San Francisco Village

COVID – 19
Research and Advisory Team:
Report and Recommendations #26
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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.

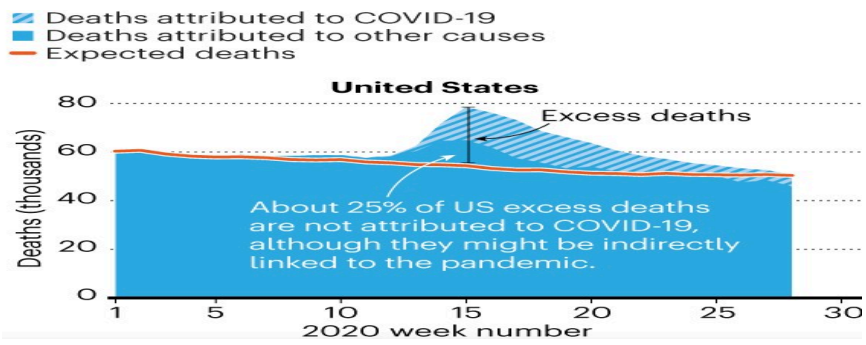
RECENT FINDINGS

1) How death counts are determined

In times of upheaval — wars, natural disasters, outbreaks of disease — researchers need to tally deaths rapidly, and usually turn to a blunt but reliable metric: excess mortality. It's a comparison of expected deaths with ones that actually happened, and, to many scientists, it's the most robust way to gauge the impact of the pandemic. It can help epidemiologists to draw comparisons between countries, and, because it can be calculated quickly, it can identify COVID-19 hotspots that would otherwise have gone undetected. According to data from more than 30 countries for which estimates of excess deaths are available there were nearly 600,000 more deaths than would normally be predicted for the period between the onset of the pandemic and the end of July (413,041 of those were officially attributed to COVID-19).

But this high-level metric has several flaws. It cannot distinguish between those who are dying of the disease and those who succumb to other factors related to the pandemic, such as disruptions to regular health care, which can delay treatments or mean that people do not seek medical care. It relies on accurate, timely reporting of deaths, which can be limited owing to underdeveloped death-registration systems, or might even be intentionally suppressed.

Nature gathered figures from several databases maintained by demographers, as well as from trackers run by *The Financial Times* and *The Economist*, two of the most comprehensive data sets on excess deaths. The *Nature* analysis shows that there are huge variations in excess deaths between countries. In the United States and Spain — two of the hardest-hit countries so far — about 25% and 35%, respectively, of the excess death toll is not reflected in official COVID-19 death statistics.



Visits to emergency departments in the United States declined by more than 40% in the early days of the pandemic, according to a report from the Centers for Disease Control and Prevention, suggesting that many people were reluctant to attend. And even if they did seek care, hospitals were severely overstretched. You died from something else, but the reason you died from something else is because the systems that were initially in place to take care of you are no longer strong enough. Preliminary, incomplete data from the CDC offer a glimpse of these indirect deaths: in April, US recorded deaths from diabetes were 20–45% higher than the 5-year average; deaths from ischemic heart disease were anywhere from 6% to 29% higher than the norm.

2) Inexpensive steroids reduce deaths of hospitalized Covid-19 patients, WHO analysis confirms

Use of inexpensive, readily available steroid drugs to treat people hospitalized with Covid-19 reduced the risk of death by one-third, according to an analysis encompassing seven different clinical trials conducted by the World Health Organization and published Wednesday in the Journal of the American Medical Association.

Corticosteroids are the first, and so far only, therapy shown to improve the odds of survival for critically ill patients with Covid-19. Based on the newly published data, the WHO issued new treatment guidelines calling for corticosteroids to become the standard of care for patients with "severe and critical" Covid-19. Such patients should receive 7-10 days of treatment, a WHO panel said. Other groups, including the National Institutes of Health and the Infectious Diseases Society of America, have already issued similar guidelines recommending the use of steroids to treat patients with severe Covid-19.

Corticosteroids do not directly attack the novel coronavirus. Instead, the drugs work by dampening the activity of a patient's immune system to prevent it from attacking the lungs — a serious and often fatal condition called acute respiratory distress syndrome, or ARDS. One of the concerns about steroids is, given too early in the course of Covid-19, they might hamper the body's ability to eliminate the virus, leading to worse outcomes.

3) A growing body of research suggests COVID-19 has detrimental long-term effects on the heart, even among very healthy young people.

