Another Covid Surge May Be Coming. Are We Ready for It?

"We've been wearing rose-colored glasses instead of correcting our vision," one scientist said.



By Benjamin Mueller

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Scarcely two months after the Omicron variant drove coronavirus case numbers to frightening heights in the United States, scientists and health officials are bracing for another swell in the pandemic and, with it, the first major test of the country's strategy of living with the virus while limiting its impact.

At local, state and federal levels, the nation has been relaxing restrictions and trying to restore a semblance of normalcy. Encouraging Americans to return to prepandemic routines, officials are lifting mask and vaccine mandates and showing no inclination of closing down offices, restaurants or theaters.

But scientists are warning that the United States isn't doing enough to prevent a new surge from endangering vulnerable Americans and potentially upending life again.

New pills can treat infections, but federal efforts to buy more of them are in limbo. An aid package in Congress is stalled, even as agencies run out of money for tests and therapeutics. Though less than one-third of the population has the booster shots needed for high levels of protection, the daily vaccination rate has fallen to a low.

While some Americans may never be persuaded to roll up their sleeves, experts said that health officials could be doing a lot more, for example, to get booster shots to the doorsteps of older people who have proved willing to take the initial doses.

"You use the quiet periods to do the hard work," said Jennifer Nuzzo, an epidemiologist at Johns Hopkins Bloomberg School of Public Health. "You don't use the quiet to forget."

The clearest warnings that the brief period of quiet may soon be over have come, as they often have in the past two years, from Western Europe. In a number of countries, including Britain, France and Germany, case numbers are climbing as an even more contagious subvariant of Omicron, known as BA.2, takes hold.

In interviews, 10 epidemiologists and infectious disease experts said that many of the ingredients were in place for the same to happen in the United States, though it was unclear if or when a wave might hit or how severe it might be.

Case numbers are still dropping nationally, but BA.2 accounts for a growing proportion of those infections, rising to almost one-quarter of new cases last week. The subvariant is estimated to be 30 to 50 percent more contagious than the previous version of Omicron, BA.1.

In New York City, average daily case numbers rose by roughly 40 percent over the past two weeks, though they remain extremely low compared with recent months. In Connecticut, scientists estimate that the frequency of BA.2 infections is doubling every seven or eight days — half the rate of Omicron's growth this winter, but also considerably faster than the Delta variant's 11-day doubling time before that.

"I expect we'll see a wave in the U.S. sooner than what most people expect," said Kristian Andersen, a virologist at the Scripps Research Institute in La Jolla, Calif. He said that it could come as soon as April, or perhaps later in the spring or the early summer.

And given that some cases inevitably turn more serious, Dr. Andersen said, "yes, such a wave would be accompanied by rising hospitalizations and deaths."



Commuters at Waterloo Station in London, where the remaining Covid restrictions were lifted Feb. 22. In much of Western Europe, case numbers are climbing again. Neil Hall/EPA, via Shutterstock

Some experts cautioned, however, that BA.2 had not driven up case numbers in every country where it emerged. In a best-case scenario, they said, even if American case numbers started climbing, leftover immunity from the first Omicron wave this winter could help protect against a heavy surge of hospital admissions. And a shift toward outdoor socializing could temper an increase in case numbers.

For now, there are fewer Covid patients in intensive care units than during almost any other point in the pandemic. The vaccines appear to protect as well against BA.2 as they did against the previous version of Omicron, according to British data, and BA.2 does not seem to cause any more or less severe disease.

In trying to forecast what lies ahead, American health officials and scientists have debated what mixture of factors has driven up case numbers in Europe and just how serious the wave there could get.

The BA.2 subvariant began its march across Europe around the time that certain countries were lifting restrictions and mask mandates, potentially giving it extra kindling for its spread. Some scientists in Britain have also attributed that country's surge in part to the fact that immunity tends to weaken over time following

vaccinations or earlier infections.

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In some parts of Europe, like Denmark and the Netherlands, the peak of the BA.2 wave has already passed. In other countries, where case numbers have climbed since early March, hospital admissions have remained flat or risen only slightly.

But Britain has emerged as a more startling example of the potential for a surge in BA.2 cases to begin filling up hospital beds, too. People 70 and older in England have been infected at record levels, health officials said, with estimates that roughly one in every 30 people in that age group had Covid in the week before March 12.

As a result, the number of hospitalized Covid patients there has climbed by around 35 percent in recent weeks, though about half of those had tested positive incidentally after admission. To bolster protection, Britain plans to start administering fourth doses to older people later this month.

In the United States, too, scientists are concerned that so many people have gone more than six months since their last doses of vaccine, reducing levels of immunity. Pfizer and BioNTech have asked American regulators to authorize fourth doses in older people, and Moderna is seeking clearance for the additional shots for all adults.

It is less clear whether relaxing Covid rules in the United States will help fuel transmission to the same degree that it may have in some European nations. Parts of the United States have effectively been without restrictions for months.

"There are lots of moving parts," said David Dowdy, an epidemiologist at Johns Hopkins University. "It's really difficult to disentangle which of these is driving any given wave."

Fewer than half of Americans who have received primary vaccine doses have taken booster shots, putting the United States in a more precarious position. Even though case numbers are so low, nearly 1,200 Americans on average are dying each day from Covid — a rate far higher than in Western Europe, where older people tend to have received vaccines and boosters in higher numbers.

As time passes, two doses become less effective at preventing Omicron-related hospitalizations, British estimates suggest, whereas a booster dose restores protection to considerably higher levels.

