



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Thursday

20210624

India records 54,069 new Covid cases

India records 54,069 new Covid cases, 1,321 deaths in a day (The Tribune: 20210624)

<https://www.tribuneindia.com/news/nation/india-records-54-069-new-covid-cases-1-321-deaths-in-a-day-273343>

A net decline of 16,137 cases in the Covid caseload has been recorded in a day

India reported 54,069 new cases of Covid in a day which took the infection tally to 3,00,82,778 while 1,321 more fatalities pushed the death toll to 3,91,981, according to the Union Health Ministry data on Thursday.

The number of active cases has declined to 6,27,057 and is 2.08 per cent of the total infections. The national Covid recovery rate has also improved to 96.61 per cent, the data updated at 8 am showed.

A net decline of 16,137 cases in the Covid caseload has been recorded in a day.

According to the inoculation data published at 7 am, India administered 64.89 lakh vaccine doses in a day taking the cumulative number of vaccines given so far to 30.16 crore.

The daily positivity rate was recorded at 2.91 per cent. It has been less than 5 per cent for 17 days in a row. The weekly positivity rate has also declined to 3.04 per cent, the ministry said.

Recoveries continue to outnumber daily new cases for the 42nd consecutive day. The number of people who have recuperated from Covid surged to 2,90,63,740, while the case fatality rate was at 1.3 per cent, it said.

On Wednesday, 18,59,469 tests were conducted in the country for the detection of Covid, taking the total number of tests carried out so far to 39,78,32,667.

The 1,321 fatalities include 508 from Maharashtra, 166 from Tamil Nadu, 150 from Kerala and 123 from Karnataka.

Of the total 3,91,981 deaths reported so far in the country, Maharashtra accounted for 1,19,303, Karnataka 34,287, Tamil Nadu 31,746, Delhi 24,940, Uttar Pradesh 22,336, West Bengal 17,475, Punjab 15,923 and Chhattisgarh 13,407. PTI

Delta Plus variant

India reports around 40 cases of Delta Plus variant (The Tribune: 20210624)

<https://www.tribuneindia.com/news/coronavirus/india-reports-around-40-cases-of-delta-plus-variant-272893>

Have been observed sporadically in Maharashtra, Kerala and Madhya Pradesh

India reports around 40 cases of Delta Plus variant

Photo for representation only. Tribune file

Around 40 cases of the Delta Plus variant, classified as a variant of concern (VOC), have been detected sporadically in Maharashtra, Kerala and Madhya Pradesh, the Union Health Ministry said on Wednesday.

Delta variant as well as all Delta sub-lineages, including Delta Plus, are classified as VOC, it said.

"As of now, among the samples sequenced (45000+) in India, Delta plus variant -- AY.1 -- has been observed sporadically in Maharashtra, Kerala and Madhya Pradesh, with around 40 cases identified so far and no significant increase in prevalence," the ministry said in its statement.

These three states have been advised to strengthen surveillance and take appropriate public health measures.

After the report of AY.1 by the Public Health England (PHE) on June 11, retrospective analysis of samples revealed the first occurrence of this lineage from a sample collected from Maharashtra. The sample was collected on April 5.

As of June 18, 205 sequences of AY.1 lineage were detected worldwide, with the US and the UK having over half of the known cases, the statement said.

INSACOG had recently identified a viral variant (delta, B.1.617.2). This viral variant has also been seen in nine other countries of the world.

INSACOG is an Indian consortium of 28 labs, established by the Government of India to carry out genome sequencing of the virus causing the COVID-19 pandemic. PTI

Third wave scare

Safeguards needed to prevent another flare-up(The Tribune: 20210624)

<https://www.tribuneindia.com/news/editorials/third-wave-scare-271680>

The first and the second waves saw huge destruction in terms of loss of life and livelihood and it is only to be hoped that the cumulative experience helps in averting another catastrophe. File photo

While 70% of India's districts reporting less than 5% positivity rate may be an encouraging sign in the fight against the coronavirus, lack of clarity on what levels of herd immunity in a population would be sufficient to ward off Covid-19 remains a matter of concern. Population immunity for diseases like polio and measles has a clear threshold, but it is not so in the case of the coronavirus, with more research required in this direction. The government has accordingly asked people not to lower the guard, with even the Delhi High Court issuing notices over violations of Covid protocols. The reliability of sero-prevalence surveys is also open to interpretation because of variations on the grounds of vaccines and the percentage of population inoculated.

The Centre had advised the states after the second wave that unlocking should take place only if the positivity rate remained below 5% for more than two weeks in a district to ensure the disease was under control. It also suggested that 70% of the vulnerable population groups with comorbidities must receive the vaccine, a process that has been stuck because of shortages and other bottlenecks. Community ownership of Covid-appropriate behaviour was also suggested to prevent a third wave, with thrust on vaccinating those 18 years or above. Vaccinating India's entire population is a huge task and will take time, making the process more arduous.

The Centre has now suggested that the lifting of the lockdown should be calibrated with the five-fold strategy of Covid-appropriate behaviour — test-track-treat, avoiding crowding, and vaccination — to break the chain of transmission. A system at the micro level to ensure that whenever there is a rise in cases in a smaller place, it gets checked there itself through local containment measures is also among the guidelines. The first and the second waves saw huge destruction in terms of loss of life and livelihood and it is only to be hoped that the cumulative experience helps in averting another catastrophe.

