How To Re-Open Society Using Evidence, Medical Science, and Logic

Scott W. Atlas, MD, is the David and Joan Traitel Senior Fellow at Stanford University's Hoover Institution and the former Chief of Neuroradiology at Stanford University Medical Center.

The consequences of the COVID-19 pandemic have been enormous. As of the first week of May, more than 70,000 Americans have died. If it were compared as a separate country, the New York area would rank, by far, as number one for deaths per capita. Given that three to four weeks typically elapses before death, thousands more already infected will also succumb to the virus. That said, the direct daily toll from the infection has markedly declined throughout the United States, including the epicenter of New York. The curves have been flattened – the stated goal of the isolation has been accomplished – for both hospitalizations per day and deaths per day.

We now have an even greater urgency, due to the severe and single-minded policies already implemented. Treating Covid-19 "at all costs" is severely restricting other medical care and instilling fear in the public, creating a massive health disaster, in addition to severe economic harms that could generate a world poverty crisis with almost incalculable consequences. Half of neurosurgery patients still refuse to come in for treatment of diseases that if left untreated risk brain hemorrhage, paralysis, and death, even when their doctors directly reassure them. Transplants from living donors are down 85 percent from the same period last year. Missed biopsies of now undiscovered cancers number thousands per week. That doesn't include the latest reports of skipping two-thirds to three-fourths of cancer screenings, most childhood vaccinations, and treatment for new strokes and known cancer.

We also know that total isolation *prevents* broad population immunity and *prolongs* the problem.

We know from decades of medical science that infection causes individuals to generate an immune response – antibodies – and the population later develops immunity. Indeed, that is the *main purpose* of widespread immunization in other viral diseases – to assist with "herd immunity". In the Covid-19 epicenter New York City, higher immunity is likely, although undoubtedly muted by the extreme isolation policies, as more than 20 percent of those tested had antibodies. A similar finding was reported in Boston. That fact has been *incorrectly* portrayed as an urgent problem requiring mass isolation. On the contrary, infected people are the immediately available vehicle for establishing widespread immunity. By transmitting the virus to others in lower-risk groups who then generate antibodies, pathways toward the most vulnerable people are blocked, ultimately eradicating the threat. While we do not know with certainty that antibodies from Covid-19 stop infection, it is

expected, based on decades of virology science, including other <u>coronavirus</u> respiratory viruses, where immunity post-infection is thought to last for a year or more. That's why scientists are hopeful about using Covid-19 antibodies to treat the sickest patients; that's the basis for the drive to generate a vaccine.

There are two critical aspects of this urgently needed, targeted re-entry plan. First, policymakers must apply logic and critical thinking to the data we have acquired, instead of continuing to prioritize hypothetical projections – projections that need to be readjusted every few days, highlighting their inaccuracy - and then combine that evidence with decades of established medical science. Second, we must demonstrate and fully convey the logic underlying the plan to reassure a public that has become almost paralyzed with panic and fear.

Reassuring the public about re-entry requires repeating the facts – what we know - about the threat and who it targets. By now, multiple studies from Europe, Japan, and the US all suggest that the overall fatality rate is far lower than early estimates, perhaps below 0.1 to 0.4%, i.e., ten to forty times lower than estimates that motivated extreme isolation. And we also now know who to protect, because this disease - by the evidence - is not equally dangerous across the population. In Detroit's Oakland County, 75 percent of deaths were in those over 70; 91 percent were in people over 60, similar to what was noted in New York. And younger, healthier people have virtually zero risk of death and little risk of serious disease – as I have noted before, under one percent of New York City's hospitalizations have been patients under 18 years of age, and less than one percent of deaths at any age are in the absence of underlying conditions.

Here are specific, science-based, logical steps to strategically end the lockdown and safely restore the pathway to normal life:

First, let's finally focus on protecting the most vulnerable – that means nursing home patients. Given that older people with underlying conditions are obvious set-ups for serious complications from respiratory infections, it is difficult to excuse policies that allowed 20,000 nursing care residents to die - 30 percent of all deaths in the US, more than half of the total in some states, particularly when they already live under controlled access. Urgently needed, targeted protection would include strictly regulating all who enter and care for nursing home members by requiring testing and protective masks for all who interact with these highly vulnerable people. Moreover, nursing home workers should be tested for Covid-19 antibodies, and if

negative, for virus to exclude infection, to ensure safety of senior residents. No Covid-19-positive patient can resume residence until definitively cleared by testing.

We must continue to educate and inform the public about what they have already successfully learned regarding the at-risk group. That means issuing rational guidelines advising the highest standards of hygiene and appropriate social distancing while interacting with elderly friends and family members at risk, including those with diabetes, obesity, and other chronic conditions.

Second, those with mild symptoms of the illness should strictly self-isolate for two weeks. It's not urgent to test them – simply assume they have the infection. That includes confinement at home, having the highest concern for sanitization, and wearing protective masks when others in their homes enter the same room.

Third, open all K-12 schools. If under 18 and in good health, you have nearly no risk of serious illness from Covid-19. Exceptions exist, as they do with virtually every other clinically encountered infection, but that should not outweigh the overwhelming evidence to the contrary. Again, standards for consciously protecting elderly and other at-risk family members or friends, including teachers in higher-risk groups, should still be employed.

Fourth, open most businesses, including restaurants and offices, but require new standards for hygiene, disinfection, and sanitization via enforceable, more stringent regulations than in the past. It is reasonable to post warnings for customers who are older or in other ways vulnerable. Avoid unnecessary requirements for spacing of customers, though – it is not logical that otherwise healthy adults, especially younger age groups, should be isolated or maintain a six-foot spacing from each other. If infection is still prevalent, socializing among these low-risk groups represents the opportunity for developing widespread immunity and eradicating the threat.

Fifth, public transportation, the lifeblood of much of the workforce in cities, should resume. In addition to new standards of cleanliness and hygiene that passengers would welcome, regional authorities could require barrier masks for passengers. Given the state of our fearful public, it seems highly likely that most people will choose to wear them.

Sixth, parks and beaches should open. The closure policy was aiming to prevent all social mingling. There is no scientific reason to insist that people remain indoors. Given now that we know who to protect and how to protect them, even inside our homes, outdoor sports activities can resume. Smart, considered limits on large group gatherings should be advised.

Finally, implement prioritized testing for three groups: nursing home workers, health care workers and first responders, and patients in hospitals with respiratory symptoms or fever. Widespread testing for the whole population is not a predicate for reopening as above. And contact tracing is not as valuable after a disease is already widespread, even though it would be an important part of the overall preparation for potential future outbreaks.

Targeted protection for the known vulnerable, standards and commonsense recommendations for individuals and businesses, and prioritized testing form the basis of an urgently needed, strategic re-entry plan that would save lives, prevent overcrowding of hospitals, and limit the enormous harms compounded by continued total isolation. Smart, safe re-entry cannot be delayed by fear or hypothetical projections, because we have direct data on risk and experience with managing it. The goal of the strict isolation has been accomplished. Let's stop underemphasizing empirical evidence and established medical science while instead doubling down on hypothetical models. Science and logic must prevail over fear and worst-case scenarios.