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 **The Indian EXPRESS**

Community engagement vital to completely eradicate TB: Vice President Venkaiah Naidu

"TB among women often goes unreported as they do not come forward to seek medical care due to societal stigma and lack of awareness. Additionally, undernutrition and gender inequality make women more susceptible to TB," Union Minister Smriti Irani said.

By: [Express News Service](#) | New Delhi |
Updated: December 17, 2021 9:15:04 am



Ministers Mansukh Mandaviya (left), Smriti Irani and Vice President Venkaiah Naidu (middle) at the National Conference on Tuberculosis. (Twitter/@MoHFW_INDIA)

peaking at the National Conference on Tuberculosis at Vigyan Bhavan Thursday, Vice President [Venkaiah Naidu](#) said that people needed to be made key partners in the fight against TB to achieve a "TB Mukta Bharat" by 2025.

THE HINDU

ICMR designs kit for Omicron detection; invites EOI from manufacturers for its commercialisation

NEW DELHI, DECEMBER 20, 2021 12:56 IST



The agreement, following Eoi, is proposed to be executed on "non-exclusive" basis with multiple manufacturers due to the extensive demand of SARS-CoV2 Omicron (B.1.1.529) real-time RT-PCR.

The Indian Council of Medical Research (ICMR) has designed a diagnostic kit for detection of Omicron variant of the coronavirus and has invited Expression of Interest from in vitro diagnostics (IVD) kit manufacturers for undertaking transfer of technology for its development and commercialisation...

Continued in page no.40

The conference, organised by the Ministry of Women and Child Development, was also attended by union Health Minister Mansukh Mandaviya and WCD Minister Smriti Irani.

“More than any other disease, community engagement is vital to completely eradicate TB”, Naidu stressed.

Observing that the impact of tuberculosis is disproportionately felt on the vulnerable sections of society, he called for a massive mobilization of resources and multi-sectoral interventions to eradicate TB. “Facing the misery of abandonment and violence if found to have TB, it is not surprising that there are a large number of unreported and therefore untreated cases of TB amongst women”, he said.

He stressed on the need for concerted action from all levels of the government to achieve the target of complete eradication by 2025. Naidu called for improving the nutritional status of people, better contact screening, reducing out-of-pocket expenditure, having safety nets for the most vulnerable sections and early detection of TB in hilly and remote areas. The Vice President also urged elected representatives — MPs, MLAs and Gram Pradhans — to take regular reviews at the district- and sub-district level.

Union Minister for Women and Child Development Smriti Irani said that in India, women account for nearly 36 per cent of the total TB cases. “TB among women often goes unreported as they do not come forward to seek medical care due to societal stigma and lack of awareness. Additionally, undernutrition and gender inequality make women more susceptible to TB,” she said. Irani added that in 2020, as many as 6,90,000 women had TB.

Health Minister Mansukh Mandaviya, meanwhile, said that there were more than 25 lakh TB patients in the country. “We all have been witness to the Covid crisis over the past two years. But whereas over nearly five lakh people

have died from Covid, every year 4 lakh people in the country die from TB. And 65 per cent of those who succumb to TB belong to the 25-55 year category. This is not a small number and it has impacted families with the death of their main bread winners who belong to this age range,” he said on Thursday.



India must prepare for Omicron

Shahid Jameel writes: It is time to increase the pace of vaccination, keep hospital capacity ready and urgently formulate clear policies on vaccine boosters and vaccinating children

Written by [Shahid Jameel](#) |

Updated: December 17, 2021 9:48:07 am



Several laboratory studies have shown sera from people who had prior infection or vaccination or a combination to poorly neutralise the Omicron variant. (C R Sasikumar)

A new variant of the [Covid-19](#) virus, named [Omicron](#), has taken the world by storm ever since it was reported by South Africa on November 24, with the earliest sample dating back to November 9. Since then, it has been detected in 77 countries, showing local transmission in many and spreading rapidly. New modelling studies suggest 25,000 to 75,000 deaths in [England](#) by the end of April 2022. This has raised concern, especially since England has so far given two doses to about 70 per cent and

a booster dose to about 35 per cent of its population.

What do we know about the Omicron variant? It has by far the highest numbers of mutations of any other variant — 50 in all when compared to the original Wuhan virus. Of these, 32 make changes to the spike protein that covers the virus surface and 10 are in a region of this protein that promotes virus entry into our cells. Several of these mutations are found in other variants as well, but never came together in a single variant earlier. How do these changes alter the phenotype (behaviour) of the virus?

Data from South Africa and several European countries show a doubling rate of two to three days. A UK report shows its transmission in a household setting to be three-fold higher than Delta. Such rates can lead to an exponential rise in cases. But the good news is we know how to reduce spread with mitigation measures such as masks, ventilation, avoiding crowds, etc. Another piece of good news is that wherever Omicron is gathering steam, the proportion of people with severe disease is lower than expected. A large study by Discovery Health, South Africa's largest health insurer, released on December 14, showed the risk of hospitalisation among adults who contracted Covid-19 to be 29 per cent lower.

Researchers from the University of Hong Kong reported on December 15 that Omicron infects and multiplies 70 times faster than the [Delta variant](#) in the human airway, but infection in the lung is significantly lower. This could explain why Omicron transmits faster between humans but shows reduced disease severity.

Several laboratory studies have shown sera from people who had prior infection or vaccination or a combination to poorly neutralise the Omicron variant. First readouts on the effectiveness of the Pfizer vaccine show that over five months, it drops to 60 per cent against Delta and about 34

per cent against Omicron. A booster dose makes the vaccine 95 per cent effective against Delta and about 75 per cent against Omicron. This translates to about five times more breakthrough infections by Omicron compared to Delta.

Where does India stand? By July 2021, the 4th National Serosurvey estimated 67.6 per cent of Indians to have antibodies. Considering that the vaccinated fraction was very low by then, much of it came from infection. Despite an impressive delivery of 1.3 billion doses, only 38 per cent of Indians have received two doses and 59 per cent have received one dose. Global data shows that people with prior infection with other variants have minimal capacity to neutralise Omicron. This together with past experience and demography suggests that there may be rapid expansion of symptomatic infections in India over the coming weeks. While hospitalisations may remain lower than in the earlier waves, even a small fraction of a very large number is a large number. It is, therefore, prudent to keep hospital capacity ready and ensure adequate stocks of medicines, oxygen, etc.

India must also increase the pace of its vaccination to cover as many people with two doses as possible. Reducing the gap between two doses of Covishield from 16 to 12 weeks will speed this up. Though it is unlikely to stop symptomatic infection, a combination of prior infection and vaccination in a large fraction of adults will ensure low rates of severe disease, hospitalisation and mortality. Simultaneously, India should urgently formulate clear policies on vaccine boosters and vaccinating children. What vaccines can be used, how many doses would be needed, when should these be given and who should be prioritised?

About 90 per cent of doses given in India are of Covishield, which would not work well as a booster dose in people who have already received two doses of it. What are the other options? [Covaxin](#) can be used as a booster for

people vaccinated with two doses of Covishield and vice versa. The DNA vaccine ZyCoV-D can also be used. There are two protein vaccines available to India that will work well as boosters. Covovax manufactured by the Serum Institute of India for Novavax (USA) has completed phase 3 trials, is approved in Indonesia and SII has exported 50 million doses. [Corbevax-E](#) is manufactured by Hyderabad-based Biologicals E in partnership with Baylor College of Medicine and Dynavax Technologies (USA). Both vaccines await emergency-use approval in India.

A policy for boosters, like everything else, should be based on evidence, not emotion. Global data shows two doses are essential for protection from disease and a booster protects further from symptomatic infection. While we await local data, let us not delay preparing for boosters and vaccinating children.

Indians are not insulated from the world. This is one lesson we have learned painfully over the past year.



Great success in vaccine development, but inequity has to be addressed, says expert

The manufacturing scale up of Covid-19 vaccines that had been developed in record time required building new production lines, which are able to consistently produce millions of doses to the highest quality standards.

Written by [Anuradha Mascarenhas](#) | Pune |
Updated: December 17, 2021 9:22:38 am



The historic manufacturing scale-up, however, is overshadowed by a shared concern that Covid-19 vaccines are not reaching all who need them. (Representational)

A year since the first [Covid-19](#) vaccine was administered, vaccine makers including biotechnology firms and manufacturers in developing and developed countries say voluntary collaboration to share innovation has been a key enabler for manufacturing output to reach 11.2 billion doses in 2021. Experts also pointed out that 11 billion Covid-19 vaccines produced in 2021 has resulted in the biggest immunisation campaign in history.

Vaccine equity, however, has been a challenge. According to Sai Prasad, executive director of Quality Operations, Bharat Biotech, and president, Developing Countries Vaccine Manufacturers' Network (DCVMN), there has been failure in ensuring equitable access to vaccines for all nations.

Prasad made the remarks while addressing a virtual media conference organised by the Biotechnology Innovation Organisation (BIO), DCVMN, and the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA).

Responding to a question from [The Indian Express](#) on booster doses in India, Prasad said the National Technical Advisory Group on Immunisation was reviewing data on booster doses. "For paediatric vaccinations, we need to let them take their time to review datasets so

that they can come up with their recommendations, specially for a large country like India," he said.

On the emergence of the [Omicron](#) variant of the infection, he said, "We will have to wait and check the different data sets on efficacy of vaccines with two doses given in the early days, or then with a booster dose... for product developers like us, we also have to think about developing a new variant-specific vaccine or then check whether an existing vaccine with a booster dose helps..."

He also said that several companies in the DCVMN network were working on mRNA vaccines. The World Health Organisation (WHO), which is spearheading this effort, has called for participation from several companies. "There are also companies looking at polyvalent vaccines but for that, questions like whether a vaccine developed against Alpha variant is also protective against Delta and other variants have to be addressed," said Prasad.

"It is an excellent opportunity for scaling up manufacturing in Africa. There are mRNA vaccines under development, and at Bharat Biotech we are actively thinking of setting up a manufacturing facility in Africa," he said.

Meanwhile, on Thursday, independent data was released that confirms production of Covid-19 vaccines was scaled up to 11.2 billion doses in just one year. The analysis by Airfinity — a health data firm that provides global health intelligence and analytics — has shown that, by the end of March 2022, G7 and EU countries are projected to have 1.4 billion surplus vaccines, even after administering boosters. As much as 55.3% of the world population has received at least one dose of Covid-19 vaccine by now, while China, EU, India and the US are set to be the biggest vaccine producers in 2021, according to the data.

Dose sharing is gaining momentum to reach those who have not yet been vaccinated, and COVAX is ramping up fast to ensure doses are distributed equitably around the world. Today, more than 700 million doses have been shipped by COVAX to 144 countries; and nearly 1 billion doses ordered.

The manufacturing scale up of Covid-19 vaccines that had been developed in record time required building new production lines, which are able to consistently produce millions of doses to the highest quality standards.

Of these deals, 229 include various forms of voluntary collaboration that rely on technology transfer, sharing of know-how about the processes and the technologies used to make the vaccines, as well as training specialist personnel to ensure quality standards, said Thomas Cueni, director general, International Federation of Pharmaceutical Manufacturers and Associations (IFPMA).

The historic manufacturing scale-up, however, is overshadowed by a shared concern that Covid-19 vaccines are not reaching all who need them. "Vaccine inequity has to be addressed on a war footing. Yes, there has been great success in vaccine manufacturing and development, but what is the use if it does not reach people," Prasad said.

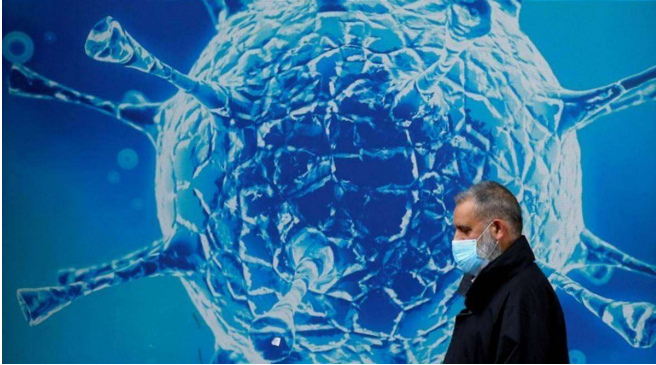


Omicron infects 70 times faster but may cause less severe disease: Study

The researchers used ex-vivo cultures of the respiratory tract to understand why Omicron

may differ in transmission and disease severity from other SARS-CoV-2 variants.

By: [PTI](#) | Beijing |
December 16, 2021 2:00:34 pm



According to researchers, taken together with the recent studies on Omicron, the overall threat from the variant is likely to be very significant. (File Photo)

The [Omicron](#) variant of [coronavirus](#) infects and multiplies 70 times faster than Delta and the original [COVID-19](#) strain, but the severity of illness is likely to be much lower, according to a study.

The yet-to-be peer-reviewed study provides the first information on how the novel variant of concern infects human respiratory tract.

The researchers from the University of Hong Kong found that Omicron infects and multiplies 70 times faster than the [Delta variant](#) and original SARS-CoV-2 in human bronchus, which may explain why it may transmit faster between humans than previous variants.

A bronchus is a passage or airway in the lower respiratory tract that conducts air into the lungs.

The study also showed that the Omicron infection in the lung is significantly lower than the original SARS-CoV-2, which may indicate lower disease severity.

The researchers used ex-vivo cultures of the respiratory tract to understand why Omicron may differ in transmission and disease severity from other SARS-CoV-2 variants.

This method uses lung tissue removed for treatment of the lung, which is normally discarded, for investigating viral diseases of the respiratory tract.

Michael Chan Chi-wai, Associate Professor at University of Hong Kong, and his team successfully isolated Omicron and compared infection from the variant with the original SARS-CoV-2 from 2020, and the Delta variant.

The team found that the Omicron replicates faster than the original SARS-CoV-2 virus and Delta variant in the human bronchus.

At 24 hours after infection, the Omicron variant replicated around 70 times higher than the Delta variant and the original SARS-CoV-2 virus, the researchers said.

Omicron replicated less efficiently — over 10 times lower — in the human lung tissue than the original SARS-CoV-2 virus, which may suggest lower severity of disease, they said.

“It is important to note that the severity of disease in humans is not determined only by virus replication but also by the host immune response to the infection, which may lead to dysregulation of the innate immune system,” Chan said in a statement.

“It is also noted that by infecting many more people, a very infectious virus may cause more severe disease and death even though the virus itself may be less pathogenic,” he explained.

Taken together with the recent studies that showed Omicron can partially escape immunity from vaccines and past infection, the overall threat from the variant is likely to be very significant, the researchers added.

Omicron is a dress rehearsal for the next pandemic

The same sequence unfolded nearly two years ago when the novel coronavirus, SARS-CoV-2, was first discovered. In those early weeks of 2020, the United States proved to be woefully unprepared for the challenges ahead, starting with the most fundamental of tasks: detecting the virus.

By: [New York Times](#) |

Updated: December 16, 2021 11:59:12 am



Shoppers walk along Oxford Street, Europe's busiest shopping street, in London Dec 15, 2021. (AP)

Written by Emily Anthes

When scientists discovered the highly mutated [omicron](#) variant of the [coronavirus](#) last month, it set off an eerily familiar chain of events.

Health experts held somber news conferences that raised more questions than answers. Officials imposed travel bans that very likely came too late. Virus trackers filled in their maps as the variant was reported in country after country. And the rest of us waited, with increasing unease, to learn more about the threat we were facing.

The same sequence unfolded nearly two years ago when the novel coronavirus, SARS-CoV-2,

was first discovered. In those early weeks of 2020, the United States proved to be woefully unprepared for the challenges ahead, starting with the most fundamental of tasks: detecting the virus.

“We had a delay of one to two months before we were even able to identify the presence of the virus,” said Dr. Charles Chiu, an infectious disease specialist and microbiologist at the University of California, San Francisco. “And by that time, it had already circulated widely between multiple states and from coast to coast.”

These failures have been well chronicled, and omicron is one more sign that the current pandemic, which has now claimed the lives of nearly 800,000 Americans, is not over.

But omicron is also a dress rehearsal for the next pandemic. The work before us now — detecting, tracking and slowing the spread of a health threat we do not fully understand — is the same work that will be required to stop a future outbreak in its tracks.

The analogy is not perfect. When omicron arrived, scientists had already developed vaccines and treatments for the virus and were on high alert for new variants. The next pandemic may come with less warning.

“We know that there are pathogens worse than SARS-CoV-2 that are emerging and reemerging and waiting for their moment to take off,” said Rick Bright, CEO of the Pandemic Prevention Institute at the Rockefeller Foundation.

Omicron's emergence is an opportunity to take stock of both the gains we have made and the ways in which we are still falling short. It is also a call to action: Whatever progress we have made is not enough.

Seek and You Shall Find

In any other context, it would have been unremarkable: On Nov. 28, a San Francisco resident who had been feeling mildly ill took a COVID test. The next day, it came back positive.

What set off alarm bells, however, was that the resident had recently returned from South Africa, where the newly discovered omicron variant was widespread.

The traveler's test sample was flagged for priority genomic sequencing, which would reveal the precise genetic code of the virus that had infected the traveler and whether it had omicron's telltale mutations.

Chiu, the microbiologist at UCSF, was tapped to do the sequencing. By 6 p.m. Nov. 30, just a few hours after Chiu first learned about the sample, it was hand-delivered to his lab, packed in dry ice.

Chiu and his colleagues quickly got to work. Although generating the full sequence takes hours, the scientists chose to use a technique known as nanopore sequencing, which allowed them to analyze the results in real time, while the process was still underway.

"As the data accumulated, we were able to identify more and more mutations," Chiu recalled.

Before dawn, he was certain: It was omicron, the first case found in the United States. Less than a week had passed since South Africa first publicly announced the existence of the variant.

We cannot fight what we cannot see, and preventing the next pandemic begins with detecting and tracking the pathogens that threaten us. In that regard, at least, "we're extraordinarily better off than we were this time last year," said Joseph Fauver, a genomic epidemiologist at the University of Nebraska Medical Center in Omaha.

Testing, Testing, Testing

The first link in the disease surveillance chain is testing. Who is infected, and where are they? Without accurate, timely testing, it can become impossible to curb the spread of a pathogen.

Unfortunately, America bungled testing from the beginning. The Centers for Disease Control and Prevention distributed faulty test kits, while supply shortages and regulatory delays created an epic mismatch between supply and demand. In the summer and fall of 2020, waits at testing sites could stretch for hours; the wait for results could take a week or more. There was no coordinated national testing plan.

These missteps allowed the virus to spread, unseen and unchecked, increasing the burden on hospitals and making other mitigation measures more difficult. Without accessible testing, the strategy that helped other countries break the chain of transmission — swiftly identifying people with the virus, isolating them and tracing their contacts — stood little chance.

As time passed, the testing crunch eased. Labs diversified their supply chains, bought new equipment and hired more staff, said Kelly Wroblewski, director of infectious diseases at the Association of Public Health Laboratories.

More and more tests won emergency authorization from the U.S. Food and Drug Administration, including rapid, at-home tests that delivered results on the spot.

But the United States is still doing less daily testing per capita, and it has a higher share of tests come back as positive than many other high-income countries, according to the Johns Hopkins Coronavirus Resource Center.

"We haven't done a great job on making tests available," said Dr. Ezekiel J. Emanuel, a bioethicist at the University of Pennsylvania who was a member of President Joe Biden's COVID-

19 Advisory Board during the presidential transition.

PCR processing times still vary widely, while rapid tests can be difficult to find in stores and remain beyond the budget for many Americans, especially because they are designed to be used frequently. (The Biden administration's new plan to have health insurers reimburse members for at-home tests may help but has its limitations.)

Many of these problems can be traced to the nation's failure to invest in testing early in the pandemic. The Trump administration created Operation Warp Speed to turbocharge vaccine development. The country needed a similar effort for diagnostic tests, experts said. Diagnostic testing may not be as tantalizing as vaccines, but in any future pandemic, they said, it should be a priority from the start.

Surveillance

The next vital link in the surveillance chain is routine, widespread genomic sequencing. This kind of surveillance helps experts keep tabs on how a pathogen is mutating and how new variants are spreading.

In the United States, this effort got off to a very slow start. "Many of the public health labs were, frankly, just overwhelmed by the initial testing volume and competing obligations," said Duncan MacCannell, chief science officer at the CDC's office of advanced molecular detection.

But in late 2020 and early 2021, the emergence of the highly contagious alpha variant and an influx of federal funding finally kicked genomic surveillance into a higher gear. Since January, the country has gone from sequencing fewer than 3,000 samples a week to 50,000 to 60,000, on average, according to the CDC.

And when news of omicron broke, on Nov. 25, some labs redoubled their efforts, adding weekend hours and night shifts to search for the

variant. Although Chiu's lab was the first to detect it, researchers in other states — Minnesota, Colorado, New York and Hawaii — soon followed suit.

"Omicron has really shown that we have expanded our capacity significantly to be able to identify these variants as they emerge," Chiu said.

Some research teams began looking for the variant in sewage. Because the virus is shed in feces, analyzing wastewater can provide a snapshot of whether the virus, or a particular variant, is present in a community and how prevalent it is.

Omicron was a test of the approach. In early December, researchers found the variant at eight wastewater treatment plants in Houston, days before the city reported its first cases.

"This is the kind of thing that really allows us to get out in front of SARS-CoV-2," said Samuel Scarpino, managing director of pathogen surveillance at the Pandemic Prevention Institute.

Room for Improvement

And yet, if omicron is a test of our preparedness for the unexpected, some experts are not convinced that we have passed. The United States was days behind many other countries in detecting the variant.

"That's not a good sign," said Dr. Eric Topol, founder and director of Scripps Research Translational Institute in San Diego.

Despite recent improvements, the country has sequenced a smaller share of cases since the beginning of the pandemic than many other nations, according to GISAID, an international database of viral genomes.

And the country needs to do a better job identifying people who are especially likely to be harboring new variants, scientists said. Rather than restrict travelers from abroad, officials could make a more concerted effort to test them for the virus and sequence positive samples.

People with breakthrough infections and those with compromised immune systems — who may have more trouble fighting off the virus, giving it more chances to mutate — should also be priorities for sequencing, experts said.

“Not only do we have to sequence, but we have to make sure we’re sequencing in the right communities and the right people,” said Janet Robishaw, senior associate dean for research at Florida Atlantic University’s College of Medicine in Boca Raton.

And while countries with centralized or nationalized health care systems, like Britain, can link the viral sequences to clinical data about patients relatively easily, in the United States that is much more difficult. Did the sample come from someone who was in the ICU or just home with a sniffle? Were they vaccinated and, if so, with which vaccine and when?

