THE IMPACT ON OUR HEALTH SYSTEM

This is the 31st update for Regents regarding the SARS-CoV-2 virus pandemic and its impact on the University’s health and academic enterprise. This issue will be the last in the series unless circumstances necessitate a resumption.

On Sunday, we will celebrate Independence Day. Two hundred and forty five years ago, our nation’s founders signed the Declaration of Independence with this closing message, “We mutually pledge to each other our lives, our fortunes and our sacred honor.” Those words continue to ring true after the searing events of the past 18 months. A new virus emerged half a world away, swept every continent, disrupted the world’s economy and killed more than 600,000 Americans. This shared experience speaks to our interdependence.

Yet through science and perseverance, we developed three new vaccines and administered more than 320 million doses in the United States. Case numbers, hospitalizations and daily death rates have plunged since our peak in January 2021. Nearly all COVID-19 deaths in the U.S. now are in people who have not been vaccinated, according to an Associated Press analysis of data from the Centers for Disease Control and Prevention (CDC). Of the hospitalizations that occurred in May, “breakthrough” infections in fully vaccinated people accounted for fewer than 1,200, or 0.1%, of more than 853,000 hospitalizations attributable to COVID-19, and 0.8% of deaths.

The end of the pandemic in this country is within reach. For those who have been vaccinated, this July 4th commemorates our freedom not only as a people but also from overwhelming fear.

The return of joy, however, does not signal a return to normal. Things cannot truly return to normal until more of us are vaccinated. Viruses, of course, evolve, and the strain of greatest concern today is the delta variant.

The World Health Organization reports the delta variant has been detected in at least 96 countries and is the most transmissible of the variants thus far. Fortunately, the vaccines approved for emergency use in the U.S. by the Food and Drug Administration continue to be effective, but wherever there are pockets of unvaccinated people, there will be outbreaks.

Unfortunately, we will not achieve the goal set by the Biden-Harris administration to have 70% of all eligible Americans vaccinated by July 4th.
That’s why, after a consultative process, the University is finalizing a policy that will require UC students and employees to be vaccinated before the start of the fall 2021 academic year, unless a person has been approved for a medical exemption or religious accommodations. The policy announcement, expected in mid-July will include implementation guidance that campuses can tailor to their needs.

COVID-19 BY THE NUMBERS
As of June 28, California has experienced more than 3.7 million cases of COVID-19 infection, nearly 63,000 deaths and 7-day average test positivity rate that has crept back up to 1.2 percent, according to the California Department of Public Health (CDPH). Fortunately, with more than 41.6 million doses administered, 59.0% of eligible Californians are fully vaccinated and 9.7% are partially vaccinated, as of June 29. A vaccination breakdown by county can be seen here.

Nationally, 54.3% of eligible people have been fully vaccinated and another 9.1% partially vaccinated, according to the CDC, as of June 29 Although those percentages are impressive compared to where we were just a few months ago, vaccination rates vary significantly by location. There’s already been an increase in hospitalizations in areas with lower vaccination. The darker the color blue on the map, the higher the vaccination rate.

Since we announced our million-dose milestone in April, UC personnel have continued to vaccinate Californians with an emphasis on the most vulnerable populations. As traffic to mass

Source: CDC COVID Data Tracker


vaccination sites slows to a trickle, vaccination emphasis pivots to smaller groups, individualized outreach and promotional efforts like lotteries.

As with so many things in the pandemic, significant disparities exist in vaccinations based on socioeconomic and health status. The below chart from CDPH shows vaccinations in four population segments based on health status. Vaccinations are highest among the healthiest segment (71.5% fully vaccinated) while the least healthy segment is 47.1% fully vaccinated.

Source CDPH: The Vaccine Equity Metric (VEM) combines the Healthy Places Index with CDPH-derived scores to create four population quartiles, ranging from less healthy community conditions in Quartile 1 to healthier communities in Quartile 4.
The electronic health records at our academic health centers not only capture an individual’s health status but also overlay place of residence with the Healthy Places Index. We will continue leveraging these tools to the fullest of our ability to close the gap among the most vulnerable.

By now, you are very familiar with our inpatient data, which we’ve tweeted each weekday for more than a year (left). I want to thank Dr. Atul Butte and his team at the UCH Center for Data Driven Insights & Innovation (CDI2) for this heavy lift. We are discontinuing external reporting but stand ready to resume if needed.

RECOVERING FROM THE FINANCIAL IMPACT

The human toll is the figure foremost in our minds. The more than 600,000 deaths across the country are accompanied by that many grieving families and many times that of friends and colleagues. Health care workers on the front lines, and those who support them, bear an emotional toll that will take time to process.

