11,649 new Covid cases

India records 11,649 new Covid cases (The Tribune: 202102015)


Daily deaths recorded below 100 for ninth time this month

India's tally of COVID-19 cases rose to 1,09,16,589 with 11,649 new infections being reported in a day, while the daily deaths were recorded below 100 for the ninth time this month, according to the Union Health Ministry data updated on Monday.

The death toll increased to 1,55,732 with 90 daily new fatalities, the data updated at 8 am showed.

The number of people who have recuperated from the disease surged to 1,06,21,220 which translates to a national COVID-19 recovery rate of 97.29 per cent, while the COVID-19 case fatality rate stands at 1.43 per cent.

The COVID-19 active caseload remained below 1.5 lakh.

There are 1,39,637 active cases of coronavirus infections in the country which comprise 1.28 per cent of the total caseload, the data stated.

India's COVID-19 tally had crossed the 20-lakh mark on August 7, 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.

The 90 new fatalities include 40 from Maharashtra and 15 from Kerala, 6 from Tamil Nadu and 5 from Madhya Pradesh.
A total of 1,55,732 deaths have been reported so far in the country including 51,529 from Maharashtra followed by 12,419 from Tamil Nadu, 12,265 from Karnataka, 10,891 from Delhi, 10,232 from West Bengal, 8,702 from Uttar Pradesh and 7,162 from Andhra Pradesh.

According to the ICMR, 20,67,16,634 samples have been tested up to February 14 with 4,86,122 samples being tested on Sunday. PTI

**Covid-19: Woman**

*Covid-19: Woman succumbs, 18 infected in Chandigarh (The Tribune: 202102015)*


Covid-19: Woman succumbs, 18 infected in Chandigarh

Chandigarh on Sunday reported one death and 18 new cases of Covid, taking the toll to 346 and tally to 21,238. - File photo

Chandigarh: The city on Sunday reported one death and 18 new cases of Covid, taking the toll to 346 and tally to 21,238. A 54-year-old woman from Sector 56, a case of type 2 diabetes mellitus, hypertension, coronary artery disease and cerebral artery infarct, breathed her last at the PGI. A total of 13 more patients have recovered. — TNS

No death, 20 test positive in Mohali

Mohali: Twenty fresh cases of Covid-19 surfaced in the district during the past 24 hours, taking the tally to 19,779. Meanwhile, 19 more patients were cured of the disease. No fresh fatality was reported in the district till Sunday evening, keeping the toll at 377. So far, 19,012 patients have been cured. — TNS

Eight new cases in Panchkula

Panchkula: The district reported eight fresh cases of coronavirus on Sunday, taking the overall tally to 10,666. With no new fatality, the Covid toll remained 147. While 10,436 patients have recovered from the disease so far, 83 cases are still active. The recovery rate stands at 97.84 per cent. — TNS
Coronavirus

Coronavirus may never go away but could change into mild annoyance (The Tribune: 202102015)


'Adults tend not to get very bad symptoms on reinfection if they’ve already been exposed'

Coronavirus may never go away but could change into mild annoyance

A member of the GP COVID-19 Expert Advisory Group, prepares a dose of AstraZeneca coronavirus disease vaccine at Health Service Executive vaccination centre outside St. Mary's Hospital, in Phoenix Park in Dublin, Ireland, on February 14, 2021. Reuters

What if COVID-19 never goes away? Experts say it’s likely that some version of the disease will linger for years. But what it will look like in the future is less clear.

Will the coronavirus, which has already killed more than 2 million people worldwide, eventually be eliminated by a global vaccination campaign, like smallpox? Will dangerous new variants evade vaccines? Or will the virus stick around for a long time, transforming into a mild annoyance, like the common cold?

Eventually, the virus known as SARS-CoV-2 will become yet “another animal in the zoo,” joining the many other infectious diseases that humanity has learned to live with, predicted Dr T Jacob John, who studies viruses and was at the helm of India’s efforts to tackle polio and HIV/AIDS.

But no one knows for sure. The virus is evolving rapidly, and new variants are popping up in different countries.

The risk of these new variants was underscored when Novavax Inc. found that the company’s vaccine did not work as well against mutated versions circulating in Britain and South Africa. The more the virus spreads, experts say, the more likely it is that a new variant will become capable of eluding current tests, treatments and vaccines.

