## The Washington Post

Democracy Dies in Darkness

**Coronavirus** 

Live updates

U.S. map

World map

F

## The U.S. faces two disastrous scenarios. There's a third option.

By Tim Searchinger, Anthony LaMantia and Gordon Douglas

March 23, 2020 at 4:50 p.m. GMT+1

Tim Searchinger is a research scholar at the Woodrow Wilson School of Public & International Affairs at Princeton University. Anthony LaMantia is a professor at Virginia Tech Carilion School of Medicine and Virginia Tech University. Gordon Douglas is professor emeritus of medicine at Weill Cornell Medical College.

Access The Post's coronavirus coverage for free through our newsletter.



and unsustainable scenarios. One is to keep the country in severe isolation for the next year or more until a coronavirus vaccine can be developed. The other is to return to occasional periods of something like normal life, to be followed by intermittent isolations to knock back new outbreaks.

Under either option, the suppression of spending will plunge the economy into a deep recession, and even directly ordered business closures will mean tens of millions unemployed. Even with intermittent isolation, hospitals would likely be overwhelmed and many people would die.

**AD** 

It is also difficult to imagine how either scenario can be sustained, particularly because the strongest benefit of social distancing comes from reducing fatalities for the elderly and the less healthy. Those young and healthier facing financial catastrophe will face overwhelming pressures to return to work, to reopen their businesses and to push government to relax restrictions.

So, what's the alternative, beyond discovery of a successful drug cocktail that would take the pressure off hospitals? We suggest a strategy of massive testing that goes far beyond the group currently being tested — those most likely infected. Instead, we need to test as many people as possible.

If we know who is infected, who is not and who has

recovered, we could greatly relax social isolation requirements and send both the uninfected and the recovered back to work. Although our health-care system is now struggling to produce enough tests even for those who are likely infected, we recommend a massive mobilization that would allow hundreds of millions to be tested.

**AD** 

There are two types of tests, and expanding both would

be necessary. The polymerase chain reaction, or PCR, test now in use identifies the genetic signature of the live virus and can identify those very recently infected. It requires someone to take swabs and package them, use of a PCR machine and trained professionals to run those machines.

The second type of test, a <u>serology</u> test, looks for antibodies or other proteins in the blood formed by the immune reaction to infection. These tests, still in development, could reveal those who had the disease and recovered, and confirm infection of some still with symptoms. It could probably be self-administered and produce results in minutes.

With enough of both kinds of tests, a variety of complementary strategies would be possible. Because live disease carriers would be more readily identified, it would be easier to trace and test their contacts and to quarantine the infected, particularly if a period of high isolation now greatly lowers infection rates.

**AD** 

In addition, with widespread serology tests, those recovered and presumably now immune and unable to transmit the virus could return to work and resume many social interactions. Although no one is absolutely sure the recovered cannot be reinfected and then infect others, they will almost certainly have substantial resistance. Given the other social costs, we must presume this resistance until it's proved otherwise.

Those both recovered and young — the doubly resistant — could also man the front lines of retail, delivery and health contacts.

To make this strategy work, governments would need to

involve employers, social organizations, schools and large retailers to conduct tests and provide time-stamped certifications. At least for the uninfected, retesting would be required at intervals to be determined based on infection rates.

How to move such an effort forward?

**AD** 

necessary. Mass testing might cost hundreds of billions, but it would be cheap by comparison with the alternatives. Congress should also exempt research labs from potential liability and provide replacement pay for those who test positive to allow them to self-quarantine.

Second, every facility capable of handling PCR tests should be pressed into service. We estimate that there are likely hundreds of thousands of machines able to run PCR in private research, commercial testing and crime labs. Technicians, graduate students and scientists need to be recruited to run these machines, and administrators reassured against liabilities. Others, preferably those recovered from the disease, should be trained to swab individuals. We suspect it should be possible to get PCR testing up to at least tens of millions per week.

Third, federal agencies — and if necessary, state agencies

— should seek out and independently verify the various serology tests already emerging on the market, and quickly approve those that have proved reliable. At least <a href="two">two</a> companies claim to have produced quick selfadministered tests, one for less than \$10.

AD

Fourth, the government should work with every facility in the country capable of manufacturing test kits and the chemicals needed to run them. It should commandeer resources if necessary.

Mass testing on the scale we propose would be

challenging and expensive, but it could help enormously. At a minimum, it would mean longer periods between societal lockdowns. It offers the best available alternative in a dire situation.

## Read more:

Read a letter in response to this piece: The infection spreading across America

Post Opinions staff: We need smart solutions to mitigate the coronavirus's impact. Here are five.

E.J. Dionne Jr.: The stimulus should focus on Americans who need the most help

AD