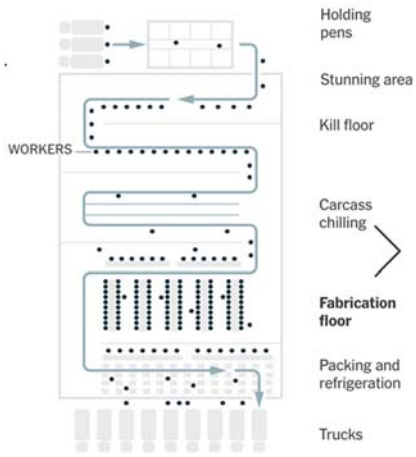
June 10, 2020

To: Distribution

From: Pandemic Working Group

Re: **COVID-19: Food Processing ~ Coronavirus by Numbers ~ The Royal Society**

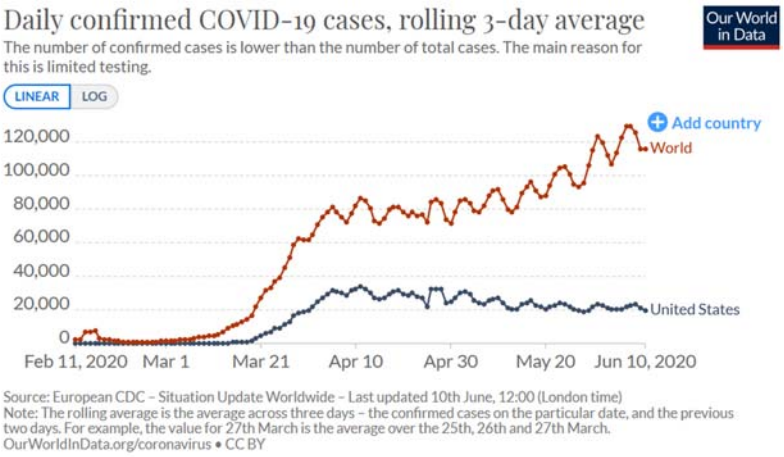
Food Processing Revisited. We have previously reported on the unusually high prevalence of coronavirus clusters in meatpacking plants. As reported in the New York Times last Monday, 25,000 workers in such plants have been infected since the commencement of the pandemic. Close proximity of workers coupled with low temperatures and powerful ventilation systems (to protect the carcasses) appear to create ideal conditions for the sustainment and spread of airborne viral particles. A simplified plant layout (from the NYT) shows how meat processing operations were typically configured pre-pandemic. The black dots represent workers. With revised CDC guidelines, areas of great proximity are being distanced and, in some cases, Plexiglas shields are being installed.

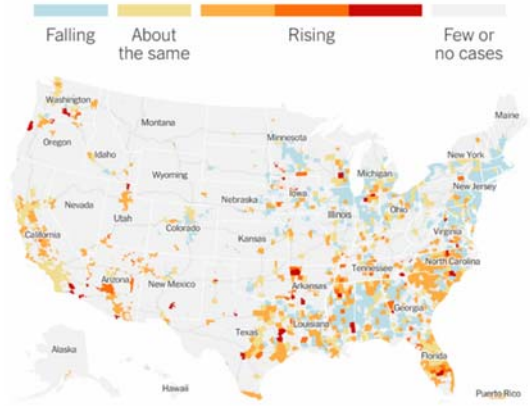


However, the story does not end there. As reported by Bloomberg yesterday, at least 60 food processing facilities outside of the meatpacking industry have seen outbreaks with more than 1,000 workers diagnosed as infected with coronavirus. Fruit and vegetable packers, bakers and dairy workers have been affected, as operations (being essential businesses) have, for the most part, remained in operation during the pandemic. It is reported that, in some cases, workers who were sick were nevertheless reporting to work so that they would not lose their wages. According to the Teamsters Union, which represents about 79 such plants, there has been a marked decline in outbreaks at their facilities, as employers have established more robust safety procedures. In summary, the duration of the pandemic continues to put the operations of many businesses to the test, and those companies that have adapted to the threat have been best able to maintain continuity. In that vein, we continue to keep the safety and health of our workers at the forefront and thank you for your efforts to carry out that resolve.

Coronavirus by the Numbers. As reported by CNN today, 19 states, including Arizona, are reporting higher infection trends, while seven are flat and 24 are declining. Taken together, this marks a slight overall decline on a national basis as compared with our last such report on May

28, when 15 states were up, 21 were flat and 17 were down. As reported in OurWorldInData.org, which draws global information from the European CDC, this chart depicts the three-day rolling average for new cases from February 11 through June 10 in both the U.S. (in blue) and the world (in orange). The general trend of cases in the U.S. is moreorless flat, while that of the world is generally trending up but with intermittent declines. Interestingly, since Memorial Day, hospitalizations in at least a dozen states (including Arizona, which has reactivated its hospital emergency plans) have been on the rise. As a further consideration, today the New York Times published a map indicating two-week infection trends across the US with hotter spots in orange and red. You can see that there is still considerable variation on a regional basis. With respect to the U.S. infection curve, the reader should bear in mind that the relative stasis in new cases is occurring in the midst of the reopening of the states' economies. At this stage, then, we are not seeing an upward turn on an average basis nationally even as COVID restrictions are lifted. Given the prevalence of the disease globally, domestic hot-spots and hospitalization trends, however, we will need to continue operating with caution.





Royal Society Mask Study. In a study published today by the Royal Society (royalsocietypublishing.org) entitled "A Modelling Framework to Assess the Likely Effectiveness of Facemasks in Combination with 'Lockdown' in Managing the COVID-19 Pandemic," – a study that can only be described as complex – researchers from Cambridge University and the University of Greenwich modeled the relative impact of wearing face coverings having varying degrees of effectiveness (25%, 50%, 75% and 100%) by varying percentages of the population (same gradient) on the rate of transmission (R factor) of the coronavirus. For purposes of the study, researchers noted that the actual transmission rate has not been conclusively settled, but is thought to be between 2.2 and 4 (that is, one infected patient transmits to 2.2 to 4 persons). Thus, they used both factors in parallel. Without getting into the weeds – and it was a veritable thicket – researchers concluded (among other things) that if all persons were to wear masks that were 50% effective in public, then an R factor of 2.2 could be pulled down to 1 (the desired goal). I could go on, but, really, in the spirit of John Lennon, all we are saying is – give masks a chance.

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