For the Next Time

Some of the progress the country has made could leave us better positioned for the next pandemic. For instance, public health laboratories have new equipment and expertise, which they can now use to track the flu, food-borne illnesses and whatever the next great global health threat turns out to be.

But solidifying these gains will require a continuing commitment and funding after the immediate crisis has passed. “The historical pattern is, we surge, and then we forget, and we neglect,” Bright said.

The United States is a large and fractured country — politically polarized and burdened

with glaring inequities, rampant misinformation and disinformation, and a considerable distrust of public officials. These are enormous, thorny problems and are much harder to address than ensuring that labs have the capacity to detect omicron or any new pathogen.

“I’m confident in our ability to detect the variant,” Fauver said. “What I’m not confident in is our ability to do anything about it. We’re detecting the [delta variant](#) every single day, every time we sequence.”

Even before the omicron news broke, another delta-driven surge had already begun. Scientists are finding more omicron cases every day, and the variant could soon overtake delta. What comes next — what we should aim for, even — is less clear. Should we spend the winter trying to stop every infection? Protecting the highest risk people from severe disease and death? Ensuring that hospitals are not overrun?

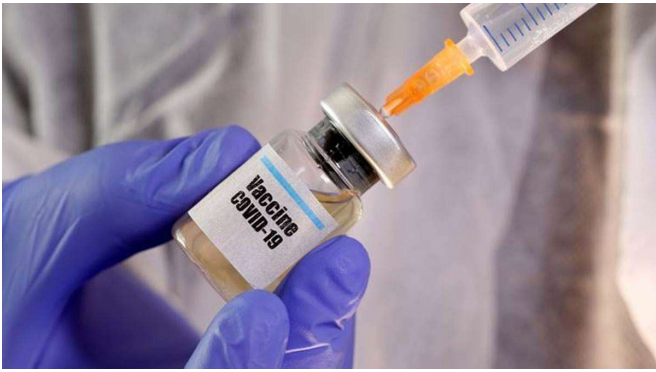
“One thing that we’ve lacked continuously through the pandemic is a goal,” said Emily Gurley, an epidemiologist at the Johns Hopkins Bloomberg School of Public Health. “We still don’t have that. Certainly, we don’t have that for omicron.”



Hong Kong researchers urge third Covid-19 shot after new Omicron study

This comes after a study showed insufficient antibodies were generated by the Sinovac and BioNTech products to fend off Omicron.

By: [Reuters](#) | Hong Kong |
December 15, 2021 11:28:39 am



"The public is advised to get a third dose of the vaccine as soon as possible while waiting for the next generation of a more matched vaccine," the researchers said in a news release.

Researchers in Hong Kong have urged people to get a third dose of [COVID-19](#) vaccine as soon as possible, after a study showed insufficient antibodies were generated by the Sinovac and BioNTech products to fend off [Omicron](#).

Tuesday's release of the results of a study by scientists in the microbiology department of the University of Hong Kong was the first published preliminary data on the impact of Sinovac's vaccine against the Omicron variant of [coronavirus](#). None of the serum of the 25 Coronavac vaccine recipients contained sufficient antibodies to neutralise the new variant, according to the study, accepted for publication in the journal *Clinical Infectious Diseases*, the researchers said.

Just five of 25 BioNTech vaccine recipients had neutralising ability against Omicron, and vaccine efficiency was reduced significantly to 20% to 24%, the study found. "The public is advised to get a third dose of the vaccine as soon as possible while waiting for the next generation of a more matched vaccine," the researchers said in a news release.

The fast-spreading [Delta variant](#) remains dominant worldwide, and it is unclear if Omicron is inherently more contagious, the World Health Organization (WHO) said in a brief on Sunday. Scientists say it is still too early to know if Omicron

causes more or less severe COVID-19 than previous variants.

A study of real-world data published on Tuesday showed [Pfizer-BioNTech's COVID-19 vaccine](#) was less effective in South Africa at keeping out of hospital those infected with the virus since the Omicron variant emerged last month. Last week, the two firms said a three-dose course of their vaccine [had neutralised Omicron](#) in a laboratory test, an early sign that booster shots could be key for protection against it.



What data shows about vaccine supply and demand in the most vulnerable places

If a country is using most of its available doses but still has a low overall vaccination rate, that is a sign of a supply problem, experts say: The country is not receiving an adequate number of doses to immunize its willing population.

By: [New York Times](#) |

Updated: December 15, 2021 12:32:08 pm



Beneficiaries getting vaccinated in India. Some countries that have below-average vaccination rates are using most of the vaccine doses they have on hand, and some are not. Most countries with high vaccination

rates have used most of the doses delivered to them. (PTI Photo)

Written by Keith Collins and Josh Holder

The detection of the [omicron](#) variant has brought renewed attention, and a new urgency, to the worldwide [COVID-19](#) vaccination campaign, which experts say remains among the most powerful tools at our disposal when it comes to preventing dangerous new variants.

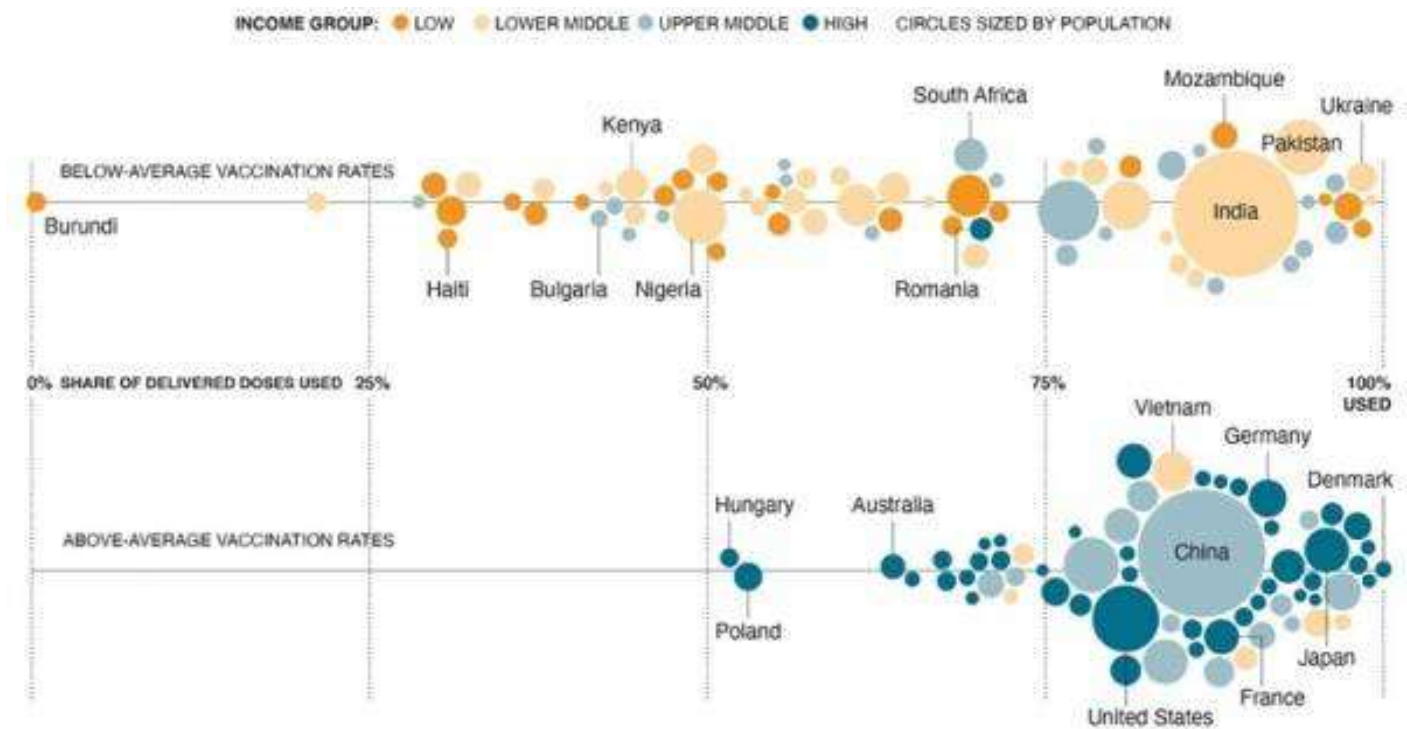
Most wealthy countries have vaccinated significant shares of their populations and have rapidly moved into the booster-dose phase. But one year into the global vaccine rollout, the gap between vaccination rates in high- and low-income countries is wider than ever.

Poorly vaccinated countries face several challenges. Early in the rollout process, some countries were not able to secure enough doses

to inoculate their residents, and many still face shortages. In others, supply is only part of the story. A New York Times analysis of available data highlights the countries where infrastructure issues and the public's level of willingness to get vaccinated may pose larger obstacles than supply.

Some countries that have below-average vaccination rates are using most of the vaccine doses they have on hand, and some are not. Most countries with high vaccination rates have used most of the doses delivered to them.

If a country is using most of its available doses but still has a low overall vaccination rate, that is a sign of a supply problem, experts say: The country is not receiving an adequate number of doses to immunize its willing population.



Sources: Delivered dose data from Airfinity; administered dose data from Our World in Data | Note: Data as of Dec. 2, 2021, when the global average vaccination rate was 45 percent. Countries that did not report dose data in the 30 days prior to Dec. 2 are not shown.

KEITH COLLINS, JOSH HOLDER AND GILBERT GATES/THE NEW YORK TIMES

The detection of the Omicron variant has brought renewed attention, and a new urgency, to the worldwide COVID-19 vaccination campaign, which experts say remains among the most powerful tools at our disposal when it comes to preventing dangerous new variants. (Graph/NYT)

If a country with a low vaccination rate is using a smaller share of the doses it has on hand, it suggests that demand in the country is weak, experts say, or that it lacks the infrastructure to distribute vaccines.

"There may be varied reasons for low vaccine uptake," said Dr. Amesh Adalja, an infectious disease specialist at the Johns Hopkins Center for Health Security. "The most obvious is just lack of doses, and that would be represented by those countries who use everything they get."

Unequal distribution

In the early days of the pandemic, when drugmakers were just starting to develop vaccines, wealthier countries were able to pre-order enough to cover their populations several times over, while others had trouble securing any doses.

Now, experts say those early purchases have led to continued gaps in vaccination rates.

"In terms of equity, things are worse than six months ago as we see the disparities in vaccine purchases translate into disparities in vaccination coverage," said Andrea Taylor, a researcher at Duke University who has studied the purchase agreements.

Wealthier countries, including the United States, have donated more than 700 million doses to lower-income countries, according to UNICEF. Experts say the donations are crucial to improving vaccination rates around the world and slowing the evolution of the [coronavirus](#) and, in turn, new variants, which can cause outbreaks in even highly vaccinated populations.

"We are entering a third calendar year of COVID-driven cycles of lockdowns and reopenings, sparked largely by regular and predictable emergences of new variants," said Benjamin Schreiber, the deputy chief of UNICEF's global immunization program. "The longer the

virus continues to spread unchecked, the higher the risk of more deadly or contagious variants emerging. Vaccine equity is not charity; it is an epidemiological necessity."

What hesitancy looks like

Weak demand simply means that people in a given country who have good access to vaccines are not showing up to get vaccinated. Experts say the reasons people have for refusing the shot vary widely around the world.

"Each country and each community has its own issues and there is no one-size-fits-all approach," Schreiber said.

For some, hesitancy is less about mistrust in vaccines than mistrust in their governments, said Kaveh Khoshnood, an epidemiologist at Yale University.

"There are countries around the world where the people just don't trust their government," he said, "because the governments lie sometimes, they are not transparent, they don't really share information with the public at large."

Others may be more skeptical about where their vaccines are coming from, such as those who have access only to vaccines from China, Khoshnood said. "The population might be somewhat hesitant or reluctant or not fully trust the Chinese vaccine, because they don't feel like there's enough information out there about the efficacy," he said.

Turning doses into immunizations

It is also possible for a country to have strong demand and adequate supply "but struggle to deliver those doses to the population because of constraints on transportation, cold chain storage" and other logistical problems, said Bill Moss, director of the International Vaccine Access Center at Johns Hopkins University.

In countries with large rural populations, the success of a vaccine rollout can come down to

the number of people available to give shots. In other words, the “human infrastructure,” said Dr. Sheela Shenoi, an infectious disease specialist at Yale University.

“Similar to what we've experienced here in the U.S., any health care delivery system is going to be dependent on the numbers and types of skilled individuals to deliver services,” she said. “Even if there's vaccine supply, if you don't have the people to deliver that supply, it's not going to succeed.”

The Indian EXPRESS

Our vaccines may become ineffective in emerging situations, says VK Paul

India's Covid Task Force chief hoped that Covid in India is possibly moving in the direction of endemicity, where there is a low or moderate level of transmission going on.

By: [PTI](#) | New Delhi |

Updated: December 15, 2021 1:00:12 pm



A syringe is prepared with the Pfizer COVID-19 vaccine. (AP)

Amid [concerns over Omicron](#), India's Covid Task Force chief V K Paul on Tuesday said there is a potential scenario that “our vaccines may

become ineffective in emerging situations” and emphasised the need to be ready to modify the vaccines as per requirement.

He also hoped that Covid in India is possibly moving in the direction of endemicity, where there is a low or moderate level of transmission going on.

“We have experienced Delta shock and now the [Omicron](#) shock... there is a potential scenario that our vaccines may become ineffective in emerging situations in the wake of the last three weeks of living with Omicron, we have seen how such doubts have come up, some of them may be genuine, we still don't have the final picture,” he said.

Speaking at an event organised by industry body CII, Paul also emphasised the need for having vaccine platforms that are adaptable quickly with the changing nature of the variants.

“How soon can we create a vaccine which is using the same platform, but is now targeted to the variant of the day... we may have to think about how we go about doing it.

“...moving from the rapid development of generic vaccine, we have to be ready to be able to have a situation where resiliently we are able to modify the vaccines as require(d). This may not happen every three months but this could happen every year perhaps. Therefore, that needs to be factored in,” Paul said.

The new Covid variant called [B.1.1.529 or Omicron was first reported](#) to the World Health Organisation (WHO) from South Africa on November 24.

According to Paul, drug development will not go out of fashion for the next viral epidemic/pandemic that the world might face and that anti-microbial resistance challenge is also crying for drug solutions.

Data indicate Omicron is milder, better at evading vaccines

The findings are preliminary and have not been peer-reviewed — the gold standard in scientific research — but they line up with other early data about omicron's behavior, including that it seems to be more easily spread from person to person.

By: [AP](#) | Johannesburg |
December 15, 2021 10:10:20 am



People wait to be vaccinated at a mobile "Vaxi Taxi" which is an ambulance converted into a mobile Covid-19 vaccination site. in Blackheath in Cape Town, South Africa, Tuesday, Dec. 14, 2021. (AP Photo/Nardus Engelbrecht)

The [omicron](#) variant is offering more hints about what it may have in store as it spreads around the globe: A highly transmissible virus that may cause less severe disease, and one that can be slowed — but not stopped — by today's vaccines.

An analysis Tuesday of data from South Africa, where the new variant is driving a surge in infections, suggests the Pfizer vaccine offers less defense against infection from omicron and reduced, but still good, protection from hospitalization.

Noting that there is a need to examine how India's classical drug industry can have a roadmap and risk-taking attitude, he said, "We are still crying for an effective drug to fight viral diseases, including Covid".

The [coronavirus](#) pandemic has taught that viruses cannot be taken lightly, and the unpredictability in emerging scenarios of health have to be respected and addressed, Paul noted.

"Pandemic is not over, we will continue to deal with uncertainty, even though we hope that we are possibly moving in the direction of endemicity, hopefully of a mild disease, that we can tackle," Paul said but cautioned that the situation cannot be taken for granted.

The endemic stage is when a population learns to live with a virus. It is very different from the epidemic stage when the virus overwhelms a population.

While noting that the contribution of the industry to science is low in the country, Paul said, "Our national investment in science is all public money... even during developing the vaccines, a lot of testing was done at the national laboratory".

Further, he said that 97 per cent of the vaccines delivered to Indian people was with public money and very little with private money.

The foremost priority right now is to make sure that there is universal coverage of the vaccine and no one is left behind, Paul said, adding that globally, there are 3.6 billion people who are not vaccinated.

The findings are preliminary and have not been peer-reviewed — the gold standard in scientific research — but they line up with other early data about omicron's behavior, including that it seems to be more easily spread from person to person.

The spread can be seen in Britain, the United States and Denmark, where confirmed omicron cases are increasing at a worrisome pace, said Dr. Jacob Lemieux, who monitors variants for a research collaboration led by Harvard Medical School.

"Omicron is moving extraordinarily fast, faster even than the most pessimistic among us thought it was going to move," Lemieux said.

During past waves of the pandemic, the U.S. could look to Europe and Britain for an early signal of what was coming, Lemieux said. "With omicron, it seems to be happening everywhere all at once with extremely rapid kinetics."

It's unclear whether omicron's rapid spread will overwhelm hospitals. In South Africa, although case numbers are rising, hospital admissions for adults diagnosed with [COVID-19](#) are 29% lower compared to the wave the country experienced in mid-2020, after adjusting for vaccination status, according to the new analysis.

Still, some experts cautioned that it's too soon to draw conclusions since the variant is quite new and hospitalizations can lag weeks behind infections.

When omicron reaches broader populations more useful information will emerge, said Dr. David Dowdy, an infectious disease epidemiologist at Johns Hopkins Bloomberg School of Public Health.

"To date, omicron has disproportionately infected young adults — people who probably have more social contacts and are more likely to attend large gatherings," Dowdy said. Young

adults may be more likely to be sick without knowing it, have more intense exposures and experience milder disease, he said.

"Our society needs to learn how to wait, rather than either panicking or dismissing early findings," Dowdy said.

U.S. health officials estimate that a small, but growing proportion of new COVID-19 infections are due to omicron, and that the rise is particularly dramatic in some places.

Two weeks ago, omicron accounted for less than 0.5% of the coronaviruses that were genetically sequenced in the U.S. That rose to about 3% last week, the Centers for Disease Control and Prevention reported Tuesday.

But it varies from place to place, and is as high as 13% in the New York/New Jersey area, according to the agency.

The CDC is tracking how fast the percentage doubles, and as more cases come in, it may be better able to predict whether — or when — the omicron variant becomes the dominant version of the [coronavirus](#) in the U.S., health officials say.

In Britain, omicron cases are doubling every two to three days. Health officials say the variant will replace delta as the dominant coronavirus strain within days.

In the new South Africa findings, people who received two doses of the Pfizer-BioNTech vaccine appeared to have just 33% protection against infection, compared to those who were unvaccinated, during the country's current omicron-fueled surge, but 70% protection against hospitalization. The analysis was conducted by Discovery Health, South Africa's largest private health insurer, and the South African Medical Research Council.

The study did not look at booster shots, which are not yet prevalent in South Africa but which data

from elsewhere has indicated improves protection.

The Pfizer vaccine's 70% protection against hospital admission during the omicron surge compares to a 93% protection level seen in South Africa's delta-driven wave, according to the new analysis.

That's a big drop in vaccine protection from severe illness requiring hospitalization, said Dr. Eric Topol, head of the Scripps Research Translational Institute.

"What we don't know yet is whether the booster will restore that back to greater than 90% and for how long," Topol said.

The analysis in South Africa was based on examining more than 211,000 COVID-19 test results that date from Sept. 1 to Dec. 7 — 41% of which were for adults who had received two doses of the Pfizer vaccine, which is the most commonly used one in South Africa.

Experts now say that omicron accounts for more than 90% of all new infections in South Africa, according to Discovery Health chief executive Dr. Ryan Noach.

Researchers around the world are rushing to figure out what the variant will mean for the coronavirus pandemic, now well into its second year. More information came Tuesday from Pfizer, which announced that its experimental pill to treat COVID-19 — separate from its vaccine — appears effective against omicron.

In the weeks since the variant was detected, South Africa has experienced rapid spread of the virus. The seven-day rolling average of daily new cases in the country rose over the past two weeks from 8.07 new cases per 100,000 people on Nov. 29 to 34.37 new cases per 100,000 people on Dec. 13, according to Johns Hopkins University. The death rate hasn't increased during that same period.

Some say there's still not enough data to draw broad conclusions about hospitalizations and the severity of disease caused by omicron.

"Is omicron milder, or more severe than delta?" said Dr. Michael Head, Senior Research Fellow in Global Health, University of Southampton, wrote of the study. "Time will tell. The world's finest scientists, including many in the global south such as in South Africa, will find out. For now, national-level decision-makers have to consider that discretion is the better part of valor."



Covid shot for kids above 3 years will be ready in 6 months: Adar Poonawalla

Adar Poonawalla also said that while the impact of Omicron is yet to be seen in children, they have so far not been impacted very badly with this strain.

By: [ENS Economic Bureau](#) | New Delhi |
Updated: December 15, 2021 7:12:08 am

With the opening of schools across the country underscoring the need for the Covid vaccination drive to cover children, Covishield manufacturer Serum Institute of India's CEO Adar Poonawalla said Tuesday that SII is planning to launch a vaccine for those below the age of 18 "all the way down to the age of three" within the next six months.

Speaking at the 27th CII Partnership Summit 2021 during a virtual conference, Poonawalla said the vaccine, Covovax, is under trial.

"We are going to be launching a vaccine in six months for children all the way down to the age of three... At the moment, Covishield is not

recommended or approved in people below the age of 18 so that's why Covovax is under trials and has shown excellent data all the way down to the age group of 3," he said.



Adar Poonawalla said there was enough data to show that the vaccines will work and protect the children against the infectious disease. (File photo)

Poonawalla said that while the impact of [Omicron](#) is yet to be seen in children, they have so far not been impacted very badly with this strain. "I think their body, cells and their lungs recover better and fortunately the panic isn't there for children," he said.

Stating that two companies in India have been licensed for children's vaccines, which would be available soon, Poonawalla said: "...you should take and get your children vaccinated. There is no harm, these vaccines have been proven to be safe and efficacious and all of that. If you feel you want to get your children vaccinated, by all means, wait for Government announcements on that, and you go ahead with that. Our vaccine Covovax will be launched for children in six months."

On December 3, Union Health Minister Mansukh Mandaviya told Parliament that the Government will take a decision on the [basis of recommendations from its two key expert groups](#) on vaccine administration.

The Central Drugs Standard Control Organisation (CDSCO) has approved ZyCoV-D of Cadila

Healthcare for restricted use in emergency situations in the age group 12 years and above.

In July, an expert panel of CDSCO had recommended the granting of permission to SII for conducting phase 2/3 trials of Covovax on children aged 2 to 17 years with certain conditions. SII is currently conducting Phase 2/3 clinical trials in 920 children in the 3-17 age group.

