

Disruptive outbreaks expected after the borders are open.

A third booster could be Novavax in Australia.



Do not wait for your so-called favorite vaccine, as unvaccinated people are far more likely to die of COVID-19

It seems that highly transmissible Covid-19 variants – copies of Delta, are circulating in many overseas countries, and the fears that, when Australian borders are open soon, an influx of people returning or visiting Australia may result in an unexpected outbreak, is a possibility.

Complacency after 80% of people over 16 years fully vaccinated is questionable as incidence of breakthrough outbreaks are on the rise in other countries.

We are fortunate in Australia that the breakthrough COVID-19 infections have been slightly more than five hundred. It has been observed that the AstraZeneca COVID vaccine has the same rate of effectiveness in keeping people alive and out of hospital as much as the more popular Pfizer jabs some preferred.

The latest data from NSW Health showed that since March 21, there have been 317 locally acquired cases in people, with two doses of a vaccine. That puts the breakthrough infection rate at about 2.6 per cent.

In Queensland, of the 133 locally acquired COVID-19 cases reported last month, just fifteen were fully vaccinated

The federal government's chief infectious disease modeler said that the Oxford University-developed vaccine was on par with Pfizer when combating the aggressive delta variant, but in UK the Pfizer-BioNTech and Oxford-AstraZeneca COVID-19 vaccines though highly effective against the highly infectious Delta variant of SARS-CoV-2, but their protection drops away with time, a study of infections in the United Kingdom has found.

The vaccine made by Pfizer in New York City and BioNTech in Mainz, Germany, was 92% effective at keeping people from developing a high viral

load — a high concentration of the virus in their test samples — 14 days after the second dose. But the vaccine's effectiveness fell to 90%, 85% and 78% after 30, 60 and 90 days, respectively.

The vaccine developed by Oxford and the pharmaceutical company AstraZeneca in Cambridge, UK, was 69% effective against a high viral load 14 days after the second dose, falling to 61% by 90 days.

Third vaccine Novavax is coming to Australia

The federal government has said it expects Novavax to begin arriving in Australia, this November.

It is more likely that it will be used as the third booster, as more than 80 per cent of the people have received both jabs from AstraZeneca and Pfizer COVID vaccines.

What is the difference between Novavax and other mRNA vaccines?

mRNA vaccines like Pfizer and Moderna delivers active spike proteins into our bodies to develop antibodies to the active spike proteins.

Novavax delivers harmless version of the spike protein found on the surface of the SARS-CoV-2 virus, along with other chemicals to heighten your body's immune response.

Once the injection is delivered, your immune system learns how to fight the spike protein, which it can then do when confronted with the virus.

Novavax is called a subunit vaccine, because it uses harmless fragments of the virus to trigger an immune response.

It is described as a more “traditional” vaccine than mRNA or viral vector vaccine like AstraZeneca vaccines, which teach your body to create its own harmless spike proteins, which then trigger the immune system.

Efficacy of this subunit vaccine is recorded as 90.4 per cent against illness and one hundred per cent protection against severe illness.

Side effects after the second jab of this vaccine are short-term, and mild such as tenderness at the injection site, headache, aches, pains, and fatigue. The good news about Novavax is that the vaccine has a significantly lower rate of side effects compared to the Pfizer and Moderna vaccines.

Moderna vs. Pfizer vaccines compared.

Both these Covid vaccines were thought to be equally effective. With time this happened to be not true.

221 million doses of the Pfizer-BioNTech vaccine have been dispensed thus far in the United States, compared with about 150 million doses of Moderna's vaccine. In a half-dozen studies published over the past few weeks, Moderna's vaccine appeared to be more protective than the Pfizer-BioNTech vaccine in the months after immunization

Recent data published by the Centers for Disease Control and Prevention found that the efficacy of the Pfizer-BioNTech vaccine against hospitalization fell from 91% to 77% after a four-month period following the second shot. The Moderna vaccine showed no declines over the same period.

Meanwhile, it has revealed that a booster of Johnson & Johnson's COVID-19 vaccine may give more protection than a single dose as declared before.

"I think this frankly was always a two-dose vaccine," said FDA adviser Dr. Paul Offit of Children's Hospital of Philadelphia. "It would be hard to recommend this as a single-dose vaccine at this point."

What is long COVID?

WHO defined long COVID as a post-Covid-19 condition in individuals with a history of probable or confirmed SARS-CoV-2 along with symptoms lasting for at least two months?

Long Covid is defined as 'post-acute-Covid Syndrome'

Fortunately, it is not as fatal and hard-hitting as acute Covid-19 and mostly found to improve over time.

It may not be as fatal and hard hitting as acute Covid-19 and mostly improve over time but it can worsen existing ailments such as diabetes and kidney diseases.

Dr Khan Amir Maroof, professor at department of community medicine said, "But the deterioration of quality of life of these patients is worrisome. From a public health perspective, the disability -adjusted life years burden and economic repercussions could be high, which needs to be studied more" ..

Dr Maroof also said that preventing Covid will prevent long-Covid too.

"So, in a way, a vaccine is the key intervention for long-Covid too. Furthermore, some recent studies have shown that those vaccinated have lower intensity and duration of long-Covid as compared to the unvaccinated. So, initial results are promising"

Hope these updates are useful.

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