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 **The Indian EXPRESS**

Delhi: 1,534 cases on Saturday; hospitalisation low, no need for more Covid beds, say doctors

The positivity rate stood at 7.71% on Saturday. The number had crossed the 8%-mark on Friday for the first time since January-end when the country's omicron variant-driven third wave was subsiding.

By: [Express News Service](#) | New Delhi |
Updated: June 19, 2022 6:08:34 am



A man being tested for Covid-19 in Delhi. (PTI)

Even as the [incidence of Covid continues to remain high in the capital with 1,534 new cases](#) recorded on Saturday, hospitals say there is no need to increase the number of beds earmarked for the treatment of the infection as hospitalisations continue to be low. The number of active cases or those with current infection has shot to 5,119, however, just more than 200



Ending tuberculosis: how health workers can make a difference

15 June 2022

Although the burden of tuberculosis in the WHO European Region is among the lowest in the world, in Ukraine the disease continues to be a major public health challenge.

Dr Oksana Moloda, a tuberculosis (TB) specialist from the Ukrainian city of Odessa, says this is primarily due to the spread of myths around TB. Health workers have a very important role not only in treating TB patients, but also in addressing the spread of misinformation and ensuring patients understand what is best for them.

"I will never forget a case from my early years as a TB specialist. Ukraine had just started implementing modern clinical approaches," Oksana shares.

"My new patient, a young man in his early twenties, was underweight and depressed. His lungs had been destroyed by TB –

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people are hospitalised, according to the daily health bulletin released by the government.

There are currently 9,500 hospital beds reserved for the treatment of Covid across Delhi hospitals, of which only 240 or 2.5% are occupied, according to the government's DelhiFightsCorona portal.

The positivity rate stood at 7.71% on Saturday. The number had crossed the 8%-mark on Friday for the first time since January-end when the country's [omicron](#) variant-driven third wave was subsiding. The positivity rate, which is the proportion of samples tested that return positive, is indicative of the spread of an infection in an area, with the World Health Organisation considering a positivity rate of 5% or less over two weeks to mean that the spread is under control.

However, the current positivity rate might not reflect the real situation on the ground as people have started testing for the infection at home after the home kits became available earlier this year.

"Now a majority of people come with already confirmed home tests; this might not be reflected in the numbers. However, people who test negative on the kits do get an RT PCR," said Dr Suranjit Chatterjee, senior consultant of internal medicine at Indraprastha Apollo hospital.

This, along with the government guidelines discouraging asymptomatic tests, has been the reason for fewer tests being conducted. There were 18,422 tests conducted on average daily in June as compared to an average of 70,246 tests conducted each day in January, with the total crossing the 1 lakh mark at least on two instances.

Delhi recorded 1,797 new cases of the infection on Friday, which is higher than the number of cases recorded this April when the city saw a slight spike in cases after mask mandates were done away with. All Covid restrictions were re-

introduced and the numbers started going down, but not to the level seen after the third wave waned. The number of new cases in the city started increasing again ten days ago.

Nevertheless, hospitalisation and mortality haven't increased proportionally, with city doctors claiming that the pattern is the same as was seen during the milder omicron variant-driven third wave. "At the moment we have 20 patients admitted with Covid, of whom only one person needs the ventilator support. And, that too because he has tuberculosis along with viral pneumonia caused by the virus. Most patients just have a fever and upper respiratory symptoms," said Dr Suresh Kumar, medical director, Lok Nayak hospital.

The hospital, which is one of the biggest Covid treatment centres in Delhi, already has 450 beds earmarked for the infection. "There is no need to increase any more beds; we are hardly seeing any admissions due to Covid," he said.

Most other hospitals have earmarked a couple of wards for Covid with other beds being utilised for the treatment of other patients. "Now, we already know how to ensure no mixing of Covid and non-Covid patients. So, it can easily be done if cases increase. Right now one ward is being used for Covid patients as the numbers continue to be low," said a doctor from the government's Burari hospital that was operationalized during Covid.

There have been 18 deaths from the infection in June and 35 deaths in May. City doctors, however, say in most cases, the deaths were in patients who were receiving treatment for other conditions and the finding of Covid was incidental.

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Ending tuberculosis: how health workers can make a difference

.....I simply couldn't see healthy tissue. This young man had become resistant to most available drugs and was not willing to receive any treatment."

Oksana made it her mission to work closely with him, convincing him of the right therapy to take, tailored specifically to his condition.

"He recovered, gained more than 40 kilos, and survived surgery. I was finally able to see him in good health and spirits," she recalls. "Tuberculosis is a challenging disease and working in this field isn't easy. Rewarding experiences like these remind me why I chose to become a phthisiologist."

Stigma and misinformation still the main challenges

Oksana says that misinformation around TB is not limited to patients such as the one she encountered early in her career. Many health workers themselves continue to harbour misconceptions about the disease.

"Sadly, stigma persists. Even among us health-care workers. Many still believe that TB patients require long periods of isolation from society," explains Oksana. "But with the right therapy, a patient may only need to be hospitalized for a couple of weeks."