For now, scientists agree on the immediate priority: Vaccinate as many people as quickly as possible. The next step is less certain and depends largely on the strength of the immunity offered by vaccines and natural infections and how long it lasts.

“Are people going to be frequently subject to repeat infections? We don’t have enough data yet to know,” said Jeffrey Shaman, who studies viruses at Columbia University. Like many researchers, he believes chances are slim that vaccines will confer lifelong immunity.
If humans must learn to live with COVID-19, the nature of that coexistence depends not just on how long immunity lasts, but also how the virus evolves. Will it mutate significantly each year, requiring annual shots, like the flu? Or will it pop up every few years?

This question of what happens next attracted Jennie Lavine, a virologist at Emory University, who is co-author of a recent paper in Science that projected a relatively optimistic scenario: After most people have been exposed to the virus — either through vaccination or surviving infections — the pathogen “will continue to circulate, but will mostly cause only mild illness,” like a routine cold.

While immunity acquired from other coronaviruses — like those that cause the common cold or SARS or MERS — wanes over time, symptoms upon reinfection tend to be milder than the first illness, said Ottar Bjornstad, a co-author of the Science paper who studies viruses at Pennsylvania State University.

“Adults tend not to get very bad symptoms if they’ve already been exposed,” he said.

The prediction in the Science paper is based on an analysis of how other coronaviruses have behaved over time and assumes that SAR-CoV-2 continues to evolve, but not quickly or radically.

The 1918 flu pandemic could offer clues about the course of COVID-19. That pathogen was an H1N1 virus with genes that originated in birds, not a coronavirus. At the time, no vaccines were available.

The US Centers for Disease Control and Prevention estimates that a third of the world’s population became infected. Eventually, after infected people either died or developed immunity, the virus stopped spreading quickly. It later mutated into a less virulent form, which experts say continues to circulate seasonally.

“Very commonly the descendants of flu pandemics become the milder seasonal flu viruses we experience for many years,” said Stephen Morse, who studies viruses at Columbia University.

It’s not clear yet how future mutations in SARS-CoV-2 will shape the trajectory of the current disease.

As new variants emerge — some more contagious, some more virulent and some possibly less responsive to vaccines — scientists are reminded how much they don’t yet know about the future of the virus, said Mark Jit, who studies viruses at the London School of Hygiene and Tropical Medicine.

“We’ve only known about this virus for about a year, so we don’t yet have data to show its behavior over five years or 10 years,” he said.

Of the more than 12 billion coronavirus vaccine shots being made in 2021, rich countries have bought about 9 billion, and many have options to buy more. This inequity is a threat since it will result in poorer countries having to wait longer for the vaccine, during which time the
disease will continue to spread and kill people, said Ian MacKay, who studies viruses at the University of Queensland.

That some vaccines seem less effective against the new strains is worrisome, but since the shots provide some protection, vaccines could still be used to slow or stop the virus from spreading, said Ashley St. John, who studies immune systems at Duke-NUS Medical School in Singapore.

Dr Gagandeep Kang, an infectious diseases expert at Christian Medical College at Vellore in southern India, said the evolution of the virus raises new questions: At what stage does the virus become a new strain? Will countries need to re-vaccinate from scratch? Or could a booster dose be given? “These are questions that you will have to address in the future,” Kang said.

The future of the coronavirus may contrast with other highly contagious diseases that have been largely beaten by vaccines that provide lifelong immunity — such as measles. The spread of measles drops off after many people have been vaccinated. AP

**Anti-viral coating**

**Anti-viral coating on face masks may kill coronavirus, UK study finds (The Tribune: 202102015)**


Anti-viral coating on face masks may kill coronavirus, UK study finds

People queue outside a bus modified into a mobile vaccination centre for the coronavirus disease (COVID-19), in Thamesmead, London, Britain, February 14, 2021. Reuters file photo

Scientists at the University of Cambridge working with an anti-viral coating technology called DioX believe that it could protect facemask users by killing the deadly coronavirus in as little as an hour.

According to ‘The Daily Telegraph’, the invisible coating on facemasks attacks the virus by rapturing its outer layer, effectively eliminating all new mutant variants, including the UK’s so-called Kent variant and the South African variant.

