

# COVID – 19 Research and Advisory Team: Report and Recommendations #27 September 13, 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.

#### RECENT FINDINGS

## 1) Icelandic study shows antibodies persist for four months after infection.

This counters earlier evidence suggesting that immune molecules disappear quickly. The antibody levels of more than 1200 people who had recovered from Covid-19 rose during the two months after diagnosis, plateaued, then remained at the same level for the a total of four months.

## 2) A COVID-19 Vaccine May Be Only 50% Effective. Is That Good Enough?

Dr. Anthony Fauci, chief of the National Institute of Health and Infectious Disease, has tried to set realistic expectations when discussing the importance of a vaccine. "We don't know yet what the efficacy might be. We don't know if it will be 50% or 60%." The Food and Drug Administration has said that once a vaccine is shown to be safe and at least 50% effective, it could be approved for use in the U.S.

50% effectiveness means that if you vaccinate 100 people, 50 people will not get disease. It's possible that the [COVID-19] vaccine will reduce the severity of disease in the other 50% who do get sick. But there's a lot to learn in that regard, given that the studies of COVID-19 vaccine candidates are still very much underway.

The extent to which any vaccine that emerges will help halt the COVID-19 pandemic depends on how many people get the immunization. In order to put this pandemic in the rearview mirror, a large percentage of the population needs to either be vaccinated or gain immunity via an infection with the virus. Herd immunity is seen when we have somewhere between 60% to 70% of the population who have some degree of protection.

This means that if 20% of the U.S. population ends up getting exposed to the virus and developing an infection before we have a vaccine, then we would still need an additional 40% of the population to gain protection via a vaccine. And in order to get 40% of a population immune through vaccination — if you have a vaccine with 50% efficacy — you're going to have to vaccinate 80% of the population, which will take months to

achieve. It's also still not known how long the immunity gained through any of the current COVID-19 vaccine candidates will last or to what extent the virus might mutate or change in a way that makes that vaccine less effective.

#### 3) Pharma's statement about Covid-19 vaccine readiness

In a highly unusual turn of events, nine vaccine makers — including some of the world's biggest companies (Pfizer, Merck, AstraZeneca, Sanofi, GlaxoSmithKline, BioNTech, Johnson & Johnson, Moderna, and Novavax ) — on Tuesday issued a public pledge not to seek government approval without extensive safety and effectiveness data. This follows a fairly similar open letter the BIO trade group (the world's largest biotech trade association) released last week warning any vaccine or therapy should only become available with the same sort of "rigorously considered" data.

These public pronunciations are not simply altruistic attempts to take the moral high ground. With each tweet and off-the-cuff remark about the vaccine timeline, Trump is eroding whatever confidence the public may have in vaccine makers, which is already questionable as far as some people are concerned. The pharmaceutical industry is keenly aware that its reputation is also at stake as the pandemic becomes more and more politicized.

#### 4) AstraZeneca's Oxford vaccine trial to resume

The AstraZeneca coronavirus vaccine trial, halted last week after a participant in the trial developed symptoms consistent with a rare but serious spinal inflammatory disorder called transverse myelitis, will resume, the University of Oxford announced Saturday. AstraZeneca said the trial will only resume in the United Kingdom, adding that it's working with health authorities across the world to determine when other trials can resume. This is the second time AZ paused the trial. The first time was related to a participant's pre-trial, undiagnosed multiple sclerosis.

The university said in a statement that some 18,000 individuals around the world have received study vaccines as part of the trial. "In large trials such as this, it is expected that some participants will become unwell and every case must be carefully evaluated to ensure careful

assessment of safety," the statement added. To have a clinical hold, as has been placed on AstraZeneca, as of yesterday, because of a single serious adverse event, is not at all unprecedented

An episode like this can be both reassuring to the general public and unnerving. Reassuring because the company did the right thing. Unnerving because the Oxford University-AstraZeneca vaccine is among the few that are closest to the authorization finish line. When a participant develops an illness or condition during a clinical trial, it could be linked to the agent being tested. But it also might not be. Symptoms and diseases occur for many reasons. In this case, the participant's symptoms could have emerged had she not been in the trial. That said, it's far better for the world that we know this occurred and that AstraZeneca is doing the right thing than if the company had kept quiet and allowed its trials to proceed.

The AstraZeneca vaccine is one of three coronavirus vaccines in latestage, Phase 3 trials in the US. It has the backing of the US federal government. Moderna and Pfizer/BioNTec are the other two groups with Phase 3 trials under way, also with federal government funding.

