



**BRUHAT BENGALURU MAHANAGARA PALIKE
BANGALORE**

**ENGLISH NEWS PAPER
CLIPPINGS**

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THE HINDU

'IIT-Kanpur paper on fourth wave should be read with caution'

Researchers sceptical because predictions are solely based on statistical models

AFSHAN YASMEEN
BENGALURU

While an IIT-Kanpur study has predicted a fourth wave of COVID-19 in the country from June to October, three experts in Karnataka that the State's Technical Advisory Committee (TAC) consulted on this possibility are sceptical of the study.

The paper by researchers from IIT-Kanpur forecasts that the fourth wave of COVID-19 in India will arrive af-

ter 936 days from the reporting of the first case, which is January 30, 2020. Therefore, the fourth wave starts on June 22, 2022, reaching its peak on August 23, 2022, and ends on October 24, 2022, according to the paper.

As the same team from IIT-Kanpur had precisely predicted the third wave of Omicron variant in January-February 2022, the State's TAC had sought an expert review on the paper by Rajesh Sundaresan from IISc, Siva Athreya from Indian Statistical Institute, and TAC member Giridhar R. Babu from the Public Health Foundation of India.

According to the expert reviews, the IIT-Kanpur's paper suffers from several limita-



A file photo of a health worker collecting swab samples for COVID-19 test in Bengaluru.

tions. "As the predictions are solely based on statistical models, they should be read with caution," the experts have opined.

The TAC deliberated upon the expert reviews at its 168th meeting held on March 16 and recommended the State to adopt a cautious approach

irrespective of the paper's limitations.

Prof. Sundaresan has said the paper uses Zimbabwe as the training data since "Zimbabwe and India have the maximum visible similarities in the shape of the COVID waves".

"But Zimbabwe and India

The problem in identifying waves in India is that most States do not have robust surveillance systems. There is no clear way of understanding the expected number of cases of a disease.

GIRIDHAR R. BABU,
TAC member

have very different vaccinated populations. Roughly, 30% have taken at least one dose and 23% two doses in Zimbabwe. The situation in India is vastly different (where vaccination is 70% first dose and 89% second dose). These higher vaccination numbers may signifi-

cantly delay a fourth wave and may result in a different wave width," he said.

"The Zimbabwe wave in November was likely due to Omicron. To say Zimbabwe's Omicron wave width will apply to India's fourth wave (which will possibly be due to a new variant) is without basis. A new dominant variant has to overcome Omicron's prevalence and possible hybrid immunity (due to Delta/Omicron infections and vaccinations)," Prof. Sundaresan said.

Several limitations

Pointing out that the prediction suffers from several limitations, Dr. Babu said the major drawbacks of the Gaussian model (used in the

prediction) are that there is a tendency of overfitting the data and high sensitivity to initial conditions.

"The natural progression of the pandemic depends on several factors. Among them, the actions taken during the initial days of the outbreak play a key role. For the Zimbabwe wave to be similar to India's, there should have been similarities with the rest of the factors. In statistical parlance, all other factors should have been held constant. Including vaccination coverage, seroprevalence or wider restrictions, none of the factors is similar. It is purely a coincidence that the width and peak of one country are similar to those of another. Without proving

this, the authors cannot go ahead with forecasting," he said. "The problem in identifying waves in India is that most States do not have robust surveillance systems. There is no clear way of understanding the expected number of cases of a disease. Therefore, it is difficult to explain the excess cases that occur," Dr. Babu pointed out.

Concurring with the two experts, Prof. Athreya said that predictions solely based on statistical models should be read with caution. "It is vital to monitor cases closely, look for early warning signs, do extensive sequencing on test-positive cases and implement randomised, seroinfected based testing on sero-survey protocol," he added.

THE HINDU

China reports two COVID-19 deaths

PRESS TRUST OF INDIA
BEIJING

China on Saturday reported two COVID-19 deaths, the first since January 2021, amid a spike in the coronavirus cases prompting authorities to rule out relaxing the much-criticised "dynamic zero-COVID" policy of restricting international travel to control the latest outbreak.

The latest surge in cases in the last few weeks was a two

year high in the country, denting official claims of China being one of the best performers in curbing COVID-19 pandemic.

China's National Health Commission on Saturday reported two deaths due to coronavirus, taking the death toll since the COVID-19 emerged in Wuhan in December 2019 to 4,638.

The Commission reported about 4,000 new cases, including 1,823 asymptomatic

cases, on Friday. In all 18,586 people are undergoing treatment, it said in its daily report.

The virus was prevalent in 15 provincial-level regions, while cases continue to remain high in Jilin province which reported 1,674 cases on Saturday.

Vice Premier Sun Chunlan has asked the health officials to step up measures to contain the virus.

Ms. Sun stressed that all

those that need to be hospitalised or isolated should be done so to completely stamp out community infections, and work must be done to optimise the process of detection, diagnosis, review and information reporting.

She also urged efforts to balance nucleic acid testing resources across the regions and improve emergency response capacity, State-run Xinhua news agency reported.

Transmission of COVID-19 infection rare in babies

Less than 2% babies born to COVID-infected mothers test positive

PTI

The SARS-CoV-2 virus, which causes COVID-19, can be transmitted from mother to baby before, during and after childbirth, but such occurrences are rare, according to a study published in *The BMJ*.

The researchers found that less than two per cent of babies born to covid-infected mothers test positive for the virus.

However, they are more likely to test positive when the mothers have severe Covid or were diagnosed after childbirth.

The team led by researchers at the University of Birmingham in the U.K. also found that vaginal births and breastfeeding do not increase the likelihood of babies testing positive for SARS-CoV-2 when their mothers have the infection.

The study examined data from around the globe relating to more than 14,000 babies born to mothers with COVID-19. Overall, 1.8 per cent of the 14,271 babies with SARS-CoV-2 infection tested positive for the virus using PCR tests, the researchers said.

“Ours is the first study to use the World Health Organization’s methods to show that it is possible for the virus to be spread from the mother to baby while in the womb, during childbirth, and after delivery,” said study lead Shakila Thangaratinam, a professor at the University of Birmingham.

The researchers noted that mothers should be reassured about the low risk of viral transmission through vaginal birth, skin-to-skin contact and breastfeeding, all of which should be encouraged.

City's garbage disposal bill set to go up

NAVEEN MENEZES
BENGALURU, DHNS

The cost of handling Bengaluru's solid waste is set to rise.