“The antiviral agent within the coating of the mask kills the virus by breaching its protective outer membrane, which is known as its envelope. Unlike other parts of the virus, the membrane remains the same regardless of any type of mutation. Hence this way of attacking the pathogen will work on any new variant of coronavirus,” Dr Graham Christie, senior lecturer at the Department of Chemical Engineering and Biotechnology at the University of Cambridge, told the newspaper.
“In fact, you could mutate the entire genome of the virus and it would have no effect on the envelope. We expect to see the same response regardless of the strain of coronavirus because structurally they are all very similar,” he said.

The technology called DiOX is based on quaternary ammonium salts – organic compounds widely used in the textile industry for their antimicrobial properties. Laboratory tests showed that the mask coated with it killed 95 per cent of pathogens on its surface within one hour and they were undetectable after four hours.

Experts say the action of the antiviral agent continues to work because it is unaffected by changes in the spike protein of the virus, which is the method by which coronavirus mutates.

“The variants that we are seeing occur in the spike proteins that stud the surface of the virus rather than the membrane of the envelope,” said Dr Christie.

“It is the genetic information that encodes this protein that is mutating, and this is leading to very slight structural changes in the shape of the spike. However, the envelope is derived from part of a human cell that the virus grabs from its host in order to protect its genetic material. It is made from lipids, which unlike the proteins do not change,” he said.

According to the newspaper report, the mask is reusable and can be washed up to 20 times, albeit subject to a reduction in efficacy after multiple washes. During the study, the mask was tested on a coronavirus called MHV-A59, which is genetically and structurally very similar to SARS-CoV-2.

“The Cambridge work followed industry standards for the testing of viruses on material,” said Andy Middleton, co-founder of LiquidNano, the UK company which commissioned the study.

“It also made some critical adaptations to give it a more ‘real-world’ relevance. This included conducting splash tests to mimic sneezing, helping to ensure the tests were as rigorous as possible. We have taken a proven antiviral agent and developed it for fabric in order to create a user-friendly mask,” he said.

DioX D4 claims to offer a patented technology for inhibiting the growth of a wide array of bacteria, mould, mildew, algae, fungi, and yeast on textile materials.

The novel antimicrobial agent provides an invisible microbistatic coating to inhibit the growth of odour causing bacteria. Given the coronavirus pandemic, DiOX D4 said it has also been independently tested to rapidly reduce bacterial and viral pathogens, “greatly limiting the risk of contact contamination and infection”.

If proved effective in further analyses, the technology could offer an additional layer of protection against deadly viruses over time. — PTI
यदि कोविड-19 कभी खतरे से बचे हैं तो क्या होगा? विशेषज्ञों की मानना है कि इस बीमारी के कुछ रूप सालों तक बने रहेंगे लेकिन भविष्य में यह कैसा होगा, यह अभी लगभग अस्पष्ट है।

दुनिया भर में पहले ही 20 लाख से अधिक लोगों की जान ले चुके कोरोना वायरस का वैश्विक टीकाकरण अभियान के जरिए क्या चेक की भावित आर्थिक और आयाम के रूप में अपने आपको तपाईल करके सदी- जुकाम की तरह लंबे समय तक बना रहेगा।

वायरस का अध्ययन करने वाले और पोलियो एवं एचआईवी/एड्स से निपटने के भारत के प्रंयान का हिस्सा रहे डॉ. जैक्ल जॉन का अनुमान है कि सार्स-कोवो-2 नाम से चर्चित है वायरस उस क्षण का अन्य संक्रमण रोगों की फेफड़े में शामिल हो जाएगा जिसके साथ इसान ने जीना सीख लिया है। लेकिन पकड़ने तौर पर किसी को कुछ पता नहीं है। वायरस तेजी से पनाह रहा है और कई देशों में नयी किस्म सामने आ रही है।

इन नयी किस्मों के जोखिम की बारह तब मुख्य सामने से नयी आयी भी जब बोज्याकेस इंग ने पाए कि उसका टीका एडवर्ड और दक्षिण अफ्रीका में सामने आयी नयी किस्मों पर कारगर साबित हुआ। विशेषज्ञों का कहना है कि यह वायरस जितना फैलेगा, उतनी ही ऐसी संभावना है कि नयी किस्म वैद्यनीक जाता, उपचार और टीकों को छः के में सम्मिलित हो जाएगी।