Even those who seem to have less-pronounced COVID-19 symptoms or no symptoms at all may discover that they have heart issues later. A study

published in JAMA Cardiology by German researchers in July was about the use of Cardiac Magnetic Resonance (CMR) imaging in 100 recently-recovered COVID-19 patients, and identified ongoing myocardial inflammation in 60 percent of the recovering volunteers. In total, 78 percent had abnormal CMR findings. It is very concerning that about 78 percent of people had some evidence of scarring or some swelling in the heart, even if they hadn't necessarily been that sick.

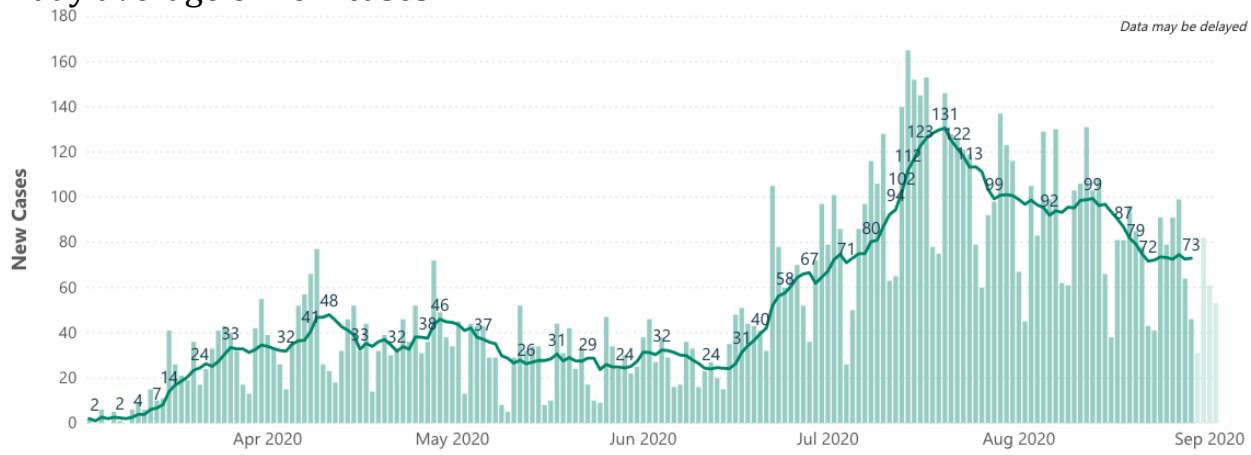
Researchers posit that one reason for these high numbers is that the infection and stress resulting from an infection can cause injury to the heart, almost as a bystander effect, with the heart working so hard to fight off the overall viral infection that can cause damage. A second reason might be some "direct viral invasion," although the evidence of that doesn't necessarily stack up. A third concern is for people who have severe symptoms, there could be an overreaction of the immune system attacking the heart. The fourth is related to clotting in the body. When the heart gets infected, that's likely related to the overall inflammation, and some of the clotting in blood vessels and other parts of the heart can also cause heart damage. Some mixture of those four various things can cause heart damage.

In a not yet reviewed but significant article, researchers at the San Francisco-based Gladstone Institutes discovered that when SARS-CoV-2 virus was added to human heart cells grown in lab dishes, the long muscle fibers that keep hearts beating were diced into short bits. They saw a similar phenomenon in heart tissue from Covid-19 patients' autopsies. Their experiments could potentially explain why some people still feel short of breath after their Covid infections clear and add to worries that survivors may be at risk for future heart failure. We should think about this as not only a pulmonary disease, but also potentially a cardiac one.

SAN FRANCISCO

Confirmed cases: 9,839 — up by 84 (0.9%) since Friday
Hospitalized: 65 — down by 0 as of 9/4, with 23 in ICU beds
Deaths: 86 — up by 2 since Friday

7-day average of new cases:



1) Mayor Breed announces SF's plan for reopening

Mayor London N. Breed, Dr. Grant Colfax, Director of Health, and Assessor-Recorder Carmen Chu, co-Chair of the City's Economic Recovery Task Force, today announced the next steps in San Francisco's reopening of businesses and activities.

