January 28, 2022 Update
COVID-19 AND ‘CORONAVIRUS’ UPDATES

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THE IMPACT ON OUR HEALTH SYSTEM
This is the 33rd update for Regents regarding the SARS-CoV-2 virus pandemic and its impact on the University’s health and academic enterprise. Given the significance of the current conditions, I am providing this overview.

On January 25, 2022, we marked the second anniversary of the day we began caring for the first COVID-19 patients in the University of California Health System. These were the first patients in California and some of the first in the U.S. With this milestone, we have now entered the third year of the pandemic.

The optimism we felt this fall was dampened by the recognition of the omicron variant in late November. As winter unfolds in the U.S., we are facing a difficult period. The omicron variant is driving cases at a rate we have not experienced before. Hospitalizations are also increasing and today are at rates similar to winter 2021 prior to the availability of vaccines.

While some studies, including one from UC Berkeley, have found omicron to less frequently cause severe illness, the variant’s extraordinary transmissibility is allowing it to have a profound impact. COVID-19 infections and associated absences are straining essential services nationwide. Hospitals have been particularly hard hit, and the UC academic health centers are no exception. Staffing shortages have reduced capacity to care for both COVID-19 and non-COVID-19 serious illness.

Vaccination, both primary and booster shots, remains the best way to combat the severe impacts of the virus. Although vaccinated individuals are not immune to omicron infection, they are many times less likely to require hospitalization or to die from infection. We must continue to make vaccines accessible to all, encourage everyone to keep their vaccination status up to date, and combat misinformation that leads to vaccine hesitancy. Recently, the Centers for Disease Control and Prevention (CDC) updated its communications to emphasize the importance of remaining up to date on COVID-19 vaccines by receiving all recommended doses when eligible. CDC defines fully vaccinated to mean that a person has received a primary series of a COVID-19 vaccine. CDC provides a helpful table that summarizes the guidelines for remaining up to date by age and type of vaccine.

In California, millions of people still need to receive their primary series or are past due for booster doses. Our state’s full vaccination rate is 72.8% for people ages 5 and above as of January 26, 2022. More than 12 million booster-eligible people (53%) in California have also received a booster dose as of January 26, 2022. The proportions in California are higher when compared to the national rate of vaccination for people ages 5 and above at 67.6% and boosted at 41%, as of January 27, 2022.
UC students, faculty and staff have shown strong support for vaccination with >99% of students and 98% of employees complying with the University’s vaccination mandate. The UC policy on COVID-19 vaccination has always included a requirement for covered individuals to keep their COVID-19 vaccination status up to date. All campuses and the Office of the President require members of the UC community who are eligible for a booster dose to complete that important step.

Vaccines are our first line of defense, and non-pharmaceutical interventions also remain important. Given the extremely contagious nature of omicron, we continue to recommend universal masking in all indoor spaces. As California Department of Public Health (CDPH) notes, with California communities experiencing high rates of COVID-19 transmission, it is important to get the most out of face coverings and recommends all individuals upgrade to a KN95, N95, or KF94. In line with these recommendations, UCLA has enhanced face covering requirements for students, faculty and staff. The campus is making upgraded masks available for students starting January 19, 2022, and requires departments to provide these masks to all faculty and staff working on site. CDPH’s guide to masking provides more information.

When illnesses occur and treatment is necessary, we now have more options. All UC academic health centers are offering IV remdesivir for outpatients, which may reduce the need for hospitalization by ~89%. Oral antiviral drugs — paxlovid from Pfizer and molnupiravir from Merck — are also now approved by the Food and Drug Administration (FDA) for emergency use. Supplies of both drugs currently are extremely limited. As a result, the drugs are reserved for the highest risk patients. We hope access to these drugs will expand by spring of this year. The drugs have shown the ability to reduce the likelihood of hospitalization or death, and they are a very welcome option beyond the intravenous treatments that have been the standard of care to date.

COVID-19 BY THE NUMBERS

In California and nationwide, the extreme surges in test positivity and cases are mostly as a result of the omicron variant. Although omicron may result in milder disease in individuals, the extraordinary number of cases is now resulting in an average of more than 2,200 deaths per day nationally according to CDC. The virus is still a cause of concern for the health of our communities and for the disruptions to essential services, schools and business that are growing due to related work absences. We are firmly in the middle of influenza season which keeps the risks to our communities high.
There is some data to suggest that in certain regions COVID-19 cases may have peaked. This is very early data, and the trends are still subject to change. Even if we have reached the height of this surge, metrics for tracking the virus’ impact remain extremely elevated, so we must continue our push for up-to-date vaccinations and preventive measures.

As of January 26, 2022, statewide, daily new cases are at nearly 205 per 100,000, which is nearly 16 times higher than when I shared data with you three months ago. Test positivity is 18.8%, as of January 26, 2022.

National trends show a similar pattern. On January 26, 2022, the U.S. 7-day moving average of daily new cases was 596,859, which is more than double the January 2021 peak, and on several days in January 2022, the U.S. recorded more than 1 million cases per day, according to data from CDC. Additionally, CDC reports that as of January 24, 2022, more than 870,000 COVID-19 deaths have occurred in the U.S., which is a staggering number to consider.

