

Prognosis

# CDC Limits Review of Vaccinated but Infected; Draws Concern

By [Elaine Chen](#)

May 9, 2021, 6:00 PM GMT+8

Updated on May 10, 2021, 8:17 PM GMT+8

- ▶ Little is known about tiny number of Covid breakthrough cases
- ▶ CDC shifts strategy in May to focus only on hospitalized, dead



World Turns to China for Vaccines

[Sign up here](#) for our daily coronavirus newsletter on what you need to know, and [subscribe to our Covid-19 podcast](#) for the latest news and analysis.

Federal health officials this month decided to limit how they monitor vaccinated people who have been infected with Covid-19, drawing concern from some scientists who say that may mean missing needed data showing why and how it happens.

At the end of April, more than 9,000 Americans were reported to be infected after being vaccinated, according to the U.S. Centers for Disease Control and Prevention. While that's a tiny

percentage of the 95 million people fully inoculated at the time, researchers still want to find out what specific mechanisms may be spurring the infections.

Rare breakthrough cases are expected since no vaccines are 100% effective. But tracking and sequencing the cases helps in figuring out who may be more at risk, whether new variants evade the vaccines and when protection from the shots begins to wane. At the same time, those infected -- some of whom are suffering widespread medical issues, even if they're not hospitalized -- say they feel lost as a result of the lack of information.

"We shouldn't be narrowing the focus, we should be broadening and develop a systematic plan," said Eric Topol, director of the Scripps Research Translational Institute in La Jolla.

At the start of May, the CDC shifted from monitoring all reported breakthroughs to only those that result in hospitalization or death, Tom Clark, head of the vaccine evaluation unit for the CDC's vaccine task force, said in an interview. The goal of the new strategy, according to the agency: maximize the quality of data collected on cases.

TOTAL NUMBER OF BREAKTHROUGH INFECTIONS REPORTED TO CDC	9,245
Females	5,827 (63%)
People aged 60 and older	4,245 (45%)
Asymptomatic infections	2,525 (27%)
Hospitalizations	835 (9%)
Deaths	132 (1%)

The CDC says its numbers are probably an undercount, since their surveillance system is passive and relies on voluntary reporting from state health departments that may not be complete.

The agency shifted its strategy because there's few worrying patterns in the data collected so far, suggesting the focus should be on the most severe cases, Clark said. He added that the agency has planned other vaccine studies, including one with a network of health centers, to compare disease severity and frequency of variant infections between vaccinated and unvaccinated people.

**More from****Singapore Moves Back Toward Lockdown as Virus Cases Rise**

---

**Japan Expands Virus State of Emergency Ahead of Olympics**

---

**Modi Says Virus Is Rapidly Spreading in India's Rural Areas**

---

**U.K. May Move Up Second Dose; German Cases Drop: Virus Update**

“I don’t think we’re missing out on this data,” Clark said. “It’s just sort of a package of how we’re looking at these questions.”

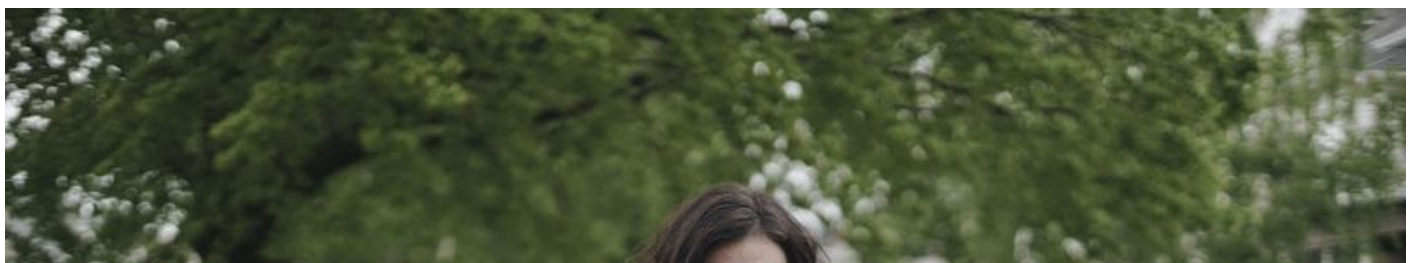
Michael Kinch, a former drug developer who’s now associate vice chancellor at Washington University in St. Louis, says as much information as possible should be recorded on breakthroughs. Cases that don’t rise to hospitalization are still important to track, he said, since symptoms that aren’t as severe for someone could eventually lead to hospitalizations. Non-life-threatening symptoms can impact someone’s life greatly, and evolve over time, Kinch said.

