THE IMPACT ON OUR HEALTH SYSTEM
This is the 18th update for Regents regarding the SARS-CoV-2 virus pandemic and its impact on the University's health and academic enterprise.

COVID-19 BY THE NUMBERS
Nationally, as of June 12, the nation has surpassed two million cases with more than 113,914 deaths, based on Centers for Disease Control and Prevention (CDC) data, representing increases of 8.4% and 5.4%, respectively since last Friday’s update. However, these data represent just the tip of the iceberg, as represented in the below graphic from Resolve To Save Lives (RSL).

RSL is an initiative of the global public health organization Vital Strategies. The five-year initiative includes Prevent Epidemics, an effort to reduce COVID-19 transmission while preserving essential services and building health system capacity. It is led by Dr. Tom Frieden, former director of the CDC and former commissioner of the New York City Health Department.

Dr. Frieden notes 11 misconceptions about COVID-19 data and ways public health officials can better interpret the data for critical decision-making. See his ‘myth-busters’ here.

In California, as of June 11, there are 139,281 confirmed cases and 4,776 deaths, according to the California Department of Public Health (CDPH), representing increases of 16.3% and 8% respectively since June 5.
At shown on the below graph, our hospitals recently experienced an increase in the number of COVID-19 associated admissions, in particular at UCI Health. This is yet another reminder that the pandemic is not over.

The site CovidExitStrategy.org tracks indicators from each state with the goal of helping states reopen safely. It classifies California as red, indicating concerns about 14-day trending of positive cases and a tightening of Intensive Care Unit availability.

The increase in confirmed cases and hospitalizations was expected. In a June 8 community meeting, Governor Newsom said, “As we phase in, in a responsible way, a reopening of the economy, we’ve made it abundantly clear that we anticipate an increase in the total number of positive cases. But we also need a concurrent recognition and commitment that we are in a substantially different place than we were 90 days ago.”
The Governor expressed optimism that the state's supply of ventilators and ICU capacity was sufficient based on projections, and noted that California-based BYD North America had received clearance from the National Institute for Occupational Safety and Health (NIOSH) to produce N95 masks. The surgical and N95 masks from this previously announced agreement are expected to begin arriving in a matter of days. If the supply chain for Personal Protective Equipment (PPE) continues to stabilize, it will mark a significant milestone in the pandemic.

UC HOSPITALS RECEIVE ADDITIONAL CARES ACT FUNDING
Since April 10, HHS has distributed nationwide approximately $115 Billion of the $175 Billion in the Provider Relief Fund provided by Congress in the CARES and Stimulus 3.5 acts:

- $50B General Distribution to hospitals and health care providers
- $12B “High-Impact” Distribution
- $10B Rural Distribution
- $4.9B to Skilled Nursing Facilities
- Unspecified portion to HRSA to cover uninsured COVID-19 patients
- $500 million to Tribal Hospitals, Clinics, and Urban Health Centers
- $10B for Eligible Safety Net Hospitals

Of these distributed funds, UC Health has received approximately $484M systemwide:

- $290M representing the UC share of $50B in General Distribution funding
- $194M representing the UC Share of $10B targeted to safety net hospitals

At the state level, the Assembly and Senate are working through the weekend on a budget proposal that may postpone some cuts until a determination is made at the federal level about additional stimulus packages. We will provide an update in subsequent issues.

'STRREET MEDICS' PROVIDE HELP TO DEMONSTRATORS
All of us are struggling to process today's current events, especially the way the pandemic and instances of police misconduct have revealed systemic racism. The inequities have led to protests in the streets.

When activities on the street result in injuries, it may be a 'street medic' first on the scene to lend a hand.

At UCSF Health, Dr. Rupa Marya, an associate profession of medicine, helps run a street medic training program in the Bay Area through the Do No Harm Coalition. The Coalition includes more than 450 health workers who committed to structural change to address health problems. The volunteers bring their clinical knowledge to the program, which then trains them in how to navigate potential situations they may encounter during a demonstration.

I would like to recognize Dr. Marya and others who leverage their clinical training and sense of social justice to illuminate important issues and care for injuries among those who are exercising their rights.

In group protests, of course, it’s not possible to avoid crowds. However, it remains important to minimize harm by wearing face coverings, practicing physical distancing as much as possible, and sanitizing or washing hands frequently. Self-quarantine and seeking SARS-CoV2 testing
after exposure to mass gathering can also limit spread of infection to others. These steps remain crucial as counties progress through phases of Governor Newsom's Resilience Roadmap, and we participate in the essential activities of our society.

