March 27, 2020
COVID-19 AND ‘CORONAVIRUS’ UPDATES

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THE IMPACT ON OUR HEALTH SYSTEM
This is the seventh update for Regents regarding the SARS-CoV-2 virus pandemic and the impact on the University’s health and academic enterprise. This week we passed a somber milestone, with the US now ranking as the country with the greatest number of COVID-19 cases in the world.

Across the UC Health system, we are also seeing an increase in COVID-19 inpatient admissions and ICU volume, and we have experienced our first COVID-19 inpatient death. As we begin to see the initial rise of a much larger surge, we are making significant progress on multiple fronts, including leveraging our Health Data Warehouse to create enterprise-wide visibility of key metrics in near real time to enable a more nimble, coordinated response. I’m deeply grateful to our front-line health care workers, infection prevention teams, laboratory personnel, procurement specialists, researchers and so many more for their heart-felt commitment and dedication to our mission.

UC IN-HOUSE TESTING CAPACITY FOR SARS-CoV-2 CONTINUES TO GROW
All five UC medical centers are now performing in-house testing for SARS-CoV-2, and our capacity continues to expand as we lean in to this historic challenge in service to our patients.

This graph shows test counts from across UC Health hospitals for March 10-26 for SARS-CoV-2, totaling 6,795 tests to date, of which 5,323 are completed with results delivered and 1,472 tests-in-progress with results pending. Three hundred and fifty six people have had a positive test to date, and those that are currently admitted in UC hospitals can be seen in Table 1.
Map: 356 positive cases have been detected from our testing to date. This map shows positive cases based on home zip code of patient.

**Age Bands:** Although older persons may experience more severe symptoms, our testing to date shows the virus is present in nearly all age bands, though with only 1 positive test in a child.

**Clinical Trials Begun at All 5 UC Medical Centers**
The drug Remdesivir, an antiviral developed by Gilead Sciences (Foster City, CA) for the treatment of Ebola and Marburg viruses, is now in clinical trials at all five UC medical centers for the treatment of COVID-19. Eligibility is limited to inpatients at UC medical centers and Zuckerberg San Francisco General Hospital who are in significant respiratory distress and require supplemental oxygen or mechanical ventilation. More information is available here.

This is the first of what we hope will be a growing number of clinical trials, all of which require approval from the U.S. Food and Drug Administration.

**An Outpouring of Support From the Public and Students**
As you’ve seen in media coverage, health care systems across the country are grappling with shortages of personal protective equipment (PPE) and other medical supplies due to an increase in patients with contagious symptoms and supply chain disruptions caused by the temporary closure of manufacturers.

As the COVID-19 situation continues to evolve, UC Health hospitals are dealing with the same macro forces. Even as we diligently work to restore supplies from our usual sources, we are also purchasing equipment on the open market, transferring supplies from non-medical labs at our campuses and working with federal and state officials.

In these very difficult times, we are heartened by the generosity of the general public, philanthropists, staff and students, who are donating their personal and professional supplies to help our health care workers and patients.
We continue to accept donations of the following PPE:

- Standard medical gloves (all brands and material)
- Masks (N95 or surgical)
- Test swabs
- Goggles
- Face shields
- Protective gowns

For information about how to donate, please visit:

UC Davis Health
UC San Diego Health
UCI Health
UCLA Health
UCSF Health

We are thankful to many individuals, organizations and companies, including:

- Tesla which donated tens of thousands of N95 masks to UCLA Health;
- The Getty Museum and Villa, which has donated the PPE that they use when handling priceless art treasures; and,
- Longtime philanthropist Marc Benioff, who brought a truck full of supplies to UCSF.

There are so many acts of generosity that go unrecognized. Please know we are grateful.

WORKING WITH CHA ON DISASTER PREPAREDNESS

The scale of the pandemic is beyond any one organization's ability to respond effectively. UC Health is actively working with the California Hospital Association (CHA) and the California Department of Public Health (CDPH) to coordinate the state-wide pandemic response. We appreciate the efforts of Larry Anstine, Interim Chief Executive Officer of UCI Health System, who is working with CHA on surge planning and those of Patty Maysent, Chief Executive Officer of UC San Diego Health, who is a member of the CHA board.

I also thank Dr. Tom Cesario, Dr. Dan Cooper, and Dr. Peter Heseltine, all from UCI, who have joined me on the Governor’s California Therapeutics and Treatment Innovation Network for COVID-19. During challenging times, our relationships with bodies like CHA and CDPH strengthen our collective ability to meet the challenge.