A dose of hope

India jabbed over 86 lakh people on Monday (The Tribune: 20210624)

<https://www.tribuneindia.com/news/editorials/a-dose-of-hope-272476>

On the first day of the Union government's new Covid-19 vaccination policy, 86,16,373 individuals were given vaccine jabs on Monday. This is a significant achievement, akin to vaccinating the whole population of, say, Switzerland, in one day. The government's new policy of centralised procurement and distribution of vaccines has got off to an encouraging start. Under the new policy, the government is buying vaccines directly from manufacturers and distributing them to the states, freeing them from having to compete with each other before the manufacturers, and allowing them to focus on planning and executing processes on the ground. The surge in May and the inability of the states to procure vaccines had caused several states to suspend vaccination. The new policy also ended the bizarre differential pricing mechanism under which the states were being forced to buy vaccines at a higher cost than the Union government.

The new policy was announced five days after the Supreme Court made stinging observations about 'arbitrary and irrational' pricing under the previous policy, and asked the Centre to explain how the sum of Rs 35,000 crore earmarked for procuring vaccines in 2021-22 was being spent. The vaccination drive had been moving at a snail's pace even as the second wave of the pandemic wreaked havoc across the country. India's previous daily vaccination record was 45 lakh doses on April 5, but the numbers declined sharply after that. By the fourth week of April, the pace of vaccination was such that, with around 13 crore people given at least one dose, it was estimated it would take over eight years to vaccinate enough people to acquire herd immunity.

Monday, summer solstice, saw a record in vaccinations; but for India to achieve the target of inoculating 950 million adults by the winter solstice, the rate of vaccination needs to rise further — experts say that India must administer 10 million doses daily. As of now, around 5% of the eligible population is fully vaccinated. Thus, while it is heartening that India administered vaccine doses equalling Switzerland's entire population in a single day, we must remind ourselves India's population is 160 times Switzerland's. India must maintain this pace for months to come.

Plug testing gaps

Pace, accuracy vital to contain Covid infections (The Tribune: 20210624)

<https://www.tribuneindia.com/news/editorials/plug-testing-gaps-270557>

INDIA's Covid testing has been a cause for concern ever since the outbreak of the pandemic. The country is conducting a modest 2.8 lakh tests per 10 lakh population, slightly better than Brazil but way behind the UK and the US. The failure or inability of various states to ensure that the testing kept pace with the fast-rising rate of infections was one of the reasons why the second wave was so destructive. While the testing rate has been dismal, the accuracy and credibility of the entire process have also not inspired confidence. The detection of a scam, wherein fake Covid-negative reports were allegedly issued by a company and two private labs during the Kumbh Mela in April, has laid bare the messy state of affairs. It is suspected that the labs fudged reports in the name of random people on the basis of their identity cards and phone numbers, apparently in an attempt to meet the daily quota of 50,000 tests set by the Uttarakhand High Court.

Though this scam pertains largely to persons who were not even tested, it's quite likely that some of the labs did not do proper testing of the samples received and might have issued negative reports to people who were actually Covid-positive. The investigators should look into all kinds of irregularities in the functioning of these labs. The infected people who were falsely declared Covid-negative must have transmitted the virus during the 'superspreader' event itself or on their return to their native places.

The rot is certainly not confined to Uttarakhand. Most states ought to get their act together in terms of the coverage, pace and reliability of testing. There is a dire need for ramping up testing facilities in urban as well as rural areas so that the time-consuming exercise of sending samples to other places and waiting for reports for days can be avoided. Timely testing and isolation are the key to controlling Covid infections. It's hoped that course correction will be done sooner than later to pre-empt the third wave.

Delta+ as mutation cases rise

States prep for Delta+ as mutation cases rise (Hindustan: 20210624)

<https://epaper.hindustantimes.com/Home/ArticleView>

Tracking variants

SURVEILLANCE PLAN

15 samples each from 5 labs and 5 tertiary care centres will be sent to regional genome sequencing labs routinely

Sequencing efforts will also be focussed on regions with unusual outbreaks, or those with high cases of vaccine breakthrough or re-infection cases

VARIANT OF CONCERN

1 Union health ministry said all sub-lineages of Delta variant are VOC, following a similar move by Public Health England

2 These include AY.1, now also known as Delta Plus, and AY.2, which has not been detected in India

3 AY.1 is being tracked for the K417N mutation, which is also in the Beta variant and may lead to vaccine resistance

4 AY.2 has a Spike protein mutation known as A222V which is also being studied by the scientific community



VACCINE TRACKER

TOTAL DOSES ADMINISTERED

300,969,538

DOSES GIVEN IN 24 HOURS*

6,926,716

*from 7pm on Tuesday to 7pm on Wednesday



TRACKING THE VIRUS

INDIA

CASES

30,082,164

(+54,330)

DEATHS

392,036

(+1,323)

DELHI

CASES

1,433,366

(+588*)

DEATHS

24,940

(+7)

*including backlog cases

Rhythmia Kaul

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New Delhi : India has begun setting up a sentinel surveillance system specifically for Sars-Cov-2 variants, with five hospitals and labs in each state sending samples for whole genome sequencing on a regular basis, people familiar with the matter said on Wednesday, adding that 40 cases of the Delta Plus variant have been detected in India so far.

Delta Plus refers to a variant scientifically known as the AY.1, which belongs to the same lineage as the Delta variant that is now established to be significantly more transmissible and possibly resistant to vaccines. AY.1 was classified as a “variant of concern” (VOC) by India on Tuesday. A new genome surveillance system will allow a better understanding of how the virus is mutating and could potentially help catch variants of concern before they take hold.

