



May 19, 2020

To: All Domestic Employees

From: Pandemic Working Group

Re: **COVID-19: Outdoor Exposure ~ Post Recovery Testing ~ Stanford and Garmin**

The Great Outdoors. With summer coming and public parks and beaches beginning to reopen, you may be wondering about the risk of coronavirus transmission outdoors. According to a New York Times article from today, a growing consensus of experts are saying that, if you are going to leave your home, it's safer to be outside than to go indoors. With fresh air and more space between people, the risk of contagion declines. According to Dr. Eugene Chudnovsky of Lehman College and CUNY, "The virus load is important. A single virus particle will not make anyone sick . . . the belief is that one needs a few hundred to a few thousand of SARS-CoV-2 viruses to overwhelm the immune system." Wind, sunlight and humidity all take their toll on airborne droplets. Interestingly, in a study of more than 7,300 cases in China, just one was connected to outdoor transmission. Experts say that a person walking, jogging or cycling too close for a few seconds is not a big worry. If you are going to exercise in public and plan to be stationary, then wear a mask. In this photo, from NYT, exercisers observe social distancing at a public park. Also, a beach is a great venue, unless you find yourself in tight quarters with prolonged exposure to others.



Testing Positive after Recovery. As reported in the Wall Street Journal, health officials in South Korea had been perplexed by the fact that some people who had had the coronavirus and recovered were still testing positive for the infection. Given the high accuracy of that country's testing, and fearing the possibility of a relapse in those persons, researchers tracked hundreds of contacts of the discharged patients and found that none of these persons had transmitted the disease to others, despite having been tested positive again after their discharge. According to Ki Moran, who is advising the government on the issue, "We're putting more weight on the theory that dead virus fragments remain in a recovered patient's body, since we haven't seen evidence of infectivity." While this study is not dispositive, it does tend to show that a positive infection result post-discharge does not equate to a relapse and, further, that recovered coronavirus patients are not likely to be infectious to others. Whether and how long they may be immune to catching the virus (or a mutation thereof) a second time, however, is still not understood.

Stanford and Garmin Team Up. This just in from Anne Turnbough. The Stanford Healthcare Innovation Lab has launched a COVID-19 wearables study to determine whether smartwatches (like the Garmin “Venu” pictured below) can predict the onset of an infectious disease, like coronavirus, before actual symptoms are noticeable. The idea for the project arose from an earlier study by Stanford School of Medicine researcher, Michael Snyder PhD., who showed that certain patterns of heart variation can indicate illness, even before symptoms appear. For this study, Dr. Snyder will gather data from Garmin wearables that have a wrist-based heart rate. Participants will anonymously share data (such as sleep, heart rate, activity) and periodically complete health surveys. From these data, researchers will create algorithms to detect when someone is getting sick. Anyone can participate. If you are interested in enrolling, go to <https://www.garmin.com/en-US/blog/health/>.



Venu

If you have any questions or comments on this advisory, please contact either [kellyw@amvac.com](mailto:kellyw@amvac.com) or [timd@amvac.com](mailto:timd@amvac.com).