लेकिन फिल्टरल वैज्ञानिकों के बीच इस तात्कालिक प्राथमिकता पर सहमति है कि व्यायामसंभव लोगों की टीका लगाया जाए और अपत्ति चरण कुछ कम करबांत है एवं यह काफी हद तक टीकों द्वारा प्रदत्त प्रतिसारसंभव पर निर्भर करता है और यह भी कि वह कब तक रहता है।

कोरलविया विश्वविद्यालय में वायरस का अध्ययन करने वाले जेनरी नाम ने कहा, "क्या लोग घोड़े- घोड़े के साथ साथ लगाए जा रहे हैं? हमारे पास यह जानने के लिए पता आते हैं।" अन्य अनुसंधान के पास भी ही समय संभावना है कि टीके से जोनसेन्स प्रतिसारसंभव मिलेंगे।

क्या भारत को कोविड-19 के साथ रहने सीख लेना चाहिए, लेकिन यह दर्शन की प्रकृति वह बार पर निर्भर नहीं करती है कि कब तक प्रतिसारसंभव रहेगा है, इसलिए अभी तक यह भी निर्भरता है कि वह वायरस जब पनाह करेगा। क्या हार साल अपने आपमें बदलाव करेगा और फ़लों की भावत हर साल टीके की जरूरत होगी या कुछ सालों में टीके की जरूरत पड़ेगी?

अब आपके का होता है, यह सब एपीसारी विश्वविद्यालय में विषयवाद जेनरी लैवन्ड की भी आकृति करता है। हाल ही में बिजनर में उनके साक्षात्कार के दृष्टिकोण से प्रकाशित हुए शोधपत्र में अभिकृत वैश्विक तात्कालिक अध्ययन की गयी: जब समस्त लोग वायरस के समस्त अंतर्गत आ जाते हैं- वायरस के जरिए या फिर संक्रमण से नियंत्रण पाने के बाद, तब यह संक्रमण जारी रहेगा लेकिन वह सदी- जुकाम की भावत बस मामूली रूप से बीमार करेगा।
India coronavirus numbers

India coronavirus numbers Explained, Feb 15: Covid cases in Kerala cross 1 million (The Indian Express: 20210215)


India's Coronavirus cases numbers: Put differently, Kerala has detected close to 30,000 infections for every million people. Only Delhi, Goa and Ladakh have higher numbers.

Once celebrated as a success story in containing the spread of coronavirus epidemic in India, Kerala saw its confirmed cases go past the one million mark on Sunday. It is only the second state, after Maharashtra, to have recorded so many cases.

On Sunday, the state reported 4,611 new infections, which took the total number of confirmed cases to 1,004,135 (ten lakh four thousand one hundred and thirty five). That would mean that one out of every 35 persons in the state has been found to be infected with the virus till now. For India as a whole, this number would be one in about 135 people.

Put differently, Kerala has detected close to 30,000 infections for every million people. Only Delhi, Goa and Ladakh have higher numbers.

The state has the highest number of active cases right now, almost half of the entire country. As on Sunday, the state had 63,484 active cases, out of the total of 1.37 lakh in the whole country. On most days of this year, the state has contributed between 45 to 45 per cent of all the new detections in the country.

Under criticism, after being hailed initially, the Kerala government has been pointing to the relatively lesser number of deaths to argue that its main focus has been to avert deaths, and serious ailments, and ultimately that is what is going to matter, not the number of infections. While it is true that Kerala has a relatively low case fatality ratio (number of deaths out of number of confirmed positive cases) of 0.4 (four people out of every 1,000 infected have died), the number is not so flattering if we take the population size into account.

Kerala has so far recorded 4,033 coronavirus-related deaths, including the 48 that the state has classified as those attributable to co-morbid conditions. That would calculate to about 120 deaths in the state per million population. That is roughly equal to the number for whole of India as well. While several states, including Delhi, Maharashtra, Andhra Pradesh and Tamil Nadu, have fared much worse, a number of large states, like Bihar, Uttar Pradesh, Gujarat, Madhya Pradesh or West Bengal, have far more impressive figures.