“In addition to what was earlier being practised, hospital-based sentinel sites in all states for sample collection are being operationalised. As many as 18 more labs have been recently added to the list of 10 labs in the national Insacog network to scale up genome sequencing. Also, states have to regularly provide 5% positive samples from community to Insacog labs,” said a senior official in the Union ministry of health, on condition of anonymity.

Insacog refers to the Indian Sars-Cov-2 genomic sequencing consortia, which was set up in December after the Alpha variant arose. The network had raised an alarm about the Delta variant but authorities were subsequently accused of delaying timely action which could have mitigated the severity of the second wave that began in March. For instance, not enough viral genomes were sequenced in the run-up to the second wave. The establishment of the sentinel sites should address that gap.

The Union health ministry in a statement on Wednesday added that there are approximately 40 confirmed infections with the Delta Plus variant, an increase from 22 announced by the Union health ministry on Tuesday. These cases have been found in six districts – two each in Maharashtra, Madhya Pradesh and Kerala.

The Union government asked officials in these states to redouble containment and testing efforts, and carry out surge vaccinations, it said on Tuesday.

In Kerala, three villages have been shut, officials said, and residents are being mandatorily tested for Covid-19. The cases were among three people, a four-year-old boy and two women in their 50s, all of whom have now recovered, said an official.

In Maharashtra, state health minister Rajesh Tope announced that 100 samples from each district will immediately be sent for genome sequencing.

Officials in Karnataka on Wednesday said genome sequencing found Delta Plus variant cases in three people, and that they had stepped up efforts to sequence more samples.

According to the Union health ministry statement, states have identified five laboratories and five tertiary care hospitals as sentinel sites, and each is expected to send 15 samples routinely to designated regional genome Sequencing Laboratories (RGSLs).

According to the health ministry, in addition to the sentinel surveillance, there will be additional event-based surveillance for special or unusual clusters – where cases have either grown unexpectedly, there is a change in symptoms or hospitalisation, or that show high breakthrough infections (those that happen despite vaccination).

The details of the epidemiological investigations, study methodology, number of samples to be collected for genome sequencing would depend on the situation or event, the person added.

One expert said more needs to be done, especially since Insacog has sequenced only 45,000 viral genomes since its inception. “We need baseline plus targeting; 5% or 3% of all positive samples plus all deaths, vaccine breakthroughs, unusual presentations, children with hospitalisations, etc, [must be done]. 5% of the 20 million cases we have had since Insacog was established is 1 million. So, we have done one-twentieth of what was proposed,” said Dr Gagandeep Kang, physician-scientist, Christian Medical College, Vellore, Tamil Nadu.

Another said resource limitations must be kept in mind for successful genome surveillance efforts. “When the case load is higher than what you can handle, the best thing to do is to go for smart sequencing, and do more sequencing in areas that look problematic such as areas from where such cases are being reported more, clusters or reporting of other conspicuous events,” said Shahid Jameel, senior virologist, and director, Trivedi School of Biosciences, Ashoka University. Jameel headed an advisory group to Insacog before he resigned from the position in mid-May.

“What is interesting is that for the Delta Plus variant you don’t need to do whole genome sequencing which is expensive and time consuming. One can go for genotyping assays that are cheaper and faster to do and can provide results in even 48 hours. It’s no rocket science as you already know the mutation, so you design probes to detect those changes. Public Health England is already doing this and for a country like ours, smart sequencing and genotyping assays will give us good results,” he added.

“The actual Insacog work started around mid February when caseload was around 10-12,000 new cases per day but the country didn’t have the capacity to handle 5% of 200,000-400,000 cases that were getting reported in a day at one point. All 10 labs put together had the capacity

to perform about 30,000 sequences per month and that is when they put on hold all other work and focus only on Covid-19. The grouping has done well in finding out what's circulating, and alerted in March about B.1.617 variant that is now being called the Delta variant, and later on also about the Delta Plus variant," he added.

The Union health ministry also said that all sub-lineages of the Delta variant , including AY.1 and AY.2, are now considered VOCs. "All Delta sub-lineages are treated as a variant of concern, although properties of AY.1 are still being investigated. Currently, the variant frequency of AY.1 is low in India. Cases with AY.1 have been mostly reported from nine countries of Europe, Asia and America," it said in a statement.

The inclusion of AY.1 (Delta Plus) and AY.2 in VOC's list was first made by Public Health England in its most recent technical briefing on June 11.

With inputs from HT Correspondents in Mumbai, Bengaluru and Thiruvananthapuram

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Coronavirus infection

Study finds loss in grey matter after coronavirus infection (The Hindu: 20210624)

<https://www.thehindu.com/sci-tech/health/study-finds-loss-in-grey-matter-after-coronavirus-infection/article34936719.ece>

U.K. brain imaging study shows effect on regions of the brain associated with smell and taste

The loss of smell and taste, which is among the most common symptoms associated with coronavirus infection, is writ large in the brain, says a study that

Coronavirus |

Coronavirus | More anti-bodies produced by Covishield than Covaxin, says study (The Hindu: 20210624)

<https://www.thehindu.com/sci-tech/health/coronavirus-covishield-produces-more-anti-bodies-than-covaxin-says-study/article34745262.ece>

Health worker administering Covishield vaccine, during COVID-19 vaccination program at BBMP head office, Bengaluru City University, in Bengaluru on June 01, 2021. | Photo Credit: The Hindu

515 doctors across 22 cities tracked through immunisation schedule.

Two doses of Covishield vaccine produced more antibodies than Covaxin doses, but there were relatively fewer instances of ‘breakthrough infections’ after the latter, reports a study of healthcare workers (HCW) in India.

