-19 therapies released its long-awaited interim results yesterday—and they're a letdown. None of the four treatments in this Solidarity trial, which enrolled more than 11,000 patients in 400 hospitals around the globe, increased survival—not even the much-touted antiviral drug remdesivir. Scientists at the World Health Organization (WHO) released the data ahead of its planned publication in *The New England Journal of Medicine*.

Yet scientists praised the unprecedented study itself and the fact that it helped bring clarity about four existing, "repurposed" treatments that each held some

promise against COVID-19. “It’s disappointing that none of the four have come out and shown a difference in mortality, but it does show why you need big trials,” says Jeremy Farrar, director of the Wellcome Trust. The prospects of two of the four treatments—the malaria drug hydroxychloroquine and the HIV drug combination ritonavir/lopinavir—had faded after another large study, the United Kingdom’s Recovery trial, showed they did not increase survival in June. After analyzing that study and its own data up until then, WHO decided to drop both from the study.

There was still hope for remdesivir and for interferon-beta, which had initially been given in combination with ritonavir/lopinavir but was tested as a standalone drug after the Recovery data came out. But neither of those treatments lowered mortality or delayed the moment patients needed ventilation to help them breathe. The results in these two treatment arms are likely to be the most scrutinized. But the Solidarity trial suggests the drug does little in severe cases. Of 2743 hospitalized patients who received the drug, 11% died, versus 11.2% in a control group of roughly the same size. The difference is so small it could have arisen by chance. When the authors pooled Solidarity’s data with those from the three other trials, they found a slight reduction in mortality that wasn’t statistically significant either

3) A herd immunity strategy to fight the pandemic can be 'dangerous,' experts say.

After months of effort to limit the spread of the coronavirus in the United States, herd immunity has emerged as a controversial topic.

During a call with reporters on Monday, White House senior administration officials discussed a controversial declaration written by some scientists that advocates for ending lockdowns, building immunity and pushing for those who are not vulnerable to Covid-19 to resume normal life. The Great Barrington Declaration aligns "very strongly with what the President has said for months -- that is strongly protect the high-risk elderly and vulnerable and open schools and restore society to function," a senior administration official said during the call.

Yet many experts warn that the idea to allow the novel coronavirus to circulate freely -- also known as a "herd immunity" approach -- is dangerous. World Health Organization Director-General Tedros Adhanom Ghebreyesus has even called it "unethical." "Allowing a dangerous virus that we don't fully

understand to run free is simply unethical," Tedros said during a briefing on Monday. "It's not an option."
Tedros explained that herd immunity is a "concept used for vaccination," not pandemic control. "Never in the history of public health has herd immunity been used as a strategy for responding to an outbreak, let alone a pandemic. It is scientifically and ethically problematic," Tedros said. "Letting the virus circulate unchecked, therefore, means allowing unnecessary infections, suffering and death."

Such an approach -- similar to what was pursued in Sweden -- would mean that many people nationwide would have to get sick with the coronavirus in order to build up a natural immunity across communities. As the virus spreads and sickens people, many could die in the process. About 2 million Americans could die in the effort to achieve herd immunity to the coronavirus, Dr. Leana Wen, emergency physician and CNN medical analyst, said in late August. "If we're waiting until 60% to 80% of people have it, we're talking about 200 million-plus Americans getting this -- and at a fatality rate of 1%, let's say, that's 2 million Americans who will die in this effort to try to get herd immunity," Wen said. "Those are preventable deaths of our loved ones that we can just not let happen under our watch."

4) We Just Got More Evidence Your Blood Type May Change COVID-19 Risk And Severity