Adding to the alarm in the United States, this week a number of wastewater testing sites had showed drastic increases in viral levels on a Centers for Disease Control and Prevention map.

But scientists said that it was difficult to measure changes while viral levels were so low and that the true picture was more muddled: Some wastewater sites in states like Massachusetts, Connecticut and Ohio had observed growing viral levels, while many others had not.



Preparing boosters in a Covid center in Washington, D.C. Americans are still dying from Covid at a rate of nearly 1,200 a day. Kenny Holston for The New York Times

Whatever lies ahead, scientists said that now was the time to get more people vaccinated, while the country still had a say in the shape of any coming wave.

"We should be reading about how the federal government is using its resources to go nursing home to nursing home, and church to church, to get booster numbers up," said Sam Scarpino, the managing director of pathogen surveillance at the Rockefeller Foundation.

But the federal government is warning that pandemic funds are drying up. Senate Republicans have said that they will not approve \$15 billion in new coronavirus aid without offsetting it by cutting spending elsewhere. House Democrats have balked at a proposal to repurpose money intended for state governments to spend on their pandemic responses.

With the aid package stymied for now, federal officials said that they would need to start cutting shipments of monoclonal antibody treatments to states next week by more than 30 percent. The government has secured 20 million antiviral pills, but orders for more are on hold. And by June, officials said, the federal government's efforts to ensure that companies keep producing enough tests will run out of money, imperiling capacity for later this year.

There is not enough money to guarantee sufficient purchases of variant-specific booster shots if they are needed, federal officials said. And while those shortages would affect all Americans, uninsured people would face particular risks because a federal program to reimburse providers for testing, treating and vaccinating

those without insurance could end in early April.

"There are so many things we could be doing, yet the United States has time and time again chosen to be reactive, rather than proactive, and that has cost us dearly," said Anne Rimoin, an epidemiologist at U.C.L.A. "We've been wearing rose-colored glasses instead of correcting our vision."

A key question remains how much protection people who got sick with the previous version of Omicron can count on — and for how long. A lab study published this week found that vaccinated people who were infected with Omicron had high levels of antibodies that would probably protect against BA.2. If that protection lasts, it could reduce the impact of any wave, given the country's high levels of infection this winter.

"I think it's reassuring," said Dr. Dan Barouch, a virologist at Beth Israel Deaconess Medical Center in Boston and a co-author of the study.

But some scientists said they worried that the immune defenses people built up during the first Omicron surge would wane, leaving them more susceptible to BA.2.

"The timing of BA.2's emergence, and the potential waning in immunity from the BA.1 wave with masks coming off, isn't great," said Nathan Grubaugh, an epidemiologist at the Yale School of Public Health.

Even health experts who said they had become accustomed to the boom-bust cycle of pandemic funding said they were shocked that the money was drying up so soon after the country had outlined plans for adjusting to a new normal.

That money, they said, was essential for avoiding full-scale shutdowns, and instead detecting surges early enough that health officials could recommend masks or increased testing in particular areas and help hospitals prepare.

"People naturally, sensibly want to get back to their lives," said Jeffrey Shaman, an epidemiologist at Columbia University. "The question, then, is how quickly would we be able to stand up a response?"

Benjamin Mueller is a health and science reporter. Previously, he covered the coronavirus pandemic as a correspondent in London and the police in New York. @benjmueller

A version of this article appears in print on , Section A, Page 1 of the New York edition with the headline: U.S. Isn't Ready If Covid Surges, Scientists Warn

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New Research

- Researchers are keeping an eye on a highly transmissible Omicron subvariant known as BA.2. Here's what we know so far.
- The Johnson & Johnson Covid vaccine was said to be among the least protective. But new data suggests it is as effective as the two mRNA options.

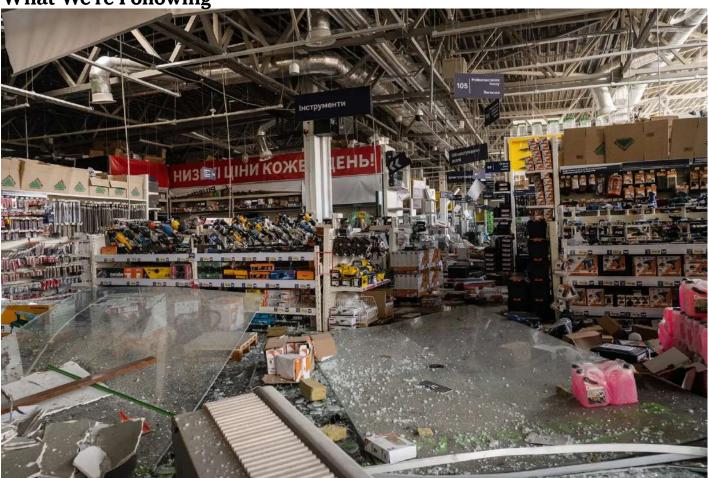
In the United States

- Dr. Anthony Fauci predicted an "uptick" in coronavirus infections in the United States similar to the current increase in Europe.
- Some states will close mass testing sites in the coming weeks despite concerns that the nation may be unprepared for a new wave of cases.

Around the World

- As Omicron surges and its economy suffers, China is fine-tuning its zero-tolerance playbook to try to make containing outbreaks less punishing.
- Austria will reintroduce an indoor mask mandate, bucking a trend among European countries to lift precautions despite rising cases.

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