The Bruhat Bengaluru Mahanagara Palike (BBMP) has planned to build three large transfer stations where the municipal waste collected by auto tippers from 8-10 wards will be shifted to compactors for processing or disposal.

While the facility is expected to eliminate roadside dumping points, such large stations, experts say, will shoot up the tertiary waste transport cost as auto tippers will have to unnecessarily travel an additional 10-15 km to transfer the garbage.

This is the first such proposal where each transfer station — consisting of equipment such as containers, hook loaders, weighing bridge, etc — will be able to handle 150 tonnes of waste on a daily basis. Bengaluru has at least 12 similar stations but they are much smaller in size and handle up to 25 tonnes of garbage a day. While a mini transfer station can serve a ward, the proposed large stations are aimed at covering an entire assembly constituency.

The BBMP feels large stations will reduce the secondary transport cost. "We are currently spending Rs 2-3 lakh per month on each compactor for disposing of the waste. Now, one compactor carries about 5-8 tonnes of garbage. When the

new facility is up and running, we will be able to compress and load up to 16 tonnes of waste in one compactor. This will do away with the need for more compactors," a senior BBMP official said.

The BBMP operates 580 compactors for disposing of waste at landfill sites or waste-processing plants.

Experts volunteering for solid waste management are not happy with the BDA's new proposal.

"The large transfer stations will undo all the reforms introduced so far. Auto tippers that collect waste from a ward are able to make a second trip because the transfer point is close-by. Having large stations per constituency will force auto tippers to travel unnecessarily," said Sandhya Narayan, an SWM expert.

She wondered how the BBMP would find land for such large stations in the city when it hasn't been able to give smaller sites for building 50 mini transfer stations.

As per the tender documents, the BBMP plans to spend Rs 39.80 crore on capital expenditure and Rs 27 crore on their operation and maintenance (O&M) for seven years. The facility, officials said, will eliminate the need to transfer garbage, which is currently done on roadsides.

To a question, a BBMP official in charge of the project said auto tippers would be given only nearby wards, thereby reducing the distance they would cover.



Auto tippers will take garbage collected from 8-10 wards to transfer stations for processing or disposal. The picture shows auto tippers lined up in Halasuru. DH FILE

July 2022: BBMP sets fresh deadline to finish Suranjan Das junction underpass work

BENGALURU, DHNS: The long-delayed work on the underpass at the Suranjan Das junction has got a new deadline and officials have been instructed to complete the work on the stretch by July 2022.

Bruhat Bengaluru Mahanagara Palike (BBMP) Chief Commissioner Gaurav Gupta visited the work site on Saturday and interacted with the engineers over the delay.

“The retaining wall has been constructed on both sides. The precast elements have to be installed and I have instructed the officials to finish the pending works by July,” Gupta said.

BBMP officials blamed the delay in works on shifting the trees at the junction. “The Karnataka High Court had to intervene in the matter and since it was resolved a few months ago, the work has picked up speed,” a senior BBMP official said. The project missed multiple deadlines, the latest one being September 2021.

Work at Wind Tunnel Road

Reviewing a series of projects, Gupta also inspected the work site at Wind Tunnel Road and gave officials six months to wrap up the work.

“The retaining wall has been constructed on one side. I have instructed the officials to obtain traffic diversion permissions and complete the construction of a retaining wall on the other side and finish the pending works within six months,” he said.

The civic body has already finished acquiring the land needed for the project from NAL and Isro.

Incidentally, Gupta, who visited the site last year, had set a September 2021 deadline for the project.

Inspecting road restoration works at some of the 110 villages in the city outskirts, the chief commissioner directed engineers to expedite the work before the onset of the rainy season.



BBMP Chief Commissioner Gaurav Gupta and an official inspect the work on the underpass at Suranjan Das Road on Saturday. SPECIAL ARRANGEMENT

DH
DECCAN HERALD

'Half of streets in Mahadevapura, 23% in Malleswaram not well-lit'

BENGALURU, DHNS

The safety of public spaces in Malleswaram and Mahadevapura assembly constituencies has scope for improvement with better streetlights and bus stops, an audit report has revealed.

The audit report, released on Saturday by the Bangalore Political Action Committee (B.PAC), showed 23% of the audited streets and public places in Malleswaram and 50% in Mahadevapura must be well lit to ensure safety.

Taking part in the panel discussion on the report's key findings, BBMP Special Commissioner (West) Dr Deepak R L vowed that the civic body will ensure budgetary allocation to install new streetlights and to repair old ones.

"There was confusion if the installation of streetlights had to be a centralised tender or a decentralised one, which caused a delay in the implementation of the project. However, now we have decentralised the process and a budgetary allocation will be made," he said.

Joint Commissioner of Police (Traf-



A discussion was organised by B.PAC at Rotary House of Friendship on Lavelle Road on Saturday. It was attended by MLA Arvind Limbavali. DH PHOTO/S K DINESH

fic) Dr B R Ravikanthe Gowda felt better lighting will ensure safety and prevent accidents. "We are passing on to the BBMP the geo-tagged information on the lack of streetlights in various areas. Better lighting will help reduce crime rates."

The report also said the city's bus stops can be enhanced with a Passenger Information System and route maps. "Many women passengers travelling late in the evening are not sure if the bus will arrive," pointed out Pooja Patel, a member of the survey team.

Noting that the BMTC is working on

projects to ensure women's safety under the Nirbhaya scheme, the corporation's Director for Security and Vigilance Radhika G said they are working on pooling in the data and live-tracking buses.

"CCTV cameras, GPS systems, and panic buttons have been installed in 50 city buses on a pilot basis. Once we have all the data, the Passenger Information System will be implemented," she said.

The audit, taken up by B.PAC in association with CGI, inspected 260 public spaces with the help of 45 volunteers over 18 months.



173 new Covid cases, two deaths in state

BENGALURU, DHNS: The state on Saturday registered 173 new coronavirus cases and two fatalities, thereby taking the total cases to date to 39,44,605 and toll to 40,035.

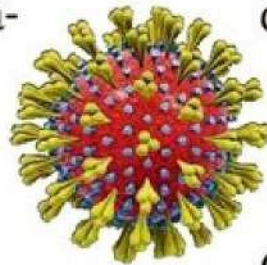
As many as 153 patients were discharged from various hospitals after recovery, taking the number of recoveries so far to 39,02,497.

The number of active cases across the state is now 2,031. The positivity rate for the day was 0.56% and the case fatality rate was 1.15%. The two deaths

reported on Saturday were from Bengaluru Urban (1) and Ballari (1).