PROVIDING EXPERTISE TO AND RECEIVING SUPPORT FROM STATE LEADERS

From the time it became apparent the SARS-CoV-2 virus would spread, leaders across UC Health have been working with California's elected and appointed leadership on the state's planning.
It was a privilege to meet (virtually) with California Governor and ex officio Regent Newsom and leaders of fellow California academic and large-scale health systems on Thursday to discuss COVID-19 and the work of our scientists. The group included leaders from Cedars-Sinai, Kaiser Permanente, Stanford Medicine, and University of Southern California. The spirit of collaboration was palpable. We can end the pandemic, and science will provide the tools.

I also met with Lieutenant Governor and Regent Eleni Kounalakis on Monday to discuss the current physical distancing measures and to identify opportunities for the UC system to further contribute to the mitigation of the pandemic.

I am also appreciative for the opportunity to join Regent John A. Pérez for a briefing with State Senate President pro Tempore Toni Atkins, Senate Majority Leader Robert Hertzberg, Chairman of the Business, Professions & Economic Development Committee Steve Glazer and Dr. Richard Pan, chair of both the Senate Committee on Health, and the Budget and Fiscal Review Subcommittee on Health and Human Services.

The commitment of our elected officials to understanding the pandemic and to supporting the UC System and the people of California is inspirational.

The pandemic, and our response, involve complex aspects of training, finance and public health, and our open exchange of information is foundational for our success. A few examples include:

- Urging state to allow practitioners to prescribe controlled substances by telemedicine in accordance with DEA regulations.
- Seeking a waiver of statutes and regulations that require nurses in their final year of training to complete 75% of clinical training in person with patients.
- Asking the Governor to expand the waiver of licensing/certification requirements for laboratory personnel to allow labs to better manage workforce issues and meet patient care needs.

GOVERNOR’S OFFICE AND UC EXPANDING INPATIENT CAPACITY

In the last update, I noted Governor Newsom's request for the federal government to deploy the USNS Mercy to the Port of Los Angeles. It is due to arrive today (Friday). The ship has 1,000 hospital beds and will be used to treat patients who need care other than for COVID-19.

For similar purposes, the State worked with local officials to accelerate the re-opening of Community Hospital in Long Beach (158 beds) to accept patient transfers from other hospitals so they can increase their capacity for COVID-19 care.

Governor Newsom also announced state action with existing underutilized inpatient facilities. The state leased Seton Medical Center in Daly City (120 beds) and St. Vincent Medical Center in Los Angeles (366 beds) for three months to care for patients with COVID-19.
Governor Newsom also called for all hospitals to significantly expand inpatient and ICU capacity. His office estimates California may need 20,000-50,000 additional beds depending on the extent of the spread and patient mix.

UC hospitals are actively engaged in this effort. Just one example is UCSF’s re-opening of hospital beds at its Mt. Zion campus, adding up to 60 beds, and its collaboration with St. Francis Medical Center to re-open up to 40 beds. The importance of collaboration across health care organizations cannot be overstated at times like these.

**DO STAY-AT-HOME ORDERS LIMIT THE SPREAD? THE DATA SUGGESTS ‘YES’**

Since the first outbreak in December, the epicenter of new infection has traveled the globe, from China to Italy and Spain, overwhelming many highly capable health systems. On Thursday, March 26, the total number of cases in the US surpassed the number of cases in Italy and China, and New York City leads the number of cases. In varying degrees, some nations and regions have responded with mitigation efforts that include stay-at-home or similar orders.

We are learning - in real time - whether these efforts help. The preliminary data is encouraging.

Two provinces in Italy enacted stay-at-home type orders at different stages of local outbreaks. The results can be seen on the accompanying chart. The lesson is clear: The earlier one acts to limit social interaction, the more effective the containment effort.

**A PIONEER OF THE MODERN ICU CLAIMED BY COVID-19**

Our deepest condolences go to the family, friends, colleagues, and trainees of Dr. John F. Murray, professor emeritus at UCSF, who passed away March 24 at 93 years of age. His work on Acute Respiratory Distress Syndrome (ARDS) and development of the modern Intensive Care Unit is a legacy that defines our approach to COVID-19.

