

Aylin Woodward, *World Economic Forum*, May 4, 2020

The COVID-19 pandemic could last for 2 years, according to US experts

 weforum.org/agenda/2020/05/coronavirus-pandemic-last-2-years

- A new report from researchers at the Center for Infectious Disease Research and Policy lays out three scenarios for how the coronavirus pandemic will progress in the coming months.
- Using the 1918 Spanish flu pandemic as a model, experts suggested the COVID-19 outbreak will last between 18 and 24 months.
- The pandemic "likely won't be halted until 60% to 70% of the population is immune", the report authors said.
- The worst of the three scenarios they outline involves a second, larger wave of coronavirus infections this fall and winter.

The coronavirus pandemic may last until 2022, according to a report published Thursday.

A group of researchers at the Center for Infectious Disease Research and Policy (CIDRAP) suggest that the COVID-19 outbreak won't end until 60% to 70% of the human population is immune to the virus, which may take between 18 and 24 months.

The experts laid out three scenarios for how the coronavirus pandemic will progress. The worst-case scenario among these three projections involves a second, larger wave of infections this fall and winter. The report authors suggest this is the most likely outcome, and states need to prepare for it.

"This thing's not going to stop until it infects 60 to 70% of people," Michael Osterholm, report author and the director of CIDRAP, told CNN. "The idea that this is going to be done soon defies microbiology."

'There is no crystal ball'



Gun-carrying protesters have been a common sight at some demonstrations calling for coronavirus-related restrictions to be lifted.

