

US study finds tiny number of vaccine 'breakthrough' COVID cases

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A US government study reported very few instances of fully vaccinated people becoming infected with Covid.

About 0.01 percent of people became infected with COVID-19 between January and April despite being fully vaccinated, a US government study confirming the shots' high efficacy showed Tuesday.

The report published by the Centers for Disease Control and Prevention (CDC) documented socalled "breakthrough" cases among 101 million people fully vaccinated in the United States.

"Even though FDA-authorized vaccines are highly effective, breakthrough cases are expected, especially before population immunity reaches sufficient levels to further decrease transmission," the report said.

It examined the period from January 1 to April 30.

A total of 10,262 infections were documented at 14 days or more after the final dose of a vaccine provisionally authorized by the Food and Drug Administration —Pfizer, Moderna or Johnson & Johnson.

Of these cases, 6,446 or 63 percent occurred in females, and the median patient age was 58 years.

Among the total number of breakthroughs, 2,725 or 27 percent were asymptomatic, 706 or seven percent were hospitalized for reasons related to COVID, and 132 or one percent died from reasons related to COVID.

The rate of breakthrough infections are thus roughly 0.01 percent, hospitalizations are 0.0007 percent, and deaths are 0.0001 percent.

The genomic sequences were available for five percent of all infections, and showed that 64 percent of cases came from variants of concern.

The most significant was B.1.1.7 that was first identified in the United Kingdom.

The study occurred during a period when the coronavirus was surging through the United States, with approximately 355,000 cases reported in the last week of April alone.

"The number of COVID-19 cases, hospitalizations, and deaths that will be prevented among vaccinated persons will far exceed the number of vaccine breakthrough cases," the authors wrote.

The CDC noted that the actual number of vaccine breakthrough cases is likely to be substantially higher because most will result in asymptomatic or mild infections that won't be tested.

The data on variants is also limited by the lack of widespread surveillance systems.

On May 1, the CDC switched from monitoring all data on breakthrough infections to only looking for severe cases and deaths, which are of greater clinical importance.

But some scientists said they would be missing out



on valuable data and criticized the decision.

About 164 million people, 50 percent of the United States' total population have now had at least one dose of vaccine, while 39 percent are fully vaccinated.

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