Dr. Murray was tirelessly dedicated to what was then was called San Francisco General Hospital (Zuckerberg San Francisco General Hospital & Trauma Center), where he was chief of pulmonology from 1966 until 1989. His influential book, "The Normal Lung," and expertise shaped the clinical practice of pulmonary medicine, the process of selecting and training fellows in pulmonary disease, and lung disease research. The cause of death was ARDS, caused by COVID-19.
CHILDCAREPOSESA CHALLENGEFOR MANY HEALTH CARE WORKERS
The appropriate closing of schools poses a practical challenge for many parents who work in health care and other essential services. It is profoundly challenging to provide care to others while worrying about the safety of your own children. I applaud the Essential Worker Child Care program launched in Sacramento by Mayor Darrell Steinberg and Mayor Pro Tem Angelique Ashby.

Sacramento is providing 350 childcare slots for children 5-12 at eight community centers. Children will be kept in separate groups of 10 or less that will not intermingle. The service, open from 7 am to 7 pm, is available for local first responders, front-line health care workers and essential City of Sacramento employees. The YMCA and other non-profits are also offering arrangements for a limited number of younger children.

I encourage other municipalities and organizations to provide similar services, while following rigorous disinfection and prevention guidelines.

THE IMPACT ON OUR ACADEMIC PROGRAMS
UC Education Abroad Program (UCEAP) programs worldwide for spring and summer 2020 have been suspended. Staff continue to work with students individually on academic and financial issues arising from the interruption of their study abroad plans.

The spring 2020 offering of the systemwide field program, California Ecology & Conservation (CEC), has been canceled. CEC is a one-of-a-kind innovative field research program that brings undergraduates from all nine campuses together to visit Natural Reserve System (NRS) reserves for seven continuous weeks, with a curriculum that teaches about scientific inquiry, the scientific method, and general principles of ecology and conservation. However, bringing students together at field stations at this time puts students, instructors, and field station staff at risk of exposure to COVID-19. During the program, the group functions as a close-knit community making transmission of the virus among the group difficult to avoid.

DISASTER DECLARATION AND FEDERAL STIMULUS LEGISLATION
Last week, President Trump approved California's Major Disaster Declaration to bolster California’s COVID-19 emergency response efforts. UC and UC Health intend to initiate disaster relief applications.

I'm very grateful to UC's Federal Government Relations and UC Health policy teams for their tireless work advocating for the needs of patients and UC Health in the latest round of emergency legislation. On March 25, the U.S. Senate unanimously (96-0) passed a $2 trillion appropriations package - the nation’s third supplemental appropriations package to address the COVID-19 pandemic - that includes elements sought by UC and UC Health. Today, March 27, the House passed the legislation with a voice vote, and President Trump signed it into law.

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<th>Table 1: Active Confirmed Inpatients</th>
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<td>LOCATIONS</td>
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<td>UC Davis Health</td>
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<td>UC San Diego Health</td>
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<td>TOTAL</td>
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Inpatient Count current as of March 26

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<th>Table 2: Positive Tests at Campus Locations</th>
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<td>Campuses</td>
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<td>31</td>
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Inpatient Count current as of March 26
The spending deal is the largest in U.S. history and will provide key funding to address many of UC’s key priorities. The agreement marshals more than $150 billion for the U.S. health care system, including:

- $100 billion for hospitals and health systems to help reimburse costs of treatment for patients with COVID-19;

- $16 billion to replenish the Strategic National Stockpile’s supply of personal protective equipment (PPE), pharmaceuticals and other medical supplies which are distributed to state and local health agencies with shortages during emergencies;

- $4.3 billion for the Centers for Disease Control and Prevention (CDC) to support federal, state and local public health agencies to prevent, prepare for and respond to the pandemic, including purchase of PPE, testing equipment, infection control and mitigation and related activities;

- $1 billion for the Defense Production Act to support domestic supply chains of critical medical supplies and equipment; and,

- $45 billion for the Federal Emergency Management Agency’s (FEMA) Disaster Relief Fund to provide immediate support to affected communities and to assist in recovery.

In addition to the necessary investment of financial resources, regulatory assistance and relief was also part of the legislative package, including:

- Guaranteed coverage of diagnostic testing (and vaccination, when available) for COVID-19 for all Americans;

- Extension of Medicaid Disproportionate Share Hospital (DSH) payments through Nov. 30, 2020;

- Reversal of a 2 percent reduction in Medicare provider payments, known as the “Medicare sequester” through Dec. 31, 2020;

- Payment bump of 20 percent to Medicare Diagnostic Related Groups (DRGs) for patients with COVID-19 who are discharged under the Inpatient Prospective Payment System for the duration of the emergency; and,

- Expansion of the Medicare Accelerated Payment Program to provide periodic or lump sum payments of up to 100 percent through the emergency.