"When patients stay in hospital longer than required, they are less able to fend off the disease on their own," Oksana says. This, in turn, takes a toll on their mental health, making treatment even harder to achieve.

"This stigma ends up discouraging patients from seeking further help, and we need to do

something about it. How? By educating everyone, including our colleagues in the medical field."

Ending TB in the time of COVID-19

Provisional data compiled by WHO from 84 countries indicates that an estimated 1.4 million fewer people received care for TB in 2020 than in 2019 – a reduction of 21% from 2019. WHO estimates that these disruptions in access to TB care related to COVID-19 could cause an additional half a million TB deaths.

Timely diagnosis is key to a quick recovery, and with expertise and advice from WHO, Ukraine is stepping up to improve TB diagnosis.

"COVID-19 and TB make for a very complicated combination, because patients with tuberculosis often have complications when infected with the coronavirus," Oksana explains. "At the same time, with the pandemic we have seen better diagnostics, simply thanks to patients opting for CT scans more often than before."

The year 2021 has been designated as the International Year of Health and Care Workers in appreciation of and gratitude for their unwavering dedication in the fight against the COVID-19 pandemic.

This story has been developed by the WHO Country Office in Ukraine, with financial assistance from the European Union, and is part of a series of stories showcasing Ukrainian health-care workers.

So: <https://www.who.int/belgium/feature-stories/item/ending-tuberculosis-how-health-workers-can-make-a-difference>

Explained: 2 பேர் பேசும்போது கொரோனா வைரஸ் பரவும் அபாயம்.. புதிய ஆய்வு சொல்வது என்ன?

நோய்த்தொற்றின் அபாயத்தை நிர்ணயிப்பதில் கண்கள் மற்றும் வாய் வழியாக வைரஸ் நுழைவதற்கான சாத்தியத்தை பகுப்பாய்வு உள்ளடக்கியதாக, வெளியீடு கூறியது.

Written by [WebDesk](#) | June 21, 2022 10:54:29 am



New study reveals the risk of Covid transmission when two people are talking

கொரோனா தொற்றால் பாதிக்கப்பட்ட ஒருவர், பாதிக்கப்படாத ஒருவருடன் பேசும்போது, முதல் நபருக்கு வைரஸ் பரவும் அபாயம் எவ்வளவு உள்ளது?

ஸ்பீச் ஏரோசோல்களின் இயக்கத்தை பகுப்பாய்வு செய்ய கணினி உருவகப்படுத்துதல்களை (computer simulations) மேற்கொள்வதன் மூலம் ஆராய்ச்சியாளர்கள் இந்தக் கேள்வியை ஆய்வு செய்தனர், ஃப்ளோ என்ற இதழில் தங்கள் கண்டுபிடிப்புகளை வெளியிட்டனர்.

இந்திய அறிவியல் கழகத்தின் (IISc) விண்வெளிப் பொறியியல் துறையின் ஆராய்ச்சியாளர்கள், ஸ்டாக்ஹோமில் உள்ள நோர்டிக் இன்ஸ்டிடியூட் ஃபார் தியரிட்டிகல் இயற்பியல் மற்றும் பெங்களூருவில் உள்ள தியரிட்டிகல் அறிவியலுக்கான சர்வதேச மையம் ஆகியவற்றின் ஒத்துழைப்பாளர்கள் குழுவில் இருந்தனர்.

உருவகப்படுத்துதலுக்காக, மாஸ்க் அணியாத இரண்டு நபர்கள் 2 அடி, 4 அடி அல்லது 6 அடி இடைவெளியில் நின்று, ஒருவரோடொருவர் ஒரு

நிமிடம் பேசிக்கொண்டிருக்கும் காட்சிகளைக் குழு ஆய்வு செய்தது, பின்னர் ஸ்பீச் ஏரோசோல்களின் (speech aerosols) பரவலின் வீதம் மற்றும் அளவை மதிப்பீடு செய்தது.

ஒரு நபர் வெறுமனே அடுத்தவர் பேசுவதை மட்டும் கவனிக்கும் போது, இருவழி உரையாடலில் ஈடுபடாதபோதும் (Passive listener) நோய்த்தொற்று ஏற்படுவதற்கான ஆபத்து அதிகமாக இருப்பதாக உருவகப்படுத்துதல்கள் காட்டுகின்றன.

இரண்டு நபர்களுக்கு இடையேயான உயர் வித்தியாசம் மற்றும் அவர்களின் வாயில் இருந்து வெளியாகும் ஏரோசோல்களின் அளவு போன்ற காரணிகளும் வைரஸ் பரவுவதில் முக்கிய பங்கு வகிப்பதாக இந்திய அறிவியல் கழகம் தெரிவித்துள்ளது.

பகுப்பாய்விற்காக, குழுவானது 'குமூலஸ் க்ளௌட்ஸ் இயக்கம் (cumulus clouds) மற்றும் நடத்தையை ஆய்வு செய்வதற்காக முதலில் உருவாக்கிய கணினி குறியீட்டை (Megha-5) மாற்றியது.

