



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Monday 20210118

## COVID-19

### **Seropositivity for COVID-19 found to be lesser in smokers, vegetarians: CSIR (The Tribune: 20210118)**

<https://www.tribuneindia.com/news/health/seropositivity-for-covid-19-found-to-be-lesser-in-smokers-vegetarians-csir-199822>

Those with blood group 'O' may be less susceptible to the infection, while people with 'B' and 'AB' blood groups were at a higher risk, says survey

Seropositivity for COVID-19 found to be lesser in smokers, vegetarians: CSIR

For its study, CSIR took samples of 10,427 adult individuals working in its laboratories or institutions and their family members. PTI file

Smokers and vegetarians were found to have lower seropositivity indicating that they may be at a lesser risk of getting infected by coronavirus, according to a pan-India serosurvey conducted by the Council of Scientific and Industrial Research in its nearly 40 institutes.

The survey also found that those with blood group 'O' may be less susceptible to the infection, while people with 'B' and 'AB' blood groups were at a higher risk.

For its study, the Council of Scientific and Industrial Research (CSIR) took samples of 10,427 adult individuals working in its laboratories or institutions and their family members, based on voluntary participation, to assess the presence of antibodies to SARS-CoV-2.

The study which was piloted by CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi said of the 10,427 individuals, 1,058 (10.14 per cent) had antibodies against SARS-CoV-2.

A follow up on 346 seropositive individuals among the samples after three months revealed 'stable' to 'higher' antibody levels against SARS-CoV-2, but declining plasma activity for neutralising the virus, Shantanu Sengupta, senior scientist at IGIB and one of the co-authors of the paper said.

A repeat sampling of 35 individuals, at six months, revealed declining antibody levels while the neutralising antibody remained stable compared to three months.

However, both the normal antibody as well as the neutralising antibody were much above the required threshold, he said.

“Our finding that smokers are less likely to be seropositive is the first report from the general population and part of growing evidence that despite COVID-19 being a respiratory disease, smoking may be protective,” the study said.

The paper also cites two studies from France and similar reports from Italy, New York and China, which reported lower infection rates among smokers.

Along with demographic information, possible risk factors were evaluated through self-filled online forms with data acquired on blood group type, occupation type, habits including smoking and alcohol, diet preferences, medical history and transport type utilised.

“The study found that higher seropositivity was found for those using public transport and with occupational responsibilities such as security, housekeeping personnel, non-smokers and non-vegetarians,” Sengupta said.

In July last year, the Union Health Ministry had said smokers were likely to be more vulnerable to COVID-19 as smoking increases possibility of transmission of virus from hand to mouth, and warned that use of tobacco products could increase severity of respiratory infections and make people susceptible to coronavirus.

In its document 'COVID-19 Pandemic and Tobacco Use in India', the ministry had said experts have confirmed that smokers were more likely to develop severe symptoms or die from COVID-19, as it primarily attacked the lungs and warned against use of any such products.

Smokers, it warned, were likely to be more vulnerable to COVID-19 as the act of smoking means that fingers (and possibly contaminated cigarettes) are in contact with lips which increased the possibility of transmission of virus from hand to mouth.

“The presence of such antibodies is a reliable marker of infection and recovery. However, some infected people may not develop antibodies,” Anurag Agrawal, IGIB director, and one of the co-authors of the paper said.

“Use of private transport, lower-exposure occupations, smoking, vegetarianism and 'A' or 'O' blood groups appeared to be protective, using seropositivity as a surrogate for infection,” the paper added.

Sengupta said this is for the first time that a study has been done in India wherein individuals have been monitored for three months (35 individuals) to six months (346 individuals) for antibodies including those with probable neutralising activity. This is the first such cohort survey, he said.

“We conducted both the normal antibody test and neutralising anti-body test to understand the prevalence and duration of antibodies,” he said.