Of the new cases, 138 were from Bengaluru Urban district which also recorded 110 discharges. Only 30,718 tests were done on Saturday. On day 4, the number of 12-14-year-old, who received Corbevax vaccine touched 1,14,517 (till 7.30 pm).

As many as 92,940 were vaccinated on Saturday, taking the total doses given so far to 10,25,62,995.





India logs over 2k fresh Covid-19 cases, 71 deaths

NEW DELHI, PTI: India's Covid-19 tally increased to 4,30,06,080 on Saturday with 2,075 fresh infections, while the active cases declined further to 27,802, according to Union health ministry data.

The death toll due to the viral disease climbed to 5,16,352 with 71 fresh fatalities, the data updated at 8 am stated. The active cases comprise 0.06% of the total infections. The national Covid-19 recovery rate was recorded at 98.73%, the health ministry said.

A reduction of 1,379 cases has been recorded in the active Covid-19 caseload in a span of 24 hours. The daily positivity rate was recorded at 0.56% and the weekly positivity rate stood at 0.41%, the ministry said. The last 24 hours saw a total of 3,70,514 Covid-19 tests being conducted. India has so far conducted over 78.22 crore tests, it said.

The number of people who have recuperated from the disease surged to 4,24,61,926. The case fatality rate was recorded at 1.20%, it added. The cumulative Covid-19 vaccine doses administered in the country so far under the nationwide vaccination drive have exceeded 181.04 crore.

India's Covid-19 tally had crossed the 20-lakh mark on August 7, 2020, 30 lakh on August 23, 40 lakh on September 5 and 50 lakh on September 16. It went past 60 lakh on September 28, 70 lakh on October 11, crossed 80 lakh on October 29, 90 lakh on November 20 and surpassed the one-crore mark on December 19. India crossed the grim milestone of two crore on May 4, 2021, and three crore on June 23.



China reports first Covid-19 deaths in more than a year

BEIJING, PTI: China on Saturday reported two Covid-19 deaths, the first since January 2021, amid a spike in the coronavirus cases prompting authorities to rule out relaxing the much-criticised "dynamic zero-Covid" policy of restricting international travel to control the latest outbreak.

The latest surge in cases in the last few weeks was a two year high in the country, denting official claims of China being one of the best performers in curbing the Covid-19 pandemic.

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'Covid situation comfortable, may change dramatically'

The guard must not be lowered: Maharashtra addl chief secretary

MRITYUNJAY BOSE
MUMBAI, DHNS

The Covid-19 situation is comfortable now but may dramatically change over the next few weeks, the Maharashtra government has warned amid the emergence of a new variant of the virus.

The active patients have come below the 2,000 level, which comes as a good sign, however, the guard must not be lowered.

Maharashtra government's additional chief secretary (health) Dr Pradeep Vyas, in a communication to all collectors, municipal commissioner, chief executive officers of Zilla Parishads has sent out a precautionary note.

"Some new variants are suspected to fuel infections in Israel and other countries. With restrictions almost relaxed, we need to be alert at this point of time...", Dr Vyas sent in the note.

According to him, crowding needs to be avoided and masking needs to be stressed.

"Be alert in identifying clusters if SARI and ILI cases and surveillance of the same need be stepped up," he said.

Dr Vyas also pointed out that Maharashtra's vaccina-

tion is below the national average and needs to be pushed up.

"Though at present we are quite comfortable with only around 2,000 active Covid cases but situation may change dramatically over the next few weeks [sic]," he said in the note dated March 17.

Dr Vyas said: "In past 24 hours some countries have recorded the highest ever new Covid cases since the beginning of the pandemic two years back.

South Korea has reported 6.21 lakh new Covid cases in a day, Germany 2.62 lakh new Covid cases in a day and the UK nearly 94,000 cases in a day. Population of South Korea is about 5.18 crore and that of Germany is about 8.32 crore.

Compared to that in our state with a population of 12.2 crore, the highest new daily cases have been around 68,000 in a day in the second surge. This comparison is to show the extent of infection in South Korea and Europe [sic]."

DR PRADEEP VYAS
Addl CS (Health), Maharashtra

“Maharashtra's vaccination is below the national average and needs to be pushed up. Though at present we are quite comfortable with only around 2,000 active Covid cases but situation may change dramatically over the next few weeks [sic].”

Can't live in fear over surge elsewhere: ICMR

'Relaxations Must Continue, With Caution'

Nisha.Nambiar@timesgroup.com

Pune: India will not necessarily go on to mirror the Covid graph of countries currently reporting huge surges in caseloads, Dr Samiran Panda, additional director general of the Indian Council of Medical Research, told **TOI** on Saturday. "Relaxations observed in states must continue. The public health approach is not living in fear forever," he said, adding that masks should stay on and vaccine coverage widened.

The comments follow a central directive asking states and Union territories to intensify surveillance after cases surged in parts of Europe and

'NO COUNTRY WILL MIRROR ANOTHER'

► China reported two Covid-related deaths on Saturday, the first since January 2021. It has reported more than 29,000 infections since the beginning of March

► Cases are rising swiftly in Germany, Italy, Austria, Australia, South Korea and Japan, among others, in a 'fourth wave'

“ (Various countries drew up different response plans.) So, no one country would mirror another country now. Even if there is a rise in cases elsewhere, it does not mean it will happen here too

—Samiran Panda | ICMR

India should extend booster to all, say docs

India must look at extending the third dose of anti-Covid vaccine — booster or precaution dose — beyond 60-plus category to ensure there is no drop in immunity, doctors told **TOI**. Doctors said younger people suffering from cancer, TB and kidney dysfunction, who are immunocompromised, need an extra dose. **TNN**

Asia. Panda said while more country-specific data is needed to formulate clear action plans, India's focus should be on easing curbs along with ensuring precaution. "We should... be cautious and must maintain surveillance and hygiene," he said.

As for the surges being seen in China, Hong Kong and some parts of Europe, the ICMR expert said various countries went on to draw up different plans to reduce infections as the pandemic progressed.

► **Genomic surveillance, P 9**

ICMR: Step up genomic and sentinel surveillance

► Continued from page 1

So, no one country would mirror another country now. Even if there is a rise in cases elsewhere, it does not mean it will happen here too. We as a country should step up genomic and sentinel surveillance,” he said, adding that, importantly, India also used a different set of vaccines against Covid-19. He maintained that any planning must be based on data generated from within the country and not on observations from other countries. “But we should closely monitor these developing scenarios,” he said.