The legislation also includes other provisions of interest, including:

- Reauthorization of Title VII and Title VIII health professions workforce training programs, which provide health professionals who serve underserved communities with additional training, as well as support in the form of loan repayment;

- $200 million for expanding telehealth services; and,
$3.5 billion in block grants to provide states with resources to offer health care workers childcare assistance during the emergency.

HOW TO DISINFECT YOUR HOME IF SOMEONE IS SICK

Although some people with COVID-19 will require hospitalization, many more will be able to manage their care at home. For multiple-person households, one challenge is how to keep the virus from spreading to healthy individuals.

The Centers for Disease Control and Prevention (CDC) has developed guidance for cleaning and disinfecting frequently touched surfaces. COVID-19 spreads between people who are in close contact (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. The disinfecting process is intended to kill the virus, which can live on soft surfaces for 24 hours and hard surfaces for 2-3 days.

Cleaning should always be done while wearing disposable gloves, because touching contaminated surfaces is a significant source of transmission.

- Use soap and water to clean tabletops, counters and desks, doorknobs, light switches, phones, keyboards, toilets, faucets and sinks;

- For surfaces that can tolerate bleach, mix 1/3rd cup of bleach per gallon of water OR four teaspoons of bleach per quart of water. Note: Never mix bleach with ammonia or other household cleaners. If bleach is not an option, then solutions with 70% alcohol and some household disinfectants can be used. The Environmental Protection Agency (EPA) has published a list of disinfectants that should be effective; and,

- The cleaning technique should keep the surface wet for several minutes to ensure the virus is killed.

Soft surface cleaning is also necessary, including carpeted floors, rugs and drapes (where cough or sneezes may have lodged the virus).

- When possible, use soap and water, launder items in the warmest water permitted for the item, and dry items completely, because the virus lives longer in damp environments. If laundering is not possible, refer to the EPA list of disinfectants includes products appropriate for soft surfaces.

Laundry is another critical component of the household disinfecting process and should be done while wearing disposable gloves.

- Gather laundry while wearing gloves and avoid touching other surfaces with your gloves unless you disinfect those surfaces afterward;

- Do not shake dirty laundry;
• Launder items on the warmest appropriate setting and dry completely;
• Clean and disinfect clothes hampers and any laundry tables that came into contact with soiled items; and,
• Remove gloves and wash your hands with soap and water immediately.

Taking out the trash involves precautions, as well.

All items from the ill person should be placed by the ill person, or a gloved caregiver, into a lined trash can. Wear gloves when removing the trash can liner and taking out the trash. Wash your hands afterward and dispose of the gloves.

It's like your mother said, wash your hands often (for 20 seconds).

If soap and water are not available, use a hand sanitizer with 60% minimum alcohol. Always wash your hands:

• After blowing your nose, coughing or sneezing;
• After using the restroom;
• Before eating or preparing food;
• After contact with animals or pets;
• Before and after any routine care for another person (child or ill person); and,
• Avoid touching your face with unwashed hands.

For more detailed instructions, view the CDC resources here.

KEEPING PEOPLE INFORMED THROUGH PUBLISHED MATERIALS

The situation is changing rapidly. UC campuses have been publishing extensive educational materials for the public, our students and staff. UCOP is distributing guidance to facilitate smooth operations. Examples include:

- Equity and Inclusion in the Face of COVID-19
- President’s Directive on Travel to Level 2/3 Countries; MRT Emergency Powers
- How UC is Responding to the Coronavirus (COVID-19)
- Guidance for UC Locations
- President’s Directive on Travel to China
- President’s Directive on Travel to Korea and other Warning - Level 3 Countries
- Information for Parents and Students
- A Summary of UC’s System Involvement in COVID-19 Patient Care and Research
You can also find the latest travel information on the CDC website - Information for Travel.

IN CLOSING
Fred Rogers of Mister Rogers’ Neighborhood is famously quoted as saying, "‘When I was a boy and I would see scary things in the news, my mother would say to me, ’Look for the helpers. You will always find people who are helping.’” UC is an organization of helpers, bold innovators, and front-line heroes. I'm proud of this incredible organization as it confronts one of the most serious challenges our world has ever faced.

I will be providing ongoing updates weekly. Please follow me on Twitter @carrie_byington, where I provide links to important information in real-time. Together we can protect the health of our students, employees, and all Californians. Fiat Lux.

Sincerely,

Carrie L. Byington, MD
Executive Vice President
UC Health