**UCSD 'RETURN TO LEARN' TESTING FINDS NO POSITIVE CASES THUS FAR**

UC San Diego Health's 'Return to Learn' pilot program tested 1,483 students as of June 10 with zero positive results. The pilot completed 591 tests among undergraduates and 987 tests among graduate students.

The population tested included students exhibiting flu-like symptoms as well as students without any symptoms. The absence of infection was not unexpected given that the sampling is occurring after weeks of shelter in place orders.

The testing program has been paused temporarily pending decisions related to the fall testing program; however, the campus has announced plans to test dorm wastewater each week to detect remnants of SARS-CoV-2. This wastewater epidemiology approach has been shown to be an effective early warning indicator of emerging cases.

**UC HOSPITALS CONTINUE GRADUALLY INCREASING CENSUS**

Even as we actively monitor local conditions and admissions with a COVID-19 diagnosis, we continue to resume essential procedures for other serious conditions.

Our systemwide occupancy is now 76%. UC Davis, which has had the lowest number of COVID-19 cases across the system for the last several weeks has the highest census at 90%.

By the end of June, we anticipate our average systemwide occupancy to approach 80%, conditions permitting. We remain prepared to draw down census rapidly if conditions indicate a surge in COVID-19 patients.

In the May 22 update I shared campaigns from UCLA and UC Davis, developed with other health systems in each market, that encourage people to return for necessary care.
This update includes a campaign from UCSF Health, also developed in collaboration with other health systems.

The campaign includes, print, social media and television (TV_1, TV2) and will run through the end of June.

**CAMPUSES POISED TO ANNOUNCE REPOPULATION PLANS FOR THE FALL**

Similar to how our health systems are gradually resuming essential services, UC campuses are developing plans to provide a return of some in-person instruction for the fall.

Nothing is more important than the health and safety of students, faculty, staff and the broader UC community.

To prepare, the University has created a roadmap of principles and guidelines based on local public health directives, input from leaders, health experts and data scientists from across the system. These elements include:

- **Principles for Responsible Operations of University Locations** as approved by the UC Board of Regents at its May meeting. The six high-level principles provide a systemwide baseline for prudently increasing on-campus operations in phases and scaling back if needed;

- **Consensus Standards for Operation of Campus and ANR Locations**, which were adopted by the UC Office of the President and chancellors. The 10 consensus standards support the responsible operations principles and include recommendations on health screening, testing and contact tracing capacity to guide local planning efforts.

- **Additional guidance from various working groups within the UC Health Coordination Committee** to help inform local decision-making. These systemwide working groups include the Testing and Tracing Task Force (T3) and the Symptom Screening Working Group, among others.
The T3 group drew upon expertise in Data Science, Epidemiology, Diagnostic Testing, Research, Biostatistics, Student Health, Pathology, Infection Prevention, Nursing, Computational Medicine, Medical Education, and Public Health.

**The T3 guidance includes:**

1. Acknowledgement that the return of large numbers of students in the fall poses a risk for seeding events.

2. Recognition that the physical setup of a campus, its activities and local health conditions may differ by location and that a ‘one size’ approach is problematic. Thus, T3 outlined two paths for chancellors to consider - one based on symptomatic testing and another with broader testing including for asymptomatic individuals. Both approaches also emphasize the importance of continuing Non-pharmaceutical interventions (NPI) to reduce viral spread.

3. Operational preparation for the rapid turn-around of tests so mitigation steps can be taken as quickly as possible. Test results must be available within 24 hours, and we are working with all campuses to ensure this is possible by start of fall classes.

4. Support for additional ways to detect the virus such as broader testing among asymptomatic individuals and environmental samples of wastewater from dorms to detect remnants of the virus. Two subject matter expert groups will further address broad asymptomatic testing and wastewater analysis.

5. Resource recommendations to support case investigation and contact tracing, including the size of the workforce needed.

Later this month, the Symptom Screening Task Force will recommend how the University's sizeable student, faculty and staff population will provide daily health updates. The outcome is expected to be consistent standards across campus-selected apps to collect, aggregate and visualize data for public health efforts while protecting the privacy of individuals who need prioritized testing.

**We remain very actively engaged with state and local public health officials.**

In addition to required elements, campuses may take additional steps to be even more vigilant. Details of each campus' plan will be released by each chancellor's office when ready.