Covid cases have been steadily rising in some parts of the world, with weekly data estimating a growth of 8%-10%. China and Hong Kong are attributing their surges to the Omicron’s BA.2 subvariant, but Indian officials have said that it is highly unlikely a new variant will lead to surges here, given the vaccination coverage.

Tenders called for development of 2 Bangalore Public Schools

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Bengaluru: Work on Bangalore Public Schools, which were announced in chief minister Basavaraj Bommai's budget, has been initiated with Bengaluru Smart City Limited calling for tenders to develop two schools in the city.

The short-term tenders propose Rs 4 crore for Cleveland School in Pulakeshinagar and Rs 2 crore for a Padarayanapura school in Chamarajpet (both run by BBMP). The technical bids will be opened on March 23. The project is likely to be over in nine months.

The government had planned to develop 20 Bangalore Public Schools — 16 run by the department of primary and secondary education and four

Photo for representation



by BBMP — by giving them a complete facelift. A sum of Rs 89 crore was allocated in the budget. The plan to upgrade infrastructure is the first step in the overall effort to improve quality of education. Following this, teachers will be recruited or rationalised.

“Any effort to improve infrastructure is about building classrooms. It includes furniture, projectors, staff room, water filters, electricity, playground development and compound wall. In one school, a lift

has been proposed due to lack of space,” said Vishal R, commissioner, department of public instruction. “For BBMP schools, teachers will have to be recruited by them. For our schools, we will rationalise teachers. Better infrastructure will bring in more students and more students will lead to more teachers,” he said.

The BBMP school in Padarayanapura has 446 students and Cleveland 650. The department, however, has not yet decided whether development will happen on the model of Karnataka Public Schools where classes from LKG to class 12 will be in one complex. The schools have been selected from densely populated areas where there are a large number of economically underprivileged families will benefit.

China reports first Covid deaths in more than a year

Beijing: China's health authorities reported two Covid-19 deaths on Saturday, the first since January 2021, as the country battles its worst outbreak in two years driven by a surge in the highly transmissible Omicron variant. The deaths, both in northeastern Jilin province, bring the country's coronavirus death toll to 4,638.

Both fatalities occurred in elderly patients and were the result of their underlying conditions, Jiao Yahui, an official with the National Health Commission, said on Saturday. One of them had not been vaccinated for Covid, she said. The majority of new 2,157 community transmissions came from Jilin. The province has imposed a travel ban, with people needing permission from police to travel across borders. China has reported over 29,000 cases since the beginning of March. It has pressed on with its policy of lockdowns and mass testing of millions of people as part of a "zero-covid" strategy. REUTERS

Chop chop, alert the cops

Forest dept FIR says some trees were felled at IISc without permission; students, employees claim hundreds axed

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TWEETS @BangaloreMIRROR

The Bengaluru Urban division of the forest department lodged an FIR against Indian Institute of Science (IISc) for cutting full-grown trees on the campus without seeking mandatory permissions.

According to Ravishankar SS, deputy conservator of forest, Bengaluru Urban division, the case was filed after the department received multiple complaints over calls in this regard during the last week.

"We received multiple complaints (in this regard). So we deputed a forest officer for an inspection and discovered, some trees were felled without seeking the required permissions. The range forest officer filed a case against IISc and the investigation is on. The officers also met the registrar of the institute, who denied any knowledge of such activities on the campus," said Ravishankar.

The department has seized a third-party vehicle from the campus, which was being used to lift and move logs.

"Five to six trees have been felled illegally on the campus and an FIR has been lodged against the institute. We will conduct a thorough inquiry and impose a penalty if (the institute is) found guilty. We have also seized a vehicle from the campus... used to lift chopped branches and trunks," said Manjunath KG, range forest officer.

Officials said the matter will now move to the court. This reporter filed an RTI with IISc requesting the institute to furnish details on permissions



The campus is known for its vast green cover (as seen in pics)



“It appears they forgot to add some zeroes to the number of trees in the FIR... My wild guess is that at least around 1,000 trees have been cut in the last six months or so –IISc employee

received for the tree felling. Central public information officer AA Vasanthan, of IISc, said responding to the RTI, "No trees are being felled. Only under unavoidable circumstances are any trees being replanted. We are committed to preserving the greenery on our campus."

Dattatraya Devare, trustee, Bengaluru Environment Trust, said, "We got to know informally that tree felling has been going on (at) the campus. Those who value green spaces consider the campus a model. If trees are being cut under unavoidable circumstances with necessary permission from the forest department, they (IISc's management) must be transparent about it."

Some IISc staff and student members pointed at irregularities in the ongoing developmental work on the campus and claimed, hundreds of grown trees were felled over the last six months to facilitate various construction activities.

"Trees are being cut at multiple spots inside the campus. Certainly, the number cannot be four or five as mentioned in the FIR. At least hundreds of trees... For instance, behind the Biology and Physics department of IISc, an area the size of a football field has been cleared recently," a student said.

A staff member said, "It appears they forgot to add some zeros to the number of trees in the FIR... My wild guess is that at least around 1,000

vtrees have been cut in the last six months or so."

Another staff member told BM, a cluster of trees, close to Centenary Visitor's House, next to the pedestrian gate near MS Ramaiah Memorial Hospital on Bel Road, have been felled to construct post-doctoral and international visitors blocks. It is said a big patch was cleared for the construction of an interdisciplinary science division building a year ago.

"The management did not find it necessary to consult the staff before razing trees... Why not demolish old buildings and come up with these facilities? There might be ambitious plans, but one cannot destroy the city's lung space in the name of development," said a staff member.

Fourth wave? Jury is out on this one

BA.2 variant of Omicron behind 68.5 per cent of Covid cases in state at present; experts say masking up and staying cautious are our best bets

| Sridhar.Vivan
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TWEETS @sridharVMIRROR

With the World Health Organisation (WHO) sounding the alarm bells of another possible wave, a debate on whether India will witness a fourth wave has been sparked off. Many countries are now seeing a surge driven by the BA.2 variant of Omicron. However, this variant is already dominant in the state with 68.5 per cent of the cases caused by BA.2.

Dr SN Aravinda (Consultant - Internal Medicine, Aster RV Hospital) said, "From our past experiences, we did not get affected too much in the last wave because of the mass immunisation program and the immunity which the community developed. Having said that, we should not take things for granted."

