



July 10, 2020

To: Distribution

From: Pandemic Working Group

Re: **COVID-19: Friendly Skies ~ PWG Notes ~ How It Invades ~ Chili Cheese Dogs**

The “Friendly” Skies. As reported in an op-ed in the Mercury News, after having received \$50 billion in stimulus money, some of the major airline carriers (most notably, American and United) have adopted a “full flight” policy, as opposed to leaving empty seats in the name of social distancing. By contrast, other carriers, like Delta (by keeping middle seats empty), Alaska (by



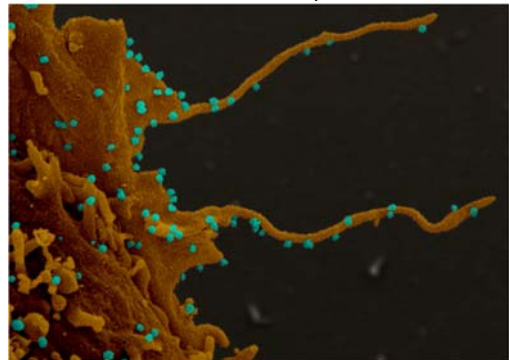
assigning seats to maximize space) and Southwest (by booking less-than-all seats per aircraft), have committed to distancing programs. This has not escaped the attention of Senator Jeff Merkley (D-Ore), whose selfie (from the Mercury News) shows him shoulder-to-shoulder on an American Airlines flight on July 2 with a cabin full of passengers whose faces are out of focus. Merkley was quoted by the Washington Post as saying, “These airlines are only flying because we’re subsidizing them . . . [and] if they’re essential, then we should do everything we can to make them safe for the people who

are using them.” CDC’s Dr. Robert Redfield expressed “substantial disappointment” at American’s decision to fill up their jets, while Dr. Anthony Fauci told a Senate panel, “I’m not sure what went into that decision making.” While the matter gets bandied about the media, Senator Merkley is not sitting still, but is planning to introduce legislation requiring carriers to keep the middle seat empty for the duration of the pandemic.

Notes on the Pandemic Working Group. From time to time, we will let you know what we have been doing to enhance the health and safety of the workforce. Most recently, we drafted an overall set of COVID protocols for the Newport offices – from face coverings to conference room capacity. We then implemented COVID controls at our lobby, including touchless temperature checks, representations about being symptom-free, designated foot-traffic patterns and reprogramming of elevators to ensure that only authorized persons may visit the suite. We also produced and disseminated a quick video on the sign-in process. Our protocols will serve as a model for other locations; in fact, working in collaboration with Technology, we will be rolling out similar controls at the GAW research center mid-next week. In addition, we continue to advise HR and Safety on multiple instances involving potential or actual COVID infections; these range from employees who present flu-like symptoms to those who have been in contact with a person who has a

possible or actual infection, to persons who are two-steps removed from an infected case – and so on. In all cases, while honoring the privacy of individuals involved, we gather facts, do tracking and tracing, and administer leaves of absence, sanitization of premises and returns to work. In all events, we follow the guidance of the CDC, which continues to evolve, and that of healthcare providers. Because we are constrained by health privacy laws against freely publicizing these matters – even within our facilities – they may appear to be shrouded in mystery from the view of other workers. For that reason, we work with managers to explain the situation as soon as we can and, in some cases, follow up with an email to potentially affected personnel. We thank HR and Safety for their help, which has been invaluable, and appreciate the cooperation of persons who work in facilities where we have had incidents. – TD

The Mechanism of Invasion. For you science fans, as originally reported in LiveScience, in order to produce therapeutic drugs for coronavirus, scientists first need to understand in detail how the virus invades human cells. New research focusing on how the virus can alter certain proteins (which carry out instructions of genes) show that cells, when infected with coronavirus, show changes in phosphorylation – a process that is extremely important for many cellular processes, including protein synthesis, cell division, signaling, cell growth, development and aging. Using monkey cells (which are similar to human cells) the team found that 40 of the 322 human proteins that were found to interact with coronavirus were phosphorylated differently in test material when compared to uninfected cells. High-resolution images of infected cells showed that they had grown tentacle-like protrusions called “filopodia” (pictured here from LiveScience) which contain viral proteins, which suggests that coronavirus hijacks cells and forces them to form tentacles, which, in turn, poke holes in nearby cells, allowing the virus to infect new cells. It’s a little like the battle of Minas Tirith in Tolkien’s “Lord of the Rings” when countless orcs cast up ladders and hooked lines to scale the walls of the otherwise impregnable fortress behind which the desperate king (Denethor) was setting himself on fire.



But back to the study. Researchers then identified 87 drugs (either FDA-approved or in clinical trials) that might target some of these pathways and found that seven of them (mostly anti-cancer and anti-inflammatory compounds) inhibited the virus from replicating and growing in human lung cells. Researchers concede that their study involves use of non-human cells, rather than primary human cells; however, the study has the potential to sharpen the focus of therapeutic research. By testing existing, approved drugs (or drugs that are in clinical trials) on these pathways, researchers may be able to accelerate the discovery of therapeutic treatments for coronavirus.

On a Final Note. The LATimes reports “finally, some positive news” – Original Tommy’s Burgers is offering “buy one, get one free” chili cheese dogs at all 34 California and Nevada locations through September 7. Admittedly, from the perspective of economics it’s tempting. They’re normally \$2.40 each, so you’re getting them for \$1.20 apiece. A deal. So I took a swing through myfooddiary.com to check out the nutritional content of these puppies. Here is how each one scores: 570 calories, with 33g of fat (51% of your daily value), 15g of saturated fat (75% of your daily value), 1890 mg of sodium (82% of DV) and 20g of protein. I’m not an expert on nutrition, but this, to me, doesn’t seem like the healthiest profile in the world. So, I’m not saying don’t get one (or two), I’m just challenging whether this is really positive news. Also, who needs a rip-roaring

case of heartburn during a pandemic? I think I'll spend my \$2.40 on something else. But this is America, and it's your money. And it's not my place to shame anyone - but really? Good news? I just think we're reaching a bit here. Have a great weekend.

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