The CSIR has some 40 institutes covering the length and the breadth of the country and each specialises in different fields. The IGIB and its sister institute Centre of Cellular and Molecular Biology have been at the forefront in conducting the genome sequencing of coronavirus. PTI

### **Ascertain cause behind illness post COVID jab**

### **Kolkata nurse stable, experts trying to ascertain cause behind illness post COVID jab (The Tribune: 20210118)**

<https://www.tribuneindia.com/news/health/kolkata-nurse-stable-experts-trying-to-ascertain-cause-behind-illness-post-covid-jab-199761>

Thirteen other ‘Adverse Event Following Immunisation’ (AEFI) cases have also been reported from various parts of the state

Kolkata nurse stable, experts trying to ascertain cause behind illness post COVID jab

Image only for representational purposes

The health condition of a 35-year-old nurse, who fell ill here following the administration of COVID-19 vaccine, is currently stable, and a medical board of experts has been formed to find out why she fainted after taking the shot, a senior official said on Sunday.

The health department official, who is also a prominent doctor, said the experts are examining her condition as of now, and the analysis might take some time.

“She is stable. We have formed a board of experts to take care of the treatment procedure. Let’s see how quickly we can analyse the reason behind her illness and come up with a solution. As of now, she is responding well to the treatment,” the official told PTI.

The health department is also consulting vaccine expert Dr Shantunu Tripathy, who was earlier associated with School of Tropical Medicine, he said.

Asked if there was any underlying cause, the official said, “No one can say anything for sure as of now. Experts are examining her condition. We have found out that the woman suffers from chronic Asthma and is hypersensitive to a number of drugs.”

The nurse was on Saturday admitted to the critical care unit (CCU) of Nil Ratan Sircar Medical College and Hospital here as she complained of uneasiness and fainted shortly after taking the shot, during the nationwide vaccination programme.

“We checked on her this morning and found that all her vital health parameters are normal. Her blood pressure and oxygen saturation levels are also fine. Oxygen support has been removed for the time being. We will soon decide on the next course of action,” the senior official said.

Thirteen other ‘Adverse Event Following Immunisation’ (AEFI) cases have also been reported from various parts of the state but “none of those were serious”, the state health department said.

“All these vaccine recipients showed minor side effects like increased blood pressure and feverish feeling. They were discharged after preliminary treatment. Our doctors in respective districts are keeping a tab on their health condition and will take a call as per the demand of the situation,” the official said.

AEFI is any untoward medical occurrence following immunisation and might not have any relation with the vaccination process, officials said.

Of the 14 AEFI cases in Bengal, three are from Murshidabad district and two from Kolkata. — PTI

#### **4 more Covid-19 vaccines in different stages**

#### **4 more Covid-19 vaccines in different stages of trial: Serum Institute of India (The Tribune: 20210118)**

<https://www.tribuneindia.com/news/health/4-more-covid-19-vaccines-in-different-stages-of-trial-serum-institute-of-india-199752>

SII has partnered with Novavax Inc to manufacture its potential Covid vaccine for India and other countries

4 more Covid-19 vaccines in different stages of trial: Serum Institute of India

Apart from Covishield, the Serum Institute of India (SII) is working on four more vaccines against the novel coronavirus, according to Suresh Jadhav, executive director at one of the world’s largest vaccine manufacturers.

Jadhav informed during a webinar that the firm has been working on five vaccines against the novel coronavirus, including the Covishield which got approval for emergency use roll-out for mass immunization drive began on Saturday.

“For one (vaccine) we have received emergency approval, three others are in different stages of clinical studies while one is in the pre-clinical stage of the trial,” he said.

The SII has partnered with Novavax Inc to manufacture its potential Covid-19 vaccine for India and other countries.

Under an agreement with the US drug developer, the Pune based drugmaker will develop two hundred crore doses of Novavax’s vaccine candidate annually.

The drugmaker will also manufacture the antigen component of the vaccine.

The SII has also partnered with the US-based Codagenix to manufacture and supply its coronavirus vaccine.

The firm’s first Covid vaccine is developed from the masterseed of AstraZeneca/Oxford University’s vaccine against the disease.

It was approved by India’s drug regulator on January 3 for emergency use authorization alongwith Bharat Biotech’s Covaxin.

However, both the drugmakers are being criticised for less transparent data in their clinical trials and receiving the approvals without completing the due process of drug licencing.

Commenting on the criticism the vaccine manufacturers have been receiving for getting approvals without completing all the trials, Jadhav said that such chances have been taken earlier as well.