Since July, San Francisco has been on the State's COVID-19 watch list, which restricted many activities and required the City to pause further reopening. On Friday, August 28, the State issued new criteria and a colored-coded tiered system, which replaced the watch list. San Francisco has been placed on the "red" tier, which provides the City the discretion to move forward with reopening some activities. While San Francisco recognizes the State's thresholds, the City will continue on a reopening path based on its unique challenges and successes, and maintains the ability to open more gradually than what the State allows.

San Francisco's immediate path forward starts with outdoor activities that are lower risk and moves to indoor activities that are lower risk and with limited capacity. In parallel to this, in-person learning and child and youth development activities will also be opened on a rolling basis. Today, outdoor personal services are resuming, as well as indoor malls at limited capacity.

Additional services, businesses, and activities will resume over the coming weeks and months, as long as San Francisco continues to make progress on limiting the spread of COVID-19.

San Francisco's Path Forward to Reopening

Outdoor activities – Moving Forward September 1

- Outdoor hair salons and barber shops
- Outdoor personal services
- Outdoor massage
- Outdoor pools (lap swimming, wading), with limited capacity
- Outdoor non-contact, recreational activities
- Indoor malls (no food courts, gathering areas) at 25% capacity
- Childcare and Out of School Time programs, with limitations
- Higher and adult education, with limitations
- Indoor funerals (up to 12 people)
- Outdoor gym and fitness centers (September 9)

GOAL: Mid-September, Low Risk Outdoor Activities and TK-6th grade in-person learning

- Outdoor tour buses and boats, with limited capacity
- Outdoor movies, with limited capacity
- Outdoor family entertainment, with limited capacity
- Hotels and lodging (not hotel fitness centers), with limited capacity
- In-classroom learning: TK-6 grade on rolling basis with approved health and safety plan
- Indoor museums, zoos, aquariums, with limited capacity and an approved health and safety plans)
- Places of worship (allows one person at a time for individual prayer indoors; 50 people outdoors)
- Small special gatherings, for example election campaigns, with limited capacity (1 person indoors, 12 people outdoors)

GOAL: End of September, Low Risk Indoor Activities

- Indoor hair salons and barber shops, with limited capacity
- Indoor personal services, with limited capacity
- Indoor one-on-one personal training, with limited capacity
- Indoor solo use of gyms and fitness centers, with limited capacity
- Places of worship, with limited capacity (25% of capacity indoors, up to 25 people; 50 people outdoors)

GOAL: October, Middle School in-person learning

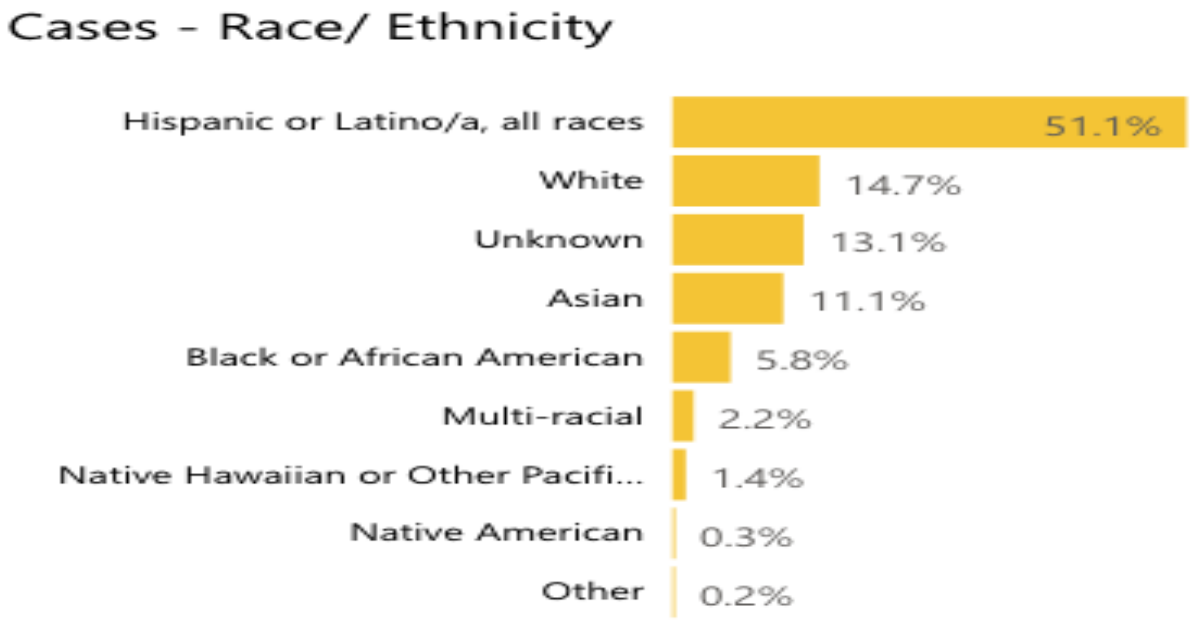
- Middle schools, in-person learning, on rolling basis with an approved health and safety plan