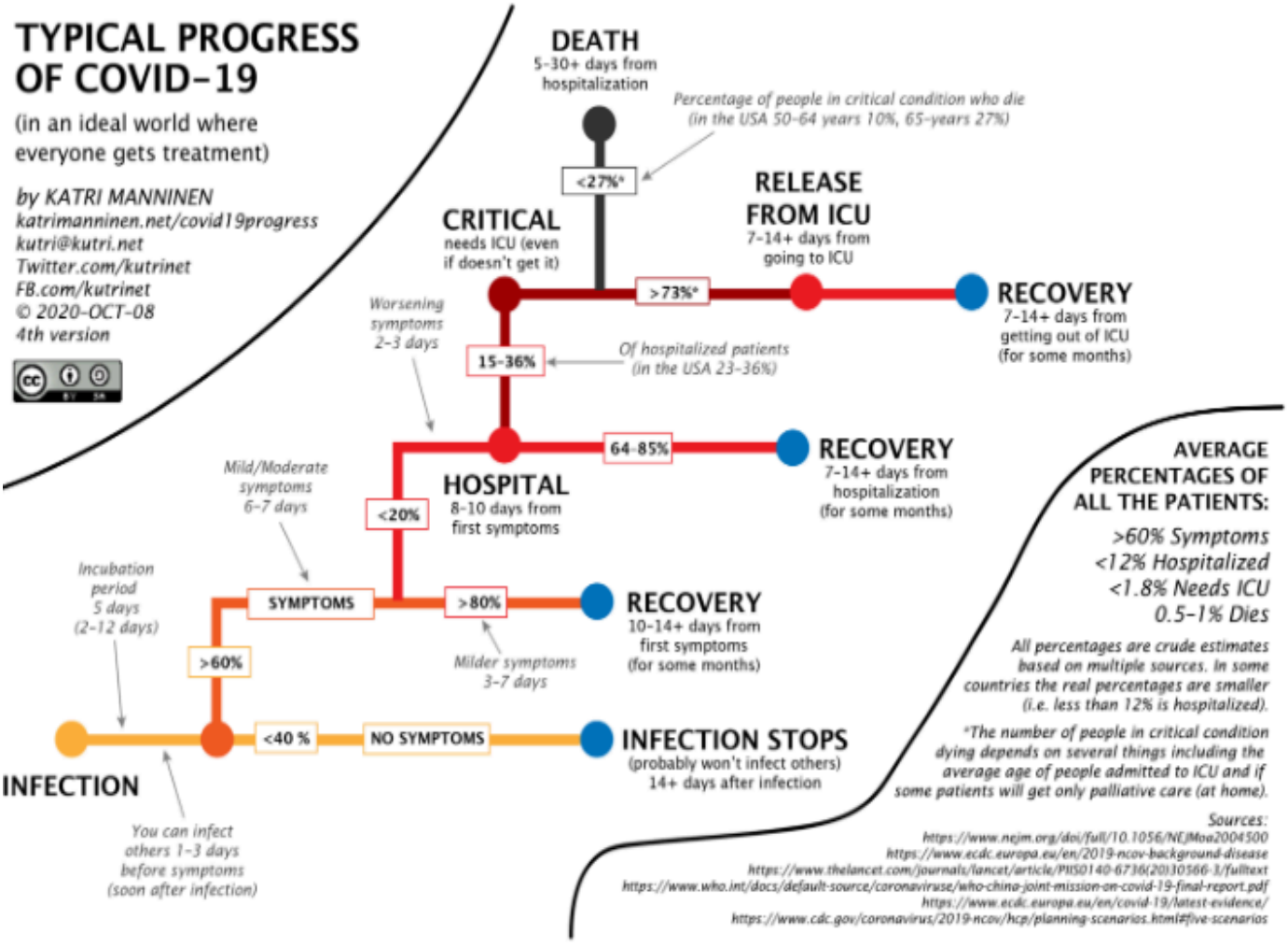
Research is coalescing around the idea that people with Type O blood may have a slight advantage during this pandemic. Two studies published this week suggest that people with Type O have a lower risk of getting the coronavirus, as well as a reduced likelihood of getting severely sick if they do get infected. One of the new studies specifically found that COVID-19 patients with Type O or B blood spent less time in an intensive-care unit than their counterparts with Type A or AB. They were also less likely to require ventilation and less likely to experience kidney failure.

Both new studies came out Wednesday in the journal *Blood Advances*. One looked at 95 critically ill COVID-19 patients at hospitals in Vancouver, Canada, between February and April. They found that patients with Type O or B blood spent, on average, 4.5 fewer days in the intensive-care unit than those with Type A or AB blood. The latter group stayed, on average, 13.5 days in the ICU. The researchers did not see any link between blood type and the length of each patient's total hospital stay, however.