UNDERSTANDING OMECROWN’S IMPACT
Researchers, including those from UC, are helping build a base of evidence on the risks posed by the omicron variant. A paper analyzing nearly 70,000 COVID-19 cases from UC Berkeley Assistant Professor of Epidemiology Joseph Lewnard, Ph.D., and co-authors at CDC and Kaiser Permanente, has been cited by the White House COVID-19 Response Team and CDC Director Rochelle Walensky, M.D., MPH, for the details it provides comparing real-world clinical outcomes between omicron- and delta-infected patients.
While this research and other reports show omicron infections may cause a lower percentage of severe illness than delta and prior variants, it does not make omicron a mild disease. We continue to see a disproportionate impact of both delta and omicron infection on the unvaccinated. CDPH estimates that between January 3 and January 9, 2022, unvaccinated people were 6.9 times more likely to be hospitalized with COVID-19 than fully vaccinated people. Even more concerning, unvaccinated people were 16.9 times more likely to die from COVID-19 than fully vaccinated people from December 27, 2021, to January 2, 2022.

Additional data from California Department of Public Health show that receiving additional vaccine shots also makes a difference. Being boosted provides better protection than just receiving primary vaccine doses. The green lines in the charts below show the effectiveness of boosters in terms of cases, hospitalizations and deaths as compared to the gold line which shows occurrences in people who have only received primary vaccine doses.
The omicron variant may cause severe illness in a lower proportion of cases, but the sheer volume of cases and ongoing delta transmission means that the absolute number of severe COVID-19 cases and hospitalizations are surging. At the same time, hospitals are experiencing a wave of patients with critical needs, driven in large part by a backlog of care that many patients have deferred as a result of the pandemic. ICU utilization levels at UC academic health centers are higher than we experienced during the delta wave.

There has also been a lot of media attention devoted to the concept of “incidental” COVID. As most health systems, and all UC health centers, test every patient for COVID, we may detect infections in people with other conditions and those who did not suspect they were infected. In some cases, these infections are asymptomatic, but often, patients may have chronic health conditions such as diabetes or lung disease that are exacerbated by even mild COVID infection. In all cases, patients who are admitted and found to be COVID positive will have increased care needs, as providers must maintain COVID-19 infection prevention protocols.

The burden of delivering care in this environment along with higher levels of infection and absences among staff are overwhelming hospitals. Many hospitals across the nation are cancelling certain procedures and surgeries, and some have declared crisis situations. UC academic health centers are experiencing these same pressures, although none have moved to crisis standards of care. The UC academic health center CEOs and I continue to monitor conditions daily.

Data from UC academic health centers clearly show the surge with inpatient counts at a level similar to the surge last winter and well above the late summer peak. Inpatients are spread somewhat evenly over the five UC academic health centers, reflecting the community spread prevalent across the state. The UC Center for Data-driven Insights (CDI2) continues to track multiple core COVID-19 patient metrics to help keep stakeholders, public health officials and the public informed about the conditions at our hospitals. CDI2 has resumed daily publishing of the COVID-19 dashboards on Twitter.

![COVID-19 inpatients seen during each day](image)

Source: UC Center for Data-driven Insights, as of 1/27/22

**RAPID TESTING ACCESS**

As we enter each new phase of the pandemic, we must constantly update our strategies to combat the virus. Reliable and ongoing access to rapid testing is one of the keys to moving
forward from the current surge, in addition to vaccinations. The SARS-CoV2 virus will be with us for the foreseeable future. Tests that show people when they need to isolate or quarantine can limit future outbreaks and help our communities return to more normal patterns without extreme swings in conditions like we are experiencing today.

Rapid COVID-19 tests can be effective for detecting high viral loads that pose the greatest risk for transmission. A new analysis from UCSF, Unidos en Salud, Chan Zuckerberg Biohub, UC Berkeley and CDPH authors analyzing test data from 731 people using a San Francisco community testing site found that the Abbott BinaxNOW rapid antigen test detected 95% of high viral load omicron cases. Study co-author and UCSF School of Medicine Professor Joseph DeRisi, who is president of the Chan Zuckerberg Biohub, noted the test “is working as it was designed.”

Making COVID-19 testing a regular part of our routines will help us ensure the functioning of our economy, schools and social practices. We are encouraged by federal and state government efforts to improve accessibility of rapid tests including through improvements in supply.

LOOKING FORWARD
The next few weeks will continue to be difficult for our nurses, doctors and hospital teams as well as essential workers across the state. Current forecasts show that we likely are just reaching the peak of cases or hospitalizations in California. The graph below shows a set of scenarios from the California COVID-19 Assessment Tool (CalCAT) from CDPH with levels likely to remain elevated through mid-February.

Even after this surge passes, we must be prepared for this virus to be with us over the long term. Ultimately, we will shift from our current pandemic to an endemic state, where we see outbreaks in more limited groups and regions. This evolution will be measured in years, not months or weeks.
Following the omicron surge, we are likely to experience a period of immunity and fairly low levels of cases, hospitalizations and deaths this spring and summer. We must be prepared to use that time to regroup, reassess the needs of our communities and work to further strengthen our pandemic response. As a society, we remain vulnerable to this coronavirus and its next variants, as well as new threats yet to come.

During this time, we will need to move beyond the individual response on which we have needed to focus, such as encouraging personal responsibility for vaccinating, mask wearing, and other preventive measures. To be ready for what is ahead, we must make it a priority to mount a broader population response with five important elements:

1. **Work to achieve a 70% global vaccination rate in 2022.**

2. **Address vaccination hesitancy in the U.S.**

3. **Build a resilient infrastructure.**

4. **Make masking an accepted and expected practice globally.**

5. **Implement strong policies that create U.S. resilience.**

**IN CLOSING**
Our capacity as a University to meet the challenge of the pandemic and build resiliency for the future is strong. I know that we will continue to be leaders for the state and the nation in offering evidence-based strategies and innovations that allow us to move beyond our current challenges and emerge with a better foundation for public health across our society.

Fiat Lux.

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