<u>GOAL: November, High Schools, additional learning activities</u>

- High schools, in-person learning, on rolling basis with an approved health and safety plan

2) Researchers call for more testing of Latinx community

UCSF researchers are calling for more COVID testing of essential workers, especially among the Latinx community. A new study conducted at the Mission's 24th Street BART station reinforces what researchers have been saying for months - that Latinx people are testing positive at higher rates than other groups. Demographic data collected during the six-day study revealed the majority of people affected are low-wage earners who live in high-density housing.



CALIFORNIA

California COVID-19 By The Numbers

Septmeber 5, 2020

Numbers as of September 4, 2020

CALIFORNIA COVID-19 SPREAD

727,239 (+4,956)

CASES

Ages of Confirmed Cases
- 0-17: 73,915
- 18-49: 436,511
- 50-64: 137,641
- 65+: 78,262
- Unknown/Missing: 910

Gender of Confirmed Cases
- Female: 367,462
- Male: 353,245
- Unknown/Missing: 6,532

13,643 (+153)

Fatalities

Hospitalizations

Confirmed COVID-19

3,413/1,116

Hospitalized/in ICU

Suspected COVID-19

829/126

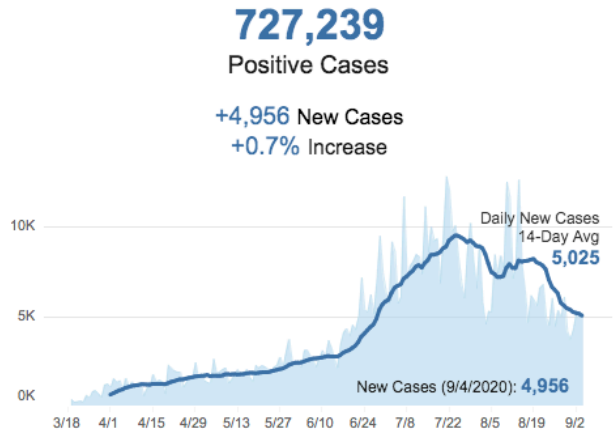
Hospitalized/in ICU

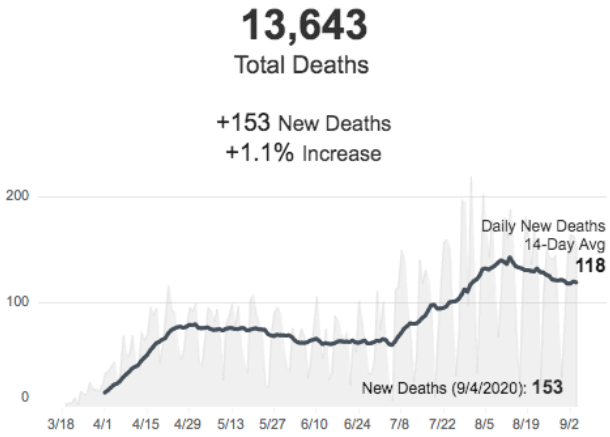
For county-level hospital data: bit.ly/hospitalsca