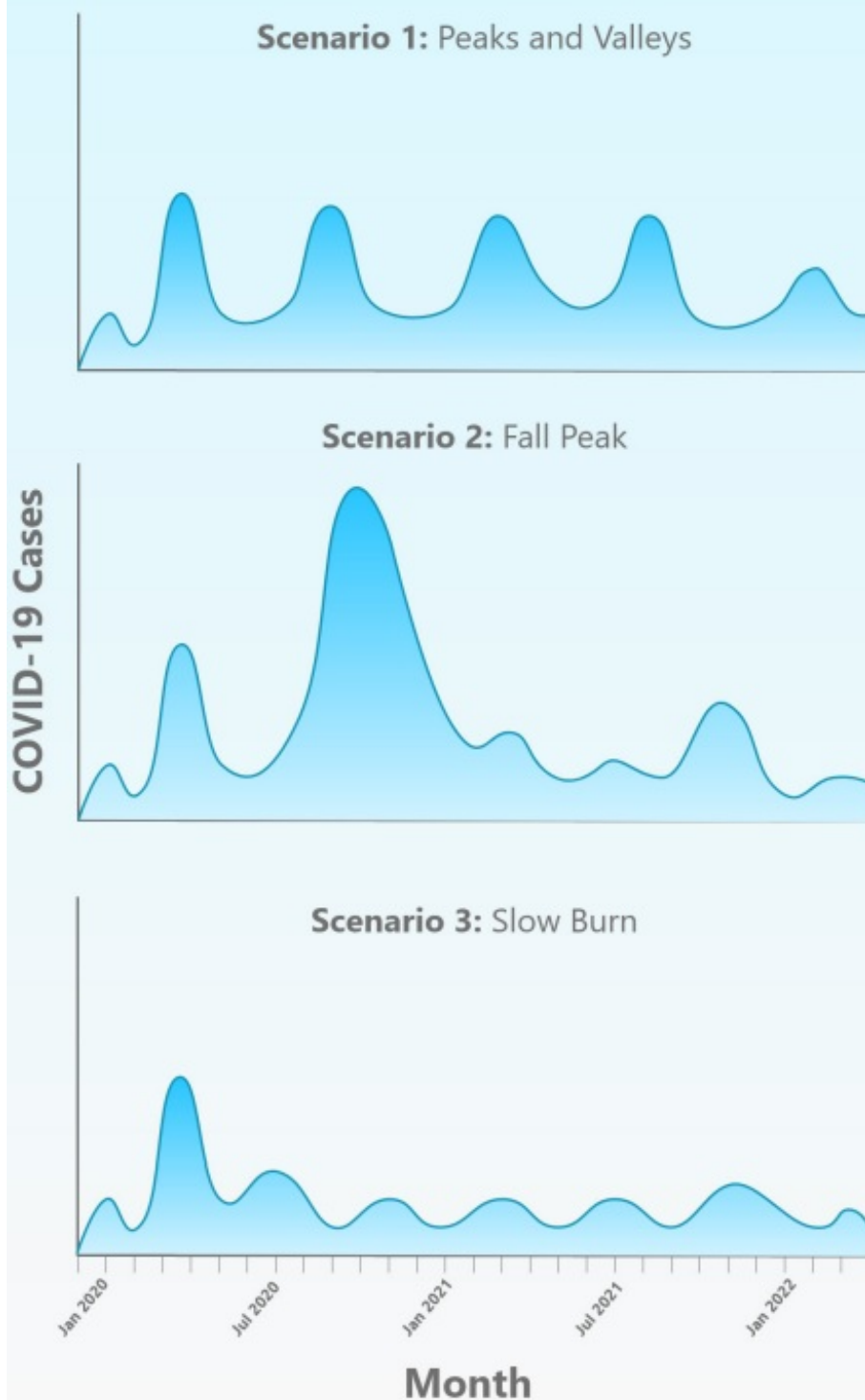
Image: Paul Sancya/AP

Osterholm and his colleagues examined multiple models that predict future coronavirus impacts, research about how well COVID-19 spreads between people, and data from past pandemics to reach their conclusions.

The coronavirus outbreak shares important similarities to a pandemic influenza, like the 1918 Spanish flu (which infected 500 million people worldwide), which makes this type of flu a solid model for comparison.

Both a pandemic influenza and the COVID-19 virus spread via droplets we emit when coughing or sneezing and can pass between infected people showing no symptoms — known as asymptomatic carriers. But even though pandemic influenza may be a good model to try and predict how the COVID-19 outbreak will play out, experts still aren't sure what to expect.

Possible Pandemic Wave Scenarios for COVID-19



The outbreak won't end until 60% to 70% of the human population is immune to the virus.

Image: CIDRAP

That's because the coronavirus spreads even more easily than the flu does; an average person with the coronavirus infects between 2 and 2.5 new people: a metric known as the virus' R0 value. Seasonal influenza's R0 value is about 1.3.

"There is no crystal ball to tell us what the future holds and what the 'end game' for controlling this pandemic will be," the report authors wrote.

That's why Osterholm's group came up with three possible scenarios about what might be coming after this first wave of coronavirus infections ends.

Scenario 1: The summer months and beyond brings a series of repetitive, smaller waves



People arrive at Hankou Railway Station in Wuhan to take one of the first trains leaving the city in China's central Hubei province.

Image: Noel Celis/AFP via Getty Images

In this projection, the first COVID-19 waves is followed by a series of repetitive, smaller waves that occur through the summer. Those waves, which come with a lower number of infections with persist over a one- to two-year period, gradually diminishing sometime in 2021.

The authors noted that where those smaller waves occur could depend on what measures certain geographic areas have in place to "flatten the curve," including social distancing and non-essential business closures, and how those measures are rolled back.

Scenario 2: A second, larger wave of infections hits this fall and winter



An elderly person arrives on a stretcher, and is admitted to NYU Langone Health Center hospital in New York City.

Image: ANGELA WEISS/AFP via Getty Images

The worst of the three scenarios, and the most likely, is one in which the first wave is followed by a larger wave in the fall or winter of 2020, and one or more smaller subsequent waves in 2021.

This mirrors what happened during the 1918 Spanish influenza pandemic and the 2009 H1N1 flu.

A second wave with more infections would require the US and other countries to reinstitute mitigation measures, like lockdowns, the authors wrote.

"States, territories, and tribal health authorities should plan for the worst-case scenario," they added.

Scenario 3: The world experiences a 'slow burn' of ongoing transmission



A commuter wears a mask while riding the New York City Subway as the outbreak of the coronavirus disease (COVID-19) continues in the Manhattan borough of New York.

Image: Lucas Jackson/Reuters

The final scenario suggests that this first wave of coronavirus infections is the only wave. In the coming months, the COVID-19 pandemic would shift into a "slow burn" of ongoing transmission and new cases.

"While this third pattern was not seen with past influenza pandemics, it remains a possibility for COVID-19," the experts reported.

This possibility would mean US states likely wouldn't need to lockdown again, although cases and deaths would continue to occur.

Each of these projections could be influenced by the development of a vaccine.

But any help a vaccine could provide during the pandemic will be a long time coming, the report authors said. The earliest a vaccine is expected is 2021.

"And we don't know what kinds of challenges could arise during vaccine development that could delay the timeline," they added.