Sourcing data about the prevailing variants in the country, Vijay Anand (an independent Covid data analyst) explained that the trend chart shows how BA.2 Omicron is now the dominant variant in India with almost 98 to 99 per cent of genomic sequencing having BA.2 variant. "The Omicron wave started with BA.1 and BA.1.1 in December and then BA.2 took over the other variants during January and February and became dominant now. So, a new wave now in India due to BA.2 is highly unlikely as India's third wave driven by Omicron was due to BA.2 only."

The data of the genome sequencing of Karnataka's Covid cases (since January 1, 2022) shows



Students of a government school await their turn for a dose of the covid vaccine in Bengaluru

Easing restrictions

A few countries which are seeing a huge resurgence in Covid cases are now thinking of easing restrictions rather than imposing fresh ones. Italy, is easing many restrictions over the coming weeks, including requirements for most workplace vaccination and mask-wearing. Meanwhile, the German government has decided to lift many pandemic restrictions, even as the country hit a new record high for newly confirmed cases.

that 79.4 per cent of the current Covid cases are Omicron-driven. Out of this, BA1.1529's share is 28.1 per cent, BA1 is 3.5 per cent and BA2 is 68.5 per cent while Delta's share is 17.6 per cent.

Dr Srikanta JT (Consultant - Paediatric Interventional Pulmo-

138 test positive

Karnataka reported 173 fresh cases on Saturday including 138 in Bengaluru. The state also reported two deaths including a 37-year-old man who died at his residence in Bengaluru after complaints of Influenza-like Illness (ILI) and a 47-year-old man from Ballari with ILI. The test positivity rate for the day was 0.56 per cent.

nology and Sleep Medicine, Aster CMI Hospital) said that vaccination and antibody titres post booster doses are known to prevent major morbidity as well as mortality. "It does have some neutralising effect on new variants but does not completely prevent it."

However, Dr Aditya S Chowti (Senior Consultant - Internal Medicine, Fortis Hospital, Cunningham Road) added that a Covid resurgence could not be ruled out at the same time. The intensity is quite variable as the second wave was horrific and yet, the third wave was mild. My advice is that despite vaccination and a certain level of immunity improving the situation, this is not ultimate and we need to be careful."

Health Minister Dr K Sudhakar had recently spoken on similar lines. "Covid-19 hasn't gone. However, it has been controlled by vaccination." He said that even those who have taken the vaccine should take precautions by wearing masks and maintaining physical distancing.

(with inputs from agencies)

whatsapp
MIRROR

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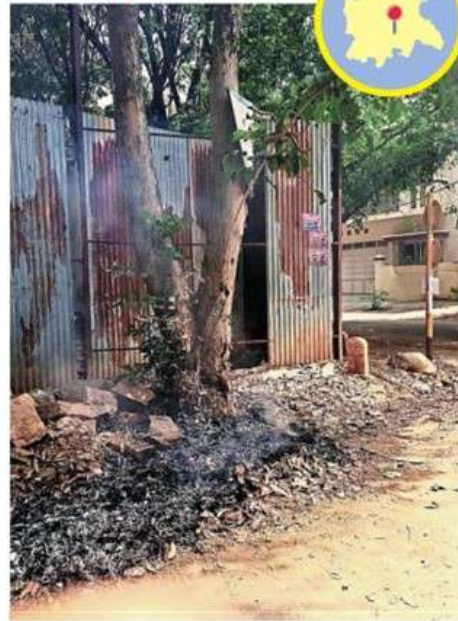
Problems in your area?
Send us a picture along with
specific details. And please,
no phone calls or spamming

Bad sign
Nagwara



The signage in KJ Halli needs to be fixed. Without proper signage commuters may get confused and lose their way.

Waste on fire
HSR Layout



Construction workers have been dumping and burning garbage at 21st Cross, 13th Main in Sector 7.

Black hole
Kalyan Nagar



In Chelekere, a big hole in the middle of the road is filled with sewage water and waste. The authorities concerned must fix the road to get rid of the black spot.

A road that is like no other

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TWEETS @BangaloreMIRROR

Once upon a time, 4th Main Road, Hoysala Nagar, was a well-tarred road devoid of bumps and craters. Commuting on the busy stretch was simple for residents. Now, however, the road is more of a dug-up pit, and let alone driving, residents find it difficult to even walk on that stretch.

The residents say that their road had been dug by BBMP months ago, however, like most stories go, no effort was taken by them later to complete the work they had started. They say that the road is spoiling the look of the entire area and there is not enough space for vehicles to pass by.

Rasheed L, a resident of the area, said, "The road is just terrible. There is no space to walk; no space to take out the vehicles. The entire place looks like a mess." According to him, the road has been like this for months now, however, authorities have not done anything to make it better. "Every morning we get stuck in unnecessary jams."

Another resident of the area who wished to remain unnamed, added that the road had become so dangerous for kids and older people. "If anyone is even slightly unmindful while walking, he/she can get into a very big accident. The road has become so narrow that even if three or four cars are in this lane, it will become a traffic jam."

The residents complain that the dugged up road has taken up a lot of space and this has hampered their parking options. They have to park their vehicles in far off lanes because there is no option to park it near their residence.

Another citizen living in the area, said, "This road is also affecting the business of the eatery that is right next to it. Initially,



The dug-up piles of debris are kept on the road itself, reducing space for vehicles and pedestrians

my family and I used to go there quite often; however, since the authorities dug up this road, we have stopped going there."

They also complain that the BBMP contractors, who have taken up the work, work for a few days and then leave the site. The labourers too are clueless.

The residents, tired with the problems brought about by this road have complained to the authorities several times; however, no heed was paid to their requests.

Two MLAs promise to make their constituencies safe for women by '23

EXPRESS NEWS SERVICE
@Bengaluru

MAHADEVAPURA MLA Aravind Limbavali and Malleswaram MLA Dr C N Ashwath Narayan have declared that they will work towards making their constituencies more women-safe within the next year.

At the launch of Bangalore Political Action Committee (B.PAC) B.SAFE Constituency Public Place Safety Audit report on Saturday, the Mahadevapura MLA promised to make women's safety a priority in the constituency. "There have not been incidents of violence against women in the constituency since I took office. However, women's safety will definitely be given priority and all suggestions and feedback in the report will be welcomed," he said.

The two reports were a combined effort by 45 women B.SAFE ambassadors from the two constituencies who identified areas in which there were infrastructural gaps.