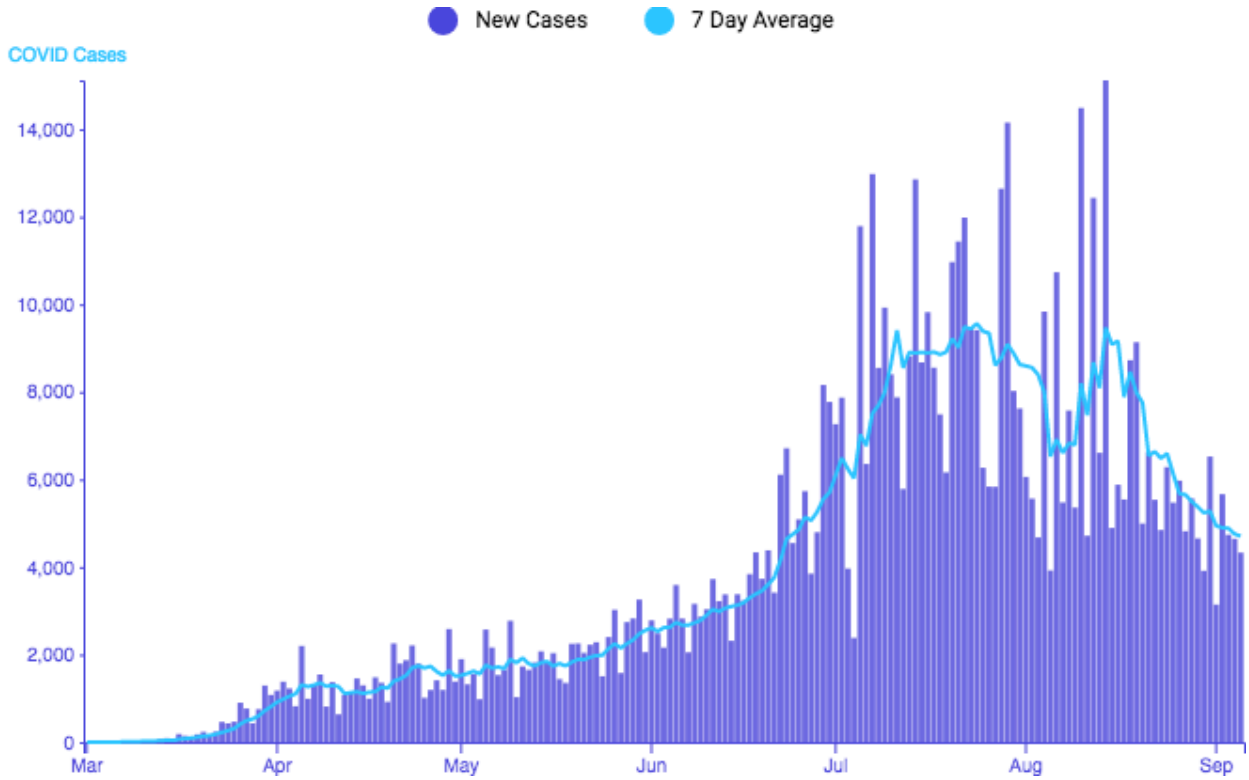
Your actions save lives.

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

covid19.ca.gov







- There were 4,255 new COVID-19 cases yesterday, with a seven-day average of 4,708 new cases per day. That's with about 110,000 tests conducted per day over the past week.
- The 14-day COVID-19 positivity rate in California is down to 5.1%, while the 7-day positivity rate is at 4.4%.
- Hospitalizations and ICU admissions for COVID-19 are each down 23% over the past two weeks.

1) Governor Newsom Signs Statewide COVID-19 Tenant and Landlord Protection Legislation

Governor Gavin Newsom announced that he has signed legislation to protect millions of tenants from eviction and property owners from foreclosure due to the economic impacts of COVID-19. These protections apply to tenants who declare an inability to pay all or part of the rent due to a COVID-related reason. Under the legislation, no tenant can be evicted before February 1, 2021 as a result of rent owed due to a COVID-19 related hardship accrued between March 4 – August 31, 2020, if the tenant provides a declaration of hardship according to the legislation's timelines. For a COVID-19 related hardship that accrues between September 1, 2020 – January 31, 2021, tenants must also pay at least 25 percent of the rent due to avoid eviction. Tenants

are still responsible for paying unpaid amounts to landlords, but those unpaid amounts cannot be the basis for an eviction. Landlords may begin to recover this debt on March 1, 2021,

UNITED STATES

Positive Cases: 6,242,039
Deaths: 188,501

1) There is growing concern that the Food and Drug Administration, under political pressure, could approve a Covid-19 vaccine before it has robust safety and efficacy data.

Public health experts have reacted with alarm to remarks by the head of the US Food and Drug Administration (FDA) that he might give the green light for a US Covid-19 vaccine before the normal clinical trial process had reached its conclusion. As the US was on the verge of 6m coronavirus cases on Sunday, Stephen Hahn, the FDA commissioner, told the Financial Times in an interview published on Sunday that he was prepared to issue emergency use authorization for a Covid-19 vaccine before the end of Phase 3 human trials that put the drug through stringent testing for safety and efficacy. Eric Topol of the Scripps Translational Research Institute said that it would take many months for the safety of the vaccine to be fully determined at trial. Any shortcuts will imperil the ultimate rollout of the vaccine and lose the public trust for getting immunized, which is already compromised.