#### **UNITED STATES**

Cases: 6,486,108 Deaths: 193,701

# 1) Half a million US children have been diagnosed with Covid-19, according to the American Academy of Pediatrics and the Children's Hospital Association.

The groups said 70,630 new child cases were reported from August 20 through September 3. This is a 16% increase in child cases over two weeks, bringing up the total to at least 513,415 cases. A disproportionate number of cases are reported in Black and Hispanic children and in places where there is high poverty. Children represent nearly 10% of all reported cases in the US, according to the report. The child cases are likely underreported because the tally relies on state data that is inconsistently collected.

## 2) Adults with Covid-19 about 'twice as likely' to say they have dined at a restaurant, CDC study suggests.

Adults who tested positive for Covid-19 were approximately twice as likely to have reported dining at a restaurant in the 14 days before becoming ill than those who tested negative, according to a new study from the US Centers for Disease Control and Prevention. The study included data on 314 adults who were tested for Covid-19 in July because they were experiencing symptoms; 154 tested positive and 160 tested negative. The tests were administered at 11 different health care facilities across 10 US states: California, Colorado, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Tennessee, Utah and Washington.

The researchers -- from the CDC and other institutions -- took a close look at how those patients responded to questions about wearing masks and various activities in the community, including whether they recently dined at a restaurant, hung out a bar or went to a gym, for instance. Forty-two percent of the adults who tested positive, the data showed, reported having close contact with at least one person known to have Covid-19, compared with 14% of those who tested negative -- and most of the close contacts, 51%, were family members. The researchers also found that 71% of the adults with Covid-19 and 74% of those who tested negative reported always using a face covering while in public.

There were no significant differences between those who tested positive versus negative when it came to shopping, gathering with fewer than 10 people in a home, going to an office, going to a gym, going to a salon, using public transportation or attending religious gatherings, according to the study. However, people who tested positive, the data showed, were more likely to have reported dining at a restaurant in the two weeks before they started to feel sick.

Reports of exposures in restaurants have been linked to <u>air circulation</u>. Direction, ventilation, and intensity of airflow might affect virus transmission, even if social distancing measures and mask use are implemented according to current guidance. Masks cannot be effectively worn while eating and drinking, whereas shopping and numerous other indoor activities do not preclude mask use.

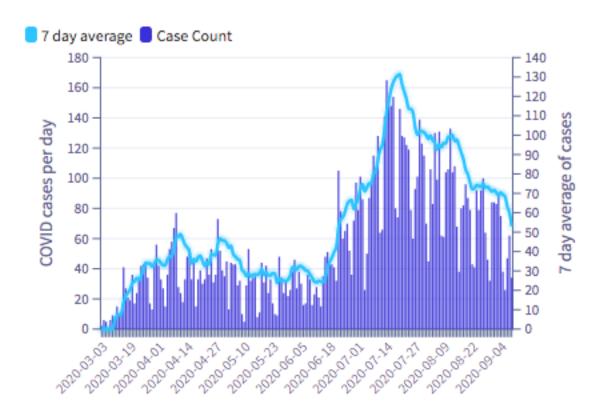
As states reopen, the CDC's guidelines for restaurants and bars list dining options from the lowest to the highest risk on the agency's website:

- **Lowest risk:** Food service limited to drive-through, delivery, takeout and curbside pickup.
- **More risk:** On-site dining limited to outdoor seating. Seating capacity reduced to allow tables to be spaced at least 6 feet apart.
- Even more risk: On-site dining with both indoor and outdoor seating.
   Seating capacity reduced to allow tables to be spaced at least 6 feet apart.
- Highest risk: On-site dining with both indoor and outdoor seating.
   Seating capacity not reduced and tables not spaced at least 6 feet apart.

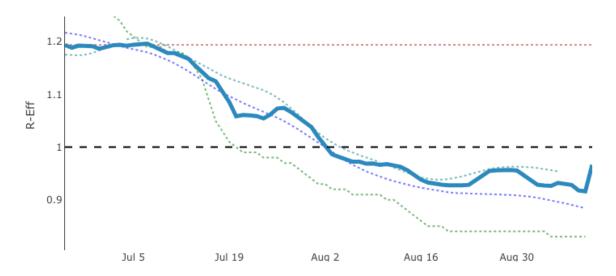
#### SAN FRANCISCO

Confirmed cases: 10,263 — up by 75 (0.7%) since Friday Hospitalized: 92 — up by 6 as of 9/11, with 26 in ICU beds

Deaths: 90 — up by 1 since Friday



The effective reproduction number (R-effective) is the average number of people each infected person will pass the virus onto and represents the rate at which COVID-19 is spreading. San Francisco's R-effective rate is 0.97, which indicates that the spread of the virus is likely stable.