The regulator is currently examining a recommendation from an expert group on granting emergency use authorisation for [Covaxin](#) based on interim Phase 2/3 clinical trial data on healthy volunteers aged 2 to 18 years submitted by Hyderabad-based Bharat Biotech.

Besides, Biological E Ltd is conducting Phase 2/3 clinical trials of RBD of SARS-CoV-2 gene in 624 children in the 5-18 age group. And, Johnson & Johnson is conducting Phase 2/3 clinical trials of its 'Ad.26COV.2S' vaccine in the age group of 12-17 in India as part of a global clinical trial.

As on Tuesday, India has administered 134.57 crore cumulative vaccinations: 82.07 crore first doses and 52.49 crore second doses.

Speaking about the threat of Omicron, Poonawalla said there is no need for panic. "We are far better prepared whether it is the health system, hospitals, oxygen supply and vaccines. The world is now better prepared for third and fourth waves because we have learnt what to do and what not to do. So we are in a far better position today and I don't think there should be panic with Omicron and other variants coming about. We should not panic just as yet, we should wait and watch how things unfold," he said.

The SII CEO said that India is in a better position, as of now, with 8,000-10,000 new cases daily of which the majority are Delta variants. "I do not want to make predictions just yet because predictions should not be made till the time we

have enough data... But what we know for certain is that if you boost with three doses, you are definitely enhancing protection in your system, at least for five to six months," he said.

However, he pointed out that Omicron is definitely more infectious and will spread quickly. "...how severe it is going to be and how many hospitalisations it is going to cause is something that we are going to wait and watch. The initial reports show that it is quite mild. However, we should not take it lightly," he said.

 **The Indian EXPRESS**

Over 1 crore in state yet to take 2nd vaccine dose

Across the state, there are still a total of 89.46 lakh beneficiaries who have to take the second dose of Covishield and 12.23 lakh who require the second dose of Covaxin.

Written by [Anuradha Mascarenhas](#) | Pune |
December 16, 2021 9:59:54 am

Top officials of the state Health Department have directed district teams to contact those eligible for the vaccine either through call centres or home visits, and remind them to take the second dose of either the Covishield or [Covaxin](#) vaccine.

Across the state, there are still a total of 89.46 lakh beneficiaries who have to take the second dose of Covishield and 12.23 lakh who require the second dose of Covaxin.



A Covid-19 vaccination drive underway at a hospital in Pune. (Express Photo by Arul Horizon)

Efforts are being made by contacting beneficiaries directly through call centres and home visits, Dr Pradeep Vyas, additional chief secretary of health Maharashtra, told [The Indian Express](#). "Our district health teams are engaged in information, education and communication campaigns," he said.

Dr Vyas, however, ruled out vaccine hesitancy and admitted that it was partly true that there was a rise in vaccination numbers as several countries have started reporting the [Omicron](#) variant of [Covid-19](#). He added. "Covering 86 per cent of the targeted beneficiaries with the first dose and 52 per cent with the second dose in a large state with varying demography and geography is a very big achievement".

According to the latest state Health Department report, Pune has the highest number of eligible people, 11 lakh, yet to get the second jab of Covishield vaccine. Another 77,000 are yet to take the second jab of Covaxin vaccine, stated a state Health Department report.

In Mumbai, there are 6.79 lakh beneficiaries who are yet to take the second dose of Covishield vaccine while over 62,000 have to take the second dose of Covaxin vaccine.

There are several other districts where a large number of people are yet to take the first dose of any vaccine against Covid-19.

Thane tops the list, where at least 13.83 lakh are yet to take the first shot of the vaccine, followed by Nashik (11.4 lakh), Jalgaon (8.56 lakh) Ahmednagar (8.45 lakh), Nanded (8.16 lakh), Solapur (7.65 lakh), Aurangabad (6.47 lakh) and others. There are at least 1.41 crore beneficiaries who are yet to get the first dose of the vaccine. Till December 13, there were 6,509 active cases of Covid-19 in Maharashtra, of which 59 per cent were hospitalised.

While the Covid positivity rate in the week till December 14 was 0.8 per cent, there are 10 districts whose weekly Covid positivity rate was higher than the state average. This includes Pune whose weekly Covid positivity rate is 1.6 per cent, Palghar, Ahmednagar, Buldhana, Jalna, Sindhudurg, Solapur, Kolhapur, Sangli and Satara.



European regulators likewise continued to recommend AstraZeneca's two-dose vaccine although, because early reports were mostly in younger women, some countries issued age restrictions.

The strange clotting problem has caused nine confirmed deaths after J&J vaccinations _ while the Pfizer and Moderna vaccines don't come with that risk and also appear more effective, said advisers to the Centers for Disease Control and Prevention.

The panel recommended the unusual move of giving preference to the Pfizer and Moderna vaccines, and late Thursday the CDC's director, Dr. Rochelle Walensky, accepted the panel's advice.

Until now the U.S. has treated all three [COVID-19](#) vaccines available to Americans as an equal choice, since large studies found they all offered strong protection and early supplies were limited. J&J's vaccine initially was welcomed as a single-dose option that could be especially important for hard-to-reach groups like homeless people who might not get the needed second dose of the Pfizer or Moderna options.

But the CDC's advisers said during a meeting Thursday that it was time to recognize a lot has changed since vaccines began rolling out a year ago. More than 200 million Americans are considered fully vaccinated, including about 16 million who got the J&J shot.

New data from unprecedented safety tracking of all those vaccinations persuaded the panel

The Indian EXPRESS

DC recommends Pfizer, Moderna COVID-19 shots over J&J's

New data from unprecedented safety tracking of all those vaccinations persuaded the panel that while the blood clots linked to J&J's vaccine remain very rare, they're still occurring and not just in younger women as originally thought.

By: [AP](#) | Washington |
Updated: December 17, 2021 8:53:12 am

Most Americans should be given the Pfizer or Moderna vaccines instead of the Johnson & Johnson shot that can cause rare but serious blood clots, U.S. health officials said Thursday.

that while the blood clots linked to J&J's vaccine remain very rare, they're still occurring and not just in younger women as originally thought.

In a unanimous vote, the advisers decided the safer Pfizer and Moderna vaccines are preferred. But they said the shot made by J&J's Janssen division still should be available if someone really wants it _ or has a severe allergy to the other options.

"I would not recommend the Janssen vaccine to my family members" but some patients may — and should be able to — choose that shot, said CDC adviser Dr. Beth Bell of the University of Washington.

The clotting problems first came up last spring, with the J&J shot in the U.S. and with a similar vaccine made by AstraZeneca that is used in other countries. Eventually U.S. regulators decided the benefits of J&J's one-and-done vaccine outweighed what was considered a very rare risk _ as long as recipients were warned.

European regulators likewise continued to recommend AstraZeneca's two-dose vaccine although, because early reports were mostly in younger women, some countries issued age restrictions.

COVID-19 causes deadly blood clots, too. But the vaccine-linked kind is different, believed to form because of a rogue immune reaction to the J&J and AstraZeneca vaccines because of how they're made. It forms in unusual places, such as veins that drain blood from the brain, and in patients who also develop abnormally low levels of the platelets that form clots. Symptoms of the unusual clots, dubbed "thrombosis with thrombocytopenia syndrome," include severe headaches a week or two after the J&J vaccination _ not right away _ as well as abdominal pain and nausea.

While it's still very rare, the Food and Drug Administration told health care providers this

week that more cases have occurred after J&J vaccinations since the spring. They occur most in women ages 30 to 49 — about once for every 100,000 doses administered, the FDA said.

Overall, the government has confirmed 54 clot cases_ 37 in women and 17 in men, and nine deaths that included two men, the CDC's Dr. Isaac See said Thursday. He said two additional deaths are suspected.

The CDC decides how vaccines should be used in the U.S., and its advisers called the continuing deaths troubling. In comparing the pros and cons of all the vaccines, the panelists agreed that side effects from the Pfizer and Moderna vaccines weren't as serious _ and that supplies now are plentiful.

Nor is J&J still considered a one-and-done vaccine, several advisers noted. The single-dose option didn't prove quite as protective as two doses of the Pfizer and Moderna vaccines. Plus, with extra-contagious virus mutants now spreading, booster doses now are recommended.

For J&J recipients, a booster is recommended at least two months after vaccination. U.S. health officials had previously OK'd mixing vaccines for booster shots.

Several countries, including Canada, already have policies that give preference to the Pfizer and Moderna vaccines. But J&J told the committee its vaccine still offers strong protection and is a critical option especially in parts of the world without plentiful vaccine supplies or for people who don't want a two-dose shot.

While blood clots are rare, "unfortunately cases of COVID-19 are not," J&J's Dr. Penny Heaton said.

The U.S. is fortunate in its vaccine availability and Thursday's action shouldn't discourage use of

J&J's vaccine in places around the world where it's needed, said CDC adviser Dr. Matthew Daley of Kaiser Permanente Colorado.

The FDA also warned this week that another dose of the J&J vaccine shouldn't be given to anyone who developed a clot following either a J&J or AstraZeneca shot.

The committee also heard some of the first data on reported side effects of Pfizer vaccinations in younger children. Early last month, the CDC recommended a two-dose series for that age group, and more than 7 million doses have been given so far. But few problems have been reported. Of the 80 reported cases of serious side effects, about 10 involved a form of inflammation that has been seen in male teens and young adults.



French biotech firm says its booster works as a follow up to its own Covid-19 shot

The news comes almost two weeks after a British study showed VLA2001 was the only shot out of seven that offered no immunity boost when given to people previously immunised with Pfizer's COVID-19 vaccine.

By: [Reuters](#) | Paris |
Updated: December 16, 2021 2:45:06 pm

French biotech firm Valneva said on Thursday its [COVID-19](#) vaccine candidate was efficient as a booster for people who had received the same shot as an initial vaccination.

"Initial results confirm that VLA2001 significantly boosted immunity in participants who received

VLA2001 as a primary vaccination," it said in a statement.



Merriam-Webster has declared vaccine its 2021 word of the year. (AP Photo/Jae C. Hong, File)

The news comes almost two weeks after a British study showed VLA2001 was the only shot out of seven that offered no immunity boost when given to people previously immunised with Pfizer's COVID-19 vaccine.

That study saw Valneva's share price tumble 14.5% on Dec. 3. At Wednesday's closing price of 22.36 euros, the stock is still up 188.5% since the start of the year after soaring 201.5% in 2020.

Valneva had said in reaction to that study that participants had been given booster doses after a shorter interval than usual and that vaccines made from inactivated viruses, such as its candidate, typically require longer to be effective. "The company is preparing to launch a dedicated heterologous booster trial, which will evaluate a VLA2001 booster shot provided at least six months after primary vaccination with other vaccines or following natural infection. This study is expected to commence in early 2022," it said Thursday.

"We are extremely pleased to report our first booster data, confirming that VLA2001 significantly boosted immunity in participants who received VLA2001 as a primary vaccination and regardless of the initial neutralizing antibody level at the time of boosting", Valneva's chief

medical officer Juan Carlos Jaramillo said in the statement.

“Our teams are working diligently on our rolling review regulatory submissions so that we can quickly deploy our vaccine (...),” he added.

The European Union's drug regulator said in early December it had started a rolling review of Valneva's vaccine – which could speed up approval – weeks after the EU signed a supply deal with the company.

Unlike shots from Pfizer-BioNTech, AstraZeneca, Johnson & Johnson and Novavax, Valneva's exposes the immune system to the entire [coronavirus](#), not just its spike protein.

Valneva has said it is hopeful its vaccine candidate would protect people against variants of the virus, adding it would test it specifically against Omicron.

The Indian EXPRESS

Omicron tracker: Study finds protection increases with booster shots; record Covid cases in UK

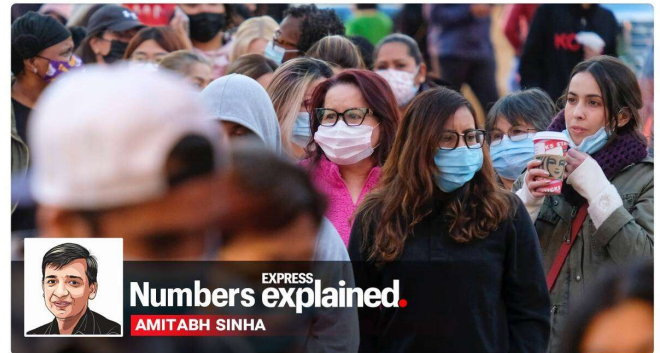
Anthony Fauci said the fact that booster doses of existing vaccines were effective against Omicron should convince everyone about the need to get vaccinated.

Written by [Amitabh Sinha](#)

Edited by Explained Desk | Pune |
December 16, 2021 11:18:53 pm

None of the three approved [Covid-19](#) vaccines in the United States — Moderna, Pfizer/BioNTech and Johnson & Johnson — offer sufficient protection against the [Omicron](#) variant with their

routine doses, but the protection does increase with booster shots, a new study has found.



Shoppers wearing face masks wait in line to enter a store at the Citadel Outlets in Commerce, California. (AP Photo/Ringo H.W. Chiu, File)

The study, conducted by researchers at the Massachusetts General Hospital (MGH), Harvard and MIT, found “low to absent” antibody neutralisation of the Omicron variant with the routine doses, *Reuters* reported. Moderna and Pfizer/BioNTech vaccines have to be taken in two doses, while Johnson and Johnson is a single shot vaccine.

The study, however, found that people who had received booster doses showed potent neutralisation, *Reuters* said.

Anthony Fauci, a top health expert in the United States, said the fact that booster doses of existing vaccines were effective against the Omicron variant, even though a little feeble than against other variants, should convince everyone about the need to get vaccinated. He said there was no need to start developing an Omicron-specific vaccine at this stage.

“Our booster vaccine regimens work against Omicron. At this point, there is no need for a variant-specific booster... If you are unvaccinated, you are very vulnerable — not only to the existing Delta surge we are experiencing, but also to Omicron,” Fauci was quoted by *The Washington Post* as saying.

Meanwhile, [England](#)'s Chief Medical Officer Professor Chris Whitty warned of difficult times ahead for the country, which has been experiencing the fastest spread of the Omicron variant. The United Kingdom, on Wednesday, reported over 78,160 new cases of [coronavirus](#) infection, [a new record](#) for a 24-hour period. The confirmed cases of Omicron infection has crossed 10,000.

Professor Whitty warned the UK should be ready for records to be broken several times in the coming days. He said the health system needed to be prepared for large number of hospitalisations as well.

"I'm afraid there will be an increasing number of Omicron patients going into the NHS (National Health Service, UK's public healthcare system), going into hospital, going into intensive care. The exact ratios we don't yet know, but there will be substantial numbers and that will begin to become apparent, in my view, fairly soon after Christmas. It will start before then but, in terms of the big numbers, I think that's a reasonably, I'm afraid, a reasonably nailed on prospect," Whitty was quoted as saying by *Sky News*.

The Chief of the UK Health Security Agency, Dr Jenny Harries, said Omicron variant represented "probably the most significant threat" since the start of the pandemic.



Pfizer confirms Covid-19 pill's results, potency versus omicron

Separate laboratory testing shows the drug retains its potency against the omicron variant, the company announced, as many experts had predicted. Pfizer tested the antiviral drug against

a man-made version of a key protein that omicron uses to reproduce itself.

By: [AP](#) | Washington |

Updated: December 14, 2021 6:49:17 pm



Pfizer's data could help reassure regulators of its drug's benefit after Merck disclosed smaller-than-expected benefits for its drug in final testing. (File)

Pfizer said Tuesday that its experimental [COVID-19](#) pill appears effective against the [omicron](#) variant.

The company also said full results of its 2,250-person study confirmed the pill's promising early results against the virus: The drug reduced combined hospitalizations and deaths by about 89 per cent among high-risk adults when taken shortly after initial COVID-19 symptoms.

Separate laboratory testing shows the drug retains its potency against the omicron variant, the company announced, as many experts had predicted. Pfizer tested the antiviral drug against a man-made version of a key protein that omicron uses to reproduce itself.

The updates come as COVID-19 cases, deaths and hospitalization are all rising again and the U.S. hovers around 800,000 pandemic deaths. The latest surge, driven by the [delta variant](#), is accelerating due to colder weather and more indoor gatherings, even as health officials brace for the impact of the emerging omicron mutant.

The Food and Drug Administration is expected to soon rule on whether to authorise Pfizer's pill and

a competing pill from Merck, which was submitted to regulators several weeks earlier. If granted, the pills would be the first COVID-19 treatments that Americans could pickup at a pharmacy and take at home.

Pfizer's data could help reassure regulators of its drug's benefit after Merck disclosed smaller-than-expected benefits for its drug in final testing. Late last month, Merck said that its pill reduced hospitalisations and deaths by 30 per cent in high-risk adults.

Both companies initially studied their drugs in unvaccinated adults who face the gravest risks from COVID-19, due to older age or health problems, such as asthma or obesity.

Pfizer is also studying its pill in lower-risk adults "including a subset who are vaccinated" but reported mixed data for that group on Tuesday.

In interim results, Pfizer said its drug failed to meet its main study goal: sustained relief from COVID-19 for four days during or after treatment, as reported by patients.

But the drug did achieve a second goal by reducing hospitalisations by about 70 per cent among that group, which included otherwise healthy unvaccinated adults and vaccinated adults with one or more health issues. Less than 1 per cent of patients who got the drug were hospitalised, compared with 2.4 per cent of patients who got a dummy pill.

An independent board of medical experts reviewed the data and recommended Pfizer continue the study to get the full results before proceeding further with regulators.

Across both of Pfizer's studies, adults taking the company's drug had a 10-fold decrease in virus levels compared with those on placebo.

The prospect of new pills to fight COVID-19 can't come soon enough for communities in the

Northeast and Midwest, where many hospitals are once again being overloaded by incoming virus cases.

Both the Merck and Pfizer pills are expected to perform well against omicron because they don't target the [coronavirus](#)' spike protein, which contains most of the new variant's mutations.

The U.S. government has agreed to purchase enough of Pfizer's drug to treat 10 million people and enough of Merck's to treat 3 million, pending FDA authorisation



Pfizer vaccine protecting against hospitalisation in South Africa Omicron wave: study

The study released on Tuesday by South Africa's largest private health insurance administrator, Discovery Health, was based on more than 211,000 positive Covid-19 test results.

By: [Reuters](#) | Johannesburg |
December 14, 2021 5:16:29 pm

Two doses of Pfizer-BioNTech's [Covid-19](#) vaccine appear to have given 70 per cent protection against hospitalisation in South Africa in recent weeks, according to a major real-world study, which suggests weaker efficacy against the new [Omicron](#) variant.

The study released on Tuesday by South Africa's largest private health insurance administrator, Discovery Health, was based on more than 211,000 positive Covid-19 test results. Around 78,000 of those results from Nov. 15 to Dec. 7 were attributed to Omicron.

The 78,000 results are not confirmed Omicron cases, meaning the study cannot offer conclusive findings about the variant labelled “of concern” by the World Health Organization and reported in more than 60 countries.

South African scientists have so far confirmed around 550 positive tests as being Omicron, with the variant accounting for 78 per cent of sequences from November, more than the previously dominant [Delta variant](#).

South Africa alerted the world to Omicron late last month, triggering alarm that it could cause another surge in global infections, and leading to the imposition of travel restrictions on southern Africa. South Africa's daily infections have since risen to around 20,000 in recent days.

The findings from a real-world analysis are some of the earliest on protection against Omicron outside of lab studies, which have shown reduced neutralising activity against the variant.

Based on analysis by Discovery's clinical research and actuarial teams, and in collaboration with the South African Medical Research Council (SAMRC), the study calculated that two doses of Pfizer-BioNTech offered 70 per cent protection against hospitalisation compared with the unvaccinated during the recent surge in cases and 33 per cent protection against infection.

It said this represents a drop from 80 per cent protection against infection and compares with 93 per cent efficacy against hospital admission during South Africa's outbreak of the Delta variant, which is the globally dominant variant and considered to be the most infectious to emerge during the pandemic.

Discovery cautioned that the study's findings should be considered preliminary.

Glenda Gray, SAMRC president, said it was however encouraging that the Pfizer-BioNTech

vaccine appeared to be offering good protection against severe disease and hospitalisation.



Children appeared to have a 20 per cent higher risk of hospital admission with complications during the fourth wave than during the first, despite a very low absolute incidence. (AP)

South Africa is using the Pfizer-BioNTech and Johnson & Johnson vaccines in its Covid-19 immunisation campaign, with more than 20 million Pfizer doses administered so far.

J&J and the SAMRC are conducting a large real-world study of J&J's vaccine, and recent analysis has shown no deaths from Omicron, Gray said.

“So that's the good news, it shows again that the vaccine is effective against severe disease and death,” she said.

EARLY DATA

With 70 per cent or more of the South African population estimated to have been exposed to Covid-19 over the past 18 months, high estimated levels of antibodies in the population might be skewing the data.

“This could be a confounding factor for these hospital admission and severity indicators during this Omicron wave,” Ryan Noach, chief executive of Discovery Health, said in a briefing on the study.

The analysis also shows protection against hospital admission is maintained across all ages,

in people from 18 to 79 years, with slightly lower levels of protection for the elderly, it said.

Protection against admission is also consistent across a range of chronic illnesses including diabetes, hypertension, hypercholesterolemia, and other cardiovascular diseases.



South African scientists have so far confirmed around 550 positive tests as being Omicron, with the variant accounting for 78 per cent of sequences from November. (AP)

It concluded that there was a higher risk of reinfection during the fourth wave than during previous waves and that the risk of hospitalisation among adults diagnosed with Covid-19 was 29 per cent lower than during the country's first wave early last year.

Children appeared to have a 20 per cent higher risk of hospital admission with complications during the fourth wave than during the first, despite a very low absolute incidence, it said.

"This is early data and requires careful follow up," said Shirley Collie, chief health analytics actuary at Discovery Health.

However, this trend aligns with a warning a recent days from South Africa's National Institute for Communicable Diseases (NICD) that during the country's third wave from June to September they had seen an increase in paediatric admissions and now, in the fourth wave, they are seeing a similar increase in admissions for children under five, she said.

South African scientists have said they cannot confirm a link between Omicron and the high admissions of infants, which could be due to other factors.

Considerable uncertainties surround Omicron, first detected last month in southern Africa and Hong Kong, whose mutations may lead to higher transmissibility and more cases of Covid-19 disease.

The WHO has said there were early signs that vaccinated and previously infected people would not build enough antibodies to ward off an Omicron infection, resulting in high transmission rates. It is unclear whether Omicron is inherently more contagious than the globally dominant Delta variant, the WHO said.

Pfizer and BioNTech said last week that two shots of their vaccine may still protect against severe disease, because its mutations were unlikely to evade the T-cells' response.