நோய்த்தொற்றின் அபாயத்தை நிர்ணயிப்பதில் கண்கள் மற்றும் வாய் வழியாக வைரஸ் நுழைவதற்கான சாத்தியத்தை பகுப்பாய்வு உள்ளடக்கியதாக, வெளியீடு கூறியது, முந்தைய ஆய்வுகள் மூக்கை மட்டுமே நுழைவு புள்ளியாகக் கருதியது.

ஸ்பீக்கர்கள் ஒரே உயரத்தில் இருந்ததை விட, வேறுபட்ட உயரத்தில் (ஒருவர் உயரமாகவும், மற்றொருவர் குட்டையாகவும்) இருந்தால், தொற்றுநோய்க்கான ஆபத்து மிகக் குறைவாக இருப்பது கண்டறியப்பட்டது.

முடிவுகளின் அடிப்படையில், கண் தொடர்பைப் பேணும்போது, அவர்களின் தலையை ஒருவருக்கொருவர் சுமார் 9° தூரம் திருப்பிக் கொள்வது ஆபத்தைக் கணிசமாகக் குறைக்கும் என்று குழு பரிந்துரைக்கிறது.

வைரஸ் பரவலில் என்ன விளைவை ஏற்படுத்தும் என்பதைப் பார்க்க, பேச்சாளர்களின் குரல்களின் சத்தம் மற்றும் அவர்களின் அருகில் காற்றோட்டம் மூலங்கள் இருப்பது போன்ற வேறுபாடுகளை உருவகப்படுத்துவதில் குழு கவனம் செலுத்த திட்டமிட்டுள்ளதாக வெளியீடு கூறியது.

டெபிட், கிரெடிட் கார்டுகளுக்கு புதிய விதிகள்: ஜூலை 1 முதல் அமலாகிறது டோக்கனைசேஷன் நடைமுறை

எல்லுச்சாமி கார்த்திக்

Updated : 21 Jun, 2022 10:01 PM



வரும் ஜூலை 1-ம் தேதி முதல் டெபிட் மற்றும் கிரெடிட் கார்டுகளுக்கான டோக்கனைசேஷன் நடைமுறை அறிமுகமாக உள்ளது. இது குறித்து விரிவாக பார்ப்போம்.

வாடிக்கையாளர்களின் பாதுகாப்பை கருத்தில் கொண்டு அவ்வப்போது புதுப்புது விதிகளை இந்திய ரிசர்வ் வங்கி நடைமுறைக்கு கொண்டு வரும். அந்தவகையில் டெபிட் மற்றும் கிரெடிட் கார்டுகளில் டோக்கனைசேஷன் நடைமுறை கொண்டு வரப்பட உள்ளது. அதன்காரணமாக ஆன்லைன் வணிகர்கள் தங்கள் வாடிக்கையாளர்களின் கார்டு குறித்த தரவுகளை இனி சேமிக்க முடியாது என தெரிகிறது.

இதற்கானக் காலக்கெடு கடந்த ஜனவரி 1-ம் தேதி என ரிசர்வ் வங்கி தெரிவித்திருந்தது. இருந்தாலும் தொழில்துறையினரின் கோரிக்கையை ஏற்று வரும் ஜூலை 1-ம் தேதிக்கு அது மாற்றப்பட்டுள்ளது.

இந்த டோக்கன் நடைமுறையின் மூலம் பயனர்கள் தங்களது கார்டு குறித்த விவரங்கள் எதையும் தெரிவிக்காமல் பரிவர்த்தனையை ஆன்லைன் வழியே பாதுகாப்பாக மேற்கொள்ள முடியும் என தெரிவிக்கப்பட்டுள்ளது. இதில் டோக்கன்கள் என்கிரிப்டட் வகையில் சேமிக்கப்பட்டு இருக்குமாம்.

ரிசர்வ் வங்கி தனது வழிகாட்டுதல்களில் ஏற்கனவே சேமிக்கப்பட்டுள்ள வாடிக்கையாளரின் கார்டு விவரங்களை ஆன்லைன் வணிகர்கள் அழித்துவிட வேண்டும் என்றும் தெரிவித்துள்ளது. குறிப்பாக ஆன்லைன் வழியே டெபிட் அல்லது கிரெடிட் கார்டுகளை அடிப்படையாக கொண்டு மேற்கொள்ளப்படும் பரிவர்த்தனைகள் இதில் அடங்கும்.



கார்டு தரவுகள்: பொதுவாக கார்டு தரவுகள் என்றால் டெபிட் அல்லது கிரெடிட் கார்டுகளில் உள்ள 16 இலக்க எண், PIN, கார்டின் வேலிட் டி காலம், கார்டு அடையாள எண் போன்ற விவரங்கள் அனைத்தும் அடங்கியிருக்கும். இதை தான் தற்போது சேமிக்க கூடாது என ரிசர்வ் வங்கி தெரிவித்துள்ளது.