Operational costs have been significant. From the earliest days of the pandemic, University of California Health prepared and supported the state’s response. The soaring costs and plunging revenues for the health centers have moderated and stabilized.

Lost Revenue by Month

<table>
<thead>
<tr>
<th>Month</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar</td>
<td>($160)</td>
<td>($1)</td>
</tr>
<tr>
<td>Apr</td>
<td>($372)</td>
<td>($190)</td>
</tr>
<tr>
<td>May</td>
<td>($166)</td>
<td>($157)</td>
</tr>
<tr>
<td>Jun</td>
<td>($63)</td>
<td>($147)</td>
</tr>
<tr>
<td>Jul</td>
<td>($96)</td>
<td>($149)</td>
</tr>
<tr>
<td>Aug</td>
<td>($124)</td>
<td>($145)</td>
</tr>
<tr>
<td>Sep</td>
<td>($167)</td>
<td>($114)</td>
</tr>
<tr>
<td>Oct</td>
<td>($187)</td>
<td>($83)</td>
</tr>
<tr>
<td>Nov</td>
<td>($196)</td>
<td>($10)</td>
</tr>
<tr>
<td>Dec</td>
<td>($167)</td>
<td>($10)</td>
</tr>
</tbody>
</table>

A FOURTH VACCINE MAY BE ON ITS WAY IN THE U.S.
There are three COVID-19 vaccines in the U.S. with Emergency Use Authorization (EUA) approval from the Food and Drug Administration. They may soon be joined by a fourth.

Vaccine maker Novavax reported preliminary results of its vaccine from late-stage clinical trials, indicating approximately 90% effectiveness, including against many variants. UC Davis Health participated in its clinical trials.

In its June 14 announcement, Novavax said it would seek U.S., European, and other authorizations in the fall with a goal of producing 100 million doses per month. Although vaccines are readily available now in this country, there remains a worldwide shortage of vaccine, especially in countries with the lowest household incomes. Like the Jansen/Johnson & Johnson vaccine, the Novavax product is less temperature sensitive, which increases its ability to be transported and administered in more settings.

I urge all of us to remember that beyond our borders, there are literally billions of people who remain at risk of COVID-19. Ensuring global access to vaccination is not simply ethical and humane, but it is also the only way to stop the widespread circulation of the virus that leads to mutations. I applaud the efforts of the Biden-Harris administration to provide up to 80 million doses of vaccines internationally by the end of June 2021, and remind us that the global population stands at 7.6 billion.

NEWS OTHER THAN COVID-19
We have an extraordinary organization and some of the world’s most talented people. Each academic health center, health professional school and the Global Health Institute have earned national and international acclaim. When we work together, amazing things happen.

Our journey toward ‘systemness’ began long before COVID-19. The experience of working closely in pandemic response brought that strength to the forefront. To us, ‘systemness’ means we share knowledge and work with colleagues across all locations with a common purpose. By working within each location and across the system, we accelerate the pace of discovery and sharing of best practices for the common good. Thus, systemness does not refer to a top-down structure, but one that is dynamic and naturally drawn to the toughest challenges in health and society.

We now have a platform to express our unique version of systemness – UniversityofCalifornia.Health is a new website that helps tell our story to prospective patients, aspiring health students, elected officials, media and others. It does not replace our other platform, but tells our story from another perspective and links to each entity for the visitor’s benefit. I hope you will explore it and share it.
IN CLOSING
Summer has always been my favorite season. I am hopeful that in California, with our excellent vaccine rates, we can enjoy summer 2021. As you enjoy the season, I ask you to remember the sacrifice, work, and miracles of science that have brought us to this moment.

Vaccination is key to maintaining the gains we have made in the US and is key to controlling the pandemic globally. You can help by ensuring that you and your loved ones are vaccinated. Talk with your friends, acquaintances, neighbors, and co-workers to encourage them to be vaccinated. Support efforts in your communities to bring vaccines to those in hard-to-reach areas. Finally consider supporting efforts to bring COVID-19 vaccines to less affluent parts of the world by donating to established non-profits such as UNICEF USA, the GAVI Alliance COVAX program or the charitable organization of your choice.

I will gratefully celebrate another birthday on July 1 and on the same day, across University of California Health we start a new academic year. This is a time both for new beginnings and a time for reflection.

I found this verse in the recently published crowd-sourced poem by Kwame Alexander particularly resonant. I hope you will enjoy the full poem available here.

I wish you all a happy 4\textsuperscript{th} of July and a joyful and safe summer. At UCH, be assured that we will continue to monitor the trajectory of the pandemic and work to keep our patients and communities healthy and informed. Like each of you, we hope this will be our last COVID-19 newsletter.

Fiat Lux.

Carrie L. Byington, MD
Executive Vice President
University of California Health