Dr. Delgado COVID-19 Update 4-21-20

WHEN TO REOPEN?

A group of experts has produced a plan for the US to reopen its economy safely this summer. However, it's contingent on doing at least 20 million tests every day, scaling up contact tracing, and ensuring those who need to isolate can be properly supported.

The report, produced by 45 cross-disciplinary experts assembled by Harvard University's Edmond J. Safra
Center for Ethics, says we need to be testing 5 million a day by early June in order to start reopening the country
and increasing to 20 million by mid-summer to fully end the shutdown.

How we get there: The level of testing needed depends on us being able to effectively trace the contacts of those
infected with coronavirus, warn those people they've been exposed, test them, and isolate everyone who tests positive, the report says. We'd need to provide job
protection and support for those who have to isolate, including food deliveries and financial backing. That involves hiring an army of contact tracers—it is suggested at least another 100,000 or more people.

It also recommends to massively scale up testing by incentivizing the private sector to create new solutions at speed, the authors say. This could be coordinated by the federal government towards securing the adequate testing supply and infrastructure necessary for its deployment. This program would be expensive: estimates range from $50 to 300 billion over two years. However, the report authors say, it is dwarfed by the economic cost of a continued collective quarantine and the $100 to 350 billion

economic loss every month.

Implementing a lockdown via social isolation does not “beat” the virus—effectively it just hits the pause button on its spread until we’re able to come up with a way to treat it or reduce the number of cases to the point where they’re traceable. While a flattening of the curve appears in some regions, it is only due to the strict restrictions in place and will invariably reverse if lifted prematurely.

The above plan would allow the monitoring of cases and avoid the need for endless cycles of opening up then shutting down the economy until we find a vaccine.

MORE ON ANTIBODIES AND IMMUNITY

As I have been repeating like a mantra, many issues remain unsettled as to antibody testing. One, the timing of antibody production may vary substantially, depending on the health and medical conditions of the individual. Unlike RT-PCR nasal/oropharyngeal swabs which is the standard testing currently administered to those suspected of Covid-19, tests for serology can vary substantially. Due to this variance, each serologic manufacturer that generates a test must be evaluated individually.

Most tests have not been validated as to accuracy and the rate of infection in our population remains unknown. This, as I explained in detail in my 4/13/20 update, creates a wide statistical variance as to the positive predictive value of any one test. Even the best tests will generate some false positives (identifying antibodies that don’t actually exist) and some false negatives (missing antibodies that really are there). In layman’s terms, one test of your immunity will not suffice as to your true status of immunity.

The accuracy of a positive test may be hard to interpret: the virus is so new that researchers cannot say for sure what sort of level of antibodies or results will signal
immunity or how long the duration any assumed protective immunity will last.

To be clear, most experts do think an initial infection from the coronavirus, called SARS-CoV-2, will grant people
immunity to the virus for some amount of time. The majority of studies have shown that most people have generated a quick and noted antibody response which could explain why a majority of people did not develop severe Covid-19 infections. That has generally been the case with acute infections from other viruses, including
other coronaviruses. For how long this specific response and immunity endures remains the crux of the question.

In addition, it's not just whether someone is immune themselves. The next assumption is that people who have
antibodies cannot spread the virus to others. Again, that hasn't been shown yet. The challenge is that no one knew
about this virus until a few months ago. That means they haven't been able to study what happens to people who
recover from Covid-19 or have an immune response — and if and how long they are protected or able to transmit
the virus — for a prolonged period of time.

Lastly, once these tests begin to provide data, it may reveal a "serosurvey" of our community or how broadly it may have spread. If that number is higher than
presumed-a strong likelihood given the lack of early testing and the potential rate of asymptomatic infections then it may offer valuable insights into how accurate these tests proved to be and how to address any future pandemics.

I continue to urge all of you to proceed with repeated antibody testing. The more results, and if they prove to be consistent, further strengthens your immunologic repose or lack thereof. While this may lead to some trepidation if negative, it will provide a map as to the ongoing mitigation of your risk individually.

FINAL THOUGHTS

Any recommendations or paths I promote are purely formulated and expressed in the interests of our safety and collective public health. They represent a thorough
review of current science and what path appears, through studies, statistics and previous viral pandemics, as to the best course to minimize the spread and Mortality rates of Covid-19. I simply follow the facts and science.

Of note, our office will contact you once our serologic tests have shipped and how we will proceed moving forward. We appreciate your continued patience.

Lastly, continue to care and commit as to your daily choices and actions. May they lead to benefit for yourselves, others and to our collective future.

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