



San Francisco Village

**COVID - 19
Research and Advisory Team:
Report and Recommendations #10
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RECENT FINDINGS

1) COVID-19 is not just a respiratory disease

The need of severely ill coronavirus patients for mechanical ventilators to help them breathe had led many people to think of COVID-19 primarily as a respiratory disease, at least in adults. However, doctors treating coronavirus patients are seeing a range of odd and frightening syndromes, including blood clots of all sizes throughout the body, kidney failure, heart inflammation and immune complications. The virus also seems to attack some organs directly. One of the most troubling is its assault on the lining of the blood vessels, which in turn causes unnatural blood clotting. Doctors have reported unusual strokes in younger patients, as well as pulmonary embolisms, the medical name for blood clots in the lungs.

Among nearly 5,500 coronavirus patients in the largest New York health system, more than one in three hospitalized COVID-19 patients developed acute kidney injuries, and nearly 15% required dialysis, researchers reported in the medical journal *Kidney International*. Other research teams have reported that the virus can infect cells in the small intestine. Researchers reported in *The New England Journal of Medicine* that autopsies of 27 people who died of COVID-19 showed the virus in tissues of 17 hearts, 17 livers, 8 brains and the kidneys of 13 people. There have also been reports of the virus causing blood clots that can lead to strokes.

2) Multisystem inflammatory syndrome in children and adolescents with COVID-19

Reports from Europe and North America have described clusters of children and adolescents requiring admission to intensive care units with a multisystem inflammatory condition with some features similar to those of Kawasaki disease and toxic shock syndrome.

A new peer-reviewed study out of Italy, published in *The Lancet*, details the cases of 10 children who presented with this condition during the Covid-19 outbreak there. Eight of the 10 children tested positive for the SARS-CoV-2 virus that causes Covid-19 in an antibody test. The children diagnosed during

the outbreak also tended to be older (a mean age of 7.5 years) than kids they usually treated for the illness (who had a mean age of 3 years). These patients ranged in age from 5.5 to 16 years old.

Doctors in 17 US states are reporting that at least 164 children have fallen sick with a rare inflammatory illness similar to a condition known as Kawasaki disease. Symptoms include fever and inflammation and can affect organs, including the heart. Some of the children have tested positive for Covid-19 or antibodies to the virus, and three have died. New York State has reported 102 cases of the pediatric inflammatory syndrome so far, with 29 percent of the cases involving children between the ages of 5 and 9 and 28 percent between the ages of 10 and 14. Clusters of the illness have also popped up in other Covid-19 hot spots, including California, New Jersey, and Illinois.

Despite the increased incidence of the pediatric syndrome, it is still quite rare, probably affecting no more than one in 1,000 children exposed to SARS-CoV-2. However, there is more research to be done as data accumulates.

3) Talking can generate coronavirus droplets that linger up to 14 minutes and can cause airborne virus transmission in confined environments.

Summary:

Speech droplets generated by asymptomatic carriers of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) are increasingly considered to be a likely mode of disease transmission. Highly sensitive laser light scattering observations have revealed that loud speech can emit thousands of oral fluid droplets per second. In a closed, stagnant air environment, they disappear in the range of 8 to 14 minutes. These observations confirm that there is a substantial probability that normal speaking causes airborne virus transmission in confined environments.

A new study shows how respiratory droplets produced during normal conversation may be just as important in transmitting disease, especially indoors. Coughs or sneezes may not be the only way people transmit infectious pathogens like the novel coronavirus to one another. Talking can also launch thousands of droplets so small they can remain suspended in the air for eight to 14 minutes.

The research, published Wednesday in The Proceedings of the National Academy of Sciences, could help explain how people with mild or no symptoms may infect others in close quarters such as offices, nursing homes, cruise ships and other confined spaces

Scientists agree that the coronavirus jumps from person to person most often by hitching a ride inside tiny respiratory droplets. These droplets tend to fall to the ground within a few feet of the person who emits them. They may land on surfaces like doorknobs, where people can touch lingering virus particles and transfer them to their face. But some droplets can remain aloft, and be inhaled by others.

Many scientists have argued that droplets can travel farther than six feet, depending on the force with which droplets are launched, the surrounding temperature, whether there are air currents that can carry them farther and other conditions.

There is also debate about whether the coronavirus can also be transmitted through even smaller droplets — less than a tenth the width of a human hair — that are known as aerosols, and can remain suspended or travel through the air for longer.

These findings strengthen the case for wearing masks and taking other precautions in such environments to reduce the spread of the coronavirus.

4) Just because you test positive for antibodies doesn't mean you have them.

In a population whose infection rate is 5 percent, a test that is 90 percent accurate could deliver a false positive nearly 70 percent of the time.

But the predictive value of an antibody test with 90 percent accuracy could be as low as 32 percent if the base rate of infection in the population is 5 percent. Put another way, there is an almost 70 percent probability in that case that the test will *falsely* indicate a person has antibodies. The lower prevalence there is of a trait in a studied population — here, coronavirus infection — the more likely that a test will return a false positive. While a more accurate test will help, it can't change the statistical reality when the base rate of infection is very low.