Kerala has witnessed the most unusual trajectory of the epidemic in the country. It was the state where the first coronavirus case in India was detected, on January 30 last year. For the next six months, it seemed to be the model state as far as containing the spread was concerned. Even as
infections proliferated in the rest of the country, Kerala recorded very few cases. For several
days in the first half of May, when the lockdown was relaxed for the first time, leading to a rise
in cases in several states, Kerala reported zero cases. Its daily count had remained within 100
till the first week of June. By that time, Maharashtra had begun reporting more than 2,000 cases
a day, and states like Delhi and Tamil Nadu were finding more than 1,000 cases every day.

But then came the turnaround, and a bewildering rise in the number of cases in Kerala that has
continued till this day. It was on September 11 that Kerala became the 13th state where the
coronavirus cases had crossed one lakh. At that time, Andhra Pradesh had recorded close to
5.5 lakh cases, Tamil Nadu had close to five lakh, and Karnataka about 4.5 lakh. Even states
like Bihar, Odisha, Telangana, Assam and Gujarat were way ahead of Kerala. While almost
every other state began to slow down the third week of September, Kerala continued to grow.

On October 10, the state recorded as many as 11,755 cases in a day. No other state, barring
Maharashtra, has ever discovered as many cases in a single day.

The intriguing thing is that there is no good explanation available for what is happening in
Kerala. The plausible explanations offered are not very convincing. Like the fact that because
Kerala had managed to contain the spread in the initial period, it was left with a much larger
proportion of people who were uninfected, and thus susceptible to the virus. Or, the fact that
because Kerala is almost entirely urbanized, cases are being reported from almost every corner
of the state, unlike several other states where the reporting from the rural areas is not very
robust. Or, it could be case of people being more reckless about wearing masks and following
physical distancing norms compared to other states.

India’s detection of new cases has been on a steady decline since the middle of September. The
daily numbers have come down from a peak of more than 98,000 to a range of 10,000 to 13,000
now. But the decline has stagnated for the last two months or so, mainly because Kerala, and
Maharashtra, have been reporting fresh numbers at a steady rate, accounting for almost 70 per
cent of all the cases in the country. In fact, in the last few days, Maharashtra numbers have
actually shown signs of increasing. On Sunday, the state reported more than 4,000 cases for
the first time in more than a month. Kerala has been consistently reporting between 5,000 and
6,000 cases a day since the start of this year.

वैक्सीन

वैक्सीन: दूसरी खुराक छूटी तो कमजोर हो जाएगा टीके वाला सुरक्षा कवच, दोनों डोज के बाद ही दिखता असर
(Hindustan: 20210215)

https://www.livehindustan.com/national/story-second-dose-of-covid-vaccine-is-missed-
safety-cover-will-be-weak-effect-is-visible-only-after-both-doses-3854339.html
टीकाकरण की दूसरी खुराक क्षूद्री होते ही कोरोना से बचने वाले टीके का सुधार काफी कमजोर हो जाएगा। देश में तेजी से टीकाकरण कारकर सम्भव को काबू करने के प्रयास में लगा सरकार इस बात को लेकर चिंतित है। दो दिन पहले देश में उन लोगों को टीके की दूसरी खुराक मिलना शुरू हो गई, जिन्होंने सभी पहले टीके की पहली खुराक ली थी। पर इसीतरीम से कई राज्य व नेता शासित प्रदेशों में दूसरी टीका लगवाने आने वालों की ताराद बहुत कम है। ऐसे में स्वास्थ्य विशेषज्ञ चिंता व्यक्त कर रहे हैं कि कहीं यह लापरवाही संक्रमण पर भारी न पड़ जाए।

28 दिन बाद दूसरी खुराक

भारत में कोविड-19 और कोविडसे नामक कोरोना वैसीसी से टीकाकरण कराया जा रहा है। भारत सरकार के मुताबिक, इन दोनों टीकों की दो-दो खुराक ली जाती है जिनमें 28 दिन का अंतर है।