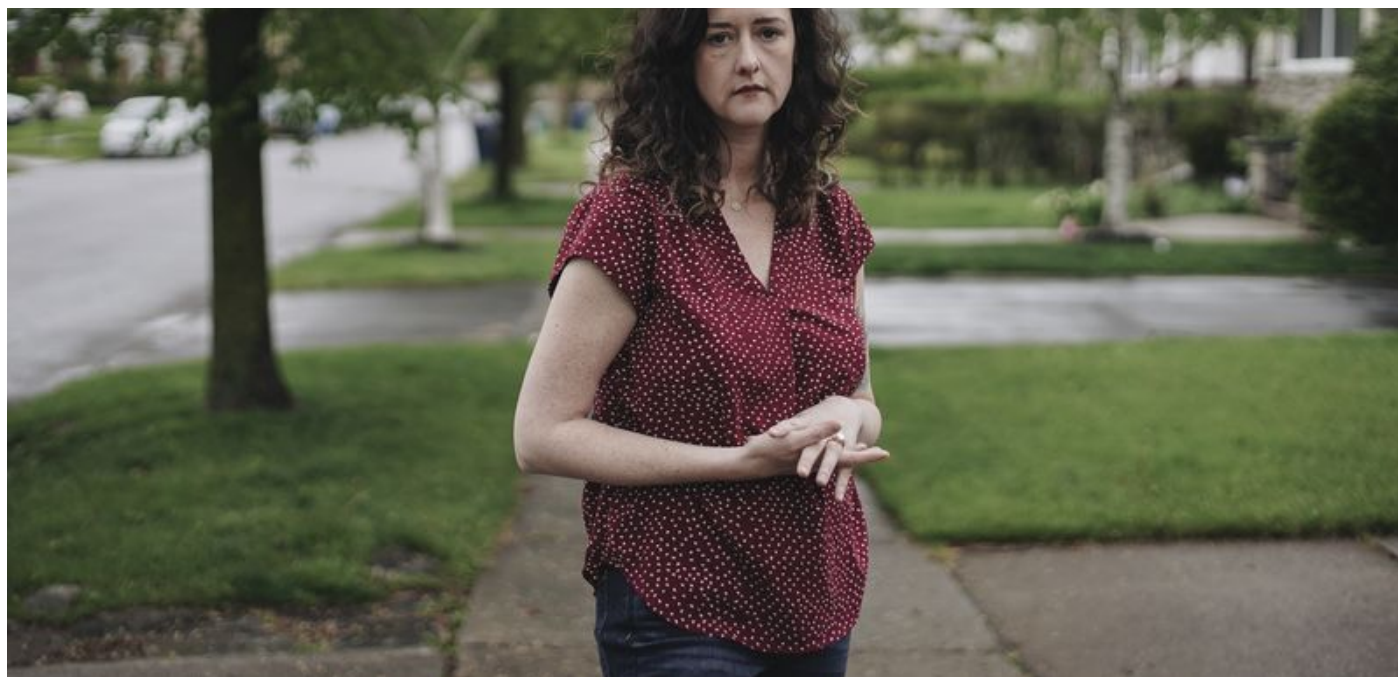
“It’s essential that we stay on top of this,” he added. “If we let our guard our down, we will pay the price.”

## Huge Price

In late March, several days after she began feeling headaches and light-headedness, Melissa Muldoon, a 35-year-old resident of Buffalo, New York, went on a run and lost consciousness.

Muldoon was taken to an emergency room, where she took a Covid-19 test, she said in an interview. The next day, it came back positive more than a month after she had been fully vaccinated. A week later, she began developing new symptoms, she said, including a loss of smell for certain foods, a racing heart and muscle twitches.





Melissa Muldoon at the spot where she collapsed while finishing a run in March, in Buffalo, New York. *Photographer: Libby March/Bloomberg*

She said some health professionals questioned how much of a role Covid played, given she was inoculated. But Muldoon wonders how it could be anything else given the quick onset and combination of symptoms.