## **Corona pandemic**

### **Corona pandemic affected people psychologically as well: Expert (The Tribune: 20210118)**

<https://www.tribuneindia.com/news/health/corona-pandemic-affected-people-psychologically-as-well-expert-199750>

Dr Sunita also said that rehabilitation and therapy infrastructures would be needed in large numbers after the vaccination is done.

Corona pandemic affected people psychologically as well: Expert

Dr Sunita also said that rehabilitation and therapy infrastructures would be needed in large numbers after the vaccination is done.

A US-based doctor has asserted that the coronavirus pandemic has affected people psychologically a lot, especially those who tested positive and remained in isolation for a long period.

Speaking at a webinar with various renowned medical expertise, Dr Sunita Jain, Consultant Physician in Physical Medicine and Rehabilitation at the Baptist Hospital, Memphis, she also emphasised on the post-Covid rehabilitation aspect of the pandemic.

“In India, the vaccination drive has begun. But it will be a challenge for the medical experts to help stabilise a large number of people who have been affected psychologically. In the beginning, the Union government and health centres faced tough times to provide infrastructures to fight the battle due to a large number of patients. And now, if a large number of people faced brain-related disorders, it won't be too easy for countries like India. It is certainly going to be a big task for the government.”

Sharing her experiences of treating such patients during the pandemic, Dr Sunita said: “I have seen many patients who have faced adverse brain disorders. Many who lost their loved ones and remained isolated for a long period had lost hope. And therefore, we need to focus on another challenge—bringing such patients back to normal.” She also said that those affected by COVID-19 and other respiratory problems may face weakness for a long period.

Dr Sunita also said that rehabilitation and therapy infrastructures would be needed in large numbers after the vaccination is done.

“I am saying it because it is a fact that one round of vaccination is not enough to break the chain globally. This coronavirus is going to exist in our lives for a long time.” A doctor of internal medicine posted at a private hospital in Medcity said that uncertainty about the symptoms of coronavirus infection and lack of accurate information on the disease led to panic among the people about the virus.

“In absence of accurate information about COVID-19 symptoms, communication channels could not spread the right message to the common people, which resulted in panic among them,” Dr Shushila Kataria, Director and Head of Internal Medicine Department at Medanta, said at the webinar on Saturday.

Talking about the treatment process, she said; “As every recipe follows a particular protocol, similarly the treatment for COVID-19 required a particular protocol to follow and then keep adding more to it step by step.” “For COVID-19 treatment, the protocol starts with finding its symptoms at the initial stage. Diagnosing the symptoms of COVID-19 is a main process of treatment because the more quickly we find them, the more quickly we can proceed further. But the problem is that in most cases, symptoms are found at least after one or two weeks. And that is why common people have this tendency that they can escape COVID-19 if they remain away from other people and isolate themselves.” Kataria said that the second aspect of treatment was to find if the symptoms were serious or not. “Once the coronavirus symptoms are determined, a doctor finds it easy to decide whether a particular patient requires home isolation or hospitalisation,” Dr Kataria added.

She lauded the central government for taking quick decisions on directions for home isolation and thereby allowing patients to remain confined in their homes. “Doing this not only reduced the burden on health centres but also helped doctors carry out treatment on patients as per beds available in their hospitals. It also helped health institutions to augment the required facilities for the next course of the treatment process.”—IANS

## **Rapid blood test**

### **Rapid blood test to detect severe disease risk of Covid patients (The Tribune: 20210118)**

<https://www.tribuneindia.com/news/health/rapid-blood-test-to-detect-severe-disease-risk-of-covid-patients-199402>

The researchers found this association held independently of a patient's age, sex and underlying health conditions

Rapid blood test to detect severe disease risk of Covid patients

Researchers, including one of Indian origin, have shown that a relatively simple and rapid blood test could predict—within a day of a hospital admission—which patients with Covid-19 are at highest risk of severe complications or death.

The study published in the JCI Insight journal indicates that the blood test measures levels of mitochondrial DNA, a unique type of DNA molecule that normally resides inside the energy factories of cells.

Mitochondrial DNA spilling out of cells and into the bloodstream is a sign that a particular type of violent cell death is taking place in the body.

"We will need larger trials to verify what we found in this study, but if we could determine in the first 24 hours of admission whether a patient is likely to need dialysis/incubation or medication to keep their blood pressure from dropping too low, that would change how we triage the patient and it might change how we manage them much earlier in the course of the disease," said researcher Hrishikesh S. Kulkarni, Assistant Professor at the Washington University in the US.