The study is being peer-reviewed and has been submitted to a journal but appears as a preprint in MedrXiv, an online repository, and is among the few studies of the real-world effectiveness of vaccination in India.

Coronavirus | More anti-bodies produced by Covishield than Covaxin, says study

The study, by a collective of doctors, shows that none of the participants, who were also all doctors and got both doses of vaccines, were ill and only about 6% tested positive at different points of the vaccination schedule. While both vaccines were protective, there were differences in the protection accorded by a single dose of the vaccines.

Due to the shortage, it’s easier for people to get a single dose rather than both doses — given that the recommended gap has been extended to as many as 12 weeks for Covishield.

For the study, 515 healthcare workers from 13 States and covering 22 cities were evaluated from January to May 2021. Their blood samples were also tested for the presence, quantity of antibodies produced and levels of the specific antibodies that are directed to the spike protein of the virus, widely held to be a proxy of protection.

A health worker shows Covaxin and Covishield vaccine. File

Covaxin, Covishield still potent against B.1.617 strain but produces fewer antibodies

A single dose of Covishield elicited about 10 times the antibodies than Covaxin whereas a second dose narrowed the gap somewhat, with Covishield-triggered antibodies about six times that of Covaxin-stimulated ones, the study found.

“Contrarily, Covishield showed a good seropositivity rate and a 4-fold rise in median antibody titre even after a single dose,” the authors note.

Overall, 97.8% of those who never had COVID and had two complete doses of Covishield had detectable levels of antibodies, or tested seropositive, compared to 79.3% with Covaxin. It is important to note that of the 515, only 90 got Covaxin. Covishield constitutes the overwhelming majority of vaccines administered in the country with nearly nine persons getting it for every one of Covaxin.

Recipients wait outside a vaccination centre in Vijayawada to receive their second dose COVID-19 jab of on May 15, 2021.

Coronavirus | Extending gap between Covishield doses scientific: V.K. Paul

Though the spike protein remains the key target of most vaccines, ICMR and Bharat Biotech, the makers of Covaxin, have previously said that being a vaccine made out of an inactivated

virus, it elicited a ‘broader immune’ response, meaning antibodies aimed at different parts of the coronavirus to neutralise it. T-cell immunity, that is reported to elicit a longer lasting protection wasn’t measured in the study.

While real world efficacy data of Covaxin and India-centric data on Covishield isn’t public yet, recent studies have shown that most vaccines — including Covaxin and Covishield — have reduced response to some coronavirus variants such as B.1.617.2 or the Delta variant.

Less susceptible

The study authors also evaluated the relationship of immune response to gender, a history of testing positive for COVID prior to vaccination and co-morbidities.

Of the 30 HCWs who tested positive for the virus, three tested positive after the first dose and 27 after the second. Breakthrough infections — testing positive for the coronavirus two weeks after the second dose — were noted in 5.5% (22/399) cohorts in Covishield and 2.2% (2/93) of Covaxin recipients.

Dr A.K. Singh, of the GD Hospital and Diabetes Institute, Kolkata and among the authors of the paper, said the greater number of infections after the second wave was probably due to the increased number of cases after April and the high exposure of the study participants — all doctors in COVID hospitals — to patients during the second wave.

The study will continue in the months ahead to evaluate if antibody levels declined, Dr. Singh told The Hindu.

There was no significant difference in seropositivity rate when compared by age, sex, Body Mass Index (BMI), blood group and any comorbidities including its duration and treatment. Participants who had Type2 diabetes and hypertension for over five years were less likely to have detectable antibodies than those without either condition or detected fewer than five years ago, the authors report.

Routine immunisation

COVID-19 hits routine immunisation (The Hindu: 20210624)

<https://www.thehindu.com/news/national/karnataka/covid-19-hits-routine-immunisation/article34940698.ece>

Experts say this is especially true among urban poor and recommend that it should be strengthened

While all focus is on COVID-19, paediatric experts point out that many children have lost out on routine immunisation during the pandemic, especially in

Vaccinations

Vaccinations fall in Belagavi as stocks end(The Hindu: 20210624)

<https://www.thehindu.com/news/national/karnataka/vaccinations-fall-in-belagavi-as-stocks-end/article34940342.ece>

After 1.8 lakh doses of the COVID-19 vaccination were administered in two days, the vaccinations in Belagavi fell to 27,000 on Wednesday.

Antibody Therapy (The Asian Age: 20210624)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=15670544>

3 high-risk Covid patients given monoclonal antibody therapy

New Delhi, June 23: Three high-risk coronavirus patients, including a senior citizen, have received the monoclonal antibody therapy at a leading private facility here, the hospital authorities said on Wednesday.

As part of this single-dose infusion-based treatment, patients with mild to moderate symptoms are offered a cocktail of Casirivimab and Imdevimab.

Three high-risk coronavirus patients, including a senior citizen, were administered the monoclonal antibodies therapy at the Max Super Speciality Hospital, Shalimar Bagh, the hospital authorities said in a statement.

S.L. Chawla (78), who had several co-morbidities, developed a severe body ache and fever five days before testing positive for Covid. He was administered the therapy recently, while his daughter Garima (36), a diabetes patient, was treated on the fourth day after developing the symptoms, a spokesperson of the hospital said.

Chawla has comorbidities such as hypertension, dia-

Over 16 lakh people in city fully vaccinated: Delhi govt

AGE CORRESPONDENT
NEW DELHI, JUNE 23

Over 16 lakh people in Delhi have been fully vaccinated against coronavirus, while more than 50 lakh have received at least one dose so far, AAP MLA Atishi said on Wednesday.

