



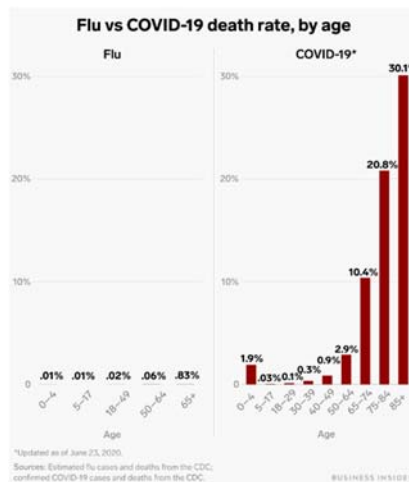
June 26, 2020

To: Distribution

From: Pandemic Working Group

Re: **COVID-19: COVID v Flu ~ States of Interest ~ Theme Parks**

COVID v. Flu. From Eric Wintemute, as reported in the Business Insider, according to the CDC, while about 0.1% of US patients with the flu last year died, based upon total deaths per reported infections, the coronavirus death rate is about 5.2%. This would make the coronavirus 50 times more deadly than the flu. As shown in this graph from BI (which compares death rate by age for the flu in 2018-2019 v. COVID-19), the relative rate of mortality correlates significantly with age. However, as reported in AppleNews, according to CDC's Dr. Robert Redfield, based upon a survey of antibody studies done across various regions of the US, for each reported infection, there are actually 10 other persons who are infected. Thus, Dr. Redfield goes on to say that the current infection total of 2.3 million cases could be as high as 23 million.



You may be saying to yourself, “Whoa there – doesn’t that mean that the death rate of 5.2% could be overstated?” Well, yes. If we were to increase the number of infections by a factor of ten and keep the number of deaths constant, then the death rate would decrease to 0.52%, which would make coronavirus five times more deadly higher than the flu. That said, as we have reported in the past, (remember the base rate fallacy?) the reliability of antibody tests is not perfect and, where the prevalence of the disease in the population is low, a large number of false positives in a small sample can tend to overstate the actual prevalence of the virus in the overall population. That said, we can safely say that, even including a hedge for the base rate fallacy, coronavirus is likely present in numbers far higher than have been reported and that we should continue doing our best can to limit its transmission.

States of Interest. Following up on our story about the coronavirus outbreak in Texas, as reported by the Dallas Morning News, in light of a surge in hospital admissions of COVID-19 patients and a daily record high 5,996 on Thursday, Governor Greg Abbott closed bars, ordered restaurants to return to 50% capacity and gave local officials more control of large gatherings. The governor noted that the rise was largely driven by certain activities “including Texans congregating in bars.” Interestingly, last week, the Texas Alcoholic Beverage Commission had suspended licenses for 17 bars after spot checks under “Operation Safe Open” showed that owners were not forcing patrons to distance properly. As reported by Anne Turnbough, in the largest hospital complex in

Houston, 40% of the staff has been tested as COVID positive, and that 98% of the hospital beds are occupied. Mandatory testing in various Texas cities is expected to commence next week.

Similarly, as reported in the Chicago Tribune, case infections have surged in Arizona, where the positivity rate is 23% - nearly triple the US average. Arizona Governor Doug Ducey stated, "The numbers continue to go in the wrong direction," and we can expect them to do so "next week and the week after." In light of these considerations, as reported by the New York Times, Vice President Mike Pence announced that both Drs. Anthony Fauci and Deborah Birx (of the White House's Coronavirus Task Force – pictured here from NYT) – will visit hotspots in Texas and Arizona to get an "on the ground report," noting that "this moment is different" in the pandemic, reflecting, in part, the fact that according to Johns Hopkins University, at least 26 states are seeing a rise in new cases over the past week.



By contrast, with a record-high cases over the past week (10,000+ on Tuesday and Wednesday and ~9,000 on Thursday) and a higher positivity rate (13%+) than ever before, also as reported by the New York Times, Florida prohibited alcohol consumption at bars, but is otherwise holding the line with its reopening. In the face of these alarming trends, Florida Governor Ron DeSantis lashed out at young bar-hoppers saying, "If you go in and it's just like mayhem, like Dance Party USA, and it's packed to the rafters, that's not just an innocent mistake." In a more measured manner, as reported in USNews, citing a surge of coronavirus cases in California (a record 7,000 on Wednesday and 5,300 on Thursday), Governor Gavin Newsom indicated that he might roll back reopenings in some areas if coronavirus patients start to strain hospitals and ICUs. Over the past week, California hospitals experienced a 32% increase in COVID patients. According to Johns Hopkins University, positivity rates in California have been climbing and, on a trailing seven-day basis, are 5.6%. And, this just in from KCRA3 (via Veronica Plascencia), Governor Newsom just reinstated the stay-at-home order in Imperial County (population 175,000, just north of the Mexican border) which has a positivity rate of 23% on a 14-day trailing basis.

Disney Slows its Pace. For you theme-park enthusiasts, as reported by the Points Guy/MSNNews, Disney has announced that its California-based Disneyland, which had been scheduled to reopen on July 17 – its 65th anniversary – will postpone its opening indefinitely. Management stated that the decision is based not upon coronavirus trends, but on the fact that



the state of California has not yet provided reopening criteria. I imagine that the state would be loath to do so until the pandemic curves improve, but I'm not running things in Sacramento. Lest you fall into despair, the Points Guy (also, who is this points guy?) reports that Disneyworld in Orlando, Florida, is still planning to reopen on July 11. Interestingly, Universal Orlando has been open since early June with crowds down by 70% versus last year. In this photo (from MSN) the line for Hagrid's Motorbike at Universal is broken into six different segments for distancing purposes, which

thoroughly confused the crowd. See them all looking at their phones for guidance and consolation. Candidly, I had no recollection of Reubus Hagrid (the half-giant professor of Magical Creatures in the Harry Potter series) having owned a motorbike, so I checked with the dispositive authority, my daughter Maggie, who never forgets anything. She confirmed that, indeed, a flying motorbike was the means by which Hagrid rescued Potter from the Dursley's house. For those who can find the entrance, I imagine that the ride would be a trip. - TD

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