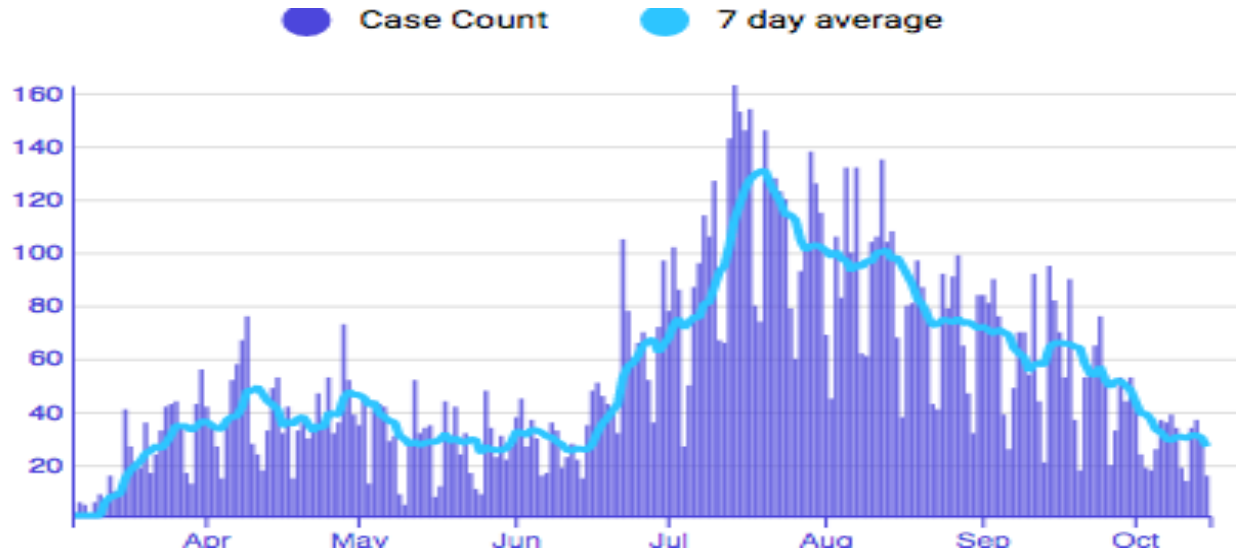
They did, however, find that only 61 percent of the patients with Type O or B blood required a ventilator, compared to 84 percent of patients with Type A or AB. Patients with Type A or AB, meanwhile, were also more likely to need dialysis, a procedure that helps the kidneys filter toxins from the blood. The second new study found that people with Type O blood may be at a lower risk of getting he coronavirus in the first place relative to people with other blood types.