டோக்கனைசேஷன்? - கார்டு தரவுகளில் உள்ள விவரங்கள் அனைத்தும் மாற்று வகையில் 'ஆல்டர்நேட்' கோடுகளாக சேமிக்கப்பட்டு, அது டோக்கன்களாக வழங்கப்படும். இந்த டோக்கன்கள் கார்டு, டோக்கனைக் கோருபவர் (Requestor) மற்றும் டிவைஸுக்கு மட்டுமே தனிப்பட்டதாக இருக்குமாம். இதில் டெபிட் மற்றும் கிரெடிட் கார்டுகளை வாடிக்கையாளர்கள் டோக்கனைஸ் செய்திருக்க வேண்டுமென்ற அவசியமில்லை எனவும் தெரிவிக்கப்பட்டுள்ளது. ஆனால் அப்படி செய்யாதபட்சத்தில் ஆன்லைன் வழியில் ஒவ்வொரு முறையும் பொருள்களை வாங்கும் போது கார்டு குறித்த விவரங்களை வாடிக்கையாளர்கள் கொடுக்க வேண்டிய சூழல் ஏற்படும் என தெரிவிக்கப்பட்டுள்ளது.

கிரெடிட் மற்றும் டெபிட் கார்டுகளை டோக்கனைசேஷன் செய்வதற்கான வழிகள்

> வழக்கமாக பயனர்கள் ஆன்லைன் வழியே உணவு, பொருட்கள் மற்றும் ஆடைகள் வாங்க பயன்படுத்தும் வலைதளம், செயலியை ஓபன் செய்ய வேண்டும். பின்னர் அதில் ஒரு பரிவர்த்தனையைத் தொடங்க வேண்டும்.

> செக் அவுட் பக்கத்தில் டெபிட் அல்லது கிரெடிட் கார்டு பேமெண்ட் ஆப்டினை தேர்வு செய்ய வேண்டும். அதில் CVV விவரத்தைக் கொடுக்க வேண்டும்.

> "Secure your card" அல்லது "Save card as per RBI guidelines" ஆப்டினை கிளிக் செய்ய வேண்டும்.

> தொடர்ந்து பயனர்களின் மொபைல் எண்ணுக்கு வரும் OTP எண்ணை அதில் உள்ளிட வேண்டும்.

> இவைகளைச் செய்து விட்டால் பயனர்கள் தங்களது கிரெடிட் அல்லது டெபிட் கார்டுகளை டோக்கனைசேஷன் நடைமுறையில் பாதுகாப்பான பயன்பாட்டுக்கு கொண்டு வந்துவிடலாம். இதன் மூலம் வணிகர்கள், சம்பந்தப்பட்ட பயனரின் கார்டு விவரங்களை அறிந்து கொள்ள முடியாது.

இது தவிர இன்னும் பிற வழிமுறைகளை இந்திய ரிசர்வ் வங்கி கொண்டு வர உள்ளதாக தெரிகிறது.

THE HINDU

Union Health Minister seeks people's support to eradicate TB

He praised State's effort to reduce IMR, MMR, and COVID-19 vaccination coverage

CHENNAI JUNE 27, 2022 00:33 IST

People must extend support to the Nikshay Mitr Abhiyan so that [tuberculosis](#) could be eliminated, said Union Health Minister Mansukh Mandaviya here on Sunday.

On a two-day visit to the city, he launched the interim report of the Indian catalogue of Mycobacterium TB mutation and their association with drug resistance at the Indian Council of Medical Research (ICMR), National Institute for Research in Tuberculosis, besides a booklet on nutritional support in Tamil for the patients.

He said there were still 50,000 people who had TB but only 5% of them had consented to support the scheme. As much as 35% had not accepted it yet. "Only with your support, like in COVID, can we overcome together this hurdle to the nation's progress," he said.

Earlier in the day, he flagged off a bicycle rally, organised by National Health Mission, to emphasise 'Healthy India, Fit India' in which State Health Secretary P. SenthilKumar, dean of Omandurar Medical College R. Jayanthi, besides several Union and State health officials, doctors and students participated.

State's efforts praised

The Minister appreciated the pregnancy anomaly screening centre and the government's efforts to offer diagnostic tests for ante-natal mothers to prevent delivery-related complications at affordable rates at the Tamil Nadu Government Multi Super Speciality Hospital. He was briefed about the robotic surgery facility and interacted with patients being treated for severe sports injuries and trauma.

The State government's effort to reduce IMR and MMR and its achievement of 94% coverage of first dose of COVID-19 vaccination and 82% of second dose were praiseworthy, he said.

Dr. Mandaviya laid the foundation stone for the Central Government Health Scheme wellness centre in Avadi virtually. The Union government had allocated over ₹2,600 crore for health for the State under the National Health Mission and ₹404 crore for medical infrastructure

advancement under the Pradhan Mantri Ayushman Bharat Health Infrastructure Mission. Under the scheme, 1.58 crore families in the State were covered and 75 lakh people had availed themselves of the benefits, he said.

Though it was encouraging that 17 districts in the State were free of malaria and lymphatic filariasis had been eradicated, health officials should remain alert and eradicate malaria, chikungunia and dengue, he said. "We are committed to make the nation malaria free by 2030," he said.

The Tamil Nadu Medical Services Corporation's drug warehouse's "robust infra, supply chain and IT infrastructure ensures uninterrupted availability of essential and lifesaving medicines for the people of Tamil Nadu," he tweeted after a visit to the facility.