Omicron tracker: New evidence that Omicron causes milder Covid

South Africa study finds people infected now are 30% less likely to require hospitalisation than in March 2020

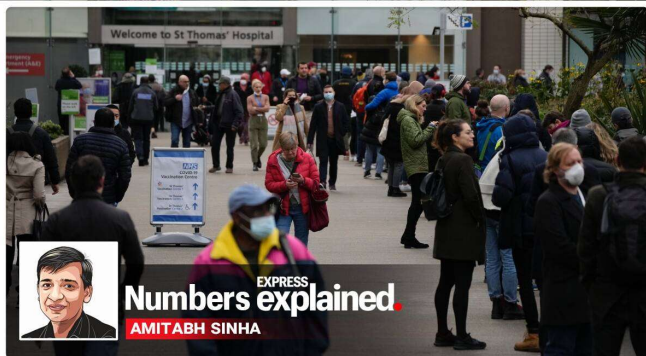
Written by [Amitabh Sinha](#)

Edited by Explained Desk | Pune |

Updated: December 14, 2021 9:18:44 pm

People getting infected with [coronavirus](#) the in South Africa now are about 30 per cent less likely to require hospitalisation than at the beginning of the pandemic in March last year, according to a study that offers new evidence that

the [Omicron](#) variant has indeed been causing milder disease in the country.



People queue in a line, at right, to go for coronavirus booster jabs at St Thomas' Hospital, in London, Monday, Dec. 13, 2021. (AP Photo/Matt Dunham)

The study, carried out by Discovery Health, South Africa's largest private health insurance provider, in collaboration with South African Medical Research Council, involved 211,000 infected people, of whom about 78,000 were believed infected with the Omicron variant.

The study also found that a double dose of the Pfizer/BioNTech vaccine, one of the main ones being used in South Africa, was 70 per cent effective in preventing hospitalisation. But it was only 33 per cent effective in preventing infection. This was significantly lower than 80 per cent effectiveness against infection during an earlier wave involving the [Delta variant](#), Reuters reported.

South Africa was the first country where the fast-spreading Omicron variant was detected three weeks ago. Although only 550 cases of infection with Omicron in the country have been confirmed through genetic sequencing so far, around 70 per cent of the cases in the current surge are believed to have been caused by the new variant. South Africa is currently reporting between 15,000 and 20,000 new cases every day.

The Omicron variant is spreading even faster in some European countries, most prominently in

the United Kingdom, which on Monday also reported the first death of an individual infected with this variant. At least ten hospitalisations have been confirmed.

The UK has already declared an 'Omicron emergency' following the rapid spread, and decided to make [booster doses of vaccine available](#) for everyone above the age of 18. On Monday, there was a great rush to book booster doses, with more than half a million people registering. The website of the National Health Service, UK's public healthcare system, collapsed for some time due to the rush.



General view of Liverpool Street railway station, in London, Monday, Dec. 13, 2021. (AP Photo/Alberto Pezzali)

UK Prime Minister Boris Johnson [confirmed the death of one person infected with Omicron variant](#). It was not immediately clear whether the infection happened to be the cause of death or was incidental. The UK Health Security Agency has also confirmed that at least ten patients infected with this variant have been hospitalised, according to Sky News.

Johnson said the hospitalisations, and the death, were adequate warnings about the threat from this new variant. "I think the idea that this (variant) is somehow a milder version of the virus, I think, that is something we need to set on one side and just recognise the sheer pace at which it accelerates through the population," the BBC quoted him as saying.

The UK confirmed over 1,200 new cases of infection with the Omicron variant on Sunday, the highest so far, Sky News reported. The total number of confirmed cases with this variant now exceeds 3,000, the highest for any country.

Norway restrictions

Norway tightened restrictions on movement of people amid a record number of coronavirus infections in the last few days, powered by the spread of the Omicron variant. Norway has been reporting 3,000 to 4,000 cases a day. On one day last week, it detected over 6,000 cases. During earlier waves, it had not registered more than 1,500-1,600 cases on any day.

“The situation is becoming increasingly serious. The number of detected cases of SARS-CoV-2 infection is increasing rapidly, followed by an increase in hospital admissions,” the Norwegian Institute of Public Health said in its latest risk assessment on Monday.

“Hospitals, nursing homes, family doctors and out-of-hours clinics are under an ever-increasing strain as a result of more patients, increased sickness absence among healthcare personnel and lower access to temporary staff from abroad. The omicron variant is becoming established in Norway and will soon dominate. This will significantly increase transmission,” it said.

It said that in three weeks' time, the daily count of new cases in Norway could rise as high as 90,000 to 30,000, if the efforts to control the spread did not succeed.



UK reports first death due to Omicron; country to give booster shots to all above 18

On Sunday evening, Boris Johnson had declared an “Omicron emergency” in the UK and decided to start booster doses for everyone above the age of 18 from this week.

Written by [Amitabh Sinha](#)

Edited by Explained Desk | Pune |

Updated: December 14, 2021 8:26:34 am



A security guard stands by a sign asking customers to wear face masks at a store in London. UK has seen a rapid increase in Omicron cases in the last few weeks. (Photo: Reuters)

The United Kingdom has reported [the first death](#) of a person infected with the new [Omicron](#) variant of the [coronavirus](#). The news was confirmed by UK Prime Minister Boris Johnson on Monday.

“Sadly, yes, Omicron is producing hospitalisations and sadly, at least one patient has been confirmed to have died with Omicron,” Johnson was quoted by the BBC as saying.

“So I think the idea that this is somehow a milder version of the virus, I think, that is something we need to set on one side and just recognise the sheer pace at which it accelerates through the population,” he said.

On Sunday evening, Johnson had declared an “Omicron emergency” in the UK and decided to start booster doses for everyone above the age of 18 from this week, the BBC reported.

"I'm afraid we're now facing an emergency in our battle with the new variant Omicron," UK Prime Minister Boris Johnson was quoted as having said in a TV statement on Sunday evening. "No one should be in any doubt, there is a tidal wave of Omicron coming."

He added: "It is now clear that two doses of vaccine are simply not enough to give the level of protection we all need. But the good news is that our scientists are confident that with a third dose, a booster dose, we can all bring our level of protection back up."

Johnson said that as of now, scientists were not sure whether the Omicron caused less or severe symptoms than the [Delta variant](#). "However, we already know it is so much more transmissible that a wave of Omicron through a population that was not boosted would risk a level of hospitalisation that could overwhelm our NHS (National Health Service — UK's public healthcare system) and lead sadly to very many deaths," he added.

Johnson's comments came on a day when the United Kingdom raised its coronavirus alert level to four — the second highest level. This corresponds to a stage in the epidemic where the transmission of the pathogen is considered to be very high or rising exponentially. Till now, the UK was on alert level three.

BBC quoted medical officers as saying that hospitalisations from the Omicron variant were already happening in the UK and that these were "likely to increase rapidly".

Meanwhile, Israeli researchers have reported a significant increase in protection against the Omicron variant of the novel coronavirus in people who have received a third dose of the Pfizer/BioNTech vaccine, news agency Reuters reported.

The study by the researchers compared individuals who had received two doses of the

vaccine five to six months ago with those who had received a third dose a month ago. "People who received the second dose five or six months ago do not have any neutralisation ability against Omicron. However, they do have some (neutralisation ability) against the Delta (variant)," Gili Regev-Yochay, the director of the Infectious Diseases Unit at Sheba, was quoted by Reuters as saying.

"The good news is that with the booster dose, it increases about 100-fold. There is a significant protection of the booster dose. It is lower than the neutralisation ability against the Delta, about four times lower," she added.



Omicron could lead to 25,000 to 75,000 deaths in UK, says study

The UK is seeing the most rapid spread of the Omicron variant anywhere in the world, with more than 600 new cases being confirmed on Saturday. The unconfirmed spread could be much higher.

Written by [Amitabh Sinha](#) | Pune |
Updated: December 13, 2021 8:45:50 am

The [Omicron](#) variant of [coronavirus](#) could claim between 25,000 to 75,000 deaths in the United Kingdom by April next year, if additional protection measures were not taken, a new study from the UK has warned.

People wear masks as they exit Westminster Underground station, in London, Thursday, Dec. 9, 2021. (AP Photo/Alberto Pezzali)

The UK is seeing the most rapid spread of the Omicron variant anywhere in the world, with more than 600 new cases being confirmed on Saturday. The unconfirmed spread could be much higher.



The new study, by researchers at the London School of Hygiene and Tropical Medicine and South Africa's Stellenbosch University, has done a range of projections considering different scenarios for the variant's transmission capability and interventions like administering of booster doses of vaccine.

In the most optimistic scenario, involving low immune escape and high booster dose efficacy, the hospitalisation rate is likely to rise to 60 per cent of the peak that the UK saw in January this year (about 3,800 hospital admissions every day).

"These results suggest that the introduction of Omicron B.1.1.529 variant in [England](#) will lead to a substantial increase in SARS-CoV2 transmission, which, in the absence of strict control measures, has the potential for substantially higher case rate than those recorded during the Alpha winter wave in 2020-21. This is due to Omicron's apparent high transmissibility and ability to infect individuals with existing immunity to SARS-CoV2 from prior infection or from vaccination," the study says.

While the variant has spread quickly in Europe, most notably in UK and Denmark, there is still no signs of this causing more severe diseases. In fact, all evidence till now has been suggesting that it causes significantly mild disease compared to the [Delta variant](#).

But as the cases rise rapidly, mainly due to its enhanced capacity to avoid the immune system, even a small proportion of

hospitalisations could translate into large numbers, as is being feared in the UK.

With another case detected in Delhi on Saturday, the number of confirmed Omicron infections in India has risen to 33.

இந்து தமிழ் திசை

கரோனாவிடம் இதுவரை பெற்றதும் கற்றதும்!

Published : 17 Dec 2021 03:06 am



உலகப் பெருந்தொற்றாக [கரோனா](#) வைரஸ் பரவத் தொடங்கி இரண்டு வருடங்கள் முடிந்துவிட்டன. கிட்டத்தட்ட 27 கோடிப் பேர் இதனால் பாதிக்கப்பட்டுள்ளனர்; 53 லட்சம் பேர் இறந்துள்ளனர்.

2019 டிசம்பரில் சீனாவின் லுகானில் பிறந்த 'நாவல் [கரோனா](#) வைரஸ்' இதுவரை 222 நாடுகளில் பரவி, மூன்று அலைகளை உருவாக்கி, பலகட்டப் பொதுமுடக்கங்களைக் கொண்டுவந்து, உலக மக்களை முடக்கியது. சர்வதேசப் பொருளாதாரம் முடங்கியது. சாமானியரின் வாழ்வாதாரம் சரிந்தது. கல்வி நிலைகுலைந்தது. நோய் குறித்த அச்சமே புதிய நோயானது. கண்ணுக்குத் தெரியாத..

ஒரு கிருமியிடம் உலகமே சரணடைந்தது. ஆனாலும், தடுப்பூசியாலும் தற்காப்பினாலும் இதன் பாதிப்பிலிருந்து தப்பித்துவிடலாம் என்று நம்பிக்கொண்டிருந்தபோது, 'ஓமைக்ரான்'

தொற்றுப் பரவல் பழையபடி அச்சத்தை ஏற்படுத்திவிட்டது.

இதனால், 'கரோனாவுக்கு எப்போதுதான் முடிவு?' என்பதே உலகளாவிய கேள்வியாக இருக்கிறது. இதற்கு விடை தெரிய இரண்டு வயது கரோனாவிடம் நாம் பெற்றதையும் கற்றதையும் பரிசீலிப்பது அவசியமாகிறது.

பெற்றது என்ன?

ஒரு பெருந்தொற்றை எதிர்கொள்ளும் அளவுக்கு மருத்துவக் கட்டமைப்புகள் வலுவில்லாமலிருந்த எல்லா நாடுகளிலும் கரோனாவின் முதல் அலை தீவிரமாகப் பரவியது. முதல் அலையில் பெரும்பாலும் முதியோருக்கும், அடுத்த அலையில் இளையோர், கர்ப்பிணிகள் உள்ளிட்டோருக்கும் தொற்றுப் பரவல் அதிகரித்தது. இந்தப் பெருந்தொற்றில் நம்மை அதிகம் கலங்கடித்தவை அதன் உருமாற்றங்களே! ஆர்.என்.ஏ. வைரஸ்களுக்கு ஒரேநேரத்தில் அதிகம் பேருக்குப் பரவ இடம்கொடுத்தால் அவை உருமாலும். அதன்படி, [கரோனா](#) வைரஸ் இதுவரை 13 முறை உருமாறியுள்ளது. அவற்றில் ஆல்பா, பீட்டா, காமா, டெல்டா ஆகியவை கவலைக்குரியதாக அடையாளம் காணப்பட்டன. அந்த வரிசையில் இப்போது ஒமைக்ரான் இணைந்துள்ளது.

வைரஸ் உருமாறுவதற்கும் பொதுச்சமூகம்தான் காரணம். 2020 டிசம்பரில், பிரிட்டனில் பொதுமுடக்கம் தளர்த்தப்பட்டதும், மக்கள் முகக்கவசம் அணிவது, கூட்டம் கூடுவதைத் தவிர்ப்பது போன்ற தற்காப்புக்களை அலட்சியப்படுத்தியதால்தான், அது 'ஆல்பா வைரஸ்' என உருமாறி என்றுயில்லாத வேகத்தில் பரவியது. அதேபோல், இந்தியாவில் முதல் அலை முடிவதற்கு முன்னரே மக்கள் அவசரப்பட்டு கரோனாவுக்கான பாதுகாப்பு வழிமுறைகளைக் கைவிட்ட காரணத்தால்தான் 2021 ஏப்ரலில் 'டெல்டா'வாகப் புது வேகமெடுத்து இரண்டாம் அலை பாதிப்புகளைத் தீவிரப்படுத்தியது; ஐரோப்பிய நாடுகளில் மூன்றாம் அலைக்கும் காரணமானது.

இதுவரை எந்த வைரஸுக்கும் தடுப்பூசி தயாராவதற்குக் குறைந்தது 10 ஆண்டுகள் பிடித்தன. ஆனால், கரோனாவுக்கு ஓராண்டிலேயே 4 வகைப்பட்ட தடுப்பூசிகள் தயாராகிவிட்டன. அதற்குத் தற்போதைய

தொழில்நுட்ப உத்திகள் கைகொடுத்தன. அவற்றில் பழைமையும் உண்டு; புதுமையும் உண்டு. உதாரணத்துக்கு, இந்தியாவின் கோவேக்சின் தடுப்பூசி பழைய வகை. பைசர் நிறுவனத்தின் எம்.ஆர்.என்.ஏ. தடுப்பூசி புதிய வகை. இந்தியாவிலிருந்து 'கோர்பிவேக்ஸ்', க்யூபாவிலிருந்து 'அப்தலா' ஆகிய புரத அடிப்படைத் தடுப்பூசிகளும் வர இருக்கின்றன. இவை மற்ற தடுப்பூசிகள் தரும் பாதுகாப்பைவிடப் பல மடங்கு கூடுதல் பாதுகாப்பு அளிப்பவை. மேலும், இந்தப் பெருந்தொற்று தொடங்கியபோது கரோனாவுக்கெனத் தனி சிகிச்சைகள் இல்லை. இப்போதோ ரெம்டெசிவிர், ஒற்றைப் படியாக்க எதிரணு மருந்துகள் (Monoclonal antibodies), ஸ்டிராய்டு போன்ற ஊசி மருந்துகளும், மோல்துபிரவிர், பேக்ஸ்லோவிட் ஆகிய மாத்திரைகளும் கிடைப்பதால், டெல்டாவை மட்டுமல்ல ஒமைக்ரானையும் அடக்குமளவுக்கு மருத்துவம் வலுவடைந்துவிட்டது; தொற்றாளருக்கு உயிராபத்து குறைந்துவிட்டது.

கற்றது என்ன?

முதல் அலையின்போது இந்தியா உட்பட பல நாடுகளில் கடுமையான பணிச்சுமை, போதிய பாதுகாப்புக் கருவிகள் இல்லாமை போன்ற பல்வேறு அழுத்தங்களுக்கு மத்தியில் மருத்துவப் பணியாளர்கள் பணியாற்றினர்; உயிரையும் கொடுத்தனர். இரண்டாம் அலையின்போது படுக்கை வசதிகள், ரெம்டெசிவிர் மற்றும் ஆக்ஸிஜன் தட்டுப்பாட்டால் மருத்துவக் கட்டமைப்பு எந்த அளவுக்குப் பலவீனமாக இருக்கிறது என்பதை உணர முடிந்தது. அடுத்த முறை இப்படியொரு மோசமான சூழலைத் தவிர்க்க முக்கிய மருந்துகள், ஆக்ஸிஜன், வென்டிலேட்டர் உள்ளிட்ட மருத்துவக் கட்டமைப்புகளை மேம்படுத்த வேண்டிய அவசியம் புரிந்தது.

சீனா இதற்கு முன்னுதாரணமானது. முதல் அலையில் அது பொதுமுடக்கத்தில் கடுமை காட்டியது. கரோனாவுக்கென பத்தே நாட்களில் 2,300 படுக்கைகளுடன் 2 புதிய மருத்துவமனைகளைக் கட்டியது. செவிலியர் செய்யும் துணை மருத்துவங்களில் ரோபோட்டுகளைப் பயன்படுத்தியது. இப்படிப் பல அசாத்திய வழிகளில் சீனா விரைவிலேயே கரோனாவிடமிருந்து மீண்டுவிட்டது.

கரோனாவிடம் கற்றதில் முக்கியமான விஷயம், இந்தப் பெருந்தொற்றைத் தடுப்பூசியால்தான் ஒழித்துக்கட்ட முடியும் என்பது. அதேநேரம், 'தடுப்பூசியால் எந்த நாடும் கரோனாவைத் தனித்து வென்றுவிட முடியாது. உலகின் கடைசி மனிதருக்கும் தடுப்பூசி கிடைத்தால்தான் எல்லோரும் தங்களைக் காப்பாற்றிக்கொள்ள முடியும்' என்று உலக சுகாதார நிறுவனம் எச்சரித்ததை வளர்ந்த நாடுகள் கண்டுகொள்ளவில்லை; தடுப்பூசி விநியோகத்தில் 'சமநெறி'யைக் கையாளவில்லை. அமெரிக்காவில் 60% பேருக்குத் தடுப்பூசி செலுத்தப்பட்டுள்ளது.

ஆப்பிரிக்காவில் 4% பேருக்கு மட்டுமே செலுத்தப்பட்டுள்ளது. 'கோவேக்ஸ்' ஒப்பந்தப்படி ஜி7 நாடுகள் 87 கோடித் தவணை தடுப்பூசிகளை ஏழை நாடுகளுக்கு வழங்குவதாக ஒப்புக்கொண்டதில், இதுவரை 10 கோடி மட்டுமே வழங்கியுள்ளன. 'இந்தச் சீரற்ற நெறிமுறை ஏழை நாடுகளை மட்டுமல்ல, வளர்ந்த நாடுகளையும் தான் பாதிக்கப்போகிறது. ஏழை நாடுகளில் [கரோனா](#) தொற்று நீடிக்கும்போது, புதிய உருவமெடுத்து மற்ற நாடுகளுக்கும் அது பரவும்' எனும் உலக சுகாதார நிறுவனத்தின் அப்போதைய எச்சரிக்கையை ஒமைக்ரான் தற்போது உண்மையாக்கியுள்ளது.

இனியாவது நாம் விழித்துக்கொள்ள வேண்டும். ஒமைக்ரான் அச்சத்தால் மூன்றாம் தவணைத் தடுப்பூசியை (Booster dose) செலுத்துவதற்கு வளர்ந்த நாடுகள் முனைப்பு காட்டுகிற அதே வேகத்தில் தடுப்பூசி உற்பத்தியைப் பெருக்கி, சமச்சீராக விநியோகித்து, தடுப்பூசிக்குத் தட்டுப்பாடு உலகெங்கிலும் இல்லை எனும் நிலைமையையும் உருவாக்க வேண்டும்.

போதிய தடுப்பூசி இருந்தும் இதுவரை தடுப்பூசி செலுத்திக்கொள்ளாதவர்களும், இரண்டாம் தவணைக்குத் தயங்குபவர்களும் இனியும் தயக்கம் காட்டுவது தங்களுக்கு மட்டுமல்லாமல் அடுத்தவர்களுக்கும் ஆபத்து என்பதை உணர வேண்டும். இந்த உணர்தலுக்குப் பிரபலங்களும் சமூகத் தலைவர்களும் தன்னார்வலர்களும் உதவ வேண்டும். அடுத்த ஆண்டுக்குள் எல்லா நாடுகளிலும் தகுதியானவர் அனைவருக்கும் தடுப்பூசி செலுத்திட வேண்டும். குறைந்தது ஓராண்டுக்காவது [கரோனா](#) தற்காப்பு விதிகளைப் பின்பற்ற வேண்டும். இப்படி,

அரசுகளோடு சமூக ஒத்துழைப்பும் இணையும்போது [கரோனா](#) வீரியமிழந்துவிடும்; தொற்றுவது நின்றுவிடும்.

- கு. கணேசன், பொதுநல மருத்துவர்,
தொடர்புக்கு: gganesan95@gmail.com



டெல்டாவைவிட 70 மடங்கு வேகமாகப் பரவும் ஒமைக்ரான்; ஆனால் நோய் பாதிப்பு குறைவே: ஹாங்காங் பல்கலைக்கழக ஆய்வறிக்கை

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கரோனா [டெல்டா](#) வைரஸைவிட உருமாறிய [ஒமைக்ரான்](#) 70 மடங்கு வேகமாகப் பரவக் கூடியது. ஆனால், நோய் பாதிப்பு குறைவே என்று [ஹாங்காங் பல்கலைக்கழக ஆய்வறிக்கை](#) ஒன்று தெரிவிக்கின்றது.

ஒமைக்ரான் தொற்று ஏற்பட்ட 24 மணி நேரத்தில் அது நுரையீரலில் பரவி விடுகிறது என்றும் அந்த ஆய்வறிக்கையில் தெரிவிக்கப்பட்டுள்ளது. ஹாங்காங் பல்கலைக்கழகத்தின் மைக்கேல் சேன் சி வாய் தலைமையிலான ஆராய்ச்சியாளர்கள் இந்த ஆய்வை மேற்கொண்டனர். [ஒமைக்ரான்](#) வேகமாகப் பரவி நுரையீரலுக்குள் சென்றாலும் கூட அது நுரையீரல் திசுக்களில் பாதிப்பு ஏற்படுத்துவது என்பது டெல்டாவை விட 10 மடங்கு குறைவு எனக் கண்டறிந்துள்ளனர்.

