#### **Coronavirus** Singapore





NO LONG-TERM IMMUNITY

It is imperative to stress that having had Covid-19 does not make one immune to Sars-CoV-2 forever.

PROFESSOR LEO YEE SIN. executive director of the National Centre for Infectious Diseases, on the waning of protection after infection.

People waiting at the observation zone in Woodlands Community Club after getting their Covid-19 vaccination booster shot last November. Professor Leo Yee Sin said that effective vaccines, with the possibility of future boosters, remain the mainstay of protection against the virus. ST PHOTO: DESMOND WEE

# Covid-19 infection can hit more than once: NCID

Reinfections tend to be milder, but Omicron variant still carries with it a risk of severe illness

> **Timothy Goh Health Correspondent**

People who have had Covid-19 can get it again as acquired immunity against the virus wanes over time, Professor Leo Yee Sin, executive director of the National Centre for Infectious Diseases (NCID), told The Straits Times vesterday.

"It is imperative to stress that having had Covid-19 does not make one immune to Sars-CoV-2 forever," she said, adding that the waning of protection after infection has been well documented in previous waves of the virus.

And while most reports to date suggest that, in general, Covid-19 reinfections tend to be milder, Prof Leo added that even a less severe variant like Omicron carries with it a risk of severe illness. So, vaccines will remain one of the key sources of protection.

Prof Leo cited two studies from Qatar. One of the studies found that previous Covid-19 infection was 90.2 per cent effective against preventing reinfection by the Alpha variant, 85.7 per cent against Beta, 92 per cent against Delta and 56 per cent against Omicron.

When it came to protection against hospitalisation, the effectiveness was 69.4 per cent, 88 per cent, 100 per cent and 87.8 per cent against Alpha, Beta, Delta and Omicron, respectively.

Noting that severe illness among the reinfected was rare, Prof Leo said: "The lower protection against the Omicron variant is likely due to its immune-evasive ability, even in people with prior infection who have been vaccinated against Covid-19."

She also noted that Qatar's population is young, with only 9 per cent being above the age of 50.

The second paper Prof Leo cited studied two sub-lineages of Omicron – BA1 and BA2 – between December last year and last month, when Qatar experienced a surge of infections fuelled by Omicron.

During this period, 0.9 per cent of those infected with one Omicron sub-lineage were reinfected with another.

The study estimated that being infected with BA1 was about 94 per cent effective in protecting

against reinfection with BA2, while being infected by BA2 was 85.6 per cent effective in protecting against reinfection with BA1.

The authors concluded that either sub-lineage infection appeared to induce strong but incomplete protection for at least several weeks, but the longer-term effects remained unknown.

"These two studies demonstrated existence of reinfection in a highly vaccinated population against the background of high incidence of natural infection. They also demonstrated the nature of the virus, which is to continue to mutate and select the fittest," said Prof Leo, noting that the latter study was conducted over a short period in a young population.

She added that having caught the disease in the past does not make one immune from the coron-

Based on one of the Qatar studies, it is possible for someone to get reinfected with the same Covid-19 variant within two months, said Prof Leo, but the longer-term effects of the disease are uncertain for now.

"The longer the interval, the higher the risk of reinfection as antibody levels wane over time, provided there is no other intervention such as vaccination and booster, and given how the virus might mutate over time," she added.

When it comes to future variants, risk of reinfection depends on two main factors. First, how well the new variant can transmit itself compared with existing ones. Second, the virus could mutate and result in more severe illness, said Prof Leo. But to date, in general, most Covid-19 reinfections tend to have milder outcomes.

However, stressing that protection levels wane after infection, she cautioned that even less severe variants such as Omicron carry a risk of severe illness.

"Therefore, effective vaccines, with the possibility of future boosters, would remain the mainstay of protection in addition to non-pharmaceutical measures to keep one safe from Covid-19, she added.

Non-pharmaceutical measures refer to actions, aside from getting vaccinated and taking medicine, that slow the spread of illnesses.

"These also act to reduce virus transmission to slow down virus mutation, hence reducing the likelihood of new and more dangerous Covid-19 variants," said Prof Leo.

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### 22,201 new Covid-19 cases, with 1,499 patients hospitalised

#### **Clara Chong**

Daily new Covid-19 infections and hospitalisations in Singapore rose yesterday, with the total number of new cases at 22,201, while 1,499 people were hospitalised.

