



April 6, 2020

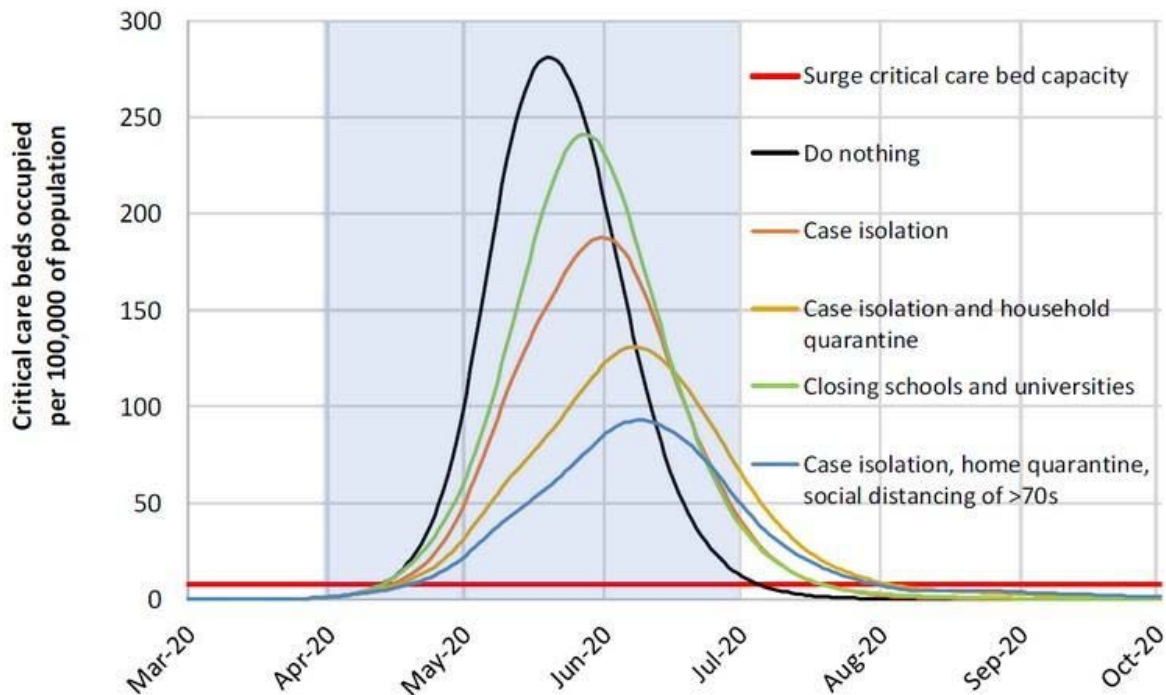
To: All Employees

From: Pandemic Working Group

Re: **COVID-19 – Pandemic Models**

Imperial College COVID Models. As many of you may have already read, public officials are focused on trying to control the pandemic to ensure that it does not overwhelm our hospital system. This effort is based, in part, upon studies such as the one written by epidemic experts at Imperial College. In a report dated March 16, 2020, their epidemiologists prepared a model on the pandemic which predicted the rate of spread in both the US and Great Britain and mapped COVID cases against available hospital beds

According to the study, the best way to end the pandemic is to develop a vaccine. However, this can take 12 to 18 months. In the meantime, we use other measures to “suppress” or “flatten” the pandemic curve. On the graph below, the authors demonstrate that the more controls we put in place – starting at “do nothing,” (the highest curve) and adding successive controls as you move down – the better we can control the spread and keep it within our hospitals’ capacity.



Bottom Line: There are a lot of moving parts to this pandemic, and these variables make it difficult to predict outcomes. Both here and abroad, COVID health orders of varying descriptions have been issued at different times in different regions. Domestically, the rate of the pandemic’s growth

now varies by state; over the past day, detections have grown by 14% in Louisiana, 8% in New York and 4% in California. On the brighter side, hospital resources have, on average, improved in urban areas. Further, you are hearing that cases in New York may “peak” in a week or so and, in the U.S., in two weeks or so. To all of this, we can say this much: if the Imperial College study is to be believed, one can expect that, even after the curves begin to flatten, we will likely have to maintain and adjust social controls for a period of time, while continuing to track relevant data.

Tomorrow we will cover certain unique aspects of the coronavirus as well as the stringent measures that have been taken by South Korea to control the pandemic.

If you have questions on any of these matters, please contact either Kelly Willmott (kellyw@amvac.com) or Tim Donnelly (timd@amvac.com).