THE HINDU

Ban on plastic to be enforced from July 1

GUNTUR JUNE 26, 2022 00:02 IST

Awareness drive to be held in Guntur every Sunday

Member of Parliament Alla Ayodhya Rami Reddy said that there was a need to ban plastic to protect environment and ensure a safe future for the world.

Addressing a public meeting held by the Guntur Municipal Corporation, he said that the Central government had taken a decision to ban single use of plastic from July 1.

"A safe environment is essential and as many as 170 countries have banned single use of plastic.

Chief Minister Y.S. Jagan Mohan Reddy is particular that plastic is banned in the State and a clean environment should prevail," he said.

MLC Lella Appireddy said that plastic ban awareness campaigns would be held every Sunday. Municipal Commissioner Keerthi Chekuri said that plastic if absorbed in human blood could result in health problems. The GMC would continue to make all efforts to ensure a 'Clean Guntur-Healthy Guntur', he said.

THE HINDU

To worry about COVID-19 endemicity or not, that is the question

CHENNAI JUNE 25, 2022 19:55 IST

"At the moment we have to calibrate when we have to launch an outbreak-like response."

Has COVID-19 become endemic or not, that is the question. While the world over, the debate rages on whether COVID-19 has reached an endemic phase, in India there seems to be broad consensus that it has, in India, though epidemiologists might have taken various paths to get there. Interestingly, another question, whether endemicity is significant at all in the current context, is also cresting this wave of discussion among professionals, and might even take over the debate in the not so near future.

[Jacob John, retired professor of virology,](#) Christian Medical College, Vellore, says the terms endemic and epidemic are based on patterns, and no one has attempted yet to post numbers that could establish the stage the SARS-CoV-2 virus is at currently. However, he uses a comparison with the numbers of the past, more

a rule of thumb criteria to argue that the infection has entered the endemic stage in India.

Considering the seven-day average of cases during the peak of the epidemic, [the daily numbers](#) have not crossed the 10% of that figure since the decline in numbers began, he points out. Despite the rise in cases in the last few days, the number has remained below 10 % of the seven-day average of cases during the peak of Omicron, Dr. John says. There has been a similar trend in South Korea, he adds.

"If you look at Bharat COVID-19 or World-ometer, the disturbances in the flat line since the drop have been very minor," he says, adding that similar to what happens in an epidemic, the numbers have been going up only in certain cities in Maharashtra, Kerala, Delhi and Tamil Nadu. "It is still virtually a flat line." Even when a disease is in the endemic stage, there can be seasonal outbreaks, and the spike in cases that a few cities in India are seeing now, could be equated to that, he reasons.

[Chandrakant Lahariya, epidemiologist](#) and public policy and health systems specialist, treads another path to arrive at his conclusion. Endemic and pandemic are all academic terms, not dependent solely on scientific parameters, he says. He draws attention away from the endemic-pandemic binary to a more experiential angle. "We know the extent of social and economic impact that COVID-19 had on the world. So, I believe that the idea is for societies to agree that the infection is an acceptable risk, as some countries are already doing so, despite the numbers going up. None of these countries are saying the disease is endemic, but they are saying 'life is returning to normal.' Of course, this will differ from country to country.

Dr. Lahariya also says it is his firm belief that it is irrelevant to India to debate endemicity or not of

the virus in the country. "We should approach it from the practical position of 'acceptable risk' - of whether or not it is disrupting social and economic life in the country." India has reached a stage wherein the virus is not creating great havoc in terms of death or morbidity. "Three years down the line, a nation could look back and mark the point of time in which it turned endemic, but it is not logical or practical to look for these signs now," he explains.

While he advances the view that [the disease is no longer a population-level public health challenge](#), but rather an individual one, and recommends that our responses change appropriately, once again professionals are split in their opinion on this too. While Dr. Lahariya recommends protection of the vulnerable, continued economic surveillance, tracking the parameters (but don't worry) and COVID-19 appropriate behaviour, he believes that the onus has moved on to the individual, from the health system.

"I agree with the view that endemic or not, our action right now must be linked to where we are in terms of vaccination coverage (public health coverage), and continuing surveillance," says Prabhdeep Kaur, deputy director, ICMR-National Institute of Epidemiology, Chennai. "This virus is fascinating in terms of its evolution, it keeps springing surprises on us. It is not like anything we have read in our text books."

At present, she says, COVID-19 does not conform to the text book definition – by being present all over the world, though it waxes and wanes, and not being confined to a few areas. That is probably why, she reasons, why epidemiologists find themselves ranged on different points of the endemicity spectrum.

"The point is if we know that a disease in a community is present at a certain level, we do not have to react to it. There are different thresholds for different diseases and they also

Co-infection of dengue, chikungunya and Zika also a concern, they say

Scientists at the National Institute of Virology (NIV), Pune, have raised an alarm about the spread of the [Zika virus](#), along with dengue and chikungunya, across several States and Union Territories where it has never been reported earlier, establishing local transmission in India.

With the monsoon season, scientists have called for urgent strengthening of surveillance, after the circulation of [Zika virus](#) was detected in Delhi, Jharkhand, Rajasthan, Punjab, and Telangana in 2021, in addition to Kerala, Maharashtra, and Uttar Pradesh.

