

Gov. Greg Abbott's claim that Texas is 'very close' to herd immunity is not 'even close' to being true, says expert

Thomas Colson
Apr 12, 2021, 7:40 AM

- Gov. Greg Abbott claimed the state of Texas is "very close" to herd immunity.¹
- The claim has been disputed by experts.
- "There is no way on God's green earth that Texas is anywhere even close to herd immunity," an epidemiologist told the New York Times.

Gov. Greg Abbott's claim that the state of Texas is "very close" to herd immunity has been dismissed by a leading expert, who said there was "no way on God's green earth that Texas is anywhere even close to herd immunity."

Abbott told Fox News on Sunday that: "When you add all the number of vaccinations that have taken place, as well as all of the acquired immunity from all of the Texans who have been exposed and recovered from COVID-19, it means very simply it's a whole lot more difficult for COVID-19 to be spreading to other people in the state of Texas.

"More than 70% of our seniors have received a vaccine shot. More than 50% of those who are 60 to 65 have received a vaccine shot. I don't know what herd immunity is but when you add that to acquired immunity, it looks like that could be very close to herd immunity," he said.

Herd immunity is when enough people in a population have immunity, either through vaccination or from past infection, to stop a disease from spreading uncontrollably.

¹ He didn't "claim" it. If you read the quote in this article, he said, "... , it looks like that could be very close to herd immunity." It's speculation, not a claim, as it should be, since no one knows for sure.

Scientists are unsure what percentage of a population needs to be immune from COVID-19, but many say it is likely to be 70% above or higher, the Associated Press reported.²

Dr. Antony Fauci, the leading US infectious diseases expert, predicted in December that the herd immunity figure could even be as high as 85% for coronavirus.

The emergence of new, more infectious could also complicate attempts to determine herd immunity threshold.

However, even by Gov. Abbott's terms, Texas does not appear to be "very close" to herd immunity.

Just 19% of Texans have received 2 shots of a coronavirus vaccination, according to Centers for Disease Control and Prevention figures cited by The Washington Post.

Further figures cited by the Post which were compiled by Columbia University predicted that, by January, a total of 31% of Texans had contracted the virus.³

² If you take Texas cumulative data, at the very beginning, the exponential portion has a slope of 0.292, from 9 March to 27 March, 2020. This gives a range of R_0 numbers, using an infectious period of 3 to 5 days, that ranges from 2.4 to 4.3, which in turn implies herd immunity of 58% to 77%.

³ This seems low. Texas has nearly 10% of the population with confirmed cases, which means a much higher number has actually had the disease. For instance, California has a similar population and case and fatality numbers, and Ioannidis IFR weighted median tally for 20 million Californians is 0.20%. The case fatality rate is 1.8% for Texas, so $1.8/.2$, using California as a proxy gives an estimate of the actual case to confirmed case ratio, or 9X. $9 \times 10\%$ is 90%, which even exceeds Dr Fauci's herd immunity estimate for the entire country mentioned here.

That could mean that at least 50% of Texans have immunity to COVID-19 but appears to fall well short of herd immunity.⁴

Michael Osterholm, a leading epidemiologist told the New York Times on Sunday of Abbott's claim: "There is no way on God's green earth that Texas is anywhere even close to herd immunity."⁵

He added: "Look no further than Michigan and Minnesota, which have much higher rates of vaccination than Texas. And we're already seeing widespread transmission."⁶

Bottom of Form

Perhaps it is not as high as that, but that estimate doesn't even include the effect of vaccines, which are supposed to increase the number of people immune.

⁴ 50% is probably close, not counting vaccines, corresponding to an IFR of 0.34% (Ioannidis USA weighted median). If the vaccine is 19% as stated here, that's probably a 50% overlap with those who already had it, so perhaps adds 10% to make it 60%. That would be very close to the low end of herd immunity estimated in footnote 1. On the other hand, CDC shows five scenarios with IFR weighted average ranging from 0.37% to 1.28%, with Scenario 5 at 0.73%, what they call their most up-to-date. This IFR is more than double the Ioannidis one of 0.34% above, which means the actual case multiple is less than half. A lot of room to speculate.

⁵ Hyperbole. No one really knows, this expert included.

⁶ What about actual infections with recovery? Widespread transmission where, exactly? Doesn't seem to be the case in Texas, at least not yet.