



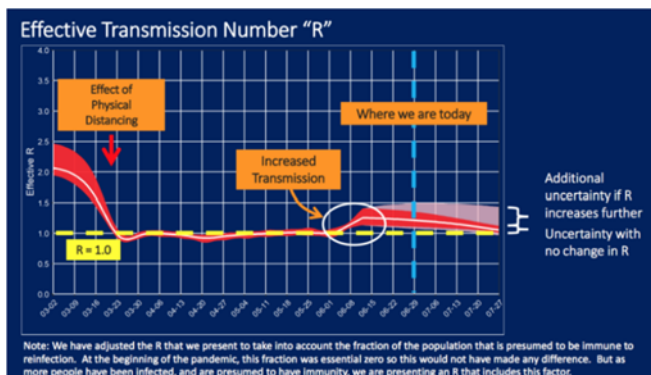
June 30, 2020

To: Distribution

From: Pandemic Working Group

Re: **COVID-19: California ~ Dispersion Parameter ~ On Gatherings ~ News Shorts**

California Heating Up. As reported by the LATimes, the coronavirus pandemic is taking a firmer hold in California. On Monday, the state broke its record for new cases in a single day (over 8,000) and is on track in the month of June to double the number of cases in May. According to L.A. County Public Health Director Barbara Ferrer, with the return en masse to bars, barbecues and parties, the new data show “alarming increases in cases, positivity rates and hospitalization.” In L.A. County, hospitalizations of COVID patients has risen by 44% in the past two weeks, and the county is projecting that it could run out of hospital beds and ICU units within the month. Positivity (infections per total tested) is up from 8% to 9% in the county, and officials warn that 1 in 140



persons is likely unknowingly infected and contagious to others (up from 1 in 400 last week). Nor is L.A. County alone in these trends. Kelly Willmott reports that Orange County had record-high daily cases and weekly deaths, while Riverside County’s ICU capacity is at 99%.

As shown by the LATimes table to the left, through suppression measures, L.A. County was able to push the R factor (transmission rate) below 1; with the reopening, the R factor has risen to 1.26. In the midst of this and other trends, Governor Gavin Newsom has ordered bars in L.A. County and six other counties closed. In addition, Mayor Eric Garcetti announced that L.A. County beaches will be closed for the July 4th weekend and that fireworks displays will be banned. Dr. Ferrer urged people to wear masks, practice social distancing and avoid crowds, saying, “It’s just not safe right now.”

Some Are More Contagious. As reported by the New York Times, growing evidence suggests that, while many people infected with coronavirus do not seem to spread, others may be super-spreaders. On the one hand, you have likely read of the Texan who attended a birthday party on May 30 and infected 18 friends and family with coronavirus. On the other hand, we read of many persons who were unknowingly infected, went about their daily lives and did not apparently transmit the virus to anyone. Epidemiologists have observed this kind of variability in measles and SARS patients. They call it the dispersion parameter, which is a measure of how much variation there is from person to person in transmitting a pathogen. According to Dr. Adam Kucharski of

the London School of Hygiene and Tropical Medicine, after comparing cases in different countries, he noted a wide variation in outbreaks suggesting that 10% of infected people may be responsible for 80% of new infections. As we have reported in the past, experts believe that (without suppression measures) coronavirus has an R factor of between 2.5 and 3, but, in light of the dispersion parameter, this figure can be misleading. If nine out of 10 people do not pass on the virus at all, while the 10th passes it on to 20 people (like the guy in Texas), then the average would still be two. Unfortunately, at this stage, experts do not know who is a super-spreader and who is not. Indeed, epidemiologists continue to point to situations – e.g., bars, nursing homes, meat processing plants, construction sites – as the locus of greatest transmission. However, if they want to dive into dispersion parameters further, I would think that they might want to call on the notorious birthday party guest from the Lone Star state and see what makes him tick.

On Gatherings. Sometimes things don't go as we plan. For example, as reported by the Washington Post, at a recent concert in Knoxville, Tennessee by country singer Chase Rice, a



crowd of about 1,000 unmasked fans rushed the stage and formed a virtual mosh-pit which, as you would expect, was photographed, hit social media and drew an avalanche of shaming from all quarters. But Mr. Rice did not plan it this way. It turns out that the concert took place at Historic Brushy Mountain State Penitentiary, a venue that features not only a distillery but also paranormal tours (I didn't make that up). Maximum capacity is 10,000. Fewer than 1,000 attended the show, with temperature checks at the door, free hand sanitizer, the works. In short, it would have been possible to maintain

proper distance. But the crowd had other ideas.

This brings me to the subject of gatherings. We have been giving a fair amount of advice (including full-blown protocols on the operation of our offices and factories), but think it is worth emphasizing that the same COVID precautions that apply in the office should also apply at events we plan or attend. According to the CDC, the larger the gathering, the longer the duration, the higher the transmission risk. They continue to recommend simple measures – like maintaining 6 feet of distance, wearing a face covering and avoiding crowds. If you find yourself in a circumstance that is getting risky – a restaurant that becomes overcrowded, a gathering where no one practices good hygiene, an unexpected meeting with several others – step away. Also, if you are planning activities for your team, please do so with coronavirus prevention in mind. It would be a shame to lose all that we have gained thus far.

News Shorts. As reported by the New York Times, while opening its bloc to 15 nations, the EU is maintaining the exclusion of the U.S., Russia and Brazil (among others) citing coronavirus concerns. New infections in the US have risen 80% in the past two weeks, causing governors in several states (Arizona, Texas, Kansas and Tennessee, among others) to reverse reopening, particularly in connection with bars, and the governor of Georgia to mandate the use of face coverings. Also, as reported by ABCNews, a single bar in Michigan has been linked to an outbreak of 100 cases. This just in - New York has added California, Georgia, Idaho, Iowa, Louisiana and Mississippi to its list of states for which residents will be required to quarantine for 14 days upon arrival in NY. A lot going on. Stay safe, my friends. – TD

If you have any questions or comments on this advisory, please contact either kellyw@amvac.com or timd@amvac.com.