Dr. Delgado COVID-19 Update 3-27-20

• Testing, testing & testing. Both locally and nationally, the volume of testing continues to slowly improve, but is still woefully insufficient. Statistics appear to show a rate of growth that is explosive, but it still remains unclear if that is due to more voluminous testing (the U.S. has doubled testing over the last week) thereby confirming those already infected or is a true indicator of continuing viral spread or a combination of both?

Acutely, more testing will aid us in treating those whom are positive, symptomatic and are at high risk of rapid progression of their illness. This data will allow us to allocate precious resources and care to those most likely to necessitate it which will be vital over the weeks to come. Secondarily, by isolating both those patients and any identifiable close contacts, we begin containment measures and potentially begin to affect its spread.

While a serologic test to determine levels of infection will be vital and should be aggressively pursued, it will be quite challenging for the foreseeable future. Previous pandemic curves and current models show a likely continued escalation that will be explosive. Testing for acute infections, in conjunction with

disease containment, should remain our utmost priority for the time being and offers us the most powerful action to mitigate the numbers in the short term.

Serologic testing will allow us to determine those who have been exposed to the virus and generated an immunological response. This will provide short term immunity, but it remains unclear as to how prolonged that protection will endure. As the volume of data emerges, this will lead to additional epidemiological information, avenues to pursue in regards to treatment and the possibility of a vaccine via reintroduction of serum from those exposed or the production of a monoclonal antibody. Monoclonal antibodies are laboratory-produced molecules engineered to mimic those antibodies that can restore, enhance or mimic the immune system's attack on a species pathogen such as Covid-19.

 Testing should be also be instituted in those locations which have seen limited numbers to this point throughout the country. Identifying those first clusters and strategically isolating and tracking them has been scientifically reproducible as the most effective public health measure that can be instituted to stem the spread of any communicable viral spread. We are dealing with a novel virus from which we have any immunity. It is proving to be much more lethal than either SARS or MERS. Any data as to its true infection rate, the level of spread from those that are infected though asymptomatic and just how dispersed it has become is still mainly speculative.

These facts alone merit extreme caution and decisive action based solely on the public health and the potential worst outcome. The notion that many states still have yet to initiate any modicum of social restrictions or that public dialogue exists to modify or circumvent any recommendations from the CDC and leading physicians in this field is truly perplexing.

• Some hopeful news. It is starting to appear that those that are asymptomatic and Covid-19 positive are likely less infectious than previously thought. In South Korea and China, they were able to slow and reverse the rate of infections by aggressively testing only those that were symptomatic or high risk. What this may infer is that the level of infection from those that are asymptomatic may be low enough to allow us to "flatten that curve" by pursuing this model.

Secondarily, what constitutes a "true" exposure and hence risk may be also evolving. The current

protocols mandate a 14 day self quarantine for any known exposure and should continue to be followed a this time.

While prudent, this may have been unnecessary. New data is appearing that strict adherence to hand hygiene and wearing a mask, if exposed and you remain asymptomatic, may suffice during this 14 day window of post-exposure concern. This would, if it bears out, allow members of a household to continue to interact if one of its occupants was exposed. While this is promising, I urge all of you to continue current isolation recommendations until more data becomes available.

Please continue to adhere to strict social isolation.

Statistics are based on collecting, organizing and interpreting data to only suggest probabilities. Just because your personal profile doesn't appear to incur a higher risk of severe illness, should lead you to minimize or ignore modifying your activities as recommended. We continue to see increasing numbers of progressive illness in all demographics of age and health. This virus will not necessarily obey statistics in how it will behave in anyone it may infect.

Lastly, continue to tend to your minds, bodies, spirits and each other. Seek out and offer assistance to those who may not be able to this for themselves.

R. Delgado, MD & staff