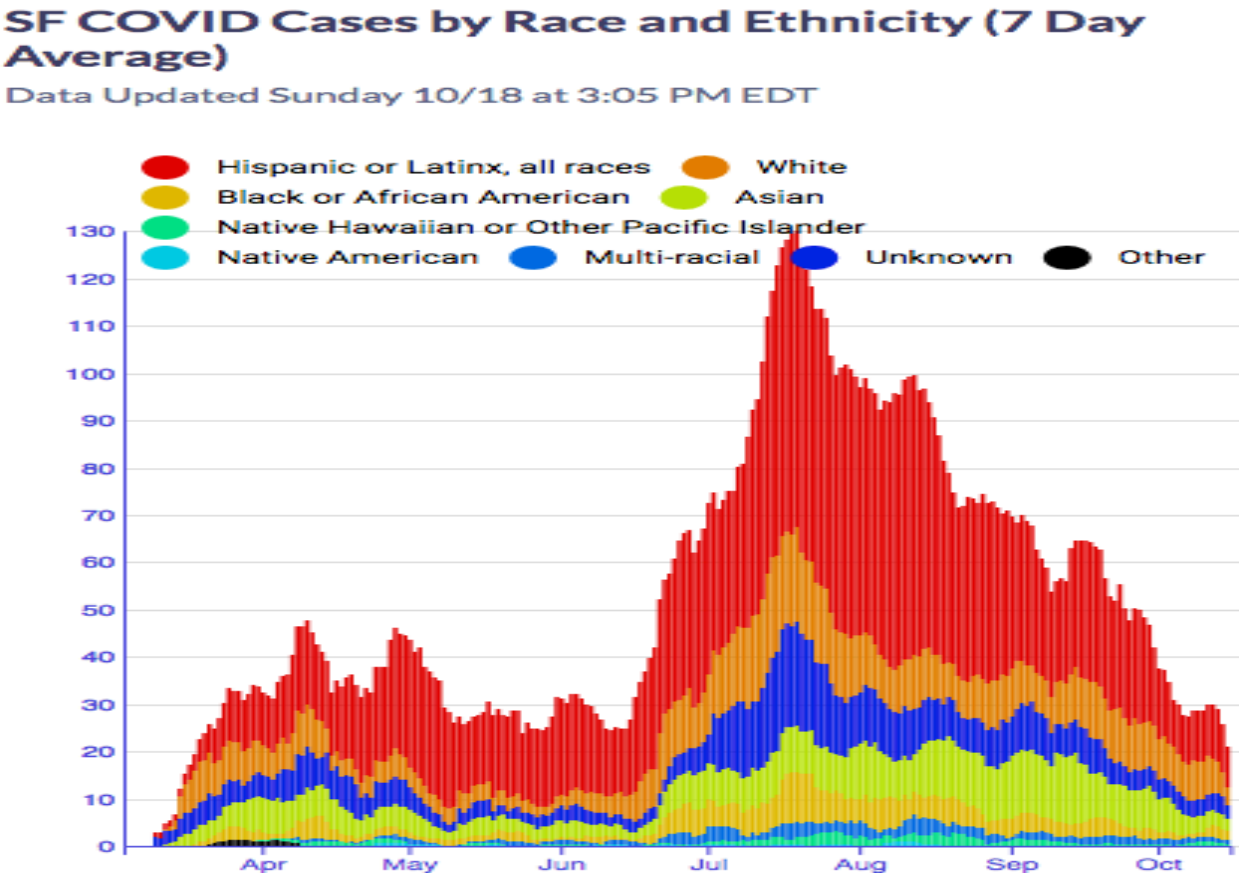
5) Typical Progress of Covid-19

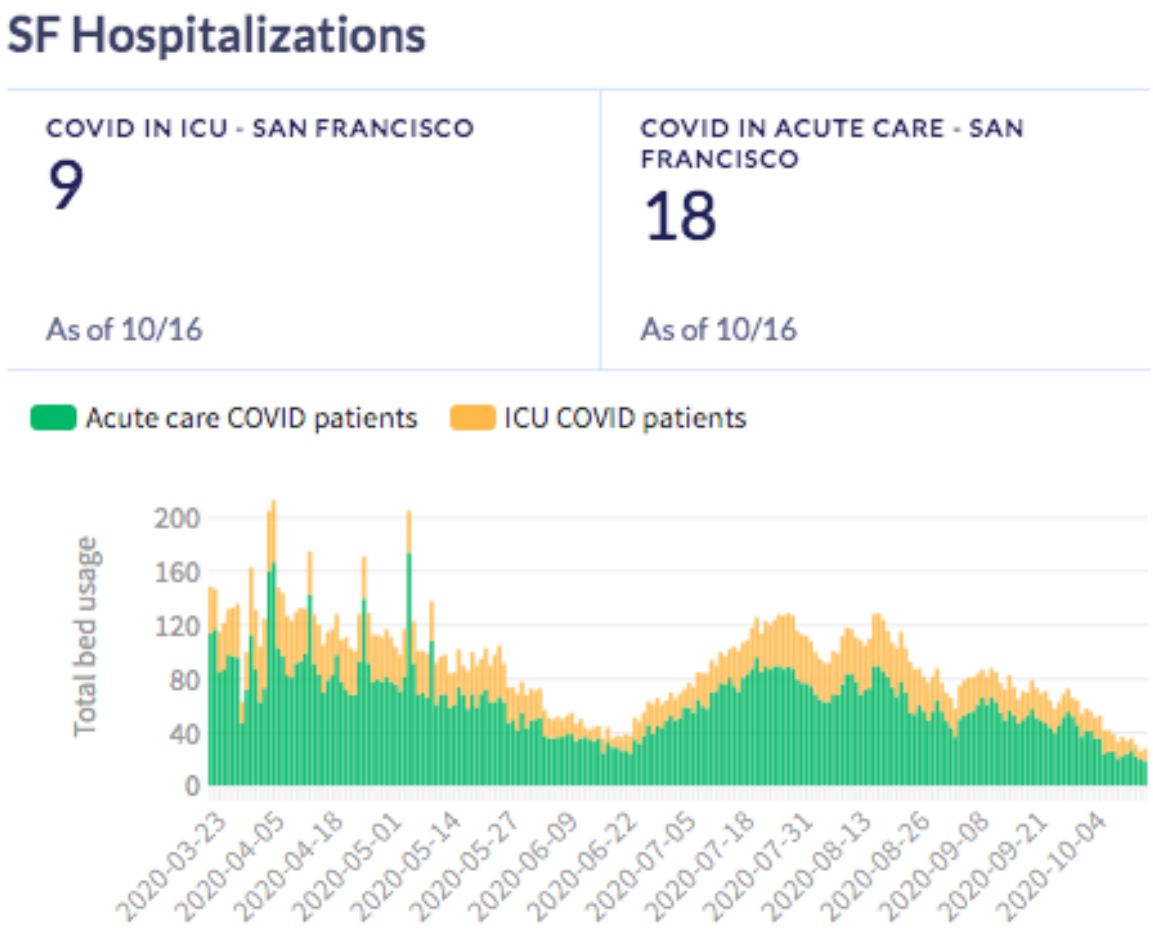
This chart describes the typical progress of the new coronavirus Covid-19. This chart is based on the average population in ideal conditions where everyone gets the best possible treatment.