She said 84,539 doses were administered in the city on June 22. Of this, around 52,000 jabs were given to people in the 18-44 age group.

"We have been saying that the vaccination number goes up whenever doses for youth are available. Tuesday's figures reflect the same thing," Atishi said.

betes and had a coronary artery bypass graft surgery (CABG) and percutaneous transluminal coronary angioplasty (PTCA), the hospital authorities said.

The other patient, Ashok Gupta (59), a hypertensive person, had Covid symptoms for four days, with a

high viral load on June 14. She said 66,87,438 vaccine doses have been administered since the inoculation exercise began on January 16. As many as 16,14,545 people have been fully vaccinated, while 50,72,893 have received at least one dose, according to government data.

Delhi has around 9.76 lakh doses available. Of this, 9.10 lakh are Covishield doses and the rest are Covaxin.

A total of 76,185 tests were conducted in Delhi in the last 24 hours, including 5 2 , 9 4 0 RTPCR/CBNAAT/True Nat tests. The cumulative tests conducted in the national capital stands at 2,09,75,900.

These three patients were the first ones to receive the antibodies cocktail therapy at the facility, the hospital spokesperson said.

The three patients had no clinical evidence of lung involvement and were maintaining saturation in

room-air condition, the statement said.

The therapy is most suited for "high-risk Covid-19 patients" who are within the first 10 days of the symptom onset and meet any of the listed criteria such as their age being 65 years or above.

The other criteria include obesity with BMI (Body Mass Index) of more than 35 or type 1 or type 2 diabetes mellitus or chronic kidney disease, including those on dialysis, or chronic liver disease or currently receiving immunosuppressive treatment or if aged above 55, having either a heart disease or hypertension or a chronic lung disease.

The national capital reported 111 coronavirus cases on Wednesday at a positivity rate of 0.15 per cent, while seven more people succumbed to the infection, according to data shared by the health department here. The seven new fatalities pushed the death toll in the city to 24,940. The case fatality rate stands at 1.74 per cent.

— PTI

Third Wave (The Asian Age: 20210624)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=15669355>

THE ASIAN AGE

24 JUNE 2021

Pace of jabs hard to sustain as 3rd wave threat gets real

Hardly has India emerged from the throes of the second wave of Covid-19 that the Union government is out with a warning against the threat of the Delta Plus variant of SARS-CoV-2, the virus that has caused the pandemic. There are about 40 cases of the variant reported from Maharashtra, Kerala and Madhya Pradesh, and the government has already declared it a "variant of concern". Apart from India, the variant has been reported from China, Japan, Russia, United States, Britain, Portugal, Switzerland and Poland. A mutant version of B.1.617.2 strain, also known as Delta, the Delta Plus is said to possess increased transmissibility and a stronger binding capability to the receptors of lung cells.

There isn't enough evidence on the virulent nature of the strain but a section of experts warn that it could cause the third wave to hit India earlier than predicted. The Centre has asked the governments in the three states where the presence of the virus has been reported to take extra pre-

From Prime Minister Narendra Modi to the Asha worker at the grassroots level, everybody talks about the importance of vaccination. However, the government seems to have learnt few lessons...

caution; however, given the nature of the virus, it is not just the three states that need to be forewarned.

India was caught off guard when the second wave of the pandemic hit us. The government and the healthcare service sector were unable to meet challenges as thousands perished gasping for breath. There was a shortage of every resource — drugs, oxygen, hospital beds, intensive care units and ventilators. India claims to be the vaccine hub of the world but a severe shortage of doses hit the vaccination programme as soon as it was rolled out. The government appeared to have no game plan to take on the virus and its "liberalised vaccine policy" made state governments and the private sector compete with each other in the marketplace. Their attempts to source the vaccine from abroad were fruitless, compounding the mess.

From Prime Minister Narendra Modi to the Asha worker who monitors the pandemic at the grassroots level, everybody talks about the importance of vaccination in the fight against the virus. However, the government seems to have learnt few lessons from the tardy management of the second wave. The government went to town when India administered 88.09 lakh vaccine doses in a single day on Monday. The celebration would have borne some merit if it marked the beginning of an intensive and sustained campaign for mass vaccination. But the figures for the following day showed a substantial dip to around 53.4 lakh doses, giving credence to the allegation that the day's record was a gimmick only.

There are no easy ways to secure the lives of 1.36 billion people. The arms of the government must touch each one with a syringe with vaccine, and the occasional spikes in the numbers are not the best way to achieve it. The government must at least now design a foolproof policy with actionable and achievable targets and ensure that everyone is inoculated before the new variant hits us in the form of a wave.

Variants of coronavirus

New research: Low-cost method for finding new variants of coronavirus (The Indian Express: 20210624)

<https://indianexpress.com/article/explained/explained-low-cost-method-for-finding-new-variants-of-coronavirus-7372921/>

Since the onset of the pandemic, thousands of viral genomes have been sequenced to reconstruct the evolution and global spread of the coronavirus.

Researchers have developed a technology for cost-effective surveillance of the global spread of new SARS-CoV-2 variants. (AP Illustration/Peter Hamlin)

Researchers at Karolinska Institutet have developed a technology for cost-effective surveillance of the global spread of new SARS-CoV-2 variants. The technique is presented in the journal Nature Communications.

Since the onset of the pandemic, thousands of viral genomes have been sequenced to reconstruct the evolution and global spread of the coronavirus. This is important for identifying particularly concerning variants that are more contagious, pathogenic, or resistant to the existing vaccines.