Representatives of Malleswaram MLA CN Ashwath Narayan's office and Mahadevapura MLA Aravind Limbavali launch the report in Bengaluru on Saturday | ASHISHKRISHNA HP

The report highlights issues like the distribution of streetlights, maintenance of public toilets, functionality of CCTVs and walkable footpaths depending on the areas assessed. The ambassadors collected data from locals and assessed the state of anganwadis, bus stops, first-mile last-mile (FMLM), primary healthcare centres, markets, police stations, parks and public toilets in the constituencies.

Limbavali said that a big hurdle in doing development projects in the constituency was due to land issues as well as lack of funding. "Mahadevapura is an underdeveloped constituency compared to Malleswaram or Shivajinagar. The installation of streetlights will require improving the roads as well as grants for both. However, we will definitely try and implement all suggestions within the next year," he said.

Fresh from Punjab win, AAP prepares for battleground K'taka

BALA CHAUHAN @ Bengaluru

POST its impressive electoral success in Punjab, the Aam Aadmi Party (AAP) is now looking to spread its winning Arvind Kejriwal's Delhi model to other parts of the country, including Karnataka, which will go to polls in 2023.

"There is a three-fold increase in support for AAP from Bengaluru City post-March 10 results. Our survey shows that Bengalureans are considering voting for AAP as the party of

their choice in the next elections," Prithvi Reddy, Karnataka state convenor and national executive member, AAP told TNIE. He added that the Punjab victory has bolstered the people's desire for change and they want AAP.

"Earlier, AAP volunteers had to introduce themselves in their door-to-door campaigns in Bengaluru. Today, people recognise and welcome the AAP cap," he said, adding, "The party will

fight against corruption, which is the single largest problem in Karnataka for the last three decades. Apart from corruption,

we will go to people on the four promises: of improving education, healthcare, bijli and paani (electricity and water)."

Accordingly, AAP, Karnataka, has started a fundraising campaign for the upcoming BBMP elections.

To raise funds for the civic elections, AAP is doing a fund-

raiser - 'AAP-Rising' -- to help run the campaign on Sunday at Chancery Pavilion Hotel on Residency Road, between 11 am and 1 pm.

"We had conducted the first fundraiser in December last year and the response was positive. But for Sunday's fundraiser, we have got an overwhelming response. The number of donors has increased five times from the earlier event. Unlike other political parties, our funding is entirely through donations made by supporters via

online or cheque," said Prakash Nedungadi, vice-president, Outreach, Bengaluru.

Bengaluru City president, AAP, Mohan Dasari said, "Bengalureans are fed up with the corruption, apathy, and inefficiency of the BJP government and BBMP. Corruption at every level, starting with the political leaders, has prevented this city from being truly a modern city that cares for every citizen. This is what AAP will do when we win in BBMP and other elections in Karnataka."

Govindaraj Nagar gets 3 projects worth ₹18 crore

Bengaluru : Three development projects, including a government school, were sanctioned at a total cost of Rs 18 crore for Govindaraj Nagar constituency on Saturday. All the three works – construction of a government school in Police Colony, near Magadi Road, construction of Shri Ammembal Subba Rao Pai Memorial Hall in Canara Bank Colony and special construction work by the Public Works Department in the Canara Bank Colony – are expected to be completed in the next year. Presently, the construction of the government school has already started with the nursery block. **ENS**

WITH CURBS GONE, KARAGA FROM APRIL 8 TO BE A BIG DRAW

EXPRESS NEWS SERVICE
@Bengaluru

WITH the most-awaited Karaga all set to be held in Bengaluru after a gap of two years, its organising committee is apprehensive about security measures for the event as the crowd is expected to be massive and crowd management will prove to be a task for them.

At a meeting with the Bengaluru Urban District Commissioner and Bruhat Bengaluru Mahanagara Palike (BBMP) Chief Commissioner, it was decided to host the festival in the traditional manner from April

8. The festival will culminate in a grand procession (Karaga Utsav) on April 16.

MLC P R Ramesh, also a Karaga committee member, told *The New Sunday Express* that huge crowds are expected on all the days of the festivities. Even as the police department, District Commissioner and BBMP are working on the security, the committee is also working on ensuring that special measures are in place to prevent any untoward incidents.

Another committee member said they are also worried that the event should not turn into a Covid super-spreader.

Emotional, religious and cultural sentiments are very high regarding local festivals. So, without hurting anyone's feelings, the event needs to be held. For this, a detailed plan is being prepared by the officials and committee members, he pointed out.

"We are also hoping that no new restrictions will be enforced by the government by that time. At present, all restrictions have been relaxed. But two years back, just a few days before the festival, restrictions were put in place. We do not want the same to happen this time," the member added.

Identify hospitals in cities for clinical surveillance: Experts

Such a move will help in tracing any changes in symptoms, they feel

CHETANA BELAGERE
@ Bengaluru

WHILE experts in India feel that the next few weeks are crucial for the country as far as monitoring for any new SARS-CoV-2 variant goes, Karnataka's health experts and epidemiologists have suggested setting up of clinical surveillance at some of the major hospitals in big cities.

"South Africa could recognise the emergence of the Omicron variant as it noticed that there is a different clinical variety of Covid-19 manifestation. Similarly, in this silent period, when the number of cases is less, we need to ensure we keep track of people coming with Covid-19 symptoms and how the disease is manifesting," said a senior doctor and member of the Technical Advisory Committee (TAC).

Experts suggest that hospitals which get higher number of patients — like the Victoria Hospital, Rajiv Gandhi Institute of Chest Diseases (RGICD), Bowring Hospital, etc., in Bengaluru — can be identified where doctors can be informed to initiate clinical surveillance to identify any changes in symptoms. In these hospitals, Covid-positive patients who come with SARI/ILI, fever or any symptoms different from the Omicron presentation, can be observed and genome-sequenced.



A health worker collects swab samples from a man for Covid-19 testing at the Kempegowda Bus Station in Bengaluru on Saturday | SHRIRAMBN

However, Dr Ravi Mehta, renowned pulmonologist, Apollo Hospitals, says that it all depends on data.

"Clinical surveillance is important, but it all depends on what we are looking at. If the data from the countries showing surge is indicating a new variant, then it makes sense to put in all resources there. Otherwise, if it is the Omicron and its sub-lineages, then there is no reason to worry in India. But vigilance has to be maintained," he stressed.

According to sources, a detailed discussion on the IIT Kanpur's statistical model, predicting fourth wave in India from June 22, was held at the recent TAC meeting by epidemiological expert Dr Giridhara Babu R, IISc Professors Rajesh Sundaresan and Indian Statistical Institute Prof Siva Athreya, and they found that there were certain inherent limitations in the forecasting.