The consequences of such a decision could be significant, particularly if the vaccine is ultimately shown to be less effective than early data suggest. But an approval before the completion of large, Phase 3 trials does not have to be problematic. Experts aren't ruling out the possibility that a vaccine could be cleared this fall if it is very effective. The risk is that if you make a decision based on promising but not convincing data, and then you discontinue your randomization, you discontinue your evidence-generating process. You can never go backward. You can never go back and generate your evidence.

The FDA has laid out clear criteria for the full approval of a vaccine: It should reduce the rate of symptomatic Covid-19 disease by 50%. Equally important is that the data should suggest it's highly unlikely that the vaccine could possibly be less than 30% effective. Any vaccine less effective than that would be useless. The agency also said that there should be safety data of a year or more for at least 3,000 patients. There's no way to shorten that timeframe,

and it is one of the reasons experts believe the FDA could grant a Covid-19 vaccine an emergency use authorization, rather than full approval.

Each of the Phase 3 trials is enrolling at least 30,000 volunteers. It's expected that the trials could need about 150 cases of Covid-19 to tell whether or not the vaccine is preventing disease. But the more effective a vaccine is, the more likely it is that the trial could be stopped at an interim analysis based on fewer cases -- if the vaccine is extremely effective, with only a handful of patients in the vaccine group getting sick.

2) U.S. advisory group lays out detailed recommendations on how to prioritize Covid-19 vaccine

A new report that aims to prioritize groups to receive Covid-19 vaccine focuses on who is at risk, rather than using job categories or ethnic groups to determine who should be at the front of the line. The committee was set up by the National Academies at the request of Francis Collins, director of the National Institutes of Health, and Robert Redfield, director of the Centers for Disease Control and Prevention. When Covid-19 vaccines are approved for use, initial supplies will be tight — potentially in the tens of millions of doses. Most of the vaccines under development will require two doses per person: a priming dose followed by a booster either three or four weeks later.

The report recommendations put health workers in high risk settings and first responders at the very front of the vaccination line, in what the committee called the "jumpstart phase." Closely behind are adults of any age who have medical conditions that put them at significantly higher risk of having severe disease, primarily heart or kidney failure or a body mass index of 40 and over. Also in this group are older adults living in long-term care homes or other crowded settings.

The report suggests that a second phase of vaccinations should involve critical risk workers — people in industries essential to the functioning of society — as well as teachers and school staff; people of all ages with an underlying health problem that moderately increases the risk of severe Covid-19; all older adults not vaccinated in the first phase; people in homeless shelters and group homes, and prisons; and staff working in these facilities.

Young adults, children, and workers in essential industries not vaccinated previously would make up the third priority group. Remaining Americans

who were not vaccinated in the first three groups would be offered vaccine during a fourth and final phase.

The CDC estimates that there are between 17 million and 20 million health care workers in the country, and roughly 100 million people with medical conditions that put them at increased risk of severe illness if they contract Covid-19. There are roughly 53 million Americans aged 65 and older, and 100 million people in jobs designated as essential services.

3) NIH reverses its statement: Not enough evidence for plasma

A National Institutes of Health panel says the current evidence doesn't warrant using plasma from people who have recovered from Covid-19to treat the disease. On 8/23, the FDA granted emergency authorization for doctors to use convalescent plasma. This announcement raised controversy after FDA commissioner Hahn and Donald Trump repeated an incorrect claim about the proven efficacy of this treatment – for which Hahn later apologized. The NIH panel reviewed published and unpublished evidence and concluded that there are insufficient data to recommend either for or against the use of convalescent plasma for the treatment of Covid-19.

4) CDC official affirms coronavirus deaths really are coronavirus deaths

The Centers for Disease Control and Prevention doubled down against rumors suggesting that coronavirus deaths have been greatly exaggerated. People are misinterpreting standard death certificate language, CDC's top expert on mortality said. President Trump has retweeted social media conspiracy theories saying that only a small percentage of the people reported to have died from coronavirus really did die from the virus. They have pointed to death certificates that list other underlying causes.

