



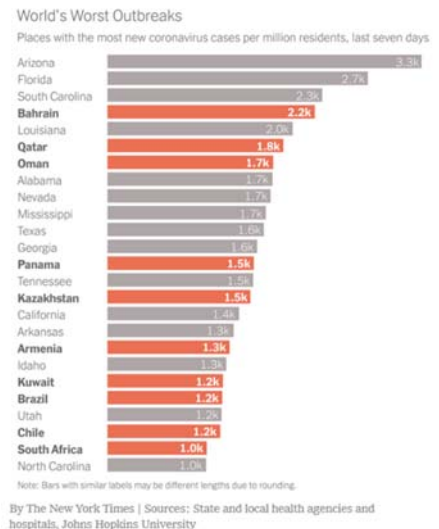
July 9, 2020

To: Distribution

From: Pandemic Working Group

Re: **COVID-19: Top Outbreak List ~ The OC ~ Mortality in Key States ~ More on the WHO**

Arizona Tops Outbreak List. This is an interesting view of things. As reported by the New York Times yesterday, if one were to list by state and nation the regions that have the most severe outbreak of coronavirus (new cases per million population on a seven-day trailing basis), Arizona, Florida and South Carolina would be numbers one, two and three. The only countries with outbreaks similar to those of the Sunbelt states are Bahrain, Oman and Qatar, which have seen significant clusters in migrant worker housing characterized by poor living conditions and social services. The graph to the right gives detail from the NYT (based upon data from Johns Hopkins University). Further, as reported by Kelly Willmott (also based upon JHU data), incidence of coronavirus in the Sunbelt states is equaling or exceeding that of our Northeastern states at the peak of the pandemic. For instance, Arizona is now reporting 52.8 cases per 100,000, while at its peak on April 10, New York state reported 50.9. Similarly, Florida is now at 40.8 cases per 100,000, while New Jersey was at 41.4 at its peak. In short, domestically, the virus has literally shifted to the south which is now supporting a nationwide surge in cases.



The OC: Discord Amidst the Surge. As reported by the LATimes, last Monday, Orange County for the first time reported more than 1,000 new coronavirus cases in a single day and now has the third highest number of cases among counties in the state. In addition, its positivity rate, which had been about 8% in mid-May, has jumped above 14% and the case rate is now at 222 per 100,000 residents. For reference, the state's targets are 25 cases per 100,000 (over 14 days) and a positivity rate of 8%. In spite of this trend, LATimes reports that, amid reopening, some of the population is deeply skeptical about the use of face coverings. For example, one of my colleagues who was wearing a mask on the way into a Starbucks was accosted by some guy in an \$80,000 car who screamed, "Take your mask off – you're in public!" The impertinent driver's ire may have been fueled in part by some members of the Board of Supervisors, who have mercilessly interrogated the county's health officers for so much as recommending face coverings. But the tide may be turning. It seems that, to her credit, Supervisor Michelle Steele, (pictured here

courtesy of Bing.com) who had previously been critical of mask orders, is now appealing to citizens in light of the pandemic surge, saying, “I ask residents and visitors of Orange County to please wear a face covering when you are in a public place and unable to properly social distance, as well as following hygiene and social distancing guidance – this is of the utmost important to protect your health and the health of others, so that we can return back to normal as quickly as possible.” Well put.



Mortality Trends in Key States. Also as reported in the LATimes, soaring infections in Texas, Arizona and Florida are also pushing fatalities upward, reversing two months of declines. In Texas, the seven-day average of deaths hit 46 this week, more than double the daily average just three weeks ago. In Arizona, the daily death toll has more than doubled over the past month, while in Florida, fatalities have jumped 60% in the past 2.5 weeks. These trends have attracted the serious attention of regional health officials. In California, where cases have also been surging, there has not yet been a sustained increase in mortality; however, yesterday marked the highest number since mid-May.

However, in many states, deaths continue to trend downward; thus, on a national-basis, total fatalities are significantly below where they were earlier in the year. According to Worldometers, we are at about 1,000 fatalities per day, down from a peak of about 2,500 per day in late April. Experts cite countervailing factors deserving of further consideration as we look forward. On the one hand, with a proportionate increase in infections among younger people, the infected population may be better able to bear the disease. Further, doctors have developed better methods to treat patients, including, for example, with dexamethasone. In the words of University of Texas’ Dr. David Lakey, “We are smarter because of the lessons we have learned nationally.” On the other hand, death tolls typically lag behind infections and hospitalizations, particularly where, as here, there may be a lag from infection of a younger person who transmits to a vulnerable person over the course of time.

WHO & Aerosols Pt. II. As we reported earlier in the week, over 200 scientists had petitioned the World Health Organization to acknowledge the role that aerosol transmission (involving viral particles less than five microns in size) may play in the pandemic. This just in – as of today, WHO published the following: “There have been reported outbreaks of COVID-19 reported in some closed settings, such as restaurants, nightclubs, places of worship or places of work where people may be shouting, talking, or singing. In these outbreaks, aerosol transmission, particularly in these indoor locations where there are crowded and inadequately ventilated spaces where infected persons spend long periods of time with others, cannot be ruled out. More studies are urgently needed to investigate such instances and assess their significance for transmission of COVID-19.” There you have it. It’s amazing what 200 scientists can do when they put their minds to it.

If you have any questions or comments on this advisory, please contact either [kellyw@amvac.com](mailto:kellyw@amvac.com) or [timd@amvac.com](mailto:timd@amvac.com).