



SpaceX  
tourists  
speak to...  
Sep 18,  
2021



With  
tighter  
grip,...  
Sep 17,  
2021

Recommended by

## The world may never reach herd immunity against Covid-19



Delta is spurring widening outbreaks in countries like the US and UK that have already been walloped by the virus. PHOTO: AFP

PUBLISHED AUG 16, 2021, 4:05 PM SGT

NEW YORK (BLOOMBERG) - As Covid-19 surged last year, governments worldwide touted the hope of "herd immunity", a promised land where the virus stopped spreading exponentially because enough people were protected against it.

That's now looking like a fantasy.

The thinking was that the pandemic would ebb and then mostly fade once a chunk of the population, possibly 60 per cent to 70 per cent, was vaccinated or had resistance through a previous infection.

But new variants like Delta, which are more transmissible and have been shown to evade these protections in some cases, are moving the bar for herd immunity near impossibly high levels.

Delta is spurring widening outbreaks in countries like the United States and Britain that have already been walloped by the virus, and presumably have some measure of natural immunity in addition to vaccination rates of more than 50 per cent.

It is also hitting nations that have until now managed to keep the virus out almost entirely, like Australia and China.

This month, the Infectious Diseases Society of America estimated that Delta had pushed the threshold for herd immunity to well over 80 per cent and possibly close to 90 per cent.

Public health officials such as Dr Anthony Fauci have drawn controversy by shifting the goalposts over the past year, increasing the number of people who need protection before hitting herd immunity.

Meanwhile, vaccine hesitancy and supply issues mean most countries won't get close to even the original numbers.

"Will we get to herd immunity? No, very unlikely, by definition," said Dr Greg Poland, director of the Vaccine Research Group at the Mayo Clinic in Rochester, Minnesota.

Even a vaccination rate of as high as 95 per cent would not achieve it, he said.

"It is a neck and neck race between the development of ever more highly transmissible variants which develop the capacity to evade immunity, and immunisation rates."

## Not nature

Nature is not going to solve the problem either. It is unclear how long natural immunity gained from surviving Covid-19 will last, and whether it will be effective at fighting off new strains.

Future variants, including some that could evade immunity even more efficiently than Delta, raise questions about how - and when - this will be over.

"If it was as simple as getting the infection once means you are immune for life, that would be great, but I don't think that's the case," said Dr S.V. Mahadevan, director of South Asia Outreach at the Centre for Asian Health Research and Education at Stanford University Medical Centre. "That's a troubling problem."



Residents waiting to receive a dose of the Johnson & Johnson vaccine during mass vaccination at the Ilha Grande island in Rio de Janeiro on July 10, 2021. PHOTO: REUTERS

Already there are signs that some people, and some places - like Brazil and other countries in South America - are being battered a second time by newer strains.

Without herd immunity, the virus could linger for decades in some form, possibly forcing the world's most powerful nations to adjust their diverging strategies on opening borders and economies.

Countries like China that have pursued tight, so-called Covid-Zero policies by attempting to wipe out every infection, may eventually have to consider a looser stance.

Others like the US and Britain, which have opened up despite a resurgence of the virus, run the risk of wave after wave of infection.

Vaccines so far have not been the quick fix some had hoped for. Israel, among the most vaccinated countries in the world, has already started administering booster shots, amid evidence that the current immunisations are not offering the protection that was hoped.

Last week, the US said Americans with weakened immune systems will get a third dose.

#### MORE ON THIS TOPIC

---

[Covid-19 Delta's spread seen pushing herd immunity threshold above 80%](#)

---

[Reaching Covid-19 'herd immunity' is unlikely in the US, experts now believe](#)

The most powerful vaccines, including the mRNA shots from Pfizer-BioNTech and Moderna, would make it easier to reach high levels of immunity since they are so effective.

Yet breakthrough infections - cases in the immunised people - are possible with even these shots.

Other vaccines, including those made by China's developers, AstraZeneca and Johnson & Johnson, may offer even less protection.

Herd immunity is a real thing, protecting much of the world against viral threats from the measles to polio. Scientists credit it for helping eradicate smallpox.

Having herd immunity as a goal likely helped the world embrace measures like wearing masks and social distancing. But it also created a false narrative.

"The focus on 'herd immunity' has, in my view, been quite damaging," said Dr William Hanage, an epidemiologist and expert in communicable disease dynamics at the Harvard T.H. Chan School of Public Health.

"It presents people with an unrealistic vision of how the pandemic comes to a close and doesn't account for the evolution of either the virus or the nature of disease in reinfections."



A healthcare worker administers a Covid-19 vaccine in Moultrie, Georgia, on July 30, 2021. PHOTO: NYTIMES

Some countries learnt the shortfalls of herd immunity the hard way. British Prime Minister Boris Johnson originally planned to use it as the primary approach to Covid-19, suggesting some of his constituents could "take it on the chin" with natural infections before the magnitude of the coronavirus' force became apparent.

Others are now throwing in the towel, with Indonesia most vocally leading the way.

The world's fourth-most populous nation determined that it would be impossible to stop the virus even if everyone in the country was immunised.

It is redoubling its efforts to promote mask wearing and social distancing, while continuing to boost the still-low vaccination rate.

Meanwhile, Singapore and Australia are easing cautiously towards reopening, promising they will do so as they hit sufficiently high vaccination levels.

Populations in Covid-Zero nations usually have lower levels of natural immunity built through previous infections.

#### MORE ON THIS TOPIC

---

Vaccines versus variants: Will the world ever reach herd immunity?

---

No Covid-19 herd immunity in 2021 despite vaccines: WHO

## The end

Despite evidence that it will be difficult or impossible to reach herd immunity, many public health officials are not willing to give up on it.

Governments worldwide are focused on widening inoculation programmes.

Yet the individualistic approach of many countries, and vaccine shortages, are contributing to the global problem. The risk of the virus remains for everyone, as long as any nation is experiencing massive outbreaks.

The world is unlikely to put the pandemic behind it until 2022 at the earliest, experts say.

And that target could be pushed back if the virus mounts another metamorphosis to become even more transmissible or even better at evading resistance.

There is hope for new vaccines and other approaches that could stop transmission more dramatically, but none of those are in human trials yet. It will be a few years before they are a real possibility.

Instead, the virus has a high likelihood of remaining entrenched globally, causing outbreaks that are hopefully mitigated partly by vaccinations, masking and other public health-driven interventions.

"Delta is not something we will be able to eradicate," Dr Hanege said. "Even Alpha would have been hard. However with sufficient immunity, ideally achieved by vaccination, we can expect it to become a much milder illness."

## Revisiting 1918

The Spanish flu of 1918 shows how Covid-19 may play out, the Mayo Clinic's Dr Poland said.

It is likely that variants will continue to emerge, forcing the use of boosters or routine immunisations, targeted to the newer strains.

"Then, if we are lucky, what is likely to happen is that this will become something more akin to influenza, where we will always have it," Dr Poland said.

"It'll become more seasonal, just like the coronaviruses that are already circulating, and we will just have to keep immunising."

#### RELATED STORIES:



More Covid-19 patients can recover at home, shorter quarantine: New measures at a glance



South Korea planning to live 'more normally' with Covid-19 after October



Useful protection or not warranted? Third Covid jab debate rages

## Get unlimited access to all stories at \$0.99/month

- Latest headlines and exclusive stories
- In-depth analyses and award-winning multimedia content
- Get access to all with our no-contract promotional package at only \$0.99/month\* for the first 3 months

[Subscribe Now](#)

\* Terms and conditions apply