#### Hospital Capacity as of 9/10/2020



#### 1) Gyms and hair and nail salons are open for indoor business.

San Francisco is moving ahead to reopen gyms for indoor workouts starting Monday. And also allowed to reopen indoors are hair and nail salons — which have been plying their trades outdoors for two weeks now. And hotels and Airbnbs will be able to welcome guests back in as well. Everyone going to get their hair done or jump on a cardio machine must wear a face mask at all times, as must the staff.

Dr. Grant Colfax, SF's director of public health, issued a statement as well saying, "We will continue our gradual reopening as it allows us to monitor the spread, manage its immediate challenges and mitigate the long-term impact on our city." The move comes as San Francisco's COVID case count and hospitalization rate has consistently trended downward for several weeks, though the spike of July into August remains fresh in memory.

#### **CALIFORNIA**

## California COVID-19 By The Numbers

September 12, 2020 — Numbers as of September 11, 2020

750,298 (+4,107)

#### **Ages of Confirmed Cases**

- 0-17: 76,593
- 18-49: 450,341
- 50-64: 141.798
- 65+: 80,630
- Unknown/Missing: 936

#### **Gender of Confirmed Cases**

- Female: 378,984
- Male: 364,731
- Unknown/Missing: 6,583

### **14,251** (+162)

**Fatalities** 

#### **Hospitalizations**

Confirmed COVID-19
2,970/970
Hospitalized/in ICU

Suspected COVID-19

878/150

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) California death toll tops 14,000, but new coronavirus cases continue to decline

The cumulative death toll rose to 14,021, up by 31 from Wednesday, but overall the state has seen deaths flatten out and new reported cases trend downward. The seven-day average of new cases on Wednesday stood at 3,742, the first time new cases dropped below 4,000 since June 21. New cases have declined substantially since July 27, when the state

recorded nearly 11,000 of them. The state has averaged 93.1 deaths a day over the last seven days, hospitalizations have declined, and the 14-day positivity rate is now at 4%, state officials said. Turnaround times for coronavirus tests also have declined and laboratories were now producing test results in an average of 1.3 days.

The effective reproduction number (R-effective) is the average number of people each infected person will pass the virus onto and represents the rate at which COVID-19 is spreading. For California, the R-effective rate is estimated to be 0.86, which indicates that the spread of Covid-19 is likely decreasing.

## 2) The coronavirus may have been in California before China announced outbreak, study suggests.

The novel coronavirus may have been circulating in Southern California as early as December, suggests a new study from UCLA published in the peer-reviewed Journal of Medical Internet Research. After analyzing electronic health records from UCLA Health hospitals and clinics, researchers found that beginning the week of December 22, hospitals began to report an abnormally high number of patients experiencing coughs and acute respiratory failure compared to previous years. For reference, the Chinese government first informed the World Health Organization of the novel illness on December 31.

The researchers compared health system and patient visit records from the period between December 1, 2019 and February 29, 2020 to previous years and found that outpatient clinic visits for those seeking care for coughs increased by over 50%. The number of visits by patients reporting coughs exceeded the average number of similar visits over the prior five years by more than 1,000. COVID-19 diagnostic testing was scarce during the winter months, which limits the study's findings.

# 3) The California Supreme Court refused to overturn Gov. Gavin Newsom's directives limiting in-classroom instruction to slow the spread of the coronavirus.

The state's highest court rejected without comment lawsuits brought by the Orange County Board of Education and others to reopen schools statewide.

#### RECOMMENDATIONS

Here are two ideas for you to consider:

- Create an election guide (or collect links to existing election guides) that could offer members accurate information about the timetable for absentee ballots, how to send them in safely, where to find ballot boxes, where to get accurate information, etc. Ashby Village has created a guide like this for their members that we could use as a model (Barbara has a copy). Perhaps a Board member or another member would be interested in adapting the AV guide for SFV or in sourcing links to guides. In addition, consider inviting a voter registration official to offer a talk on safe voting.
- Members are under increased stress from the pandemic, the fires, and smoke pollution. In addition to the many programs SFV offers that already help with stress (eg. meditation, qigong, improv), consider asking members to recommend TV series and movies that make them laugh or uplift them and include a section in the regular report that lists these recommendations.