For global surveillance of the genome, it is crucial to sequence and analyse many samples in a cost-effective way. Researchers in the Bienko-Crosetto laboratory at Karolinska Institutet and Science for Life Laboratory (SciLifeLab) in Sweden have developed a new method, named COVseq, that can be used for surveillance of the viral genome on a massive scale at a low cost.

First, many copies of the viral genome are created using so-called multiplex PCR. The samples are then labelled and pooled together in the same sequencing library, using a previous method developed in the Bienko-Crosetto laboratory and now adapted for SARS-CoV-2 analysis.

Covid origin

Covid origin: What the world wants China to disclose in Wuhan lab leak probe (The Times of India: 20210624)

<https://timesofindia.indiatimes.com/world/china/covid-origin-what-the-world-wants-china-to-disclose-in-wuhan-lab-leak-probe/articleshow/83428355.cms>

Covid origin: What the world wants China to disclose in Wuhan lab leak probe

China's anti-sanctions law: What we know

The streaming service that is the powerhouse of storytelling in India

China adopts new law banning defamation of military personnel

File photo: Security personnel keep watch outside the Wuhan Institute of Virology .

BEIJING: The US push for a new inquiry to determine the origins of the coronavirus -- including whether it leaked from a Wuhan lab -- raises a key question: What has China failed to disclose?

The Group of Seven leaders this weekend are set to call for a fresh, transparent, World Health Organization-convened study into the origins of this virus, according to a draft statement seen by Bloomberg News. Yet so far they've been vague on what exactly they want.

In his statement giving intelligence agencies 90 days to redouble efforts into the origin of Covid-19, President Joe Biden asked them to come up with "specific questions for China." Beijing officials have repeatedly denied that the virus leaked from the lab, and pointed to a WHO report earlier this year that said the most likely origin was natural.

The Indians who made world take Chinese lab leak theory seriously

Using Google Translate to pore over Chinese documents, the three joined hands with a global alliance of volunteers to find answers about the origins of Covid-19

The Indians who made world take Chinese lab leak theory seriously

But WHO director-general Tedros Adhanom Ghebreyesus said the lab leak hypothesis required further investigation, adding that he was ready to deploy more resources. He said scientists would benefit from "full access to data," including biological samples from at least September 2019. The European Union similarly called for more data.

Here's what a new study should examine:

Details on Wuhan lab research

One big outstanding question is what type of work was actually going on in the Wuhan Institute of Virology. Shi Zhengli, the top bat coronavirus researcher at the lab, said in a March 2020 article in Scientific American that the genetic code of the virus that causes Covid-19 doesn't match any of her lab's samples. She also told the WHO team that all staff had tested negative for Covid-19 antibodies.

READ ALSO

Why these scientists insist the virus came from a Chinese lab

As US asks agencies to redouble efforts to determine origins of coronavirus, we look at why some still believe the virus originated from a Chinese lab

Why these scientists insist the virus came from a Chinese lab

Still, researchers haven't yet had access to all coronavirus isolates and genomic sequence data held at Wuhan labs. And they also haven't had access to log books and records of the research

that was being conducted on coronaviruses, in particular viruses with the RaTG13 bat sequence that is similar to SARS-CoV-2, the pathogen underpinning Covid-19.

There are also questions about whether the institute conducted gain-of-function experiments, in which researchers manipulate naturally occurring viruses to see if they can be made deadlier or more transmissible.

Medical records of lab workers

The Wall Street Journal reported last month that US intelligence indicates three researchers from the lab became sick enough in November 2019 that they sought hospital care. A number of media also reported that the Chinese government has restricted access to an abandoned copper mine in southwest China where researchers from the Wuhan lab collected coronavirus samples after a 2012 incident in which six miners fell ill with a “mysterious” respiratory illness.

Shi, the bat coronavirus researcher, told the WHO team that all staff had tested negative for Covid-19 antibodies. The China Daily again reported this week that no staff member of the Wuhan Institute of Virology has ever contracted the virus that caused Covid-19.

Still, researchers haven’t had access to medical records and specimens collected from staff at the institute who sought hospital care in late 2019. And they would also want to see medical records and specimens collected from the miners in southwest China.

More data on early cases

To identify the earliest human cases in December 2019, the WHO team reviewed health records, mortality data, trends in retail sales of cold and cough medications and reported patterns of influenza-like illnesses and severe respiratory infections in the two months preceding the outbreak in Wuhan.

International investigators examined 76,000 cases from more than 200 medical centers, and researchers in China also tested some 4,500 patient specimens stored at hospitals in Wuhan and other parts of China.

Even so, the WHO team that went to Wuhan earlier this year proposed further analysis of cases of respiratory illness that occurred in Wuhan in October and November 2019.

Documentation on Wuhan wet markets

To identify potential animal sources, 11,000 blood samples taken from livestock and poultry in 31 provinces were tested along with 1,914 samples from 35 species of wild animals. Researchers in China looked for SARS-CoV-2 in 12,000 animal swabs and 50,000 samples from 300 different species of wild animals. All were negative.

Researchers this week found that mink, masked palm civets, raccoon dogs, Siberian weasels, hog badgers and Chinese bamboo rats were among 38 animal species sold live at markets in Wuhan from May 2017 to November 2019.

Still, gaps remain in evidence to support a theory that the virus spilled over to humans from animals. WHO researchers haven't seen full documentation of what species of animals were sold live at markets in Wuhan in 2019, when they were present, and a list of their vendors and suppliers.

The WHO team has sought additional sampling of animal species that may act as a reservoir, including bat populations in China and neighboring countries. They also would benefit from names and addresses of farms raising minks, foxes, raccoon dogs and other fur-producing animals in China from 2018 to 2020.