दोनों दोज के बाद ही दिखता असर

स्वास्थ्य मंत्रालय के मुताबिक, टीके की दूसरी खुराक लगाने के 12 दिन बाद टीके का प्रभाव शुरू होता है। यानी अगर कोई पहली खुराक लेने के बाद ही सोच ले कि वह संक्रमण से सुरक्षित हो जाएगा तो तपराही बात है।

प्रतिरक्षा बढ़ायी दूसरी खुराक

कोरोना वैसीसी की दूसरी खुराक का बुद्धि भी बढ़ा है क्योंकि पहली खुराक शरीर के प्रतिरक्षा तंत्र को एही वायीज किया करने के लिए प्रस्तावित करती है जबकि दूसरी खुराक प्रतिरक्षा तंत्र की इस क्षमता को बढ़ाया देती है।

चिंता : 4 पीसीडी लाभार्थी हो आए

सरकार ने शानिवार को बताया कि 28 दिन बाद पहली खुराक ले चुके लाभार्थियों में से मात्र चार पीसीडी ही शानिवार को दूसरी खुराक लगवाने आए लाभार्थियों के इस व्यवहार को लेकर सरकार अम्य चिंता में है क्योंकि अगर दूसरा टीका लगवाने आने वालों की ताराद कम रही तो फिर एक महीने से ज्यादा टीकाकरण का पूरा लाभ नहीं मिलेगा।

उत्तर प्रदेश समेत इन राज्यों में आज से शुरूआत

भोपाल से उत्तर प्रदेश, मध्य प्रदेश, महाराष्ट्र, बिहार, नागालैंड, ओडिशा और कर्नाटक में दूसरी खुराक लिंग जाने की शुरूआत होगी। जबकि तमिलनाडु और केरल में मंगलवार से इसकी शुरूआत होगी। बीते शानिवार को देश के पंजाब, चंडीगढ़, हरियाणा, राजस्थान और विजयपुर ने इसकी शुरूआत कर दी थी।

दुनिया की स्थिति

अमेरिका में भी दूसरी डोज चुनौती : टीके के खिलाफ दुनियाभर में चले दुश्चिन्ता के कारण लोगों को पहली खुराक लगवाने के लिए तैयार करना ही बहुत चुनौती था। अब उन्होंने लोगों को महीनों बाद दोबारा दूसरी खुराक के लिए बुलाने में भी चुनौती आ रही है।

ब्रिटेन टाल रहा दूसरी खुराक : संक्रमण का एक और खतरा दोस्त रहा यह देश ज्यादा से ज्यादा लोगों को टीके की पहली खुराक देने की गृहीत पर चल रहा है इसीलिए सरकार ने दूसरी खुराक लेने की अवधि को एक महीने से बढ़ाकर तीन महीने कर दिया है। यहां सरकार का दावा है कि पहली खुराक अंतराली रूप से सुरु कर देती है इसलिए लोग पहली खुराक के तीन महीने तक दूसरी खुराक लगवा लें।
Health experts

Maharashtra records 4K Covid-19 cases after 39 days, health experts sound alarm (Hindustan Times: 20210215)

https://www.hindustantimes.com/cities/mumbai-news

Maharashtra on Sunday recorded 4,092 Covid-19 infections, over 4,000 for the first time since January 6, taking its tally to 2,064,278. Mumbai, meanwhile, reported over 600 cases after 31 days with 645 fresh infections.

Maharashtra on Sunday recorded over 4,000 Covid-19 cases after a gap of 39 days, while Mumbai reported over 600 cases after exactly a month. With the number of cases seeing an upward trajectory for the past four or five days, health experts have sounded an alarm stating that administration will have to increase tracing and testing, while the people will have to strictly adhere to Covid-appropriate behaviour. They also suggested that areas where cases have seen an uptick should be put on “red alert”.

Maharashtra on Sunday recorded 4,092 Covid-19 infections, over 4,000 for the first time since January 6, taking its tally to 2,064,278. Mumbai, meanwhile, reported over 600 cases after 31 days with 645 fresh infections. The city last saw over 600 cases in a day on January 14.

Health experts, who are also on state government panels and task forces, have attributed the rise in cases to the increased movement of people post the resumption of activities and the operation of trains in Mumbai and Mumbai Metropolitan Region (MMR), and Covid fatigue in wearing masks and sanitising.