**SUPPORT FOR COVID-19 PATIENTS HOSPITALIZED ELSEWHERE**

I continue to be inspired with the generosity of our personnel across UC Health.

Our employees have helped to prepare our hospitals and recognizing their capacity, reach out to other hospitals, clinicians and patients with a COVID-19 diagnosis at other facilities.

One example is UC San Diego Health's Mobile ECMO service, the only one in San Diego.
ECMO stands for extracorporeal membrane oxygenation, an external pump that circulates blood through an artificial lung to infuse oxygen and remove carbon dioxide.

For patients whose lungs have been severely compromised by COVID-19, ECMO represents a lifeline to give the patient's lungs and hearts additional time to recover. The equipment is expensive and complex, and some hospitals dealing with a surge may lack a sufficient number for all the patients who need it. Adding complexity, when a patient's condition deteriorates to be point of needing ECMO, they can't be transferred without extensive support.

UC San Diego created a mobile unit and its multidisciplinary support team in April and has transported seven patients from El Centro, Sharp Chula Vista, Scripps Chula Vista, Kaiser Permanente and Paradise Valley.

Several of the hospitals mentioned are near the U.S.-Mexico border, including the 161-bed El Centro Hospital in the Imperial Valley just across the border from Mexicali. El Centro, CA has had the second highest rate of case growth in the US over the last two weeks, with 1943 new cases or 10.7 cases/1,000 people.

UC San Diego Health has had an affiliation with El Centro Regional Medical Center (ECRMC) since 2015 that includes a management services agreement, physician staffing of the emergency department and provision of the CEO and Chief Medical Officer. The affiliation has become even more important to the Imperial Valley community during the COVID-19 pandemic because the surge has overwhelmed the hospital's 20-bed Intensive Care Unit (ICU). UC San Diego Health has supported ECRMC by:

1. **Tele-Critical Care** Three months ago, UC San Diego Health began providing tele-critical care services. Tele-ICU consultation helps with when to use prone positioning, make ventilator adjustments, provide hemodynamic and fluid management, sedation, and extubation plans.

2. **Patient Transfers** UC San Diego Health has been accepting transfers of critically ill patients. Transports occur by land and air including transport by UC San Diego's mobile ECMO service.

3. **Emergency Department Management** UC San Diego Health runs the ECRMC Emergency Department, one of the primary ways that patients with COVID-19 enter the ECRMC system. UC San Diego Health doctors have established policies and protocols to safely screen and accept patients in need of hospitalization.

4. **Supply Chain Support** UC San Diego Health has provided supply chain support with tests, ventilators and other medical supplies. The team provides testing for all symptomatic patients and have sent 15 ventilators and associated supplies (circuits, filters), a portable X-ray, 100k earloop masks and more than 1,000 COVID-19 tests.
SOME OF THE HEROES OF THE PANDEMIC

Top L: Nick and employer, vCom Solutions, printed 200 face shields for UCSF Benioff Children’s Oakland.

Top C: UC Davis Health’s Aron Anthony King reminds us of the importance of culturally competent care.

Top R: Richelle Home and UCI School of Medicine graduates were featured on ABC World News Tonight.

Middle L: Orinda high schooler sells his homemade “Jack’s Jam” to raise funds for hospitalized teens.

Middle C: Karimeh Borghei at UC Davis Clinical and Translational Science Center keeps clinical trials on track.

Middle R: Scott beat cancer and two kidney transplants; his newest came from his soon-to-be aunt-in-law!

Bottom L: UCI Health’s OR, ER and ICU teams get 730 meals from Synchrony and Greenleaf Chopshop.

Bottom R: UC San Diego Health helps clients of Father Joe’s Villages with testing and chronic health issues.
IN CLOSING
We continue to learn and move forward at this time of uncertainty for our hospitals and our campuses. I am grateful to be part of an organization with such deep expertise in the health sciences and one that is able to generate new knowledge. Equally important is the commitment to health equity with inclusion of voices from throughout the organization and from the communities we serve.

As we begin to return to normal operations across our organization, there will be challenges and also remarkable opportunities. As an organization, we have risen to meet the demands of the first wave of the pandemic, and we have developed new strengths. We also remain humble in the face of what we do not yet know.

The balance of strength and humility will be essential in the days to come and will ensure we are making the best decisions for the health and safety of our patients, students, trainees, and employees. Fiat Lux.

With gratitude,

Carrie L. Byington, MD
Executive Vice President
UC Health