The novel coronavirus has spread in the US since early March, igniting epidemics in some major cities like New York City, New Orleans, and Detroit. Many of the outbreaks have increased rapidly, peaked, and some have now declined. Despite the worst fears, the virus has not spread broadly in the general population.

As of April 10th, there have been about 475,000 cases and 17,000 deaths reported in the US. In California, there have been about 20,000 cases and 550 deaths, equivalent to rates of 51 cases and 1.4 deaths per 100,000 California residents. California is currently ranked 30th of 50 states, with a death rate that is about one-quarter of the US rate. Within California, Covid-19 risk varies substantially by county. About 90% of the cases and deaths have occurred in 14 mostly urban counties, particularly Los Angeles, Santa Clara, San Diego, and Riverside counties. In the 44 remaining counties, which are mostly rural and less densely populated, the case and death rates are less than half of the overall California rates and are among the lowest in the entire US.

Since April 1st, new cases have been relatively steady with increases likely due to more testing rather than increased transmission. Our hospital systems have been preparing for weeks. We have seen increases in Covid-19 admissions and cases in intensive care units but currently our system capacity to manage those cases has been quite adequate.

The number of Covid-19 deaths have been much less than the 750 total deaths that occur every day in California. Furthermore, there is evidence that there have been substantial reductions in the deaths due to seasonal flu, pneumonia, and accidents because of the almost exclusive focus on Covid-19 and the current statewide lockdown. Thus, it is possible that there has been no increase in the normal number of total daily deaths. Given the massive societal disruption of the statewide lockdown, it is important to assess the overall mortality statistics.

Many of the predictions on the frequency and impact of Covid-19 in California have been based on statistical models. Indeed, the University of Washington’s Institute for Health Metrics and Evaluation (IHME) Model has overestimated the Covid-19 death and hospitalization rates. The total number of IHME projected Covid-19 deaths in California has been reduced by nearly 75% from the March 26th estimate of 6,100 to the April 7th estimate of 1,611. Similarly, the projected peak number of hospital beds needed for Covid-19 patients each day has been reduced from 15,000 to 5,000.
The current statewide “shelter-at-home” approach might have been justified in the absence of actual data based on the substantial fears of viral spread within the general population, but now that policy appears to be an overreaction failing to account for the observed frequency and distribution of cases. Those most at risk are the elderly and those with existing chronic conditions. Indeed, among the persons hospitalized with Covid-19, 86% of those aged 18-64 years and 94% of those aged 65+ years have at least one underlying medical condition.

We should be updating our response to the epidemic in California with a localized public health approach focused on protecting the elderly and those with chronic conditions. We must increase testing, isolation and contact notification activities. We can continue to emphasize lower-cost personal behavior changes such as staying at home for work or school if ill, covering coughs or sneezes, avoiding those currently with respiratory symptoms and handwashing. We must greatly increase case finding through unrestricted and expanded free testing for anyone who wants a test, symptomatic or not. And we must approve the use of home-collection to enable the safe and easy delivery of testing kits and return of specimens to laboratories through the mail.

We should scale up technological solutions that facilitate registration for testing and timely online confidential access to test results and contact notification. We should limit the duration of quarantine by utilizing tests that detect the virus to enable those who test negative to return to work or school. Furthermore, we should lift restrictions that have little theoretical value such as closed beaches, parks, tennis courts, and hiking trails.

Because of the epidemiologic characteristics of the novel coronavirus—the lower transmission efficiency than influenza, relatively short duration of infectiousness (~ 8 days), low proportion of asymptomatic infection (10-20%)—there is low potential of Covid-19 to cause epidemic spread in the general population. While original models predicted massive spread resulting in infection of more than 50% of the general population, that has not occurred in any area.

Now that our understanding of the how the virus spreads is improving, it is time to let the data inform an updated response. Our resources to control the coronavirus epidemic have increased. We need to use them strategically, protect the vulnerable, and enable Californians in low transmission areas to get back to work and school. We can monitor the frequency of new cases, hospital admissions and adapt interventions based on the burden of infection in a given population to maintain our health system capacity.

Like any response to an emergency, our response must be data-driven and not fueled by panic. We must use the data available to support an updated approach rather than continuing indefinite “stay at home orders” and prolonged quarantine.

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