“I’m anxious about what happens if there’s no answer,” she said, “and it just keeps up with random problems or strange things happening with my body that I haven’t experienced before.”

## What’s Known

What’s known so far about breakthroughs is encouraging for the vaccination effort, scientists say, with current research indicating that people in breakthrough cases tend to be either asymptomatic or to have only mild symptoms. There is some evidence as well that vaccination may make illness less severe, according to the CDC, and scientists have also detected infectees that don’t spread Covid to others. But little else is known.

Clinical trials weren’t designed to study how the vaccines perform in specific subgroups and people with certain medical conditions weren’t included, said Lee Harrison, a professor of medicine and epidemiology at the University of Pittsburgh.

At a more granular level, the specific mechanisms that explain how breakthroughs occur should be further investigated, said Alex Greninger, assistant director of the clinical virology laboratories at the University of Washington Medical Center. The conventional thinking is that

those who mount less of a response to vaccines would be more susceptible to getting breakthrough infections, he said. But Greninger said he's seen a few cases where people developed strong immune responses to the vaccines, yet still got infected.

## Link to Variants

Scientists are also trying to figure out whether a disproportionate number of breakthroughs are linked to variants. However, studying all this is difficult given that number of cases is small and some may not be detected at all since many are asymptomatic or have only mild symptoms, said Stefan Green, co-principal investigator at the Regional Innovative Public Health Laboratory at Rush University.

Green said he's also seen in a few cases that viral loads are too low to conduct whole genome sequencing on, similar to what some other researchers have found.

Breana Landon, a 23-year-old Utah resident, has also been experiencing ongoing symptoms.

Landon tested positive for Covid in late March after being fully vaccinated, she said. It was her second time testing positive, and her second shot came six days later than is recommended. She was told, though, that missing the deadline didn't matter.

The first time she was infected came last fall, before she got vaccinated. She had respiratory problems then that developed into pneumonia. This time, she experienced a whole new set of symptoms, including persisting heart palpitations and pain.

## 'Dead End'

"I feel a little lost, almost, kind of at a dead end," Landon said in an interview. She recognized it's possible she never fully recovered from the first round of Covid, but she had gotten multiple negative tests before she tested positive again.

---

## The latest Covid updates

Make sense of the headlines and the outbreak's global response with the Coronavirus Daily.

Enter your email

Sign Up

Please enter a valid email address

☐ Bloomberg may send me offers and promotions.

By submitting my information, I agree to the [Privacy Policy](#) and [Terms of Service](#).

---

When she called with her local health department, they told her she probably got infected with a variant but didn't ask further, she said. "They didn't want to do a PCR test, do any sequencing on it or research it further, which made me feel even more at a dead end," Landon said. "I mean, isn't this something we want to look into? We're in the middle of a pandemic, and don't we want to research this and find out what's going on?"

Jenny Johnson, a public information officer at the [Utah Department of Health](#), said the agency encourages people to get the appropriate PCR testing within 48 hours of a positive rapid test. Tracking down samples for sequencing is challenging since they're taken from PCR tests, which is up to the individual to take, she said.

## Treading Carefully

Those who experience breakthroughs also feel like they must tread carefully even when talking about their experiences.

Muldoon posted about her situation on Facebook because she wanted to hear from others with similar symptoms. But she said, "I felt conflicted talking about it because I don't want it to seem like I'm encouraging people not to get vaccinated."

Peyton Azar felt similarly about her breakthrough experience. The 21-year-old is on immunosuppressants for a kidney transplant and has had to go to the emergency room for the common cold before, she said. Yet when she got Covid after vaccination in early April, she felt only mild cold-like symptoms.

She's always appreciated vaccines in general, she said. "I think getting Covid with the vaccine and seeing how mild it was, I appreciate it even more."

Even then, "I've been scared that someone will take this information and be like, 'oh well I heard of a girl who got Covid even after she got vaccinated, so the vaccines don't work.' "

*(Update adds CDC statement in the sixth paragraph that their data may undercount breakthrough cases.)*

[Terms of Service](#) [Trademarks](#) [Privacy Policy](#)

©2021 Bloomberg L.P. All Rights Reserved

[Careers](#) [Made in NYC](#) [Advertise](#) [Ad Choices](#) [Help](#)