SAFE TO FLY

Allow biz travellers to get booster shots, says trade body

CHETANA BELAGERE @ Bengaluru

SEVERAL IT companies and manufacturing units planning to send their employees to European countries, especially Germany, or those travelling on business from Bengaluru, are finding it difficult to do so. The reason being that these countries want incoming Indian travellers to have had either the first or second dose of the prescribed Covid-19 and 270 days have not lapsed from the date of the last dose.

Even if an adult is vaccinated with the second dose in August, then the 270-day period will have elapsed and they will be considered as unvaccinated. The Bangalore Chamber of Industry and Commerce (BCIC) recently wrote to Health Minister Dr K Sudhakar seeking permission to administer precautionary doses for such travellers, irrespective of age.

"It is brought to our notice that some countries in the EU want incoming Indian travellers to ensure that both doses of the Covid vaccination have been administered and 270 days have not elapsed from the date of the last dose. In the event 270 days have elapsed, then the individual is considered as unvaccinated. This norm causes undue inconvenience to many business travellers, as international air travel is opening up in many countries," BCIC president K R Sekar said in his letter.

Sekar suggested that those who have been given two doses of Covid-19 vaccine be allowed to receive additional booster shots immediately after the expiry of 270 days, irrespective of their age, in case they intend to travel abroad. A fourth shot may also be considered in case the destination countries do not change their guidelines for incoming international travellers, he noted.

"We are getting requests from companies and industries to ensure permission is given so that business travellers are free of unnecessary hassles of being in quarantine after reaching the destination," he said.





DURATION OF PANDEMIC

2 YEARS, 11 DAYS

CASES REPORTED

Today: **106** | Yesterday: **140**

TALLY

Today: **39,44,432**

Yesterday: **39,44,326**

DEATHS

Today: **5**

Yesterday: **2**

DISCHARGES

Today: **154**

Yesterday: **162**

ACTIVE CASES

Today: **2,013**

Yesterday: **2,067**

POSITIVITY RATE

Today: **6.04%**

Yesterday: **6.04%**

MORTALITY RATE

Today: **1.01%**

Yesterday: **1.01%**

RECOVERY RATE

Today: **98.93%**

Yesterday: **98.93%**

DISTRICT-WISE COVID CASES

LAST 24 HOURS

■ Bengaluru Urban	84
■ Bengaluru Rural	2
■ Bagalkot	0
■ Ballari	0
■ Belagavi	0
■ Bidar	0
■ Chamarajana gar	0
■ Chikkaballapur	1
■ Chikkamagaluru	2
■ Chitradurga	3
■ Dakshina Kannada	6
■ Davanagere	0
■ Dharwad	2
■ Gadag	0
■ Hassan	0
■ Haveri	0
■ Kalaburagi	1
■ Kodagu	0
■ Kolar	0
■ Koppal	0
■ Mandya	0
■ Mysuru	2
■ Raichur	0
■ Ramanagara	1
■ Shivamogga	1
■ Tumakuru	1
■ Udupi	0
■ Uttara Kannada	0
■ Vijayapura	0
■ Yadgir	0

CATCHING THE VIRUS

After battling Covid-19 for over two years, scientists and policymakers in India seem to be in agreement that future virus research in humans as well as in animals must move in tandem

Shantanu Nandan Sharma

When virologist Priya Abraham first caught a glimpse of the Covid-19 virus, SARS-CoV-2, in February 2020, her first reaction was — “What a pretty virus it is!” Beneath the lens of a powerful electron microscope what she saw was a moving object similar to the sun and its rays beautifully drawn by a primary school kid.

After two years, having relentlessly combated the virus in labs and fields, she is now tweaking her remark. “It might look good but let’s not forget it is evil, which is refusing to leave us so soon,” Abraham, director of Pune-based National Institute of Virology (NIV), told ET. Her corner room on the ground floor of the institute houses, among others, a 1940 black-and-white photo of Mahatma Gandhi studying leprosy germ through a microscope.

NIV, a premier institute under the Indian Council of Medical Research (ICMR), was instrumental in isolating a Covid virus strain as early as March 9, 2020, making India the fifth nation — after China, Japan, Thailand and the US — to do so. This feat, in fact, was achieved two days before the World Health Organisation declared Covid-19 a pandemic. Behind this speedy and efficacious move of isolating the virus strains, a sine qua non for developing homegrown vaccines plus antibody test kits, lies NIV’s biodiversity level-4 (BSL-4) laboratory built in 2012, the first such facility in Asia. The famous Wuhan Institute of Virology in China built such a lab only five years later. BSL-4 laboratory is vital for eliminating accidental leakages of live viruses even in hostile conditions like an earthquake.

No doubt, the pandemic has given an impetus to virus research in India, a neglected discipline for decades, even kindling in young minds a desire to pursue it as a career. But it has also brought to light something else. Scientists and policymakers in India now seem to be in agreement that virus research in humans and animals must move in tandem. Pursuing such researches in silos, as practised till now, has proved to be counterproductive. As Abraham says, the future lies in virus research encompassing animals, humans and the environment.

Another noted virologist and visiting professor of Ashoka University, Shahid Jameel, says virus research in India needs to improve. “Many more institutions should be doing both basic and clinical research around infectious diseases and viruses. More importantly, this research has to be coordinated across multiple sectors — human health, animal health, wild animals and environment,” he says. “In the Indian context, this will require coordination at the highest levels among the ministries of health, agriculture (animal husbandry), environment and forests.”

A concept called One Health has gained momentum after the outbreak of the pandemic, even as scientists across the globe are struggling to pre-empt incidents of infectious agents jumping species. In his recently published book *Going Viral*, ICMR director-general, Balram Bhargava, says an estimated 60% of known infectious diseases and 75% of all new, emerging or reemerging diseases in humans have origins in animals, adding that all seven coronaviruses found in humans, including the newest of the lot, SARS-CoV-2, have most likely migrated from animals, mainly bats, mice and pets. He also highlighted a field study undertaken in 2018 on bats and bat hunters in Nagaland. Both international and Indian scientists were part of that study. In fact,



Representational image of research in BSL-4 lab

ICMR has been involved in the research of bat behaviour since 2001. Bhargava’s book further adds that using RT-PCR test, the NIV’s bat surveillance team also spotted pathogenic coronaviruses in two bat species — Indian flying fox and Rousettus.