Global

Total Confirmed Cases: 4,673,809

Deaths: 312,646

US

Total Confirmed Cases: 1,435,098

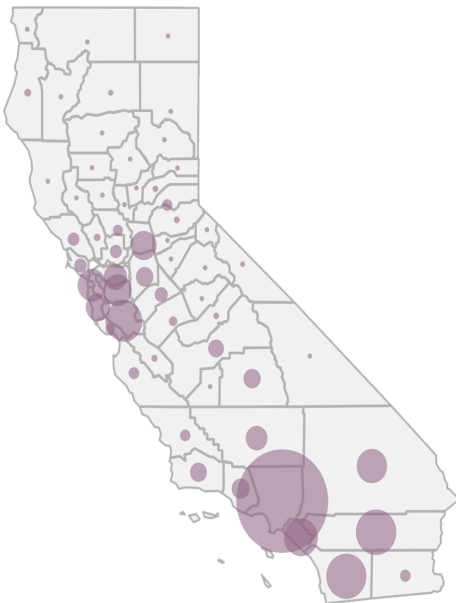
Total Deaths: 87,315

California

California COVID-19 By The Numbers

May 16, 2020

Numbers as of May 15, 2020



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

CALIFORNIA COVID-19 SPREAD

76,793

Total Cases

Ages of Confirmed Cases

- 0-17: **3,064**
- 18-49: **38,611**
- 50-64: **18,908**
- 65+: **16,101**
- Unknown/Missing: **109**

Gender of Confirmed Cases

- Female: **37,676**
- Male: **38,647**
- Unknown/Missing: **470**

Hospitalizations

Confirmed COVID-19
3,126/1,079
Hospitalized/in ICU

Suspected COVID-19
1,298/234
Hospitalized/in ICU

3,204

Fatalities

Your actions **save lives.**

covid19.ca.gov



California is entering phase 2:

Some sectors are allowed to reopen (with modifications) everywhere in the state, as long as the county gives the green light. Those sectors include retail (for curbside pickup), manufacturing, logistics, childcare facilities, offices where people can't telework, car washes, pet groomers, landscapers, and outdoor museums.

However, if a county wants to open schools, dine-in restaurants or shopping malls, they have to go through an attestation process, in which they certify the spread of COVID-19 is under control locally. 22 of California's 58 counties have been approved by the state to reopen those three areas: Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Glenn, Humboldt, Lassen, Mariposa, Modoc, Nevada, Placer, Plumas, San Benito, Shasta, Sierra, Siskiyou, Sutter, Tehama, Tuolumne and Yuba counties.

Higher risk businesses, where the spread of COVID-19 is more likely, are not allowed to open anywhere in the state. That includes salons, barbershops, gyms and entertainment venues.

Criteria counties are required to meet to prove their readiness:

- 1 or fewer cases per 10,000 residents the past 14 days
- No deaths for the past 14 days
- Minimum daily testing of 1.5 per 1,000 residents, with recommendation of 2 per 1,000
- Testing sites within 30 minutes of 75% of urban residents and 60 minutes of 75% of rural residents
- 15 contact tracers for every 100,000 residents
- Temporary housing available for 15% of population experiencing homelessness
- Hospital capacity for 35% surge in COVID-19 patients
- A “robust” plan to protect hospital workers and provide personal protective equipment
- A 14-day supply and a documented supply chain of PPE for skilled nursing facilities

San Francisco

Total Confirmed Positive: 2054

Total Deaths: 36

Cases by Age:

Age	Percentage
<18	4%
18-30	17%
31-40	23%
41-50	18%
51-60	15%
61-70	10%
71-80	6%
81+	5%

Cases by Race Ethnicity:

Race/Ethnicity	Percentage
Hispanic/Latino	42.8%
Unknown	16.9%
White	15.4%
Asian	12.6%
Other	5.1%
Black/African American	5.0%
Native Hawaiian/Other	1,2%

San Francisco starting to enter phase 2:

San Francisco Mayor London Breed said that the city was preparing to allow most retailers to reopen for curbside sales, barring a significant spike in COVID-19 diagnoses and hospitalizations over the next few days.

About 95 percent of San Francisco businesses will be permitted to reopen, albeit with severe restrictions. Retail establishments will be operating on a curbside and/or delivery basis and warehouse-like facilities will do so on a reduced capacity.

San Francisco health officials note that we have reached our goals of daily testing two people for every 1,000 city residents (1,600 tests per day). At a Friday UC San Francisco COVID-19 Town Hall, the expert panel spoke highly of the city's robust contact tracing program, our available hospital capacity, and our ramped-up testing and relatively low instance of positive tests. However, we are not yet adequately testing some of our most vulnerable populations — nursing home residents and, especially, homeless people or SRO dwellers.

Where to Get Testing in San Francisco

<https://sf.gov/find-out-how-get-tested-coronavirus>

The COVID-19 testing available detects if you have the virus at the time you take the test. It does not test for immunity or if you had the virus in the past. Testing is currently open for:

- Any person living in San Francisco that has 1 symptom or has been in close contact with a positive COVID-19 person
 - You have a fever over 100.4° Fahrenheit or 38.0° Celsius
 - You're shivering a lot
 - You have a cough
 - It's hard to breathe
 - You feel tired or sore
 - You can't smell or taste anything
 - Your throat hurts
 - Your head hurts
 - You have a runny or stuffy nose
 - You have diarrhea, feel sick to your stomach, or vomit
- Any essential or frontline worker serving the community of San Francisco regardless of symptoms or exposure

You can get a free test at a number of sites around the City or visit your healthcare provider. Walk-thrus or drive-thrus are available at various locations throughout the City.

You do not need medical insurance to get tested. You do not need a doctor's note to schedule a test. You must make an appointment for the test.

RECOMMENDATIONS

We have no new recommendations at this time.

We congratulate Kate, Staff, and Board members for having demonstrated exemplary leadership in rapidly assessing and responding to members' needs, in fostering intergenerational connections, in using technology to support ongoing community and education, in sustaining and growing SFV members, volunteers, and donors, and in creating the foundation for SFV's future.