Previously, sporadic cases were reported from Gujarat (2016-17), Tamil Nadu (2017), Madhya Pradesh and Rajasthan (2018). The researchers also found co-infection of Zika, dengue and chikungunya, which, they said, was another concern at many places. There was a need to be aware and take preventive measures, they added.

Zika virus (ZIKV), a vector-borne flavivirus, is transmitted by the bite of infected *Aedes* mosquitoes, mainly *Aedes aegypti* and *Aedes albopictus*.

For the study, a total of 1,520 clinical samples — serum (1,253), plasma (99), whole blood (120), and urine (48) — were collected from 1,475 patients across 16 viral research and diagnostic laboratories (VRDLs) in Delhi, Kerala, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Madhya Pradesh, West Bengal, Bihar, Odisha, Telangana, Assam, Jharkhand, and Bihar.

The samples were subsequently transferred to the apex laboratory at the Indian Council of Medical Research-National Institute of Virology (ICMR-NIV), Pune, for molecular diagnosis, serology, and genomic analysis.

may be seasonal thresholds, but we have not been able to establish the threshold for COVID-19, because of several reasons – including changing practices for testing and surveillance. At the moment we have to calibrate when we have to launch an outbreak-like response," she adds.

COVID will continue to remain a disease of importance that has the ability to [cause outbreaks](#), Dr. Kaur explains, listing why she believes vaccination should continue to be a public health activity. If we fail to do this, there is potential to cause great damage in terms of mortality and morbidity.

Dr. John says: "Somehow vaccination in India seems to have lost steam along the way. People are now asking why vaccinate when the peak is over. And as far as the government goes, the outreach and public education activity on why a booster dose is required, has not been sufficient. There is a difference between individual vaccine for averting risk, and a population-based vaccine. We still have to focus on the latter."

Along with the vaccine, the other tool in the armoury is mask wearing, Dr. John says. He recommends that governments make mask wearing mandatory in public gatherings and public places, whenever an upswing in the number of cases is noticed. If left to the individual's choice, compliance will be very low, and leave a number of people without the protection that masking affords, he adds.



Scientists warn of Zika spread in newer areas, call for better surveillance

"In 2021, Zika virus outbreaks were reported in Kerala (May-July), Maharashtra (July), and Uttar Pradesh (October) and since these outbreaks were reported from distant locations and over a period of six months, we conducted a retrospective screening of dengue and chikungunya negative clinical samples (stored with VRDLs) from May to October 2021 to understand the extent of the spread of the virus in India," said Nivedita Gupta, head of virology at ICMR, who co-ordinated the study.

Pragya D. Yadav, scientist and group leader at the maximum containment laboratory at ICMR-NIV, added that after 2020, the public health surveillance of ZIKV could not be continued with the same vigour due to the involvement of all VRDLs in COVID-19 diagnostics considering the subsequent waves of the pandemic. All these VRDLs were advised to store the dengue/chikungunya test samples.

The research noted that retrospective surveillance for ZIKV demonstrated the silent spread of the virus to almost all parts of India with a predominance of the more recent 2018 Rajasthan ZIKV strain.

"Our results indicated the need for continuous and enhanced surveillance for ZIKV along with DENV [dengue virus] and CHIKV [chikungunya virus] with emphasis on the ante-natal ZIKV screening," Dr. Yadav said.

The scientists added that the development of quick and reliable tests as well as validating the utility of simple serology-based tests for ZIKV would help in augmenting the diagnostic capabilities. With the massive upscaling of the COVID-19 RT-PCR testing laboratories in India, this network can also be re-purposed for augmenting ZIKV testing in the country.

"Along with these efforts, it is also essential not to lose sight of effective vector control measures and focus on the development of a safe and effective vaccine for ZIKV, which could be

administered to pregnant women," the study added.

THE HINDU

Focus is now on sewage surveillance to detect emerging variants

BANGALURU JUNE 17, 2022 22:58 IST | Afshan Yasmeen

This will provide early warning on impending local surge of COVID-19

With some samples of sewage surveillance in Bengaluru having shown the presence of "possible" BA.4 and BA.5 sub-lineages of Omicron, there is an increased focus on it now.

While top health officials in the State confirmed the presence of these variants in wastewater samples, they said it is yet to be correlated through genome sequencing.

Sewage surveillance is known to help in early identification of any impending wave of COVID-19 and notifying the emergence of new variants of SARS-CoV 2, if any, to initiate local public health actions. Six agencies are involved in sewage surveillance in Karnataka for the last one year. Last month, the Infectious Disease Research Foundation (IDRF) was granted permission to take up sewage surveillance in select sites in Bengaluru city, Bengaluru international airport and Mangaluru airport.

Following a recommendation by the State's COVID-19 Technical Advisory Committee (TAC), the State Health Department on June 7 set up an eight-member sewage surveillance appraisal committee headed by the TAC chairman. The committee has been asked to submit bi-weekly reports to the TAC.