Evidence from outside China

Chinese officials have repeatedly raised the specter that the virus originated elsewhere in the world, and was brought into the country either through frozen-food imports or even a US military operation. Foreign Ministry officials have repeatedly called for the US to provide access to Fort Detrick in Maryland, which is home to the American bio-defense agency.

The WHO team has called for collecting and analyzing epidemiological, clinical, molecular and environmental data from other countries to better understand the virus's origins, since some reports have suggested it may have been circulating outside China before December 2019. They are also seeking more research to understand if it could be transmitted from contaminated products to humans, and under which conditions that might occur.

Coronavirus Variants

Coronavirus Variants: अब तक कितनी बार रूप बदल चुका है कोरोना वायरस? (Dainik Gagan:20210624)

<https://www.jagran.com/lifestyle/health-coronavirus-variants-how-many-times-coronavirus-has-mutated-since-its-origin-in-wuhan-21767734.html>

अब तक कितनी बार रूप बदल चुका है कोरोना वायरस?

Publish Date:Thu, 24 Jun 2021 10:41 AM (IST)Author: Ruhee Parvez

Coronavirus Variants कोई भी वायरस अपने आप को बनाए रखने के लिए कुछ तरीकों का सहारा लेते हैं। इनमें से एक है मानव शरीर में कोशिकाओं के साथ अपने समीकरण को बदलना साथ ही हवा में ज्यादा समय तक खुद को जीवित रखने की कोशिश करना।

नई दिल्ली, लाइफस्टाइल डेस्क। Coronavirus Variants: कोरोना वायरस की दूसरी और बेहद खतरनाक लहर से कुछ राहत मिली ही थी कि इस संक्रमण के नए वैरिएंट ने एक बार फिर सबके दिलों में दहशत पैदा कर दी है। कोरोना वायरस के नए वैरिएंट डेल्टा प्लस भारत के साथ कुल 11 देशों में पाया गया है। दुनिया भर में अब इसके कुल मामले 197 हो गए हैं।

क्यों बढ़ते हैं वैरिएंट?

कोई भी वायरस अपने आप को बनाए रखने के लिए कुछ तरीकों का सहारा लेते हैं। इनमें से एक है मानव शरीर में कोशिकाओं के साथ अपने समीकरण को बदलना, साथ ही हवा में ज्यादा समय तक खुद को जीवित रखने की कोशिश करना। ये विषाणु कुछ लोगों में वायरस लोड को बढ़ाते हैं ताकि व्यक्ति सांस, छींक और खांसी के ज़रिए वायरस को फैलाए। इसके अलावा वायरस संक्रमण के दौरान खुद में बदलाव भी लाते हैं।

कितनी बार रूप बदल चुका है कोरोना?

यंग, खूबसूरत महिला पेट को टच कर मुस्कराती हुई

हाजमे को रखें दुरुस्त, इन आसान उपायों के साथ

यह भी पढ़ें

साल 2019 में चीन के शहर वुहान से शुरू हुआ कोरोना वायरस अभी तक कई बार रूप बदल चुका है। म्यूटेट होना यानी रूप बदलना हर वायरस की फितरत में होता है। ऐसा ज़रूरी नहीं कि हर वैरिएंट ताकतवर और खतरनाक ही साबित होगा।

एल्फा वैरिएंट

कोविड-19 का एल्फा वैरिएंट सबसे पहले इंग्लैंड की काउंटी केंट में पाया गया था। इसका वैज्ञानिक नाम B.1.1.7 है, जिसे WHO ने एल्फा का नाम दिया। कोरोना के बुनियादी किस्म यानी SARS-CoV-2 की तुलना में एल्फा 40% -80% अधिक संक्रामक है। इसका पता नवंबर 2020 में लगा, जब सितंबर महीने में यूनाइटेड किंगडम में कोविड-19 महामारी के दौरान इसके नमूने लिए गए थे। यह दिसंबर के मध्य तक तेजी से फैलने लगा, और देश में SARS-CoV-2 संक्रमण में वृद्धि देखी गई।

अलर्ट : कोरोना वैक्सीन

अलर्ट : कोरोना वैक्सीन ले चुके नौ स्वास्थ्य कर्मियों में एक संक्रमित, अध्ययन में और भी कई खुलासे (Amar Ujala:20210624)

दिल्ली सरकार के मौलाना आजाद मेडिकल कॉलेज के डॉक्टरों ने किया अध्ययन

अध्ययन के दौरान कोवाक्सिन से ज्यादा एंटीबॉडी कोविशील्ड से मिलीं

लोकनायक, जीबी पंत के डॉक्टर, नर्स को किया अध्ययन में शामिल

कोरोना वैक्सीन की दोनों खुराक लेने के बाद नौ में से एक स्वास्थ्य कर्मचारी कोरोना संक्रमण की चपेट में आया जबकि वैक्सीन की एक खुराक लेने वाले पांच में से एक स्वास्थ्य कर्मचारी को संक्रमण हुआ। दिल्ली सरकार के मौलाना आजाद मेडिकल कॉलेज के डॉक्टरों ने अपना पहला अध्ययन जारी किया है जिसके अनुसार कोवाक्सिन से ज्यादा एंटीबॉडी कोविशील्ड वैक्सीन के ज़रिए पाई गई हैं।