ஆகையால் ஒரு தனிநபரிடம் இருந்து மற்றவருக்கு [ஒமைக்ரான்](#) பரவும் வேகம் மற்ற உருமாறிய வைரஸ்களைவிட 70 மடங்கு அதிகம் என்றாலும் கூட அது நோய் பாதிப்பு ஏற்படுத்தும் தீவிரம் ஒப்பீட்டு அளவில் மிகக் குறைவு எனத் தெரிவித்துள்ளனர்.

ஓமைக்ரான் வைரஸ் இப்போது 77 நாடுகளில் பரவி உள்ளது. தென் ஆப்பிரிக்காவில் முதல் தொற்று கண்டறியப்பட்ட மூன்று வாரங்களில் 77 நாடுகளுக்குப் பரவி இருப்பது அதன் பரவும் தீவிரத்தைக் காட்டுவதாக ஆய்வாளர்கள் கூறுகின்றனர்.

மேலும், அதிகம் பரவும் இந்த புதிய உருமாறிய வைரஸ் மற்ற திரிபுகளை ஒடுக்கி கரோனா பெருந்தொற்றை முடிவுக்குக் கொண்டுவரலாம் என்றும் அவர்கள் கணிக்கின்றனர். இனி கரோனா இன்ஃப்ளூவன்சா வைரஸ் போல், மக்கள் வாழக்கற்றுக் கொள்ளும் வகையில் ஒரு நோய்க்கிருமியாகும் என்றும் அவர்கள் கணிக்கின்றனர்.

இந்து தமிழ் திசை

பிரிட்டனில் ஒரேநாளில் 78 ஆயிரம் பேருக்கு கரோனா தொற்று; ஓமைக்ரான் உச்சம்: மக்கள் அச்சம்

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பிரிட்டனில் ஓமைக்ரான் வைரஸ் உக்கிரமாகி வருகிறது. இதுவரையில்லாத வகையில் நேற்று ஒரேநாளில் 78 ஆயிரத்துக்கும் அதிகமானோர் கரோனாவில் பாதிக்கப்பட்டுள்ளனர் என்று பிரிட்டன் சுகாதாரத்துறையினர் தெரிவித்துள்ளனர்.

பிரிட்டனில் 70 சதவீதம் பேர் தடுப்பூசியை முழுமையாகச் செலுத்திவிட்டனர், பூஸ்டர் டோஸ் தடுப்பூசியும் செலுத்தப்பட்டு வரும் நிலையில் அங்கு 3-வது அலை வாட்டி எடுத்து வருகிறது.

அடுத்த சில நாட்களில் பாதிப்பு இன்னும் கடுமையாக அதிகரிக்கும் என்று பிரிட்டன் சுகாதாரத்துறையினர் எச்சரித்துள்ளதால், மக்கள் பீதியில் உள்ளனர்.

இதற்கு முன் கடந்த ஜனவரியில் அதிகபட்சமாக தினசரி 10ஆயிரத்துக்கும் மேல்தான் பாதிக்கப்பட்ட நிலையில் ஒரேநாளில் 78ஆயிரத்து 610 பேர் பாதிக்கப்பட்டது அதிகபட்சமாகும். பிரிட்டனில் 6.7 கோடி மக்கள் வசிக்கும் நிலையில் இதுவரை 1.10 கோடி பேர் கரோனா தொற்றால் பாதிக்கப்பட்டுள்ளனர்.

பிரிட்டன் பிரதமர் போரிஸ் ஜான்சன் நேற்று அளித்த பேட்டியில், “ பிரிட்டனில் அதிக சக்தி வாய்ந்த, வேகமாகப் பரவக்கூடிய ஓமைக்ரான் வைரஸால்தான் தொற்று வேகமாக அதிகரித்து வருகிறது. அடுத்துவரும் நாட்களில் பாதிப்பின் தீவிரம் மேலும் அதிகரிக்கக்கூடும்” என எச்சரித்துள்ளார்.

இதற்கிடையே பிரிட்டனில் கரோனாவைக் கட்டுப்படுத்த எடுக்கப்பட்ட நடவடிக்கை போதுமானதாக இல்லை எனக் கூறி 100க்கும் மேற்பட்ட எம்.பி.க்கள் பிரதமர் போரிஸ் ஜான்சனுக்கு எதிராகக் கிளம்பியிருப்பது அவருக்கு பின்னடைவை ஏற்படுத்தியுள்ளது.

பிரிட்டன் சுகாதாரத்துறை அமைப்பின் தலைமை நிர்வாக அதிகாரி ஜென்னி ஹாரிஸ் கூறுகையில் “ கரோனா பெருந்தொற்று தொடங்கியதிலிருந்து ஓமைக்ரான் வைரஸ்தான் மிகப்பெரிய அச்சுறுத்தலாக மாறியிருக்கிறது.

அடுத்துவரும் நாட்களில் தற்போதுள்ள பாதிப்புகளைவிட இன்னும் மோசமாக அதிகரிக்கும். மற்ற உருமாறிய வைரஸ்களைவிட ஓமைக்ரானில்பாதிப்பு தீவிரமாக இருக்கிறது. பிரிட்டனில் பெரும்பாலான இடங்களில் குறிப்பாக லண்டன், மான்செஸ்டர் நகரங்களில் ஓமைக்ரானில் பாதிப்பு கண்டுபிடிக்கப்பட்ட இரு நாட்களில் இரு மடங்காக உயர்ந்துள்ளது” எனத் தெரிவித்தார்

இவ்வளவு வேகமா; ஒமைக்ரான் எளிதாக நினைக்காதீர்கள்: உலக சுகாதார அமைப்பு எச்சரிக்கை

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கரோனா வைரஸின் உருமாற்றமான ஒமைக்ரான் வைரஸ், உலகின் பலநாடுகளுக்குப் பரவிவிட்டது, இதுவரை 70 நாடுகளுக்களும் அதிகமாக பரவியுள்ளது. லேசான பாதிப்புதான் இருக்கும் என்று யாரும் எளிதாக நினைக்க வேண்டாம் என்று [உலக சுகாதார அமைப்பு](#) எச்சரித்துள்ளது.



உலக சுகாதார அமைப்பு நேற்று ட்விட்டரில் வெளியிட்ட அறிவிப்பில் கூறப்பட்டிருப்பதாவது:

ஒமைக்ரான் வைரஸ் தற்போது உலகளவில் 77 நாடுகளுக்குப் பரவிவிட்டது, உண்மையில் இன்னும் அதிகமான நாடுகளில் ஒமைக்ரான் பரவல் இருக்க வேண்டும், அது கண்டுபிடிக்கப்படாமல் இருக்கலாம்.

இதற்கு முன் நாங்கள் பார்த்திராத வகையில், [ஒமைக்ரான் வைரஸ்](#) பரவல் வேகம் அதிகமாக இருக்கிறது. உலக மக்கள் [ஒமைக்ரான் வைரஸ்](#) பாதிப்பு லேசானதாக இருக்கும் இருக்கும் என உதாசினப்படுப்படுத்துகிறார்கள் என்பது கவலையாக இருக்கிறது.

உறுதியாகச் சொல்கிறோம், எங்களுக்குத் தெரிந்தவரையில், இந்த வைரஸ் குறித்து நாம் குறைத்து மதிப்பிடுகிறோம். ஒமைக்ரனால் உடல்நலப் பாதிப்பு குறைவாக இருந்தாலும், அதன்பரவல் நோயால் பாதிப்படுவோர் எண்ணிக்கை அதிகரித்து நாட்டின் சுகாதார அமைப்புமுறையே செயலிழக்கச் செய்துவிடும்.

மக்கள் தொடர்ந்து கரோனா வைரஸ் தடுப்பு முறைகளைக் கடைபிடிக்க வேண்டும். தடுப்பூசிக்குப்பதிலாக முகக்கவசம், தடுப்பூசிக்கு பதிலாக சமூகவிலகல், தடுப்பூசிக்கு பதலாக திறந்தவெளியிடம், கைகளை அடிக்கடி கழுவுதல் என்று இல்லாமல் அனைத்தையும் கடைபிடிக்க பிடிக்க வேண்டும் தடுப்பூசியை கண்டிப்பாகச் செலுத்தவேண்டும். அனைத்தையும் தொடர்ந்து, சிறப்பாகக் கடைபிடிக்க வேண்டும்.

ஒமைக்ரான் வைரஸ் பரவல் இருக்கும் நாடுகளில் தற்போது பூஸ்டர் தடுப்பூசி செலுத்தப்பட்டு வருகிறது. ஆனால், இந்த ஒமைக்ரானுக்கு எதிராக பூஸ்டர் தடுப்பூசியும்சிறப்பாகச் செயல்படுமா என்பதற்கு எந்தவிதமான ஆதாரங்களும் இல்லை.

ஒமைக்ரான் வைரஸ் பரவல் அதிகரிக்கும்போது, மருத்துவமனையில் பாதிக்கப்படுவோர் மற்றும் அது தொடர்பான உயிரிழப்புகள் அதிகரிக்கும் என எதிர்பார்க்கிறோம்.

இவ்வாறு [உலக சுகாதார அமைப்பு](#) தெரிவித்துள்ளது

ஒமைக்ரான் வைரஸ் மனிதர்களின் நுரையீரலை உடனே பாதிக்காது: ஆய்வில் தகவல்

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புதுடெல்லி: ஒமைக்ரான் வைரஸ், உண்மையான சார்ஸ் கோவிட்டை விடவும், டெல்டா வைரஸை விடவும் வேகமாகப் பரவும், பன்மடங்கு பிரதியெடுத்துப் பெருகும் என்றாலும் மனிதர்களுக்கு பாதிப்பை உடனடியாக ஏற்படுத்தாது. குறிப்பாக நுரையீரலின் கீழ்ப்பகுதியை உடனடியாக பாதிக்காது என்று ஆய்வில் தெரியவந்துள்ளது.

ஆனால், [டெல்டா வைரஸ்](#) தொற்று ஏற்பட்டால் அடுத்த சில நாட்களில் மனிதர்களின் நுரையீரலை மிக மோசமாக பாதித்துவிடும். அந்த அளவோடு ஒப்பிடும்போது, 10 மடங்கு குறைவான பாதிப்பையே ஒமைக்ரான் ஏற்படுத்தும் எனத் தெரியவந்துள்ளது.

ஹாங்காங் பல்கலைக்கழகத்தைச் சேர்ந்த எஸ்கேஎஸ் மருந்துத்துறையைச் சேர்ந்த ஆய்வாளர்கள் [ஒமைக்ரான் வைரஸ்](#) குறித்தும், தீவிரத் தன்மை குறித்தும் ஆய்வு நடத்தி அறிக்கை வெளியிட்டுள்ளனர்.

மனிதர்களின் இரு நுரையீரல்களும் சுவாசக் குழாயின் முனையில் ஒவ்வொரு நுரையீரலிலும் ஒரு 'y' போலப் பிரிகின்றன. முந்தைய [கரோனா வைரஸ்](#) அதாவது டெல்டா வைரஸுடன் ஒப்பிடும்போது [ஒமைக்ரான் வைரஸ்](#) நுரையீரலுக்குள் ஆழமாக ஏன் முன்னேறுவதில்லை என்பது குறித்துக் கட்டுரையில் விளக்கவில்லை. இன்னும் அதுகுறித்து மதிப்பாய்வு செய்யப்பட்டு வருகிறது எனத் தெரிவிக்கப்பட்டுள்ளது.

மனிதர்களின் நுரையீரலில் இருந்து நுரையீரல் திசுக்களைப் பிரித்தெடுத்து அதில் ஒமைக்ரான் உருமாற்றத்தை மட்டும் ஆய்வாளர்கள் பிரித்தெடுத்துள்ளனர். டெல்டா வைரஸிலிருந்து, [ஒமைக்ரான் வைரஸ்](#) எவ்வாறு மாறுபட்டது, எந்த அளவு பாதிப்பைத் தருகிறது, தரவில்லை என்பது குறித்து ஆராய்ந்துள்ளனர்.

அதில் டெல்டா வைரஸை விடவும், உண்மையான சார்ஸ் கோவிட்டை விட பிரதி எடுப்பதில் 70 மடங்கு வேகமாக ஒமைக்ரான் செயல்படுகிறது. ஆனால், நுரையீரல் திசுக்களைப் பிரதியெடுப்பதில் சார்ஸ் கோவிட்டை விட 10 மடங்கு குறைவாகவே இருக்கிறது என்பது கண்டுபிடிக்கப்பட்டது. இதன் காரணமாகவே நுரையீரலை ஒமைக்ரான் உடனடியாக

பாதிக்காது என ஆய்வாளர்கள் தெரிவிக்கிறார்கள்

ஹாங்காங் பல்கலைக்கழகத்தின் பொது சுகாதாரத்துறையின் இணைப் பேராசிரியர் மருத்துவர் மைக்கேல் சான் சீ-வாய் கூறுகையில், "ஒமைக்ரான், [டெல்டா வைரஸ்](#) பாதிப்பு ஏற்பட்டபின் மனிதர்களால் எளிதாக சுவாசிக்க முடியாததற்கு காரணங்கள் உண்டு. வைரஸ் தன்னைப் பிரதி எடுப்பதில் மட்டும் நோயின் தீவிரம் தீர்மானிக்கப்படுவதில்லை. நோய் எதிர்ப்பு சக்தியின் அளவைப் பொறுத்தும் அமைகிறது.

ஒமைக்ரான் வைரஸ் குறைவான சக்தியுடைய கிருமியாக இருந்தாலும், அதிகமான மக்களை பாதிக்கும்போது, நோயின் தீவிரம் அதிகமாகி, உயிரிழப்பையும் அதிகரிக்க வைக்கும். எங்களின் ஆய்வில் ஒமைக்ரான் வைரஸ், தடுப்பூசி அளிக்கும் நோய் எதிர்ப்பு சக்தியிலிருந்து தப்பிக்கிறது. ஏற்கெனவே கரோனா வைரஸால் பாதிக்கப்பட்டு நோய் எதிர்ப்பு சக்தி கிடைத்திருந்தாலும் அதிலிருந்து தப்பிக்கிறது எனத் தெரியவந்துள்ளது. எப்படியாகினும், ஒமைக்ரான் வைரஸால் ஏற்பட்டுள்ள ஒட்டுமொத்த அச்சுறுத்தல் முக்கியத்துவம் வாய்ந்ததாக இருக்கிறது" எனத் தெரிவித்துள்ளார்.

இந்தியாவில் இதுவரை 73 பேர் ஒமைக்ரான் வைரஸால் பாதிக்கப்பட்டுள்ளனர். ஆனால், தென் ஆப்பிரிக்காவில் இருந்துவரும் தகவலின்படி, ஒமைக்ரான் தொற்று வேகமாக அதிகரிக்கும் எனத் தெரியவந்துள்ளது. சமீபத்திய ஆய்வுகளின்படி, ஒமைக்ரானுக்கு எதிராக உற்பத்தி செய்யப்படும் நோய் எதிர்ப்பு சக்தி முந்தைய வைரஸ் வகைகளைவிட 20-40 மடங்கு குறைவாக இருப்பதாகத் தெரிவிக்கின்றன. ஆனால், கரோனாவால் ஏற்கெனவே பாதிக்கப்பட்டு குணமடைந்தவர்கள், தடுப்பூசி போடப்பட்டவர்களிடமும், நோய் எதிர்ப்பு சக்தி அதிகமாக உள்ளது.

பிரிட்டனில் மட்டும் 10 ஆயிரம் பேர் ஒமைக்ரான் வைரஸால் பாதிக்கப்பட்டுள்ளனர், அதில் 10 பேர் மருத்துவமனையில் அனுமதிக்கப்பட்டுள்ளனர், ஒருவர் உயிரிழந்துள்ளார். நாஸ்தோறும் பிரிட்டனில் நோய்த்தொற்று 80 ஆயிரமாக அதிகரித்துள்ளது.

சென்சூசர்-ஜிஜிபி அமைப்பின் இயக்குநர் அனூராக் அகர்வால் ட்விட்டரில் பதிவிட்ட கருத்தில், “சார்ஸ் கோவிட் குறித்த எங்கள் ஆய்வில் சுவாரச்யமான திருப்புமுனை கிடைத்துள்ளது. அதாவது டெல்டா வைரஸ், உண்மையான சார்ஸ் கோவிட்டை விட, ஓமைக்ரான் ஏற்படுத்தும் பாதிப்பு குறைவுதான். ஆனால், காற்றில் பரவுவதும், பிரதி எடுப்பதும் வேகமாக இருக்கும். நுரையீரலின் மேல்சுவாசப் பகுதியைத்தான் பாதிக்கும் என்பதால், சாதாரண ஜலதோஷம், நிமோனியா இருக்கும். இருப்பினும் ஓமைக்ரான் அச்சுறுத்தல் இன்னும் அதிகமாகவே இருக்கிறது” எனத் தெரிவித்துள்ளார்.

graph in Bengal for more than four months now. However, health officials said that the hospital can be used for Covid treatment again if needed.

THE TIMES OF INDIA

Covid-19: Omicron variant spreads 70 times faster than Delta, study finds

Bloomberg | Dec 16, 2021, 10.53 AM IST



HONG KONG: Omicron multiplies much faster in the human bronchi and much more slowly in lung tissue, according to a Hong Kong study that offers a potential explanation for why the Covid-19 variant spreads so rapidly but may inflict less severe disease on some patients. Using tissue removed from people's bodies, researchers found that 24 hours after infection Omicron had replicated 70 times faster in the human bronchus than with the Delta variant or the original coronavirus strain. The bronchi are large airways that lead to the lungs. Meanwhile, the replication rate in human lung tissue was more than 10 times lower than what was seen with the original strain - - an observation that “may suggest lower severity of disease,” according to a statement from the LKS Faculty of Medicine at The University of Hong Kong.

THE TIMES OF INDIA

TB hosp back to pre-Cov status

TNN | Dec 15, 2021, 04.18 AM IST



Kolkata: The health department has decided to restart tuberculosis treatment at KS Roy TB Hospital. The hospital in Jadavpur was converted into a designated Covid Hospital in November last year. Before pandemic, it was used as a facility to manage drug-resistant TB.

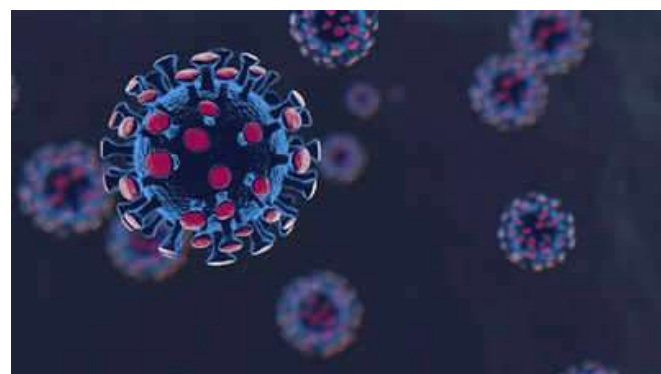
Health officials in South 24 Parganas, as well as the hospital authority have been asked to arrange for the makeover. Sources said the decision was taken considering the stable Covid

THE TIMES OF INDIA

Ayush ministry suggests ways for prevention of Covid19, care during disease

Dec 15, 2021, 11.27 PM IST

NEW DELHI: Amid concerns over a possible surge in Covid-19 cases in the country powered by the new variant Omicron, the Ayush ministry has come out with a comprehensive document putting forth suggestions for the prevention of Covid-19, care during the disease as well as to deal with post-Covid stages. "Covid-19 is an evolving disease, characterised by the development of sequelae to the primary disease known as post-Covid syndrome and long Covid-19.



It has been observed that patients recovering from SARS-CoV-2 suffer from persistent and often, debilitating symptoms extending several months past their initial diagnosis," an official said. The recommendations cover dietary, mental health and physical health suggestions.

These recommendations have been formulated stressing the need for a healthy lifestyle with Ayush preventive measures and care in respect of Covid-19 and Long Covid-19, the official said.

General preventive measures and methods for promoting systemic immunity, ways to promote



The research -- still under peer review for publication -- could shine a biological light on reports from health officials in South Africa and elsewhere that omicron spreads faster than anything yet in the pandemic but is generally causing less severe bouts of Covid-19. Daily numbers of new cases hit records in the UK and South Africa on Wednesday.

Severity of disease isn't just a function of virus replication, but also relates to how the immune system responds to infection, potentially leading to the so-called cytokine storms that have caused many of the deaths in the pandemic, said Michael Chan Chi-wai, associate professor at the university's school of public health, in the statement.

Beyond that, "by infecting many more people, a very infectious virus may cause more severe disease and death even though the virus itself may be less pathogenic," said Chan, who led the team that conducted the research.

"Taken together with our recent studies showing that the Omicron variant can partially escape immunity from vaccines and past infection, the overall threat from Omicron variant is likely to be very significant," Chan said.

local mucosal immunity along with other preventive courses such as fumigation (Dhupana) have been recommended by the ministry.

Recommendations related to mental health and measures to increase mental strength (Satvabala) are also part of the document which were not in the previous guidelines or advisories issued by the Ayush ministry

THE TIMES OF INDIA

IIT Delhi researchers develop RT-PCR based assay for detection of Omicron variant within 90 minutes

PTI | Dec 13, 2021, 07.51 PM IST



NEW DELHI: Researchers at the Indian Institute of Technology (IIT), Delhi have developed an RT-PCR based assay for the specific detection of the Omicron variant of Covid-19 within 90 minutes, according to officials.

Currently, the identification or screening for Omicron is done worldwide using next-generation sequencing-based methods which require over three days.

The institute has filed an Indian patent application for the rapid screening assay developed by its Kusuma School of Biological

Sciences and is in process of initiating talks with potential industry partners.

"The assay is based on detecting specific mutations which are present in the Omicron variant and absent in other currently circulating variants of SARS-CoV-2. Primer sets targeting these unique mutations in the S gene were designed for the specific amplification of either the Omicron variant or other currently circulating variants of SARS-CoV-2 and tested using real time PCR," a senior IIT Delhi official said.

"Using synthetic DNA fragments, the assays were optimised to distinguish the wild-type from the Omicron variant in a dynamic range. Currently, the identification or screening for Omicron is done worldwide using next-generation sequencing based methods, which require over 3 days. By using this RT-PCR based assay, it will be possible to test for the presence of the Omicron variant within 90 minutes," the official added.

IIT Delhi was the first academic institute in India to have obtained ICMR approval for a real-time PCR-based diagnostic assay. The institute developed a method to detect Covid-19 which significantly reduced the cost of testing, making it affordable for a large population in the country

Following approval from the ICMR, the kit was successfully launched in the market.

The Omicron variant was first detected in India in Bengaluru with two people testing positive for it.