Dr Shashank Joshi, member of the Covid task force in the state, said, “Kerala and Maharashtra are outliers. And the increase in cases has coincided with three things—full unlocking, gram panchayat elections, and some degree of schools and colleges reopening. All these three things have a significant role. In geographies like Mumbai, MMR, the population in trains is increasing. These are the reasons for the increase in the cases and need to be looked at urgently.”

Dr Joshi added that footfall in Mumbai trains has gone up from 2 million to 3.4 million after the general public was allowed to use trains from February 1. “We definitely need to remain alert and should avoid complacency,” he said.

For Mumbai, Dr Joshi said that the population that was thus far unexposed to the virus could be getting affected. He suggested that areas should be re-looked at and put on “red alert”. “Covid is going to become an endemic in Mumbai. We will routinely see cases between 400 and 600 daily. But it should not drastically spike. The exposed population could have herd immunity, but the unexposed population is getting hurt now. For example, children who never
stepped out earlier are now going to schools. We might see a spurt in these cases. We need to increase testing, tracking and isolation,” Dr Joshi said.

Meanwhile, Dr Subhash Salunkhe, advisor to the state government on Covid-19 and former director-general of health services, said that he was “warning” of a possible surge in daily cases. He painted a grim picture saying Mumbai, which was a hotspot of Covid-19, could be in more “trouble” with train traffic increasing.

“Mumbai could get into trouble with local trains starting and flow of people increasing from its surrounding areas. The numbers were expected to rise as people are lax in Covid-appropriate behaviour. We are seeing a similar rise in Pune as well as people are behaving as if the pandemic has passed,” Salunkhe said.

He added that the vaccination drive is progressing slowly and it will take time for herd immunity to build after inoculation. He said, “The vaccination is taking place at a slow pace. The inoculation of the general public (above age 50, and with comorbidities) will start only next month. Till that period at least, people have to remain vigilant.”

**COVID-19 vaccine**

**Boosting confidence: On need for efficient use of COVID-19 vaccine stocks**


The government should ensure that the available stocks of vaccine are used efficiently

The downward trend in fresh coronavirus infections in India continues to inspire confidence that the pandemic is on the wane. The daily new cases fell below 10,000 for the third time this month. India’s tally is now 10.9 million cases and fresh reported fatalities were recorded below 100 for the eighth time this month, according to Health Ministry data. On January 1, there were around 20,000 fresh infections, which fell to about 11,000 by the month end. Should this sharp decline continue for this month too, then it would be a truly propitious turn of events. So far, around 8.2 million doses of vaccine have been administered to healthcare workers and some frontline workers, though this is still below the first lot of 16.5 million doses of Covishield and Covaxin that the government commissioned from their manufacturers. India has also managed to donate vaccines to neighbouring countries. For now, supply seems to far exceed demand, with only around half of those enrolled for vaccinations showing up for their doses. Saturday marked 28 days since the first doses of vaccine were administered and time for the first batch of those inoculated to show up for their second dose. The government is also considering administering vaccines to those above 50 and those younger with co-morbidities from March. India is also likely to get 97 million doses of Covishield by June — half of them by March.
This is a far cry from many countries where demand far exceeds supply and experiments are under way to test if different vaccines can be administered as first and second doses, so that more people may get at least one dose. However, the disappearance of a pandemic does not equate to the vanishing of the virus. The results of the ongoing serology surveys from the ICMR, meant to estimate the prevalence of COVID-antibodies, say that only around 21% of the population has been exposed to the virus. That, combined with the fact that there is so far no reliable information on the kind of coronavirus variants prevalent in the population, means that India can ill-afford to be complacent. Though dreaded variants such as the South African one have not yet been identified in India, key mutations (E484K and N440K) that are known to help the coronavirus evade antibodies have been reported in India. In spite of a consortium of labs analysing variants since December, there is no firm indication from the Centre if the U.K. variant has been found outside of those with a history of international travel. However, the government’s message to not be complacent and continue to adhere to mask use is in the right scientific spirit, given the uncertainty about virus evolution. Considerable hesitancy continues to exist as evidenced in Chhattisgarh. The Centre should work on furnishing efficacy data on Covaxin as well as improving public confidence, in ways that the available stocks of vaccine can be efficiently used.