SAN FRANCISCO
Total Cases: 11,865
Total Deaths: 133







1) SF Case Counts Return to Pre-Spike Levels

San Francisco, which was seen as a global leader for its proactive approach to the pandemic back in March, has once again wrestled COVID-19 under control. But with new case counts across the U.S. and in many other countries trending upward, the city's ability to keep things that way is an open question.

After steadily falling for the past month, San Francisco's rolling seven day average sunk to just 29 cases per day on October 10, according to the latest data publicly available. That's down from a high of an average of 130 cases per day in late July. The latest new case counts are the lowest since mid-June, and close to the city's all-time low point since the beginning of the pandemic.
The city has continued to depress new case counts even as large parts of its economy and culture reopen, including indoor dining and worship, museums, some schools, and personal services like salons, barbershops, and gyms — all at limited capacity. However, as the city's previous spike demonstrated,

reopening is a tenuous balancing act, creating new opportunities for viral transmission. City leaders have made clear they will not hesitate to roll back reopening if cases again begin to rapidly rise.

San Francisco's current per capita transmission rate of 3.0 new daily cases per 100,000 people set it apart from other major cities. San Francisco's COVID-19 deaths are also an outlier. The city's 123 deaths from the virus give the city a death rate of about one in 7,000 Despite the city's relative success with the virus, its impact has been disproportionately felt by Latinos, who make up about half of the city's cases, but just 15 percent of the total population. Likewise, low-income neighborhoods like Bayview, the Mission, the Tenderloin, and Excelsior continue to report a disproportionate number of new cases.