Cases of Omicron, which is categorised as a "variant of concern" by the World Health Organisation, have been detected in about 60 countries.

Covid-19 vaccines may be less effective against Omicron - WHO

Reuters | Dec 15, 2021, 03.13 PM IST

GENEVA: Preliminary evidence indicates that Covid-19 vaccines may be less effective against infection and transmission linked to the Omicron coronavirus variant, which also carries a higher risk of reinfection, the World Health Organization said on Wednesday.



The WHO, in its weekly epidemiological update, said that more data was needed to better understand the extent to which Omicron may evade immunity derived from either vaccines or previous infection.

"As a result of this, the overall risk related to the new variant of concern Omicron remains very high," it said.

Continued from page no.1

ICMR designs kit for Omicron detection; invites EOI from manufacturers for its commercialisation

.....The ICMR-Regional Medical Research Centre, NE, Dibrugarh, one of the institutes of the ICMR, New Delhi, has developed a novel technology—real-time RT-PCR assay for detection of Omicron (B.1.1.529) variant of SARS-CoV2 and a kit for the same.

"ICMR is the owner of the said technology, including any underlying intellectual property(ies) and commercialisation rights. ICMR is lawfully entitled to enter into any form of non-exclusive license agreements with selected manufacturer/manufacturers, including transfer of technology through suitable agreement to any other interested manufacturers," the invitation of Expression of Interest document said.

"ICMR, New Delhi, invites Expression of Interest (EOI) through email from experienced IVD kit manufacturers for undertaking transfer of technology for development and commercialisation of SARS-CoV-2 Omicron (B.1.1.529) Real time RT-PCR assay (RT-PCR) through a novel diagnostic kit, developed by ICMR," the invitation of Eoi said.

Subject to the terms and conditions of an agreement, more particularly a license agreement, ICMR shall grant a non-exclusive license to the manufacturer, a royalty bearing right and license to use and practice the technology and process ("licensed technology") to manufacture, sell and commercialise the product, including a non-exclusive right to manufacture, sell and market products worldwide and the right to use licensed technology for manufacturing products worldwide.

The agreement, following Eoi, is proposed to be executed on "non-exclusive" basis with multiple manufacturers due to the extensive demand of SARS-CoV2 Omicron (B.1.1.529) real-time RT-PCR assay that is being envisaged, the document said.

'All Omicron patients stable, symptoms mild'

HYDERABAD, DECEMBER 20, 2021 00:23 IST

Variant may turn virulent if it replicates: doctors

Along with growing concerns over the newly-detected Omicron cases in the State, there is also curiosity tinged with anxiety regarding the different ways in which one may have contracted the coronavirus variant, the people they have come in contact with and especially, their health status.

Director of Medical Education K. Ramesh Reddy said that health condition of all the patients with Omicron is stable and that they have only mild symptoms.

However, senior doctors have stressed that it is imperative to maintain all COVID precautions since the variant might become virulent (severe) if it gets a chance to replicate. PHFI's IIPH-Hyderabad director G.V.S. Murthy concurred, adding that most mutations occur when viruses pass through human beings repeatedly as they try to survive better by adapting to the human host.

"When people do not protect themselves, mutation may become more serious. As of now, presentation of Omicron in people has been mild to moderate, and does not require hospitalisation. As with any COVID infection, it might become severe if a person has co-morbidities, or has high exposure to the virus or has not been vaccinated," said Dr Murthy.

Senior doctors have reiterated the importance of precautions such as wearing face masks, vaccination and avoiding mass gatherings to keep severe/ dangerous possibilities at bay.

A total of 20 cases of the variant had been detected in the State till Sunday night, excluding a boy who was in transit and left for Kolkata, West Bengal. All of them were admitted to Telangana Institute of Medical Sciences (TIMS), Gachibowli.

Since the variant is new and being studied across the world, health condition of the patients at TIMS is being closely monitored. Healthcare workers have collected various details such as age, COVID vaccine doses, dates of vaccination, if there are experiencing any symptoms such as respiratory distress and fever, etc. Their vitals are checked regularly too.

"None of them have respiratory disease. Symptomatic treatment is being provided to them. We are also focusing on containment of the variant," said Dr Ramesh Reddy.

Most patients are young, the maximum age being 40. Doctors said that the real virulence of Omicron will be known if people of various age groups, including the elderly, contract the variant/ State Health staff have been on the task of tracing all contacts of Omicron patients to contain the spread. However, the possibility of it spreading at a faster rate is not ruled out.

COVID-19 vaccination | India prioritising second dose until year-end: officials

NEW DELHI, DECEMBER 18, 2021 19:25 IST

Jacob Koshy

With two weeks left for year-end, country is still far from its target of vaccinating all adults by that time

While about 87% of India's adults have got at least one dose of COVID-19 vaccine and 56% fully vaccinated, the government's current priority appears to be increasing the second dose over the first, officials told *The Hindu*.

With two weeks left for the year-end, the country is still far from its target of vaccinating all adults by that time.

So far, 136.7 crore doses have been administered, with 82.6 crore being the first one and 54.1 crore the second one. The target is to inoculate 94 crore adults by December 31 as per claims by several Union Ministers through the year.

Since October 16 to 22, however, the second dose number has steadily outpaced that of the first. From 2.1 crore second dose and 1.59 crore first one in that week, the week from December 11-17 has seen the first dose fall to 1.2 crore and the second one increase to 3.36 crore. So far, India has inoculated at least 60% of its population with one dose and 40% fully vaccinated. The government is yet to approve vaccines for children as well as booster doses even as global concerns emerge of the Omicron variant being far more capable of evading protective antibodies in those vaccinated as well those who have been exposed to a live infection.

Experts say that while targeting 100% of population is "ideal," reaching out to the last 10%-20% is challenging as experience with previous vaccination programmes had shown, said Samiran Panda, who heads the epidemiology and infectious disease section of the Indian Council of Medical Research (ICMR).

Innovative approaches

"While inoculating an entire population is ideal, I'd rather have 80% of the population fully vaccinated. By all accounts, that would in itself be a tremendous achievement," Dr. Panda

told *The Hindu*, "Logistics, vaccine hesitancy, geographical challenges all play a role in reaching out to the last fraction of the population. We have a project of delivering vaccines through drones, called I-Drone, and you'd have to employ innovative approaches such as this for full coverage."

More than 60 countries across the world are providing booster doses and India has at least four clinical trials going on to test the feasibility of mixing approved vaccines and using them as booster doses.

Of the vaccines administered so far, Covaxin comprises about 10%. Its maker Bharat Biotech said in May that it took four months for a batch of Covaxin to be manufactured and readied for supply. That month, Dr. V.K. Paul, Chairman, National Empowered Group on Vaccines, said India would have close to 216 crore doses from August-December. But when the Union Health Ministry, in an affidavit to the Supreme Court in July, said that only 135 crore doses would be available, he clarified that his estimate was "aspirational."

THE HINDU

Top news of the day: WHO says Omicron cases doubling in 1.5 to 3 days in areas with community spread

DECEMBER 18, 2021 19:02 IST

The major news headlines of the day, and more.

[Omicron cases doubling in 1.5 to 3 days in areas with local spread, says WHO](#)

Omicron is spreading rapidly in countries with high levels of population immunity, but it is unclear if this is due to the virus' ability to evade immunity, its inherent increased transmissibility or a combination of both, the WHO said in an update.



Omicron in 89 countries, cases doubling in 1.5 to 3 days: WHO

GENEVA, DECEMBER 18, 2021 16:22 IST

'Variant spreading rapidly in countries with high levels of population immunity'

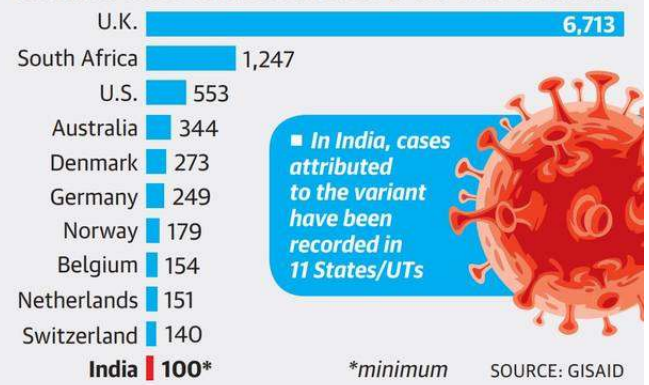


The Omicron variant of coronavirus has been reported in 89 countries and the number of cases is doubling in 1.5 to 3 days in areas with community transmission, the World Health Organization (WHO) said on Saturday.

Omicron is spreading rapidly in countries with high levels of population immunity, but it is unclear if this is due to the variant's ability to evade immunity, its inherent increased transmissibility or a combination of both, the WHO said in an update.

Case tally

The chart shows the 10 countries with the highest number of confirmed COVID-19 cases attributed to the Omicron variant



The agency designated Omicron a variant of concern on November 26, soon after it was first detected, and much is still not known about it, including the severity of the illness it causes.

'More data needed'

"There are still limited data on the clinical severity of Omicron," the WHO said. "More data are needed to understand the severity profile and how severity is impacted by vaccination and pre-existing immunity."

It added, "There are still limited available data, and no peer-reviewed evidence on vaccine efficacy or effectiveness to date for Omicron."

Overwhelming hospitals

The WHO warned that with cases rising so rapidly, hospitals could be overwhelmed in some places.

"Hospitalisations in the U.K. and South Africa continue to rise, and given rapidly increasing case counts, it is possible that many healthcare systems may become quickly overwhelmed," the agency said.

காசநோய் இல்லா இந்தியாவை உருவாக்க மக்களின் பங்களிப்பு அவசியம்: குடியரசு துணைத் தலைவர் வெங்கய்ய நாயுடு

Published : 17 Dec 2021 10:59 am

புதுடெல்லி : 2025-ம் ஆண்டுக்குள் 'காசநோய் இல்லா இந்தியா' பிரச்சாரத்தில் மக்களை 'முக்கிய பங்களிகளாக' உருவாக்க வேண்டும் என்று குடியரசு துணைத் தலைவர் வெங்கய்ய நாயுடு இன்று அழைப்பு விடுத்தார்.

இது தொடர்பாக அவர் கூறுகையில், "எல்லா நோய்களையும் விட, காசநோயை முற்றிலுமாக அகற்ற சமூகத்தின் ஈடுபாடு இன்றியமையாதது. காசநோயின் தாக்கம் சமுதாயத்தின் பாதிக்கப்படக்கூடிய பிரிவினரின் மீது அதிக அளவில் உணரப்படுகிறது. காசநோயை ஒழிக்க வளங்களைப் பெருமளவில் திரட்டவும் பல துறைகளின் தலையீடுகளும் தேவை.

மக்கள் இயக்கமாக உருவெடுத்தால் மட்டுமே காசநோயை முற்றிலுமாக ஒழிக்கும் இலக்கை அடைய முடியும். இந்த இயக்கத்தில் மக்களை ஈடுபடுத்த அனைத்து மட்டங்களிலும் உள்ள மக்கள் பிரதிநிதிகளுக்கு அழைப்பு விடுக்கிறேன். 2025-ம் ஆண்டுக்குள் இந்தியாவை காசநோய் இல்லாத நாடாக மாற்ற 'டீம் இந்தியா' உணர்வை ஏற்றுப் பல்முனை முயற்சிகள் தேவை" என்றார்.

காசநோய்க்கு எதிராக பெண்கள் வெற்றி பெறுவதற்கான தேசிய மாநாட்டில் உரையாற்றிய குடியரசு துணைத் தலைவர், காசநோய் தொடர்பாக இந்த ஆண்டு நடைபெறும் இரண்டாவது மாநாடு இது என்பதால் காசநோய் ஒழிப்பில் அரசின் உறுதி தெளிவாகத் தெரிகிறது என்றார்.

இந்த மாநாட்டில் நாடாளுமன்ற உறுப்பினர்கள் மட்டுமின்றி, பிற மக்கள் பிரதிநிதிகள்,

காசநோய் ஒழிப்புக்காக பாடுபடும் அமைப்புகள், காசநோயால் பாதிக்கப்பட்ட பெண்கள், அங்கன்வாடி பணியாளர்கள் உள்ளிட்டோர் கலந்துகொள்வது குறித்து அவர் மகிழ்ச்சி தெரிவித்தார்.

காசநோயிலிருந்து மீண்ட பெண்களைக் குடியரசு துணைத் தலைவர் பாராட்டினார். காசநோயை எதிர்த்துப் போராட பாலின-உணர்வற்ற அணுகுமுறைக்கு அழைப்பு விடுத்த அவர், பெண்களுக்குச் சிறந்த ஆலோசனை, ஊட்டச்சத்து மற்றும் வீடு தேடி பரிசோதனை ஆகியவற்றைப் பரிந்துரைத்தார்.

'காசநோய் தடுக்கக்கூடியது மற்றும் குணப்படுத்தக்கூடியது என்ற செய்தியை மக்களிடம் கொண்டு செல்லுங்கள்' என்று அவர் கேட்டுக்கொண்டார். காசநோய் பற்றிய களங்கத்தை அகற்றுவதற்காக மக்கள் பிரதிநிதிகளை உள்ளூர் மட்டத்தில் தொடர் ஆய்வுகளை மேற்கொள்ளவும், உரையாடல்களில் பங்கேற்கவும் வெங்கய்ய நாயுடு அழைப்பு விடுத்தார்.

பீதியில் பிரிட்டன்: ஒரே நாளில் 12 ஆயிரம் பேர் ஒமைக்ரானில் பாதிப்பு: 82 ஆயிரம் பேருக்கு தொற்று

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லண்டன் : பிரிட்டனில் கடந்த 24 மணிநேரத்தில் 82 ஆயிரத்துக்கும் அதிகமானோர் கரோனா தொற்றால் பாதிக்கப்பட்டுள்ளனர். இதில் 12,133 பேருக்கு ஒமைக்ரான தொற்று ஏற்பட்டுள்ளது என அந்நாட்டு சுகாதாரத்துறை தெரிவித்துள்ளது.

பிரிட்டனில் [ஒமைக்ரான்](#) தொற்று கண்டறியப்பட்டபின், 12 ஆயிரத்துக்கும் மேற்பட்டோர் ஒரேநாளில் பாதிக்கப்படுவது இதுதான் முதல்முறையாகும். பிரிட்டனில்

ஒட்டுமொத்தமாக [ஓமைக்ரான்](#) பாதிப்பு 37ஆயிரத்து 101 ஆக அதிகரித்துள்ளது.



பிரிட்டனில் கடந்த 24 மணிநேரத்தில் 82ஆயிரத்து 886 பேருக்கு கரோனா தொற்று உறுதி செய்யப்பட்டுள்ளது. இதன்மூலம் அந்நாட்டில் கரோனா பாதிப்பு ஒரு கோடியே 13 லட்சத்து 61 ஆயிரத்து 387 ஆக அதிகரித்துள்ளது. கடந்த சனிக்கிழமை 90 ஆயிரம் பேரும், வெள்ளிக்கிழமை 93 ஆயிரம் பேரும் கரோனாவில் பாதிக்கப்பட்டனர்.

பிரிட்டன் சுகாதாரத்துறை அமைச்சர் சாஜித் ஜாவித் கூறுகையில் “ கரோனா வைரஸின் புதிய வகை [ஓமைக்ரான்](#) வைரஸ் மிக, மிக வேகமாகப் பரவுகிறது. இப்போது அரசு வெளியிட்டுள்ள கரோனா பாதிப்பின் எண்ணிக்கைவிட பாதிக்கப்பட்டவர்கள் எண்ணிக்கை அதிகமாகத்தான் இருக்கும். ஏனென்றால், ஒவ்வொருவரும் பரிசோதனைக்கு எடுக்கவில்லை. முடிவு கிடைக்க தாமதமாகும் என்பதால் வீட்டிலேயே இருக்கிறார்கள்” எனத் தெரிவித்தார்.

பிரிட்டனில் [ஓமைக்ரான்](#) பரவல் கட்டுக்கடங்காமல் போகும் சூழல் உருவாகும் என்பதால் அடுத்த சில நாட்களில் பல்வேறு கட்டுப்பாடுகளை விதிக்க வேண்டும் என்று பிரிட்டன் அரசுக்கு சுகாதாரத்துறையினர், அறிவியல் வல்லுநர்கள் எச்சரித்துள்ளனர்

இதுவரை [ஓமைக்ரான்](#) வைரஸ் 90-க்கும் மேற்பட்ட நாடுகளில் பரவியிருக்கிறது.



[ஓமைக்ரான்](#) பாதிப்பு ஏற்பட்டபின் தொற்று பரவல் அடுத்த 3 நாட்களில் ஒன்றரை மடங்கு அதிகரித்து, சமூகப் பரவலுக்கு இட்டுச் செல்கிறது என உலக சுகாதார அமைப்பு எச்சரித்துள்ளது.

பிரிட்டனில் 12 வயதுள்ள 89 சதவீதம் பேர் முதல் டோஸ் தடுப்பூசி செலுத்திவிட்டனர், மற்ற வயதுபிரிவினரில் 81 சதவீதம்பேர் 2 டோஸ் தடுப்பூசி செலுத்தியும் [ஓமைக்ரான்](#) பாதிப்பு ஏற்பட்டுள்ளது



ஓமைக்ரான் பரவல் : எதையும் எதிர்கொள்ள தயாராக இருப்போம்: எய்ம்ஸ் இயக்குநர் எச்சரிக்கை

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புனே: பிரிட்டனில் [ஓமைக்ரான்](#) பாதிப்பு நாளுக்கு நாள் அதிகரித்து வருவது குறித்து அச்சம் தெரிவித்த [எய்ம்ஸ்](#) இயக்குநர் ரன்ஜீப் குலேரியா, “ எந்தச் சூழலையும் எதிர்கொள்ள நாம் தயாராக இருக்க வேண்டும்” எனத் தெரிவித்தார்

தென் ஆப்பிரிக்காவில் கடந்த மாதம் 24ம் தேதி கண்டறியப்பட்ட [ஓமைக்ரான்](#) வைரஸ் அடுத்தடுத்து பல்வேறு நாடுகளுக்கும் பரவி

70க்கும் மேற்பட்ட நாடுகளுக்காக மேல் பரவிவிட்டது.

இதனால், அமெரிக்கா, ஐரோப்பிய நாடுகள், பிரிட்டன், கனடா உள்ளிட்ட பல நாடுகள் தென் ஆப்பிரிக்கா, கிழக்கு ஆப்பிரிக்க நாடுகளில் இருந்து வரும் பயணிகளுக்கு கட்டும் கட்டுப்பாடுகளை விதித்துள்ளன சில நாடுகள் தடையும் விதித்துள்ளன.

கரோனா வைரஸில் மோசமான விளைவுகளை ஏற்படுத்திய டெல்டா வைரஸைவிட, [ஓமைக்ரான்](#) வைரஸ் வேகமாகப் பரவுகிறது என்றும், பாதிப்பின் அளவில் லேசான அறிகுறிகளை ஏற்படுத்துகிறது என்றும் முதல் கட்ட புள்ளிவிவரங்கள் மூலம் தெரியவந்தது.

அதுமட்டுமல்லாமல் கரோனாவில் பாதிக்கப்பட்டு அதனால் கிடைத்த நோய் எதிர்ப்புச்சக்தி, தடுப்பூசி மூலம் கிடைத்த நோய் எதிர்ப்புச்சக்தியையும் இந்த [ஓமைக்ரான்](#) வைரஸ் குறைத்து விடுகிறது, அல்லது அழித்துவிடுகிறது என்றும் கூறப்பட்டது. ஆனால், அதிகமான புள்ளிவிவரங்கள் ஏதும் கிடைக்காததால் அறிவியல் வல்லுநர்கள் உறுதியான தகவலை ஏதும் கூறவில்லை.

பிரிட்டனில் நாளுக்கு நாள் கரோனா, ஓமைக்ரானில் பாதிக்கப்பட்டோர் எண்ணிக்கை அதிகரித்து வருகிறது. நாஸ்தோறும் சராசரியாக 80 ஆயிரம் பேர் தொற்றால் பாதிக்கப்பட்டு வருகிறார்கள். இதுவரை பிரிட்டனில் மட்டும் 37ஆயிரத்துக்கும் அதிகமானோர் ஓமைக்ரானில் பாதிக்கப்பட்டுள்ளனர்.

ஒட்டுமொத்தமாக அந்நாட்டில் கரோனா பாதிப்பு 1.13 கோடியாக அதிகரித்துள்ளது. அதிலும் வெள்ளிக்கிழமை அதிகபட்சமாக 93 ஆயிரம் பேருக்கு தொற்று ஏற்பட்டது.

இந்நிலையில் பிரிட்டனில் கடந்த ஆண்டு நவம்பர், டிசம்பர் மாதங்களில் டெல்டா வைரஸ் பரவும்போது இதேபோன்றுநிலை இருந்தது. இந்தியாவில் பரவாது என்று நினைத்திருந்தபோது, கடந்த மார்ச் முதல் மே மாதம் வரை இந்தியாவில் 2-வது அலை மக்களை கொத்துக்கொத்தாக காவு வாங்கியது

இதனால் பிரிட்டனில் ஏற்பட்டுவரும் [ஓமைக்ரான்](#) பாதிப்பு

இந்தியர்களுக்கு சற்று பீதியை ஏற்படுத்தியிருக்கிறது. இதுகுறித்து [எய்ம்ஸ்](#) இயக்குநர் மருத்துவர் ரன்தீப் குலேரியா, புனேயில் நேற்று பேட்டியளித்தார்.

அப்போது அவர் கூறுகையில் “ பிரிட்டனில் [ஓமைக்ரான்](#) பாதிப்பு, கரோனா தொற்று அதிகரித்து வருவது கவலையை ஏற்படுத்தியுள்ளது. நாம் எந்தச் சூழலையும் எதிர்கொள்ள தயாராக இருக்க வேண்டும். ஆனால், பிரிட்டனில் சூழலை மோசமான அளவுக்குச் செல்லாது என்று நம்புகிறேன்.

ஓமைக்ரான் வைரஸ் குறித்து அதிகமான புள்ளிவிவரங்கள் தேவைப்படுகிறது. உலகில் மற்றநாடுகளில் [ஓமைக்ரான்](#) பரவலையும் தொடர்ந்து நாம் கண்காணிப்பது அவசியம். எதற்கும் தயாராக இருப்போம். எதற்கும் தயாராக இருப்பது என்பதைவிட, ஓமைக்ரானைவரவிடாமல் தடுக்கும் வகையில் கரோனா பாதுகாப்பு வழிமுறைகளைக் கடைபிடிக்க வேண்டும்” எனத் தெரிவித்தார்



6 விமான நிலையங்களுக்கு வரும் எச்சரிக்கை பட்டியல் நாடுகள் பயணிகளுக்குப் புதிய கட்டுப்பாடு: இன்று முதல் அமல்

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புதுடெல்லி: ஒமைக்ரான் பரவல் எச்சரிக்கைப் பட்டியலில் இருக்கும் நாடுகளில் இருந்து வரும் பயணிகள் 6 விமானநிலையங்களில் வந்திறங்கும் போது, ஆர்டிபிசிஆர் பரிசோதனைக்காக புறப்படும் முன்பே முன்பதிவு செய்திருக்க வேண்டும் என்பது இன்று முதல் கட்டாயமாக்கப்பட்டுள்ளது.