Final certification

State Health Commissioner Randeep D. said areas with a high case load detected in sewage surveillance are being prioritised for COVID testing. "Waste water analysis is an early detection tool to assess the spread of new sub-lineages and variants in a hotspot area of increased positivity. Some samples have shown the presence of possible BA.4 and BA.5 sub-lineages of Omicron in the city. However, the final certification of such detections would be only after confirmation by Indian SARS-CoV -2 Genomics Consortium (INSACOG)," the Commissioner told *The Hindu*.

TAC chairman M.K. Sudarshan said after the third wave, many people are not coming forward to get tested. "Moreover, there is a restriction on testing asymptomatic persons as per the ICMR's purposive testing strategy. The testing levels are low due to these reasons, resulting in poor information on emerging variants. Sewage surveillance will provide early warning on an impending local surge of COVID-19 and an estimate of the disease burden in a particular region," he said.

Pointing out that the first SSAC meeting was held on June 11, Dr. Sudarshan said the committee has representation of all the organisations involved in wastewater surveillance. The IDRF is preparing to start sewage surveillance in the third week of June, he said.

C.N. Manjunath, member of the State's Clinical Experts Committee, said several studies have demonstrated that increases in SARS-CoV-2 RNA can be detected in environmental samples several days before detection of COVID-19 through clinical surveillance.

Highest in Mahadevapura

Bhaskar Rajakumar, a public health consultant who is part of the TAC and also heads the COVID war room at BBMP, said sewage surveillance has

shown a slight surge in positivity rate in Mahadevapura in the last few days. "Wastewater surveillance has shown a jump from 33% positivity rate in the last week of May to 75% in the first week of June. The current rise in number of cases in Mahadevapura is also indicating the same. This is mainly because Mahadevapura is an IT corridor with a huge migrant population. This has been the trend in all the three previous waves," Dr. Rajakumar added.



US announces \$122 million fund for India to address challenges posed by infectious diseases

The funds will be distributed to the three top Indian health research institutions -- Indian Council of Medical Research (ICMR), National Institute of Virology (NIV) and National Institute of Epidemiology (NIE).

By: [PTI](#) | Washington |
June 16, 2022 3:50:26 pm



The United States has announced a funding of USD 122 million to top three Indian medical research institutions to prevent avoidable epidemics, early detection of disease threats, and rapid and effective response.

The total funding of USD 122,475,000 will, over a period of five years, be distributed to the three top Indian health research institutions — Indian Council of Medical Research (ICMR), National Institute of Virology (NIV) and National Institute of Epidemiology (NIE).

Announced by the Centres for Disease Control and Prevention (CDC) on Wednesday, the fund will accelerate the progress towards an India which is safe and secure from infectious disease threats through ICMR institutions' focus on emerging and re-emerging pathogens.

Prominent among these include detecting and controlling zoonotic disease outbreaks through a 'one health' approach; evaluating vaccine safety monitoring systems; capacitating the public health workforce in field epidemiology and outbreak response; and combating antimicrobial resistance, a media release said. CDC said ICMR is in a unique position to conduct this work, as it was originally established as an apex body for the formulation, coordination and promotion of biomedical research in India, and has taken up most of the laboratory-based surveillance of infectious diseases in recent years.

Eligibility for funding beginning September 30, 2022 is limited to ICMR, and ICMR institutions, including the National Institute of Virology (NIV), Pune and the National Institute of Epidemiology (NIE), Chennai.

ICMR is the apex governing body for numerous national level institutes which are centres for excellence and reference in specific scientific area for India, namely National Institute of Virology, National Institute of Epidemiology, and several others.

These institutions are mandated by the Ministry of Health of Family Health and Welfare (MoHFW) to provide an oversight for laboratory confirmation of priority pathogens in India in a tiered manner as well as collate and analyze surveillance data

for public health actions and work closely with the state governments where these institutes are located, the release added.



Cutting Edge: New TB test kit can detect latent infection

With the c-TB test using a specific infection-causing part of the TB, the 5 mm cut-off for a test to be positive can be followed for all, including HIV patients, says Dr Rajendra Joshi, deputy Director- General, National TB Elimination Programme.

Written by [Anonna Dutt](#) | New Delhi |
Updated: June 22, 2022 10:03:58 pm



The test, which will be manufactured and marketed as Cy-TB by the Serum Institute of India, is a slightly tweaked version of a century-old test. (Representational)

With India chasing the target of eliminating tuberculosis by 2025, five years ahead of the global sustainable development goal, Union Health Minister Mansukh Mandaviya recently announced a "Made in India" TB skin test to be used in the disease control mission.

The test, which will be manufactured and marketed as Cy-TB by the Serum Institute of India, is a slightly tweaked version of a century-old test where a protein extract of tuberculosis bacteria

was injected under the skin to test for reaction to the infection.

Why is the test necessary? Because it can help detect latent tuberculosis infections. At present, the national TB programme focuses solely on detecting and treating those with an active infection, meaning those who have already started showing symptoms. There are two methods of detecting an active infection – microscopy, where a lab technician literally checks the patient sample under the microscope, or the nucleic acid amplification test, where the genetic material of the pathogen is amplified and its segments are automatically matched by the machine to give a positive result (just like an RT-PCR test for [COVID-19](#)). These tests, however, use a patient's sputum sample and cannot detect a latent infection.

