

# Almost 47 million Americans already infected with coronavirus by Nov. 15, study says

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(HealthDay)—By Nov. 15 of last year, roughly 47 million Americans—about 14.5% of the U.S. population—had already been infected with the new coronavirus, a new study finds.

That's much higher than the close to 11 million *known* U.S. cases of infection that were recorded by that date, the researchers said, because reported cases "do not represent the full SARS-CoV-2 disease burden."

"Case reports are dependent on patients seeking [health care](#)," among other factors, and at least 40% of all infections are thought to be asymptomatic, according to a team led by Dr. Frederick Angulo. He works in medical development and scientific/clinical affairs at Pfizer Vaccines, which has an approved COVID-19 vaccine already in distribution in the United States.

It's believed that everyone who becomes infected

with the new coronavirus will develop some form of immunity. And if enough of the population (about 70%) were to gain immunity—either through infection or vaccination—so-called "herd immunity" would set in, thwarting the virus' ability to spread further.

But the numbers for Nov. 15, 2020 show that herd immunity is still far away, the research team said.

"Findings of this study suggest that although more than 14% of the U.S. population was infected with SARS-CoV-2 by mid-November, a substantial gap remains before herd immunity can be reached," they reported Jan. 5 in *JAMA Network Open*.

The Nov. 15 numbers were based on a total U.S. count of recorded cases on that date of 10,846,373.

Infection rates have exploded across the United States since then, and according to a tally kept daily by *The New York Times*, more than 20.8 million verified cases have been recorded as of Tuesday.

Even so, Americans remain far away from herd immunity, one expert said, so the rollout of a nationwide vaccination campaign remains imperative.

"While it has always been the case that a major underestimate of the true disease burden with COVID-19 has been present, most parts of the country have *not* reached [herd immunity](#)," said Dr. Amesh Adalja, an infectious disease expert and senior scholar at the Johns Hopkins Center for Health Security, in Baltimore.

"This underscores the need for vaccination uptake to be optimal to put this pandemic behind us,"

Adalja said.

In their study, Angulo's group analyzed data from four "seroprevalence" ([blood test](#)) surveys conducted by the U.S. Centers for Disease Control and Prevention in April, May, June, July and August. These surveys were conducted in 10 states (California, Connecticut, Florida, Louisiana, Minnesota, Missouri, New York, Pennsylvania, Utah and Washington). A fifth CDC survey was conducted in 47 states nationwide.

All of that data helped the researchers estimate the level of "under-reporting" of [coronavirus](#) infections—the gap between the number of people recorded as having COVID-19 and the larger "true" number of cases, reported and unreported.

Angulo's team used those calculations to come up with an estimated number of 46,910,006 cases of SARS-CoV-2 infection having occurred among Americans by Nov. 15, 2020.

The researchers stressed that the COVID-19 pandemic is not a static phenomenon, so these calculations "will change over time as the proportion of persons with [infection](#) tested, diagnosed and reported changes." Their calculations may, in fact, be "conservative," the team said.

The introduction of an immunization campaign could change the numbers greatly, as well, so additional surveys are needed "to monitor the pandemic, including after the development of safe and efficacious vaccines," Angulo and colleagues concluded.

**More information:** Find out more about the unfolding pandemic at the [U.S. Centers for Disease Control and Prevention](#).

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