இதன்படி டெல்லி, கொல்கத்தா, மும்பை, சென்னை, பெங்களூரு, ஹைதராபாத் விமானநிலையங்களில் வந்து இறங்கும் எச்சரிக்கைப்பட்டியல் நாடுகளில் இருந்து வரும் பயணிகள் பிசிஆர் பரிசோதனைக்காக முன்பதிவு செய்வது கட்டாயம்

ஒருவேளை பிசிஆர் பரிசோதனைக்காக முன்பதிவு செய்யாமல் எந்தப் பயணியாவது இந்த 6 விமானநிலையங்களுக்கு புறப்பட்டால் அவர்கள் விமானத்தில் பயணிக்க அனுமதிக்கப்படமாட்டார்கள். மத்திய சுகாதாரத்துறை அமைச்சகம் வெளியிட்ட எச்சரிக்கைப் பட்டியலில் ஐரோப்பிய நாடுகள், பிரிட்டன், தென் ஆப்பிரிக்கா, பிரேசில், போட்ஸ்வானா, ஜிம்பாப்வே, தான்சானியா, ஹாங்காங், சீனா, கானா, மொரிஷியஸ், நியூஸிலாந்து, இஸ்ரேல் ஆகியவை அடங்கும்.



மத்திய விமானப்போக்குவரத்து அமைச்சகம் வெளியிட்ட அறிவிப்பில் “ ஏர் சுவிதாவில் மாற்றம் செய்யப்பட்டுள்ளதால், பயணிகள் எச்சரிக்கைப் பட்டியலில் நாடுகளில் இருந்துவரும்போது, அல்லது கடந்த 14 நாடுகளுக்கு முன் இந்த நாடுகளுக்குச் சென்றுவிட்டு வேறு நாட்டிலிருந்து வரும்போதும் அங்கிருந்து புறப்படும் முன்பே ஆர்டிபிசிஆர் பரிசோதனைக்கு முன்பதிவு செய்ய வேண்டும்.

ஏர் சுவிதா தளத்தில் உள்ள பயணிகளுக்கான விண்ணப்ப படிவத்தில்

அனைத்துவிவரங்களையும் வழங்கிட வேண்டும். டெல்லி, கொல்கத்தா, மும்பை, சென்னை, பெங்களூரு, ஹைதராபாத் விமானநிலையங்களில் வந்து இறங்கும் பயணிகள் பிசிஆர் பரிசோதனை முன்பதிவு செய்ய வேண்டும். இந்த புதிய நடைமுறை, கட்டுப்பாடு டிசம்பர் 20ம் தேதி முதல் (இன்று) நடைமுறைக்கு வருகிறது.



ஒருவேளை பயணி பிசிஆர் பரிசோதனைக்கு முன்பதிவு செய்யாமல் அல்லது முன்பதிவு செய்வதில் சிரமங்களைச் சந்தித்து அதனால் முன்பதிவு செய்யாமல் விமானத்தில் ஏறினால் அவர் பயணம் செய்ய அனுமதிக்கப்படமாட்டார். ஒருவேளை அவர் பயணம் செய்துவிட்டால், சம்பந்தப்பட்ட விமானநிறுவனத்தின் அதிகாரிகள் அவரை பரிசோதனைக்கு உட்படுத்தவேண்டும்” எனத் தெரிவிக்கப்பட்டுள்ளது.

விமானநிலையத்தில் [ஆர்டிபிசிஆர் பரிசோதனை](#) செய்தபின், அந்த முடிவுகள் கிடைத்தபின்பு அதில் நெகட்டிவ் இருந்தால் மட்டுமே விமானநிலையத்தை விட்டு பயணிகள் வெளியே செல்லமுடியும்.



3 நாட்களில் ஒன்றரை மடங்கு அதிகரித்த ஒமைக்ரான்: உலக சுகாதார அமைப்பு எச்சரிக்கை

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உலக அளவில் 3 நாட்களில் ஒன்றரை மடங்கு [ஓமைக்ரான்](#) தொற்று அதிகரித்துள்ளது என்று [உலக சுகாதார அமைப்பு](#) (டபிள்யூஎச்ஓ) எச்சரிக்கை விடுத்துள்ளது.

தென் ஆப்பிரிக்காவில் முதன்முதலாக கண்டறியப்பட்ட [ஓமைக்ரான்](#) வைரஸ் தற்போது இந்தியா உள்பட பல்வேறு நாடுகளுக்கு பரவி உள்ளது. மிகவும் வேகமாக பரவும் தன்மை கொண்டது என்று விஞ்ஞானிகள் எச்சரித்து உள்ளதால், [ஓமைக்ரான்](#) வைரஸ் பரவலை தடுக்க உலக நாடுகள் தீவிர நடவடிக்கை எடுத்து வருகின்றன. இந்தியாவில் இதுவரை 113 பேருக்கு [ஓமைக்ரான்](#) பாதிப்பு உறுதி செய்யப்பட்டுள்ளது. 11 மாநிலங்களில் [ஓமைக்ரான்](#) பரவி உள்ளது.

இதற்கிடையில், உலக அளவில் கரோனா வைரஸின் பாதிப்பு மீண்டும் தீவிரமடைந்து வருகிறது. குறிப்பாக இங்கிலாந்தில் கரோனா பரவல் வேகம் இதுவரை இல்லாத அளவுக்கு அதிகரித்துள்ளது. அந்நாட்டில் நேற்று முன்தினம் ஒரே நாளில் 93 ஆயிரம் பேருக்குகரோனா பாதிப்பு உறுதி செய்யப்பட்டுள்ளது. இதனால், பூஸ்டர் டோஸ் தடுப்பூசி செலுத்தும் பணிகளை இங்கிலாந்து தீவிரப்படுத்தியுள்ளது.

இந்நிலையில், [டபிள்யூஎச்ஓ](#) வெளியிட்டுள்ள அறிக்கை:

உலக அளவில் [ஓமைக்ரான்](#) பாதிப்பு 3 நாட்களில் ஒன்றரை மடங்கு அதிகரித்துள்ளது. எதிர்பார்த்ததை விட இந்த வைரஸ் வேகமாக பரவி வருகிறது. எனவே பொதுமக்கள் கரோனா வைரஸ் கட்டுப்பாட்டு விதிகளை கடுமையாக கடைப்பிடிக்க வேண்டும். அனைவரும் கரோனா தடுப்பூசியை செலுத்திக் கொள்ள வேண்டும். அதிக அளவு மக்கள் தொகை உள்ள நாடுகளில்

இந்த வகை வைரஸ் வேகமாக பரவுகிறது. எனவே பாதிக்கப்படும் பொதுமக்களுக்கு தேவையான படுக்கை வசதி உள்ளிட்டவற்றை மருத்துவமனைகள் தயார் செய்துகொள்ள வேண்டும்.

பிரிட்டன், தென் ஆப்பிரிக்காவில் இந்த வகை வைரஸ் வேகமாக பரவியுள்ளது. அங்கு மருத்துவமனைகளில் அனுமதிக்கப் படுபவர்கள் அதிகரித்து வருகின்றனர். எனவே அங்குள்ள மருத்துவமனைகளில் படுக்கை எண்ணிக்கைகளை அதிகரிப்பது நல்லது. இதற்காக சம்பந்தப்பட்ட நாடுகள் உடனடியாக நடவடிக்கை எடுக்க வேண்டும். இவ்வாறு அதில் கூறப்பட்டுள்ளது.

70 மடங்கு வேகமாக பரவுகிறது

இதுகுறித்து டெல்லி பி.எஸ்.ஆர்.ஐ. மருத்துவமனையின் தலைவர் மருத்துவரில்நானி கூறியதாவது:

மேற்கு ஐரோப்பிய நாடுகளில் [ஓமைக்ரான்](#) வைரஸ் அதிவேகமாக பரவி வருகிறது. எனவே இப்போதே நாம் முன்னெச்சரிக்கையாக இருக்க வேண்டும். இணைநோய் உள்ளவர்களுக்கு பூஸ்டர் தடுப்பூசி போடுவது குறித்த கொள்கையை உருவாக்குவது அவசியம். இந்தியாவில் [ஓமைக்ரான்](#) வைரஸால் மனிதர்களுக்கு ஏற்படும் உடல்நல பாதிப்பு குறைவாகவே உள்ளது. எனினும் இந்த வைரஸ் பரவும் வேகம் கவலையளிக்கிறது.

இவ்வாறு அவர் தெரிவித்தார்.

டெல்லியைச் சேர்ந்த மகப்பேறு மருத்துவர ஷீபா மார்வா கூறும்போது, "முந்தைய கரோனா வைரஸ்களுடன் ஒப்பிடும்போது [ஓமைக்ரான்](#) வைரஸ் 70 மடங்கு வேகத்தில் பரவுகிறது. இந்த வைரஸ் காரணமாக இந்தியாவில் 3-வது கரோனா அலை ஏற்படக்கூடும்" என்றார்.

சீனாவைச் சேர்ந்த பெய்ஜிங் பல்கலைக்கழக விஞ்ஞானிகள் ஐரோப்பா, வடஅமெரிக்கா, ஆசிய நாடுகளில் [ஓமைக்ரான்](#) வைரஸ் குறித்து ஆய்வு செய்து அறிக்கை வெளியிட்டுள்ளனர். அதில் கூறியிருப்பதாவது:

ஓமைக்ரான் வைரஸால் பாதிக்கப்படும் 10 பேரில் 4 பேருக்கு எவ்வித அறிகுறியும் இல்லை. இதனால் இந்த வைரஸ் பரவலை தடுப்பதில் மிகப்பெரிய சவால் காத்திருக்கிறது. 20 வயதுக்கு உட்பட்டோர் புதிய வைரஸ் தொற்றால் பாதிக்கப்படும் அபாயம் அதிகமாக உள்ளது.

ஓமைக்ரானால் வடஅமெரிக்க நாடுகளில் புதிய கரோனா அலைஏற்படக்கூடும். அதன் பிறகு ஐரோப்பாவிலும் ஆசிய நாடுகளிலும் புதிய அலைகள் ஏற்படலாம். இந்த நேரத்தில் அனைத்து நாடுகளும் கரோனா தடுப்பூசி திட்டத்தை தீவிரப்படுத்த வேண்டும். இவ்வாறு அதில் கூறப்பட்டுள்ளது.



15-வது கட்ட மெகா முகாமில் 19 லட்சம் பேருக்கு தடுப்பூசி

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தமிழகம் முழுவதும் நேற்று நடைபெற்ற 15-வது கட்ட மெகா கரோனா தடுப்பூசி முகாமில் 19 லட்சத்து 7 ஆயிரத்து 9 பேருக்கு தடுப்பூசி செலுத்தப்பட்டது.

புதிதாக உருமாறிய ஓமைக்ரான் கரோனா வைரஸ் தொற்று உலகை அச்சுறுத்திக் கொண்டிருக்கிறது. இந்தியாவிலும் 100-க்கும் மேற்பட்டவர்களுக்கு ஓமைக்ரான் பாதிப்பு ஏற்பட்டுள்ளது.

தமிழகத்தில் ஒருவருக்கு ஓமைக்ரான் பாதிப்பு உறுதி செய்யப்பட்டுள்ளது. இதனால், கரோனா தடுப்பூசி போடும் பணி தமிழகத்தில் தீவிரப்படுத்தப்பட்டுள்ளது. தமிழகத்தில் இதுவரை 14 மெகாதடுப்பூசி முகாம்கள் நடத்தப்பட்டுள்ளன. வீடுகளுக்கு சென்றும் தடுப்பூசி போடப்படுகிறது.

இந்நிலையில், 15-வது மெகா கரோனா தடுப்பூசி முகாம் நேற்று தமிழகம் முழுவதும் 50 ஆயிரம் இடங்களில் நடைபெற்றது. தாம்பரத்தை அடுத்த நந்திவரம் மேம்படுத்தப்பட்ட அரசு ஆரம்ப சுகாதாரநிலையத்தில் நடைபெற்ற தடுப்பூசிமுகாமை முதல்வர் மு.க.ஸ்டாலின் பார்வையிட்டு ஆய்வு செய்தார். அமைச்சர்கள் மா.சுப்பிரமணியன், கே.என்.நேரு, க.பொன்முடி, எ.வ.வேலு, தா.மோ.அன்பரசன் ஆகியோர் உடன் இருந்தனர்.

நேற்று இரவு 7 மணியுடன் நிறைவடைந்த 15-ம் கட்ட மெகா முகாமில் 19 லட்சத்து 7 ஆயிரத்து 9 பேருக்கு தடுப்பூசி செலுத்தப்பட்டது. தடுப்பூசி முகாமில் ஈடுபட்ட சுகாதாரப் பணியாளர்களுக்கு இன்று(ஞாயிறு) விடுமுறை அளிக்கப்படுகிறது. அதனால், தடுப்பூசி மையங்கள் இன்று செயல்படாது என்று சுகாதாரத் துறையினர் தெரிவித்தனர்.



அனைத்து வெளிநாடுகளில் இருந்து வரும் பயணிகளுக்கும் கரோனா பரிசோதனையை கட்டாயமாக்க வேண்டும்: மத்திய அரசுக்கு தமிழக அரசு கடிதம்

Published : 19 Dec 2021 06:09 am

அனைத்து வெளிநாடுகளில் இருந்து வரும் பயணிகள் அனைவருக்கும் கரோனா

பரிசோதனையை கட்டாயமாக்க வேண்டும் என்று மத்திய அரசுக்கு தமிழக அரசு சார்பில் பொது சுகாதாரம் மற்றும் நோய் தடுப்பு மருத்துவத் துறை (டிபிஎச்) இயக்குநர் டி.எஸ்.செல்வவிநாயகம் கடிதம் எழுதியுள்ளார். அக் கடிதத்தில் கூறியிருப்பதாவது:



தமிழகத்தில் 28 பேருக்கு அறிகுறி

தமிழகத்தில் இதுவரை 28 பேருக்கு ஒமைக்ரான் அறிகுறிகள் இருப்பது கண்டறியப்பட்டுள்ளது. அதில், 4 பேர் மட்டுமே பாதிப்புள்ள நாடுகளில் இருந்து வந்தவர்கள். மீதமுள்ள 24 பேர் குறைவானபாதிப்புள்ள நாடுகளில் இருந்து வந்தவர்களாகவும் அவர்களுடன் தொடர்பில் இருந்தவர்களாகவும் உள்ளனர். ஒமைக்ரான் உறுதி செய்யப்பட்ட ஒருவருடன் தொடர்பில் இருந்தவர்களுக்கு 48 மணி நேரத்தில் ஒமைக்ரான் அறிகுறிகள் கண்டறியப்பட்டுள்ளன. இது, ஒமைக்ரான் மிக வேகமாக பரவும்தன்மையை காட்டுகிறது. தற்போதுவரை ஒமைக்ரான் அதிகம் பாதிப்புள்ள பிரிட்டன் உள்ளிட்ட நாடுகளில் இருந்து வருபவர்களுக்கு கூடுதல்கட்டுப்பாடு விதிக்கப்படுகிறது.

ஆபத்தில்லாத நாடுகளில் இருந்து வருவோருக்கு எவ்விததீவிர கட்டுப்பாடுகளும் இல்லாமல் உள்ளது. அங்கிருந்து வருபவர்களில் வெறும் 2 சதவீதம் பேருக்கு மட்டுமே [கரோனா பரிசோதனை](#) செய்யப்படுகிறது. இதனால், ஒமைக்ரான் பரவலை தடுக்க முடியாது. பரவல் அதிகரிக்கக் காரணமாகிவிடும். அதனால், அனைத்து வெளிநாடுகளில் இருந்து வரும் அனைத்து பயணிகளையும் கரோனா பரிசோதனைக்கு உட்படுத்த மத்திய சுகாதாரத் துறை அனுமதிக்க வேண்டும்.

அதேபோல், கரோனா பரிசோதனையில் நெகடிவ் என முடிவு வந்தால் மட்டுமே விமான நிலையத்திலிருந்து வெளியேற அனுதிக்கவேண்டும். ஒரு விமானத்திலிருந்து மற்றொரு விமானத்துக்கு மாறுவதாக இருந்தால் கூட நெகடிவ் முடிவு அவசியமாக இருக்க வேண்டும். வெளிநாடுகளில் இருந்து வந்தவர்களுக்கு நெகடிவ் என்றால் 7 நாட்கள் தனிமைப்படுத்திக் கொண்ட பின் 8-ம் நாள் மீண்டும் பரிசோதனைக்கு உட்படுத்திக் கொள்ள வேண்டும்.

அதில் தொற்று உறுதியானால் ஏற்கெனவே உள்ள நடைமுறைப்படி சிகிச்சை வழங்க வேண்டும். நெகடிவ் என்றால் மேலும் 7 நாட்கள்தனிமைப்படுத்திக் கொள்ள வேண்டும். இதற்கு [மத்திய அரசு](#) அனுமதி அளிக்க வேண்டும்.

இவ்வாறு அவர் தெரிவித்துள்ளார்.

 **The Indian EXPRESS**

Defending ourselves against Omicron

Rajesh M Parikh writes: Among other measures, we must overhaul our vaccination policy, particularly with regard to booster doses in vulnerable populations

Written by [Rajesh M Parikh](#) |

Updated: December 18, 2021 9:31:11 am

If all the world's a stage on which [Covid-19](#) has been the longest-running act in a hundred years, then the theatrical axiom about the unsustainability of two prima donnas in the same scene was bound to take effect. On December 12, British Prime Minister Boris Johnson bowed before [Omicron](#) and declared an "Omicron Emergency", predicting a "tidal wave" of Omicron cases.



A worker sticks social distancing markers at Sardar Vallabhbhai Patel International airport amid concern over 'Omicron' variant of coronavirus, in Ahmedabad (PTI Photo)

Johnson's announcement was preceded by the publication of a not yet peer-reviewed modelling study by the London School of Hygiene and Tropical Medicine (LSHTM). The model suggests that if additional control measures are not put in place in the UK, the Omicron variant may result in higher levels of cases and hospitalisations in the country than those seen during January 2021. In the most optimistic scenario, between December and April, there will be close to 25,000 deaths. If no measures are put in place, this number rises to 75,000. With immediate effect, the UK introduced booster doses for all eligible persons.

In the same announcement, Johnson also stated: "Some medical appointments are to be postponed to focus on boosters". This could be the unfortunate scenario around the world. Due to a diversion of attention and resources towards Covid, a large number of people are deprived of treatment for existing medical illnesses. In the time since the detection of Omicron in Botswana, while there has been one known death due to Omicron, there have been three million deaths due to other preventable or treatable causes. These include cardiovascular diseases, [cancer](#), diabetes, tuberculosis, malaria, diarrhoea, AIDS and suicide. In the months to come, the indirect cost of Omicron may be higher than that of the variant itself.

According to the WHO, we are facing a large undercount of overall deaths directly and indirectly linked to Covid-19 with the latest Covid deaths reported to the global health agency already reaching 3.3 million, based on the excess mortality projections calculated for 2020. According to the WHO's most recent malaria report, an estimated 241 million malaria infections and 6,27,000 malaria deaths occurred globally in 2020 — around 14 million more cases than in 2019, with 69,000 more fatalities. During the pandemic, almost two-thirds of excess fatalities were attributable to interruptions in malaria prevention, diagnosis and treatment.

Epidemiologists consulted by The Economist have developed a machine-learning algorithm that calculates the number of excess deaths in each nation on each day since the pandemic began. It is based on over 100 statistical variables as well as estimates of deaths in excess of official figures. Although the official mortality toll from Covid-19 is currently 5.3 million, the best estimate is that the true toll is 17.6 million. Based on the model, there is a 95 per cent possibility that the actual number of fatalities is between 11million and 20.5 million more than the official number. In India, the model indicates that 2.3 million people had died from Covid-19 by May 2021, compared with about 2,00,000 official deaths. These figures include unaccounted death due to Covid and mortality due to other causes.

Omicron is spreading relentlessly and is currently on every continent and in over 80 countries. It exacts a different toll across nations. For instance, for reasons that are unclear, patients in South Africa are recovering faster with milder illnesses than those in the UK. The WHO Director-General has warned that health authorities should no longer assume that Omicron is a mild variant.

To minimise the effects of Omicron we need to look not only at the low lethality of the variant,

but at its larger impact on global health. Only by minimising hospitalisations due to Omicron can we focus on other illnesses. An increase in testing to identify and isolate individuals with Omicron for prompt treatment, increasing the capacity for genome sequencing within the nation and rapidly deploying booster vaccinations along with reiterating Covid appropriate behaviours are measures that will minimise the collateral damage caused by Omicron.

Genome surveillance tracks changes in the virus's genetic make-up to examine how variations in the order of the nucleotides influence viral actions. We need to better understand Omicron's transmissibility, severity, evasion of antibodies acquired from past infections or immunisation and the likely evasion of detection.

Vaccination continues to be the best global defence against SARS-CoV-2. To contain Omicron and its collateral damage, it is time to overhaul our vaccination policy, particularly with regard to booster doses in vulnerable populations such as immunocompromised patients and healthcare workers. Alternatively, we can consign our rapidly expiring stocks to the dustbin. This need not be a Shakespearean dramatic dilemma.



Foreigners in Russia outraged by new medical checks

From the end of the year, foreigners working in Russia must be tested regularly for syphilis, leprosy and drugs.

By: [Deutsche Welle](#) |
December 19, 2021 8:57:54 pm



Foreigners living in Moscow will have to go to the migration center in Zakharovo, which is in the southwestern part of the capital, about 60 kilometers outside the city center. (DW)

The amendment states that foreign professionals, their family members living in Russia and any foreigner who wants to stay in the country for an extended period of time have to be tested every three months for infectious diseases, including syphilis, HIV, leprosy, tuberculosis, and [Covid-19](#). They are also required to take a drug test and must submit their fingerprints and a biometric photo to the authorities.

Children over 6 to be tested for drugs and syphilis

The new rules will also apply to all children over the age of 6. If someone tests positive for any of the specified diseases, they will not be granted a visa, and any existing visa will be revoked. They will be designated "undesirable," and ordered to leave the country. Foreigners are already required to present a negative HIV test when applying for a work visa or a residence permit to stay in Russia for longer than 90 days.

