Dr. Delgado COVID-19 Update 4-10-20

A study suggests that the vast majority of people infected by the coronavirus remain undetected, raising the specter of fresh outbreaks if social distancing measures and travel restrictions are lifted too early. Researchers of the study, from the University of Gottingen in Germany, said only 6% of coronavirus infections had been detected across the 40 countries they analyzed.

The researchers calculated their rates by using an estimate of the infection fatality rate from a study published by The Lancet website on March 30 that estimated .66% of people infected had died.

What this study suggests is that policymakers need to exercise extreme caution and necessitate more data as to case numbers and the prevalence rate of coronavirus before the easing of any restrictions should be considered.

Resurgence of infections will rapidly rise unless governments ensure restrictions are lifted slowly and, most importantly, done so in conjunction with a comprehensive plan for monitoring the rates of immunity & transmission (i.e. testing).

Getting this wrong-how fast we go or not knowing when new pockets of infection emerge-could lead to further outbreaks and new restrictions being placed. Until a

vaccine emerges, this will continue to pose significant risk as we move forward.

How long will immunity last?

Developing immunity to the coronavirus is key to getting the world back to some semblance of normal. Running wide-scale testing would provide a more accurate picture of how many people have been infected and gained immunity to the virus.

It is not yet known how long immunity will last. It appears almost all patients infected develop antibodies. Unfortunately, not enough time has passed to ascertain if the antibodies will remained effective for an extended period of time.

A study by China's Center for Disease Control and Prevention, published in the Antiviral Research journal in 2017, said Sars antibodies were detected in most patients two years after infection. Meanwhile, T cells, the other immune response, were found in patients more than 10 years after a Sars infection.

In Mers, another coronavirus, antibodies were present in people about 12 to 13 months after infection, according to studies in Jordan and Saudi Arabia. Based on the findings, Chinese CDC researchers said antibody levels declined more rapidly in Mers patients than those in Sars survivors.

In addition, researchers in South Korea found that some Mers patients, particularly mildly infected cases, did not show any antibody responses, but those who did had those antibodies for at least a year.

So what does this all mean? Essentially, it is still too early to profess any prolonged immunity to anyone with an antibody response. We can only hope that any current immunity will function as a bridge to a future vaccine that ensures a more established length of protection.

Herd Immunity

Herd immunity occurs when the resistance to the rapid spread of a contagion within a population results because of a sufficiently high proportion of the population becoming immune to the disease. Essentially, the more people that have either acquired the infection or have achieved immunity, the less likely the infection will continue to spread and hence those vulnerable will be protected.

This is generally accomplished via vaccination. We can increase that number by vaccinating, because vaccination makes people immune to infection, but it also stops infected people passing on the disease to everyone that they otherwise would. If we can get enough people immune to the disease, then it will stop spreading in the population.

The sad fact is that herd immunity just isn't a solution to our pandemic woes at this moment. Yes, it may eventually happen anyway, but hoping that it will become a reality by infecting our population slowly is unrealistic. It will mean significantly more resources, hospitalizations and deaths.

The only time to discuss herd immunity is when we have a vaccine developed, and not a second earlier, because at that point we will be able to actively stop the epidemic.

Serologic Test Availability

Currently, the tests are expected to be shipped April 13 to my office. It is not clear if all or part of my order will arrive at once or at staggered intervals.

We will proceed accordingly and grant initial availability to those that have multiple risk factors for serious illness with Covid-19, but I expect to be able to get thought most of the available tests relatively quickly.

If you register for the upcoming local study involving serologic testing at Valley Apothecary and are chosen to participate let us know. During our testing you will be asked if you wish to have your results shared and I will offer that data to the study.

I will continue to update all of you as more information becomes available.

Office Update

A “soft opening” of the office will begin this Monday, April 13th. It will be limited to acute/subacute issues and will start with a triage by phone as to the nature of the problem. No physicals or general follow up visits will be scheduled a this time.

My intention is to continue to limit the volume of patients and hence exposure risk to both my staff and our valued clients.

Hospital Update

Adequate hospital capacity and resources remain available as of April 8th.

I would like to reiterate that I would not proceed with any non-emergent medical testing, treatments or imaging at the hospital or outpatient clinics at this time. If you need any clarification as to whether your particular issue should proceed, please contact me accordingly for review.

End of Life 2.0

Anyone interested in formalizing your end of life decisions legally, if you have not already done so, should obtain an Idaho Physicians Scope of Orders (POST) form and

complete it. I am glad to offer assistance and answer any questions related to this issue. This form can be obtained at https://www.healthandwelfare.idaho.gov

R. Delgado, MD & staff