In Pune, ET also interviewed three senior NIV scientists — bio-informatics specialist Sarah Cherian, molecular biologist Varsha Potdar and epidemiologist Sumit Bharadwaj — to understand the kind of research being undertaken since December 2019 when the scientists at the institute first brainstormed about a possible roadmap to battle the virus that was spotted in Wuhan. NIV has 49 scientists in total, most of whom are virologists. The institute earlier played a critical role in tackling Zika and Nipah viruses.

Basic and clinical research around infectious diseases and viruses has to be coordinated across multiple sectors — human health, animal health, wild animals and environment. In the Indian context, this will require coordination at the highest levels among the ministries of health, agriculture (animal husbandry), environment and forests”

SHAHID JAMEEL,
Virologist & Professor,
Ashoka University



42.5 million

Total Covid cases in India since January 2020

0.5 million

Total deaths in India due to Covid-19

75% Of all new, emerging or reemerging diseases in humans have origins in animals

7 Number of coronaviruses found in humans, all of which are suspected to have migrated from animals, mainly bats, mice or pets

Source: Ministry of Health and Family Welfare, “Going Viral” by Balram Bhargava

Raman Gangakhedkar, an epidemiologist and ICMR’s face at press briefings during the first lockdown starting March 25, 2020, says one of the possible reasons why Omicron added 30 more mutations over Delta is that the virus has had reverse zoonosis, meaning the pathogens getting transmitted from humans to animals.

“We know virus often comes from bats and other animals. But once it infects humans, there is a possibility that it gets transmitted to domestic animals. And then it infects humans again. That is why we find a variant, which suddenly acquires 30 more mutations,” he says, adding that Omicron is more like a distant cousin whereas the relationship among earlier variants such as Alpha, Beta, Gamma and Delta is much closer.

Meanwhile, Govt has embarked upon a journey of cross-cutting collaborations

among animal, human and wildlife health professionals by creating the One Health consortium comprising 27 organisations, including the All India Institute of Medical Sciences in Delhi, National Institute of Animal Biotechnology, Wildlife Institute of India, ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, et al. Also, the National Institute of One Health, equipped with a BSL-4 laboratory, is being built in Nagpur, which in turn is expected to work in a holistic manner involving veterinarians, ecologists, wildlife experts, epidemiologists and public health experts, among others, according to a written reply to the Rajya Sabha in December last year. The department of biotechnology, which comes under the ministry of science and technology, is the nodal department for this project.

Use of animals for virus research has another set of challenges. Activists and NGOs often vehemently oppose sacrificing animals for the sake of human wellbeing. Also, the use of monkeys for research has a religious dimension — it’s an animal revered in India and scientists are circumspect in their use.

But for some specific researches, for instance in the pre-clinical trial of Covid vaccines, experiments on monkeys are indispensable. While developing Covaxin in collaboration with Hyderabad-based Bharat Biotech, NIV scientists needed two dozen rhesus macaques for trial. Such an experiment had to take place after completing the vaccine trial on mice and hamsters. But in the summer of 2020, the monkeys were not readily available. Finally, NIV scientists with foresters caught 24 of them in

“We know virus often comes from bats and other animals. But once it infects humans, there is a possibility that it gets transmitted to domestic animals. And then it infects humans again. That is why we find a variant (Omicron) which suddenly acquires 30 more mutations”

RAMAN GANGAKHEDKAR,
Former Head of
Epidemiology, ICMR



a deep jungle near Nagpur. The animals were brought by road. Once they got acclimatised in cages, they were taken to NIV’s BSL-4 lab for trial, with one batch getting vaccines and another placebo. They were then exposed to live Covid virus to determine the efficacy of the vaccine. “The trial did not end there. Animals had to be used in batches to clinically examine the exact status of their lungs and other organs — lungs of those vaccinated, for instance, continued to be puffed up with oxygen.

“We follow the guidelines of animal ethics committee,” says NIV’s Abraham, citing the example of an accidental capture of a pregnant monkey ahead of Covaxin’s trial and its subsequent release. “We did not use her. We caught her by mistake. She delivered a baby and we subsequently released the mother and the child in the forest,” she adds.

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“HAVE NOT SPOTTED REVERSE ZONOSIS CASES IN INDIA YET”

There have been instances in Denmark where the Covid virus moved from humans to minks before returning to humans. Dr Priya Abraham, director of National Institute of Virology, Pune, tells Shantanu Nandan Sharma that no such case has been found in India. She adds that the future of virus researches must encompass animals, humans and the environment. Edited excerpts:



What is the current status of the Covid-19 virus SARS-CoV-2?

This virus is still an invisible enemy to the world. Under-vaccinated countries and regions are more susceptible. Also, it is still a problem for the elderly as well as people with comorbidities, particularly if they are unvaccinated. So the virus is very much around, but as the number of vaccinated people and those exposed to the virus have substantially increased in India and many parts of the world, we are relatively better off for now.

How risky is the new Omicron sub-variant, which has been fuelling the recent spike of cases in China?

Omicron has a sub-lineage named BA.2 and we are seeing that in India too. It is the Omicron variant of concern, not a new variant. In fact, the predominant strain in our country is now BA.2. As far as we know, it is more transmissible and can evade the immune response to some extent but it is not causing severe disease or death in those who are vaccinated or have had natural infection.

Are there instances in India where the Covid virus has gone from humans to animals and back?

There have been instances in Denmark where the virus migrated from humans to minks and returned to humans. In India we have not spotted any case of reverse zoonosis as yet.

How important is it to adopt coordinated virus research – of humans and animals?

The government has given a lot of emphasis on what we call One Health – the study of infections in both humans and animals. As part of the PM Ayushman Bharat Health Infrastructure Mission, a satellite One Health centre is being built in Nagpur. A new BSL-4 lab will be constructed there. The centre is likely to be ready by the end of next year, latest by 2024.

Some of the deadly diseases come from animals. For instance, if we notice an unusual number of bats or birds die in a particular region, we must investigate it and study it holistically. Our future lies in virus research encompassing animals, humans and the environment.

China Reports First Covid-19 Deaths in a Year

Beijing: China's health authorities reported two Covid-19 deaths on Saturday, the first since January 2021, as the country battles its worst outbreak in two years driven by a surge in the highly trans-



Nationwide, China has reported over 29,000 confirmed cases since the start of March

missible omicron variant. The deaths, both in north-eastern Jilin province, bring the country's covid death toll to 4,638. Both fatalities occurred in elderly patients and were the result of their under-

lying conditions, Jiao Yahui, an official with the National Health Commission, said on Saturday. The majority of new 2,157 community transmissions reported on Saturday came from Jilin.

— Reuters