The Russian government has not explained what it intends to achieve with the new regulations. However, a letter accompanying the draft law states that the 2.5 million citizens of Belarus, Kazakhstan, Kyrgyzstan, Moldova and Uzbekistan in Russia constitute the majority of foreigners in the country and that they are only randomly subjected to medical tests. This, the letter pointed out, means there is a risk of the

“infiltration and spread of dangerous infectious diseases in Russia.”

Belarusian citizens are explicitly exempted from the new rules — probably because Belarus and Russia are formally a “Union State.” Belarusians do not need a visa to go to Russia, and if they seek employment there, the rules and requirements that apply to them are much simpler.

Little success modifying the new rules

According to Thorsten Gutmann, the spokesperson of the German-Russian Chamber of Commerce (AHK Russia), his organization has been working behind the scenes for months to try to get the new regulations dropped. They have, however, had only minimal success.

“Originally, people were going to be required to take the tests every time they entered the country, but now they will have to do them every three months,” Gutmann told DW.

The Russian authorities will decide where and how the tests are done. Foreigners living in Moscow will have to go to the migration center in Zakharovo, which is in the southwestern part of the capital, about 60 kilometers outside the city center.

A German businessman wrote a letter to the AHK after going to Zakharovo to try to complete the medical checks, in which he described what went on there as “pure harassment.” The procedure took at least four whole working days, he reported. On the first day, he had to stand in line for hours in each of the four areas of the migration center, in order to undergo the required medical examinations — with several hundred migrant workers all in the same room.

“I wouldn’t be surprised if I caught COVID there — hardly anyone was wearing a mask correctly, and there was no [social distancing](#),” he said.

New rules described as “unacceptable”

On his second visit, the German businessman said, he spent the majority of a full working day in Zakharovo, “acting as ‘courier’ for the immigration service: collecting medical certificates and handing them in at the counter for highly skilled workers.” The regulations state that you have to do everything yourself, in person. He then had to spend a third day there for the drug tests. By January at the latest, he will have to make another day trip to the migration center to complete a formal identification process and submit his fingerprints and a biometric photo.

The businessman described this whole procedure as “unacceptable,” especially if it has to be repeated every three months, requiring a full lung X-ray each time. “If that’s the case, I’m more likely to look for a different job in Germany. A lot of people probably feel the same,” he wrote.

Appeal by ten foreign business associations

Germany’s Committee on Eastern European Economic Relations (OA) also reported a wave of indignation among German businesspeople in Russia. It said they “feel harassed — with reason.” Both the OA and AHK Russia warned that these new changes in the law will significantly diminish Russia’s attractiveness to foreign investment, and will also result in an exodus of skilled foreign workers. This, they pointed out, would put Russia’s economic development at risk, as foreign specialists and executives make a significant contribution.

This week, in an initiative led by AHK Russia and the OA, 10 foreign business associations, including the Association of European Businesses and the American Chamber of Commerce, wrote to the Russian government to make clear that the new law would have serious consequences.

Healthcare set to get a boost in Chennai

TNN | Dec 20, 2021, 03.38 AM IST



CHENNAI: In a bid to make the healthcare services more robust, the city corporation will soon set up 140 urban health and wellness centres (UHWC) across 15 zones under Centre's flagship Ayushman Bharat Comprehensive Primary Healthcare scheme. Forty polyclinics and four diagnostic laboratories will also be established at an allocated cost of 88 crore.

The civic body officials have proposed that the UHWCs function from 4 PM onwards till night. Currently the existing urban primary healthcare health centres take patients from 9 in the morning till 4 PM. "In most places, we are planning to convert the land used for Amma mini clinics as sites for UHWCs," an official told TOI.

The city currently has 140 UPHCs and 192 Amma Mini Clinics. However, latter is only used for vaccination purposes now.

Officials said each UHWC will be set up at a cost of Rs 25 lakh and will be manned by five staff, medical doctors, sanitary nurses, multi-purpose health workers, and two hospital workers. "We have received the funds from Union Government and the land identification and staff recruitment

process is underway," said a senior corporation official.

A SHOT IN THE ARM			
Activities	Total Number of Units	Unit cost (L)	Amount released(CR)
Urban healthcare and wellness centre (UHWC)	140	₹25	₹35
Diagnostic labs	4	₹22	₹0.88
Polyclinic services	40	₹14.9	₹5.9

Total cost for UHWC, Polyclinics	₹85.6cr
Total cost for Diagnostic laboratory	₹2.7cr
The total cost of the project	₹88cr

Officials said the UHWC's primary aim is to provide care in pregnancy, childbirth, neonatal, and infant healthcare services. While there is no proper database of a population registry for health, the UHWC aims to change that with its IT services. The Central Government has directed all the states to establish a 'wellness room' for creating a health database of patients visiting the UHWC.

"It will also be involved in services like population enumeration, empanelment, and non-communicable disease screening," officials said, adding that the 40 polyclinics would provide care for common ophthalmic and ENT problems, and basic oral healthcare.

The Centre has also said that the time taken for care at the UHWCs must not be more than 30 minutes and the medical officers must also refer patients to tertiary hospitals

Meanwhile, the diagnostic labs in the city will facilitate screening for all the crucial communicable diseases under the National Health Programmes (Tuberculosis, Leprosy, Hepatitis, HIV- AIDS, Malaria Kala-azar, Filariasis, and other vector-borne diseases) and mental disorders and cancers.

* Genome sequencing of every sample is not possible. It is a surveillance and pandemic assessment and a tracking tool, not a diagnostic tool as of now. It can be assured that sufficient systematic sampling is being undertaken.

* We have been discussing these anti-viral Covid-19 pills. It has been found that these pills need to be given very early, even before the diagnosis of the disease.

* India is administering Covid-19 vaccine doses at the highest rate in the world and the daily rate of doses administered here is 4.8 times the rate of doses administered in the USA and 12.5 times the rate of doses administered in the UK.

* 19 districts are reporting weekly Covid positivity between 5-10 per cent; 5 districts reporting over 10 percent.

* Districts with over 5 per cent Covid case positivity rate need to ensure restrictive measures until it's below 5 per cent for at least 2 weeks.

* The sheer number of cases could once again overwhelm unprepared health systems.

* In most countries those being hospitalized and dying are those who have not been vaccinated.

Renewed warnings over the dangers posed by the Omicron variant come as 12 new cases were reported from national capital Delhi earlier today.

India reported 7,447 daily new cases and 391 deaths according to the health ministry data on Friday.

THE TIMES OF INDIA

Of 161 Omicron cases, 80% are asymptomatic, says minister

NEW DELHI: Of a total of 161 cases of the Omicron variant of Covid-19 detected in the country so far, 13% were mild, whereas 80% were asymptomatic and 44 have recovered so far, health minister Mansukh Mandaviya said in the Rajya Sabha in his reply to a discussion on emergence of the fast spreading strain.

Mandaviya said the government is keeping a close watch on the situation and the virus has also been cultured in labs domestically to test the efficacy of the existing vaccines, results of which may be out in a week's time. He assured that there was an adequate capacity in terms of labs to test and track the variant.

MONDAY DIP: CASES AT 582-DAY LOW				
Least Since May 17, 2020; Maha Deaths (4) Lowest Since April 1, '20				
Worst five states in Covid cases			India Cases	India Deaths
Name of State/UT	New cases confirmed on Monday	Deaths on Monday	Monday	
Kerala	2,230	14	5,089	46
Tamil Nadu	605	6	Sunday	
Maharashtra	544	4	6,649	45
Bengal	414	7	Last Monday	
Karnataka	222	2	5,547	92
Others	1,074	13		

Buffer stocks of medicine and oxygen have been prepared to mitigate any crisis and 48,000 ventilators have been distributed to states, the minister said. "We are monitoring the situation daily with experts. With our experience during the first and second waves, to ensure that we do not face problems when the variant spreads, we have arranged a buffer stock of important medicines." There have been increased demands for booster doses in the wake of Omicron's emergence and though it has been relatively mild, it can, as with other Covid strains, be severe in the case of the elderly and those with health complications.

The government also underlined the country's vaccine manufacturing capacity will be

increased to 45 crore doses per month in the next two months from 31 crore doses a month at present. Two more companies have submitted their vaccine data seeking emergency use authorisation, Mandaviya added.

Highlighting efforts to ramp up vaccination coverage, Mandaviya said majority of the adult population is now covered under the programme with 88% receiving at least their first dose, whereas 58% of adults covered with both doses of jabs. "Today, every state has adequate stock of vaccine with 17 crore doses available with states," he said.

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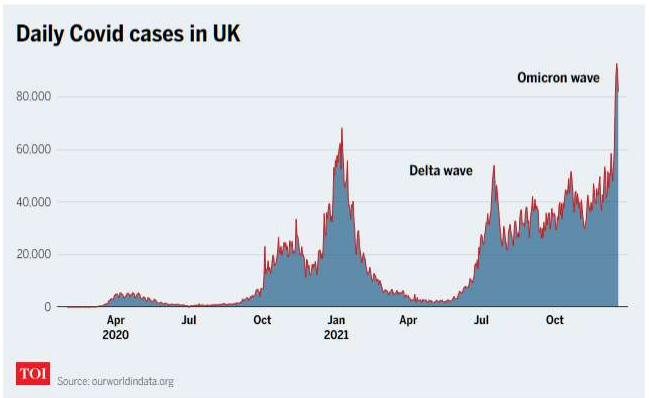
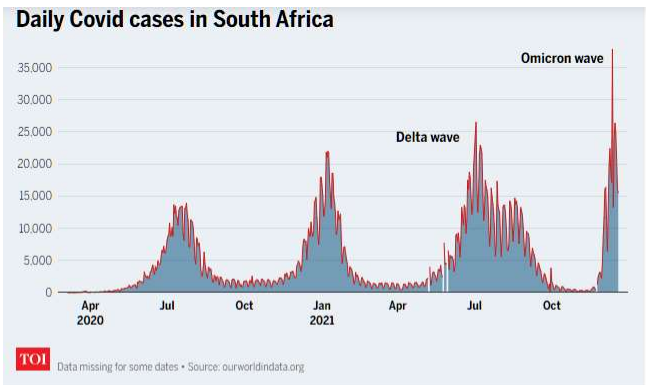
Fast-spreading, less mild and evasive? Why Omicron puzzle has kept world on edge

TIMESOFINDIA.COM | Dec 20, 2021, 08.12 PM IST



NEW DELHI: The Omicron variant of Covid-19 has plunged the world into a state of fear and uncertainty due to the explosive rate at which it's been spreading in some countries.

UK has reported over 50% rise in weekly Covid cases while daily infections in South Africa have swelled by 75-times since the start of November.

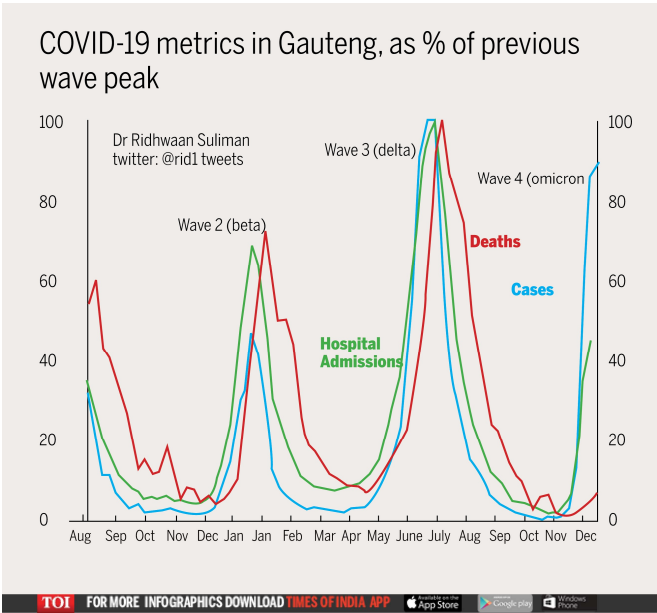


While the cases in South Africa are expected to peak very soon, the nascent experience with this new, highly transmissible variant has given the world some clues about the course of the pandemic in the coming days.

How big of a threat in Omicron?

Daily Covid infections in South Africa may have surged rather quickly due to the new variant, but there has been no corresponding rise in deaths or even hospitalisation.

According to early data, hospitalisation in South Africa is significantly lower compared to previous waves of Delta variant. Moreover, there has not been a single Omicron-linked death in the country even though it has been nearly a month since the first cases were detected.



The graph above shows the case trajectory of Omicron-hit South African province of Gauteng.

The figures clearly indicate that in all the previous waves, South Africa witnessed a corresponding rise in both hospitalisation as well as death.

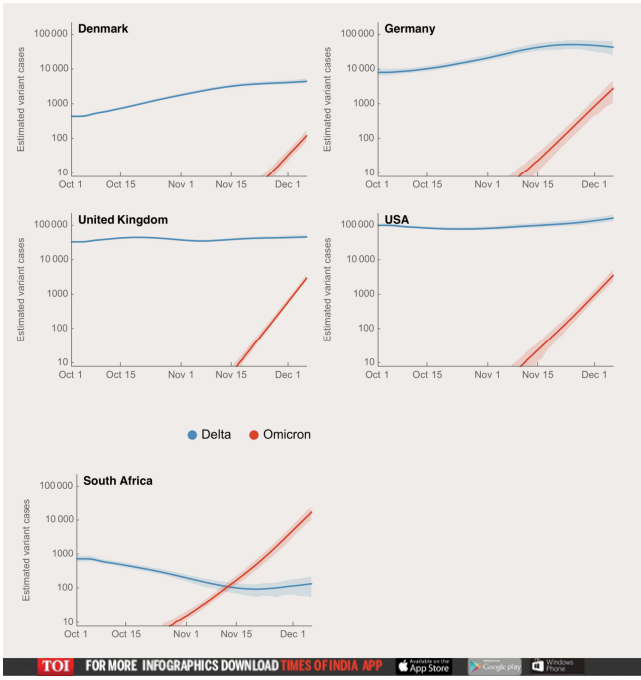
Omicron may replace Delta

Several experts have predicted that the rate at which it is spreading, Omicron will gradually replace the dominant Delta strain which had triggered mayhem in several parts of the world.

While Delta is still the dominant strain in many countries, the fast-spreading Omicron is quickly going to overpower the previous variant.

Virologist Dr Trevor Bedford has graphed the cases by variant type and country.

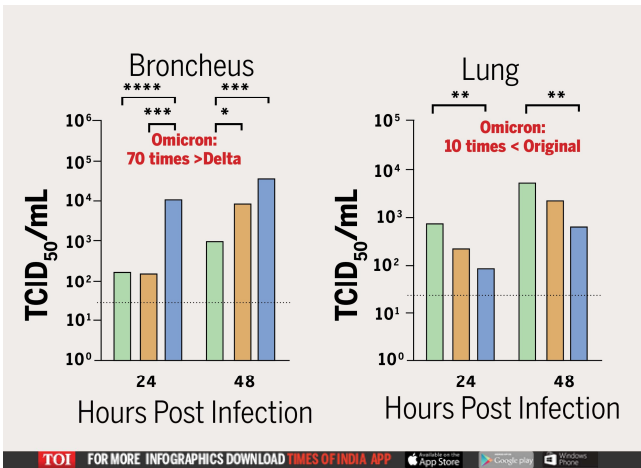
The graph shows that Omicron is clearly the dominant variant in South Africa and is on its way to surpass the Delta strain in several other countries.



How Omicron is different from Delta

The unprecedented pace at which Omicron is spreading has certainly stoked fears. Experts believe that cases could soar as much as the testing capacity of some nations, something that has not been witnessed during a pandemic yet.

A group of scientists in Hong Kong took human tissue from the bronchus and lung and infected it with Omicron.



They measured how quickly the virus replicated compared to other variants like Delta

They found that 24 hours after infection, Omicron replicated 70 times higher than the Delta variant and the original SARS-CoV-2 virus in the bronchial tissue.

However, Omicron replicated less efficiently (10 times lower) in lung tissue than the original SARS-CoV-2 virus, which may contribute to less severe illness.

Moreover, the findings indicate that Omicron is also partially escaping vaccine immunity and infection-induced immunity.

Thus, while vaccines offered a fair degree of protection to those infected with Delta, they would do little to prevent Omicron from affecting people.

The only hope therefore rests on the severity of the disease caused by the new strain. The explosion of cases are bound to increase hospitalisation - something both South Africa and UK are witnessing - but if deaths continue to remain low and past immunity holds, then Omicron may not pose as big a threat as Delta.

In fact, there are some expert predictions that if Omicron does replace Delta as the dominant strain, the world may enter the stage of endemicity.

Nevertheless, the potential surge in fresh cases is sure to keep countries on the edge as they look to prevent the devastation seen during the Delta wave. Several European nations have already imposed strict holiday restrictions and are considering new lockdowns to stem the spike in cases.

Moreover, there is still no clarity whether the booster doses will actually help in fighting off Omicron. Initial results show that while vaccines based on new mRNA technology like Pfizer and Moderna are effective, others like Covishield and China's Sinopharm may not offer much efficacy against the contracting the infection.

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Omicron driven 3rd wave in India likely to peak in Feb: Covid Supermodel panel

ANI | Dec 18, 2021, 05.28 PM IST



NEW DELHI: Daily Covid-19 caseload in India that is currently around 7,500 infections is expected to increase once the Omicron starts displacing Delta as the dominant variant, informed members of the National Covid-19 Supermodel Committee and predicted the third wave in India early year.

Vidyasagar, who is also the head of the National Covid-19 Supermodel Committee, said that India will have Omicron's third wave but it will be milder than the second wave.

"Third wave is likely to arrive early next year in India. It should be milder than the second wave due to a large-scale immunity present in the country now. There will definitely be a third wave. Right now, we are at around 7,500 cases per day which is sure to go up once Omicron starts displacing Delta as the dominant variant," he told ANI.

Vidyasagar, who is also a professor at the Indian Institute of Technology (IIT) in Hyderabad, said

that it's unlikely that India will see more daily cases than the second wave.

"It is extremely unlikely that the third wave will see more daily cases than the second wave. Please remember that the Government of India started vaccinating ordinary Indians (i.e., other than front-line workers) only starting March 1, which was just about the time that the Delta variant hit. So the Delta variant hit a population that was 100 per cent vaccine-naive, other than the frontline workers."

He further said that according to a sero-survey, a tiny fraction is left that hasn't come into contact with delta virus. "Now we have sero-prevalence of 75 per cent to 80 per cent (prior exposure), first dose for 85 per cent of adults, both doses for 55 per cent of adults, and a "reach" for the pandemic of 95 per cent (meaning that only a tiny fraction of the public has not come into contact with the virus)."

"So the third wave will not see as many as daily cases as the second wave. We have also built up our capacity based on that experience, so we should be able to cope without difficulty," he said.

Explaining further, the IIT professor said that the number of cases would depend on two factors, each of which is unknown at present. "First, what is the extent to which Omicron bypasses natural immunity obtained by prior exposure to Delta," he said.

Citing the second reason, he said, "Second, what is the extent to which Omicron bypasses the immunity conferred by vaccination. Because these are not known, we have generated various "scenarios," assuming (for example) 100 per cent vaccine protection remains, or only 50 per cent remains, or all of it goes away. The same for natural immunity escape. For each scenario, we project the number of cases that could result."

According to Vidyasagar, in the worst scenario, India will not have more than two lakh cases per day in case the third wave grips the country.

"I emphasize that these are projections, not predictions. We can start making predictions once we know how the virus is behaving in the Indian population. Based on our simulations, in the worst scenario that we have simulated, namely total loss of immunity conferred due to vaccination and maximum loss of naturally induced immunity, the number of cases remains below 1.7 to 1.8 lakh cases per day. This is less than half of the peak during the second wave."

The panel's other member, Maninda Agrawal, told ANI, "India is expected to report one lakh to two lakh cases per day which will be less than the second wave."

Elaborating on the record surge in Covid-19 infections, Agrawal said that the UK has high vaccine penetration (but mostly with mRNA vaccines), but low sero-prevalence.

"India has both high sero-prevalence which gives a lot of natural immunity, as well as high vaccine penetration. The UK also has an older population as well as more problems with obesity etc. This is why yesterday the UK had 93,045 cases while India, with 20 times the population, had 7,145 cases. In my view, people trying to draw inferences about what would happen in India, based on what is happening in the UK, would be making a major error."

"If we look at South Africa, and specifically the Gauteng Province where Omicron was first identified, we see a trend of a rapid rise in cases, but hospitalizations initially not rising at the same level and are now beginning to plateau. The situation in South Africa is the inverse of that in the USA that has a low vaccine penetration but high sero-prevalence, (India has both parameters high, as mentioned above.)," he said

"It allows us to learn the difference between vaccine and natural immunity. However, the effect of Omicron in the UK cannot be directly translated to India due to very different levels of natural immunity in the two countries," said Agarwal.

The panel assumes that community transmission of Omicron has been already started.

"Just continue to comply with Covid appropriate behaviour. Prevention is better than cure," said Vidyasagar.

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Covid-19 Omicron variant: Tamil Nadu suspects second index case

TNN | Dec 16, 2021, 07.23 PM IST



CHENNAI: A 38-year-old woman hailing from Arni in Tiruvannamalai district, who returned to India from the Republic of Congo via Chennai on December 12, tested positive for Covid-19, health officials said on Thursday. An RT-PCR test done two days later showed an S-gene dropout – an indicator that she could be carrying the Omicron variant.

The samples have been sent for whole genome sequencing to labs in Bangalore and Pune. If samples return positive, she will be the second index case of the new variant in Tamil Nadu.

The patient has been admitted to Government Medical College Hospital in Tiruvannamalai, and her health condition is stable. Health workers are tracking the health condition of her close relatives although they have tested negative. She travelled to her home town from Chennai in a taxi.

The ICMR National Institute of Virology on Wednesday confirmed the first case of Omicron variant in Tamil Nadu. The patient is a 47-year-old man who travelled to Chennai from Nigeria via Doha on December 10.

The RT-PCR tests are conducted in whole for all the genes - 'N', 'S', 'E' and 'ORF'. The S gene is absent in Omicron. "Since S gene is not detected during the test, it is called S-gene dropout or fall. The other gene targets are recognised. Although not a specific indicator, S-dropout is considered a proxy indicator for the new variant. In fact, organisations such as WHO are advising countries using this as an early warning.," said state DPH laboratory head Dr S Raju.

State public health staff and infectious diseases experts are now asking the state to expand the list of "at risk" countries or make testing mandatory for all international passengers. "The state has to create separate facilities for passengers so that there won't be further community spread," said a senior government doctor.

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