लोकनायक और जीबी पंत अस्पताल के डॉक्टर, नर्स व पैरामेडिकल स्टाफ पर किए इस अध्ययन को मेडरेक्सिव मेडिकल जर्नल में प्रकाशित किया गया है। हालांकि संक्रमित हुए स्वास्थ्य कर्मचारियों से पांच फीसदी को ही अस्पताल में भर्ती कराने की नौबत आई। सामुदायिक चिकित्सा विभाग के इस अध्ययन में 326 स्वास्थ्य कर्मचारियों को शामिल किया गया था जिनकी औसतन आयु 29.1 वर्ष थी। इनमें 212 यानि 65 फीसदी पुरुष थे।

अध्ययन में शामिल 200 स्वास्थ्य कर्मचारी यानि 90.9 फीसदी वैक्सीन की दोनों खुराक ले चुके थे। जबकि 41 कर्मचारियों ने एक खुराक ली थी और उसके बाद वह संक्रमित हो गए। 326 में से 168 (51.5 फीसदी) कर्मचारियों ने कोवाक्सिन लिया था। जबकि 158 (48.5 फीसदी) ने कोविशील्ड वैक्सीन लिया। छह जून तक चले इस अध्ययन के दौरान जब वैक्सीन लेने वाले इन स्वास्थ्य कर्मचारियों से बातचीत और एंटीबॉडी की जांच की गई तो पता चला कि 36 स्वास्थ्य कर्मचारियों को वैक्सीन लेने के बाद भी कोरोना संक्रमण हुआ।

यानी कुल 11 फीसदी कर्मचारियों में ब्रेक थ्रू इंफेक्शन (वैक्सीन के बाद संक्रमण) पाया गया। अध्ययन में यह भी पता चला है कि जिन स्वास्थ्य कर्मचारियों ने पहली खुराक ली थी उन्हें कोरोना संक्रमण 14 दिन के भीतर ही हो गया। हालांकि राहत यह रही कि इनमें से अधिकांश घर में रहकर ही ठीक हो गए थे। अध्ययन में यह भी पता चला है कि 94.4 फीसदी ब्रेक थ्रू इंफेक्शन के मामले माइल्ड थे। इन्हें ऑक्सीजन थैरेपी की आवश्यकता नहीं पड़ी।

गौर करने वाली बात है कि जिन स्वास्थ्य कर्मचारियों को वैक्सीन लेने से पहले कोरोना संक्रमण हुआ था उनमें साढ़े चार गुना कम संक्रमण का असर तब मिला जब वैक्सीन लेने के बाद फिर से वे कोरोना संक्रमित हुए थे। इस अध्ययन से यह भी स्पष्ट हुआ है कि कोरोना संक्रमण एक व्यक्ति को एक से अधिक बार भी हो सकता है। डॉ. प्रज्ञा शर्मा, डॉ. सुरुचि मिश्रा, डॉ. सौरभ बासु, डॉ. नेहा तंवर और डॉ. राजेश कुमार की टीम ने मिलकर यह अध्ययन पूरा किया है।

दूसरी लहर के दौरान हुआ है अध्ययन

डॉक्टरों के अनुसार इस साल 16 जनवरी से देश में कोरोना टीकाकरण कार्यक्रम शुरू हुआ था। मार्च माह तक करीब 80 फीसदी स्वास्थ्य कर्मचारियों को कम से कम एक खुराक मिल चुकी थी। जबकि इसी बीच दूसरी लहर भी देश में सामने आने लगी। यह अध्ययन इसी दौरान शुरू किया गया और यह पता चला कि दूसरी लहर में वैक्सीन लेने कई कर्मचारियों में कोरोना संक्रमण हुआ।

इन पर हुआ अध्ययन

259 डॉक्टर व इंटरन (79.4 फीसदी) . 52 (15.9%) फ्रंटलाइन वर्कर. 12 (4.6%) लैब टेक्नीशियन . 3 (0.9%) नर्स, . 212 (65%) पुरुष, 114 (35%) महिला कर्मचारियों की हुई जांच. 50 (15.3%) स्वास्थ्य कर्मचारियों को वैक्सीन लेने से पहले ही चुका था संक्रमण। . तीन स्वास्थ्य कर्मचारियों को वैक्सीन लेने के बाद संक्रमण हुआ और अस्पताल में भर्ती करना पड़ा।

ये चला पता

वैक्सीन की एक नहीं, दोनों खुराक लेने के बाद ही सुरक्षा की उम्मीद। . वैक्सीन की दोनों खुराक लेने के बाद भी संक्रमण से इंकार नहीं, लेकिन गंभीर भी नहीं। . पहले से संक्रमण और फिर वैक्सीन लेने के बाद एंटीबॉडी काफी हद तक करती हैं बचावा। . वैक्सीन की दोनों खुराक लेने के बाद ब्रेक थ्रू इंफेक्शन की दर काफी कम।

Vaccines (Amar Ujala: 20210624)

<https://www.amarujala.com/delhi/delhi-news-one-infected-among-nine-health-workers-who-have-taken-corona-vaccine>

कोविशील्ड बनाम कोवाक्सिन

कोविशील्ड की दोनों खुराक लेने के बाद 158 में से 13 लोगों को संक्रमण हुआ। जबकि कोवाक्सिन लेने वाले 168 में से 23 लोगों को संक्रमण हुआ है। इन दोनों ही वैक्सीन का ब्रेक थ्रू इन्फेक्शन क्रमशः 8.2 और 13.7 फीसदी पाया है। वैक्सीन की दोनों खुराक लेने के बाद सबसे ज्यादा 35 वर्ष से कम आयु के पुरुष डॉक्टर संक्रमित हुए हैं जिनमें से ज्यादातर चेहरे पर मास्क लगाने के साथ सोशल डिस्टेंसिंग का पालन कर रहे थे।