There were 13,520 infections and 1,477 people hospitalised on

The number of new cases has dropped compared to last Tuesday, when the Ministry of Health (MOH) recorded 24,080 new Covid-19 cases. Case numbers on Tuesdays tend to be higher compared with the rest of the week as they reflect the spike in infections after weekends, when more people are out in various social settings.

There were 15 deaths reported yesterday, up from six on Monday. The Covid-19 weekly infection chongcjy@sph.com.sg

growth rate remained below one at 0.95, MOH said in its nightly update. This is the seventh day in a row that the weekly infection rate has dipped under one since March 2. The rate refers to the ratio of community cases for the past week over the week before. A rate of more than one indicates that the number of new weekly Covid-19 cases is increasing.

There were 49 patients in the intensive care unit yesterday.

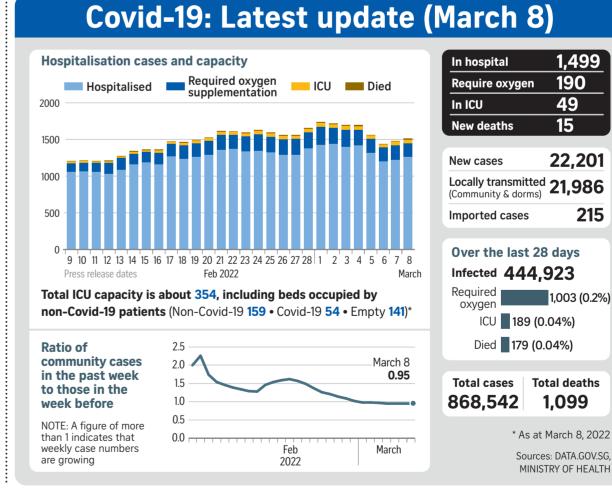
Of the local cases, 19,294 were detected through antigen rapid tests (ARTs), which means they were assessed by a doctor to have mild symptoms and of low risk

Another 2,692 cases were detected through polymerase chain reaction (PCR) tests.

There were 215 new imported cases, of which 58 were detected through PCR tests and 157 through ARTs.

Singapore has now recorded a total of 868,542 Covid-19 cases, with 1,099 deaths. About 95 per cent of the eligible

population have completed their full vaccination regimen, and 69 per cent of the total population have received their booster shot.



## S'pore giving \$20.5m to global coalition to tackle future pandemics

#### **Dominic Low**

Singapore will be contributing US\$15 million (S\$20.5 million) over the next five years to a global coalition set up to develop vaccines against future infectious dis-

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ease threats. The Coalition for Epidemic Preparedness Innovations (Cepi) plays an indispensable role in the global health architecture, Health Minister Ong Ye Kung said as he announced the move in a prerecorded speech on Wednesday.

"Transnational issues such as research and development, and scaling up manufacturing and distribution capabilities and capacity for vaccines, require increased collective financing and action," he said.

The minister's speech was telecast at the Global Pandemic Preparedness Summit 2022, which was jointly hosted in London by Cepi and the British government.

The summit aims to explore how the world can respond to the next pandemic by developing safe and effective vaccines within 100 days.

This goal is part of what Cepi is seeking to achieve with its fiveyear plan, which it announced last year. It is looking to raise US\$3.5 billion to implement the plan.

In his speech, Mr Ong said that countries around the world are Covid-19 pandemic, including through closures of borders, lockdowns and nationwide vaccination exercises, as well as unprecedented rapid development of vaccines and therapeutics.

"Meanwhile, trillions have been spent to prop up local economies and healthcare systems, even as the costs in human lives and ill health accumulate," he added.

The minister noted that it re-

doing their best to respond to the mains uncertain how the pandemic will develop, and that a coordinated, multilateral international response is needed.

> "We can never coordinate our actions as fast as a new variant will spread; but try we must," he said. "It is therefore only good sound

> sense to invest sufficiently and collectively in global transnational pandemic preparedness capabilities. We must not let the common good deteriorate to become a

tragedy of the commons."

Mr Ong said that all countries, whether large or small, are responsible for collectively rectifying the longstanding under-investment in pandemic preparedness.

"We strongly urge all countries to contribute towards our common goal of a strengthened global health system, and emerge stronger together from the pandemic."

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