But that doesn't mean the patients did not die from coronavirus, Bob Anderson, chief of mortality statistics at the CDC, said in a statement.
The underlying cause of death is the condition that began the chain of events that ultimately led to the person's death. In 92% of all deaths that mention Covid-19, Covid-19 is listed as the underlying cause of death. Just because a death certificate lists other conditions, it doesn't mean one of those conditions caused a death.

5) Doctors warn against 'herd immunity' plan
One of President Trump's top medical advisers, Scott Atlas, is urging the administration to lean into a national "herd immunity" strategy to combat the pandemic. Atlas, a neuroradiologist and fellow at Stanford's Hoover Institution— a right-leaning think tank and research center — is pushing for the United States to embrace a laissez-faire pandemic management model like Sweden's, by allowing the coronavirus to spread freely to most of the population while protecting those in senior homes or in other vulnerable populations. Yet Sweden's laissez-faire approach resulted in the country having a higher per-capita death rate than its neighboring comparable countries. Sweden's per capita COVID-19 death rate was 43.88 out of every 100,000 people, compared to 4.46 out of every 100,000 people in Norway and Denmark's rate of 10.00 out of every 100,000 people. The notion of herd immunity will not only result in a great number of deaths, but those who survive and those without symptoms (which are 40% of all cases) may suffer long term consequences, especially heart disease.

6) US Coronavirus deaths to more than double by January. Deaths from COVID-19 could be reduced by 30% if more Americans wore face masks, but mask-wearing is declining,
U.S. deaths from the coronavirus will reach 410,000 by the end of the year, more than double the current death toll, and deaths could soar to 3,000 per day in December, the University of Washington's health institute forecast on Friday.

The U.S. death rate projected by the IHME model, which has been cited by the White House Coronavirus Task Force, would more than triple the current death rate of some 850 per day. Cumulative deaths in the US are expected by January 1 to be 410,000; this is 225,000 deaths from now until the end of the year. The United States, which has the world's third largest population, leads the planet with more than 186,000 COVID-19 deaths and 6.1 million coronavirus infections. The model's outlook for the world was even more dire, with deaths projected to triple to 2.8 million by Jan. 1, 2021.

Mask use continues to decline from a peak in early August. Declines are notable throughout the Midwest, including in some states such as Illinois and Iowa with increasing case numbers. Deaths could be reduced by 30% if more Americans wore face masks as epidemiologists have advised.

7) Experts say Trump's eviction moratorium is hard to access and will be of limited help. The eviction moratorium does not protect all renters and does not forgive owed back-rent

Donald Trump declared a national eviction moratorium Tuesday night that, while postponing homelessness for many until December, does not protect all renters and does nothing to address the underlying long-term housing crisis caused by the coronavirus pandemic. Tenants can be charged late payment fees and interest for non-payment of rent that accrues, which becomes a legal obligation of a tenant as of Jan 1, 2021. Because Trump's moratorium does not include any measure for rent forgiveness, it only temporarily wards off the eviction crisis for the people that it manages to cover.

According to a draft of the ban posted on the Federal Register, the Trump administration argues that "COVID-19 presents a historic threat to public health" and that "in the context of a pandemic, eviction moratoria — like quarantine, isolation, and social distancing—can be an effective public health measure utilized to prevent the spread of communicable disease." Because the moratorium is being cast as a public health policy, it is being implemented through the Centers for Disease Control and Prevention.

RECOMMENDATIONS

1) While it is beyond our purview to address the politics behind some of the information, we do feel that it is our ethical obligation to urge members not to rely solely on information provided by the CDC and the FDA. There have been instances of their advice changing with political pressure, and then reversing, and then undoing the reversal.
2) There have been reports that a vaccine may receive emergency FDA authorization by November 1. Members need to take several factors into consideration as they understand the implications of this approval:
    - What does emergency authorization mean: the FDA can green light unapproved medical products for life-threatening diseases when there are no approved alternatives. Using that authority, regulators may clear a product once they determine that it “may be effective” and that its “known and potential benefits” outweigh the risks. That is not nearly as tough as the standards for full approval, which require a product be shown to be safe and effective

- According to FDA criteria, for the full approval of a vaccine, it should reduce the rate of symptomatic Covid-19 disease by 50%. Older members and those with chronic conditions need to weigh whether a 50% reduction is sufficient. It is unclear what degree of effectiveness a vaccine receiving emergency authorization will need to achieve.
- The vaccine will not have been studied long enough to determine what health consequences it may have over time.
- It is unclear the degree to which the vaccine will be tested on older adults.