2) Coronavirus: Bay Area's recent progress

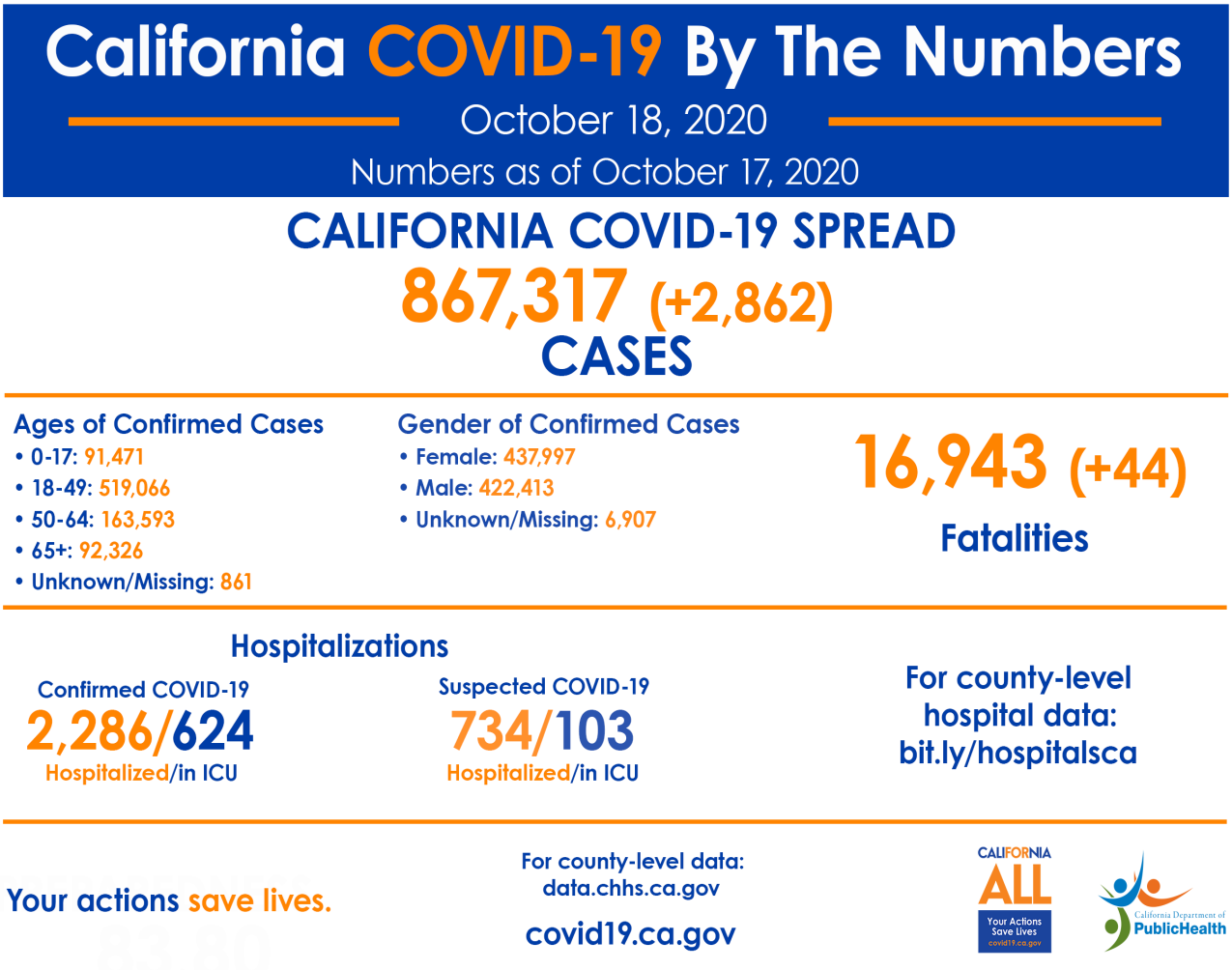
The Bay Area hit two milestones in its battle with COVID-19 on Wednesday. The region's 10 counties, including Santa Cruz, reported their fewest cases in a single day since late-June, while there were fewer deaths reported in the past week than any other seven-day period since mid-July. Altogether, there were 300 new cases and an additional 16 fatalities from the virus around the region on Wednesday, which decreased each seven-day average to about 450 cases and six deaths per day, or a total of 43 deaths over the past week.

In the past two weeks, the Bay Area has reduced its average daily cases by about 10%, active hospitalizations by about 17% and average daily deaths by about 43%. Statewide, the seven-day average of cases had crept slightly higher than it was two weeks ago: about 3,340 per day, or about 3% more than two weeks ago, though it remained in the plateau range that it has been in for a little over a month.

