Dr. Delgado COVID-19 Update 4-6-20

How long?

Populations might have to endure lockdowns or stay-at-home orders of more than six weeks before the coronavirus pandemic can be brought under control in their area, researchers in the United States have said.

According to the study published this week on *SSRN*, an open-source journal for early-stage research, countries adopting "aggressive interventions" might see a moderation of an outbreak after almost three weeks, control of the spread after one month, and containment after 45 days or more.

The researchers defined aggressive intervention as involving lockdowns, stay-at-home orders, mass testing and quarantine. With less aggressive intervention, the process will likely take much longer. The researchers based their findings on an examination of 36 countries and most US states.

They said the US faced unique challenges because some states have yet to adopt any significant restrictions and the rest, while committing too aggressive intervention, have done so at staggered times. This does not portend well for a 6 week window to be a realistic outcome in our country.

Once the acceleration phase ends and a reduction in confirmed cases begins, we must remain committed to social distancing. The post-peak period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur and countries will likely need to be prepared for a second wave as we are seeing in China.

Previous viral pandemics have been characterized by numerous waves of activity spread over months. Once the level of disease activity drops, a critical communications task will be to balance this information with the possibility of yet another wave. Pandemic waves can be separated by months and an immediate "at-ease" signal will likely be premature.

In the post-pandemic period, it is suggested (this remains hypothetical and under current rigorous discussion) that the pandemic virus may behave as a seasonal influenza virus and recur. If this becomes a realization, at this stage it is important to maintain aggressive surveillance via comprehensive testing and all encompassing disease tracking. We must continually update pandemic preparedness and response plans accordingly. Hopefully, a vaccine will become a reality in the near future and lessen these waves in both scope and mortality.

Masks

In warning against the universal use of face masks, some American health authorities had made the argument that wearing the protective gear is not just unnecessary, but potentially dangerous. A mask on your face, they said, could make you touch your face more often, hence increasing the risk of infection by transferring pathogens from your hand to your eyes or nose. A 2015 study from the American Journal of Infection Control shows that people on average touch their faces more than 20 times per hour.

But this argument appears to be giving way as a growing number of American officials have joined several European countries and most of Asia in recommending broader use of face coverings. In 2008, researchers from the Netherlands and the US found that, despite imperfections, any type of facial mask is likely to decreased the viral infection risk in the population.

So, continue to wear mask or any coverings over your face and concurrently try to minimize touching your face.

WHO recommendations regarding masks for your review.

- 1. Before putting on a mask or scarf, clean your hands with alcohol-based hand rub or soap and water.
- Avoid touching or face covering while using it; if you
 do, clean your hands with alcohol-based hand rub or
 soap and water.
- 3. Cover the mouth and nose with mask and make sure there are no gaps between your face and the mask.
- 4. Replace the mask or scarf with a new one as soon as it is damp.
- 5. To remove the mask: remove it from behind (do not touch the front of mask); discard immediately in a closed bin or washing machine; clean hands with alcohol-based hand rub or soap and water thereafter.

Lastly, I cannot emphasize enough that these recommendations in no way supersede the need for continued adherence to social distancing. The new directive is in conjunction with distancing. This should in no way prompt a false sense of security or increase the frequency of your exposure.

Serologic testing 3.0

After extensive research, I have ordered serologic tests. It is my hope to acquire them in the near future based on the company's projections, but distribution of any medically related products remains a monumental challenge at this time. Recently, Abbott Labs promised

delivery of 50,000 serologic test daily, but was stopped due to FDA demanding the packaging be reworded.

This test will not be absolute in regards to your immunity status as I briefly touched upon my last email. Positive results will likely need additional testing and/or cultures to properly assess any risks of cross reactivity due to other viruses that are are similar enough genetically to trigger the test.

While it would seem logical to obtain any serologic test that becomes available, I urge all of you to proceed with caution and be sensible. Any results clearly merit interpretation and clarification as to the perceived risk of future infection on an individual basis.

Treatment Update

I discussed in my previous email (4/3/20), the experimental use of injecting convalescent plasma from those who had the illness to transfer passive immunity into those currently ill is being investigated. St Lukes, while not yet attached to any multi center trials, is proceeding on its own with development of this treatment option and clinical protocol for its use.

With that in mind, anyone who tested positive for Covid-19 and is 2 weeks beyond their diagnosis may be a candidate to donate their blood for analysis. They request

you contact a local Red Cross (redcrossblood.org) and make an appointment if you meet these criteria.

In addition, the use and benefits of hydroxychloroquine remain equivocal.

Office update

I continue to weigh the risks vs. benefits incurred by any office reopening. Orders for PPE's have been in place for over 4 weeks and while disappointed, we obviously concur with the priority being placed with hospital providers.

I remain amenable to addressing clinically significant, subacute issues in the office if they merit the visit, but will do so with the utmost caution. This will continue to be at my discretion and after a dialogue to assess your needs in conjunction with the potential risk of any exposure.

As you recall from previous emails, several recent studies suggest that over 50% of those who tested positive where asymptomatic and likely shed the virus for many days unknowingly. This could include my staff in their interactions with you.

I urge you to continue to call the office with any medical needs as the arise and without hesitation. Together, we can decide the best way forward on an individual basis.

Local Update

As you are likely aware, St. Lukes Wood River Hospital opened Friday on limited basis to address our community's needs. This is to provide care for emergent/acute surgeries or non-Covid related admissions, but will likely evolve. I will continue to follow and update any changes as they arise.

As of April 3, the St. Lukes health system shows adequate capacity and resources for care to meet the underlying need of it patients.

Sign Off

Continue to follow the recommendations. The rate of new positive cases appears to be flattening locally, but this is not a time to lose vigilance as to exposure and risk potential spread.

Remain active and engaged mentally, physically, spiritually and emotionally.

R. Delgado, MD & staff