It is estimated that almost one-fourth of the world's population carries the TB bacteria in the latent form, but some of them may go on to develop an active infection, especially if their immune system gets compromised by other illnesses or medication. Although people with latent TB cannot spread the infection, they act as a reservoir for the pathogen to persist in humans.

“In India, anywhere between 30 and 40 per cent of the population has latent TB infection and five to 10 per cent will go on to develop active TB. Even a small percentage in India translates to crores of people. In order to achieve the elimination target, other than testing and treating those with an infection, we also have to prevent new infections,” says Dr Rajendra Joshi, deputy Director- General, National TB Elimination Programme.

For detecting the latent TB cases, either a blood test or a skin test can be performed. The problem with the hundred-year-old skin test, also known as Mantoux test, is that it also shows positive for those who have received the BCG vaccine for

tuberculosis. BCG vaccine is a part of the routine immunisation for children in India, making the test useless.

“Since most people in India have received the BCG vaccine, the 5mm cut-off for the wheal (skin bump) used by the world does not work in India. We have to keep the cut-off at 10 mm and this might be leading to us missing several cases. It also does not work very well with those who have HIV,” said Dr Joshi. With the c-TB test using a specific infection-causing part of the TB, the 5 mm cut-off for a test to be positive can be followed for all, including HIV patients.

The test will be used to detect latent tuberculosis in contacts of a patient with active TB and among those with conditions such as HIV and cancers who are at a higher risk of developing active TB.

Not only does the c-TB test produce more accurate results – as accurate as the lab-based blood test – it also does not need extracts from the actual bacteria making the manufacturing easier.

It is relatively cheaper than the blood tests for latent TB and does not require laboratory facilities. The skin test can be used to screen for TB in the community.

The new test, instead of using a protein extract of the entire bacterium, measures the body's immune response to two of the antigens or infective parts of tuberculosis — EAST-6 and CFP10.

To perform the test, the compound is injected just under the skin on the arm which forms a bump. This is then measured two to three days later to see whether the person has the infection. The bump grows larger if they are carriers of the pathogen.

The test was developed by the Statens Serum Institute, Denmark with which SII has a

partnership. The skin test can be used to screen for TB in the community.

A clinical trial has found that it is as safe as the Mantoux test but has better sensitivity in the general population as well as household contacts of a TB patient and those at a high risk of contracting the disease. The test will be available for adults while the company will be conducting a trial in those below the age of 18 years, according to the subject expert committee under India's apex drug regulator.

THE TIMES OF INDIA

Gujarat: Man undergoes rare surgery for spinal tuberculosis

TNN | Jun 21, 2022, 08.17 AM IST

AHMEDABAD: A man underwent occipital cervical fusion surgery at Nutan Medical College in Visnagar, to address his cervical pain.

Dr J P Modi, spine surgeon, said this is an extremely rare surgery in the north Gujarat region.

"Rajendrasinh Chavda, the patient, had severe pain in his spine for about four months. He had difficulty moving and other issues. He went to a few hospitals in Mehsana, but eventually came to the government-run Nutan Medical College for diagnosis and treatment," said Dr Modi. The surgery lasted three hours and involved neurologists and other experts. It was successful, with Chavda getting back on his feet. "This surgery is not generally taken up due to the risk and expenses involved. It was done free of cost at the government hospital. The case is important to create awareness about TB of the spine and its treatment," said Dr Modi.

"His reports showed TB on the C1 and C2 discs. TB on these discs is found in one of every 1 lakh patients. In this case, the C1 disc was completely damaged by to the infection.

The surgery lasted three hours and involved neurologists and other experts. It was successful, with Chavda getting back on his feet. "This surgery is not generally taken up due to the risk and expenses involved. It was done free of cost at the government hospital. The case is important to create awareness about TB of the spine and its treatment," said Dr Modi.

THE TIMES OF INDIA

Free X-ray facility in govt hospitals for kin of tuberculosis patients

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DEHRADUN: In a state government initiative, the family members of tuberculosis patients will now be able to get free X-rays at government hospitals in the capital. The move is aimed at limiting transmission of the disease to the immediate family members. Dehradun district has had 3473 notified TB patients till date - of which 2876 are currently undergoing treatment. In 2021, there were 7000 reported cases in the district. According to officials, TB can be transmitted through air to people living in close proximity to a patient, and hence, screening of family members should be done regularly. "They will be screened and X-rays will be done for free at any government centre," said chief medical officer, Dr Manoj Upreti. However, people will have to get receipts from government approved TB centres (separate from government hospitals) only to avail this facility. Meanwhile, they will not be required to pay OPD fees as well, said officials.

“All this is aimed at making the country TB free by 2025. All necessary precautions are being taken to ensure best health care for TB patients and their families,” said Dr Manoj Verma, district TB nodal officer. Notably, TB patients remained neglected and several didn’t even come forward for testing due to Covid global health scare and hence, the focus is again being shifted to the disease and doctors hope to bring down the numbers soon, said officials

Meanwhile, similar instructions have been given in Haridwar district too; however, the state health officials haven’t confirmed yet whether this is applicable in the entire Uttarakhand or not.

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