There were 21 fewer deaths reported around the region Wednesday than a week ago, which caused the large drop in the seven-day average. Of the 43 total over the past week, 10 have come in Santa Clara County and there have been nine in each San Francisco and Contra Costa County. Alameda County added 11 to its death toll Wednesday, but that came after it adjusted its count down by 10 deaths earlier in the week. The rest of the core Bay Area has also seen its cases and hospitalizations continue to fall or hold steady over the past two weeks, but in the North Bay, Solano and Sonoma counties each reported more active hospitalizations and cases than two weeks ago.

In San Francisco, there has been a dramatic drop off in hospitalizations and cases in the past two weeks, and the city's seven-day positivity rate is now under 1%. The number of patients hospitalized in San Francisco has fallen by 55% in the past two weeks to 27 on Tuesday, according to CDPH — its fewest active hospitalizations since the state began tracking hospital data at the beginning of April. San Francisco's average daily cases have fallen by nearly as much: a 52% drop in the past two weeks, to about 25 per day — fewer than any county in the state with an equal or greater population and among the 10 lowest per-capita infection rates in the state.

CALIFORNIA



California reported an additional 2,862 cases of COVID-19 on Saturday, bringing the state's case total to 867,317. California also reported 44 more deaths, marking nearly 17,000 coronavirus fatalities in the state. The state's seven-day positivity rate stands at 2.5 percent, as of Saturday. California is seeing an average of 3,285 cases per day, an increase of 2% from the average two weeks earlier. By percentage, that's far less than other states. The U.S. as a whole is experiencing a 25% increase in confirmed cases.

UNITED STATES

Total Cases: 8,133,373
Deaths: 219,556

1) Americans Are Dying In The Pandemic At Rates Far Higher Than In Other Countries

During this pandemic, people in the United States are dying at rates unparalleled elsewhere in the world. A new report in the Journal of the American Medical Association finds that in the past five months, per capita deaths in the U.S., both from COVID-19 and other causes, have been far greater than in 18 other high-income countries.

The study looks at per capita death rates in 2020 in 18 countries with populations larger than 5 million people and per capita gross domestic product levels above $25,000 per year. It breaks out deaths attributed to COVID-19 and examines how total deaths in the U.S. are higher than normal this year. This so-called "all-cause" mortality takes into account fatalities that may have been due to the coronavirus but were never confirmed or were due to other factors such as people not seeking medical care during the crisis. Even looking just at confirmed COVID-19 deaths, the number of people dying since May 10 — again after adjusting for population size — is on average 50% higher than every other country in the study. In addition, the rate people are dying in the U.S. has stayed far above everywhere else.

Overall deaths in the United States this year are more than 85% higher than in places such as Germany, Israel and Denmark after adjusting for population size. Deaths in the U.S. are 29% higher than even in Sweden, which ignored everything for so long. Sweden made a point of refusing to order strict social restrictions and never went in to a full lockdown.

2) Fauci warns that Covid-19 infection rates are too high heading into winter.
The number of coronavirus cases in the United States surpassed 8 million on Friday as health officials from coast to coast scramble to contain the rising rate of infections. The case numbers are steadily increasing daily, according to data from Johns Hopkins University.
The country has averaged more than 53,000 new daily cases for the past week -- an increase of more than 55% in just over a month -- and Friday's caseload was not the exception, according to Johns Hopkins data.

Unlike previous rises, this time it appears that no region is safe. The Northeast, which has remained relatively stable since the spring, is seeing a rise in cases as is the Pacific Northwest. The increases come as the numbers of new cases in the Midwest hasn't slowed. At least four states -- Idaho, Illinois, North Carolina and Wyoming -- reported their highest daily Covid-19 case count to date on Friday, state health officials said.

Dr. Anthony Fauci, the nation's top infectious disease expert, warned that infection rates are far too high heading into the end of the year. Other experts say is setting the country up for a very difficult winter.

RECOMMENDATIONS

We have no new recommendations at this time.

Here is the recommendation from last week's report:

Given the complexity, confusion, and politicization around treatments, vaccines, vaccine efficacy and safety, vaccine trials, vaccine authorization, production, and distribution, and more – SFV might want to consider inviting an expert to offer a program and discussion for members.

NOTE: Barbara arranged for expert researchers (who were recruiting older adults who live in Berkeley/Oakland) to offer such a talk for Ashby Village. Barbara is in touch with experts in SF who may be available to offer a talk for SFV members.