The test could serve as a way to predict disease severity as well as a tool to better design clinical trials, identifying patients who might benefit from specific investigational treatments.

The team evaluated 97 patients with Covid-19, measuring their mitochondrial DNA levels on the first day of their hospital stay.

They found that mitochondrial DNA levels were much higher in patients who eventually were admitted to the ICU, incubated or died.

The researchers found this association held independently of a patient's age, sex and underlying health conditions.

On an average, mitochondrial DNA levels were nearly tenfold higher in patients with Covid-19 who developed severe lung dysfunction or eventually died.

Those with elevated levels were nearly six times more likely to be incubated, three times more likely to be admitted to the ICU and nearly twice as likely to die compared with those with lower levels. — IANS

## **India vaccinates**

**India vaccinates 220k over two days of driveThree people taken to hospitals with severe reactions, but most others were mild, say government officials(Hindustan Times: : 20210118)**

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

# Inoculation push continues

India had the highest Day 1 vaccination number in the world, o

**224,301** people given  
Covid-19  
vaccine till  
Sunday

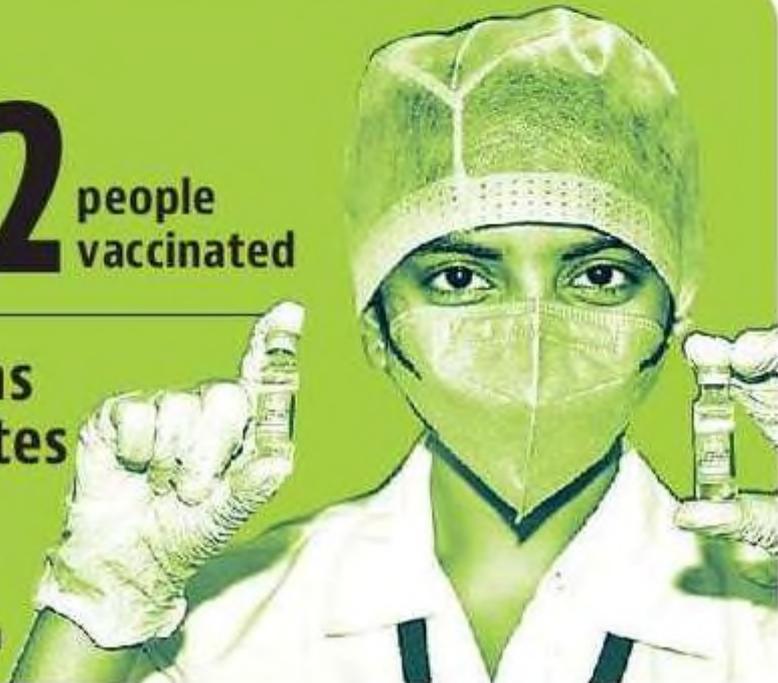
**207,229** v  
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ON SUNDAY

**17,072** people  
vaccinated

**553 sessions**  
held in 6 states

Andhra Pradesh,  
Arunachal Pradesh,  
Karnataka, Kerala,  
Manipur, Tamil Nadu



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letters@hindustantimes.com

New Delhi : Six states carried out roughly 17,000 more coronavirus vaccinations on Sunday, the Union health ministry said, pegging the figure of total immunisations at 224,301 since the process began on Saturday morning.

According to officials, among the 207,229 who got doses on the first day, three people — or .0014% — had significant side effects. Of these three, two were hospitalised overnight and discharged the following day while one remained admitted as of late Sunday.

“None of the three had any serious adverse reactions post immunisation. They largely had fever, headache, nausea, etc. Only three people of all having experienced adverse reactions needed to be hospitalised, of which two have already been discharged,” said Manohar Agnani, additional secretary, health ministry, while updating on the Covid-19 vaccination drive that began in the country on Saturday.

Overall, a total of 447 adverse events following immunisation (AEFI) were reported and most were mild side effects such as headache, nausea and low-grade fever.

The three who had significant side effects were each vaccinated at the All India Institute of Medical Sciences (AIIMS), Delhi, the Northern Railways Hospital in the Capital and AIIMS, Rishikesh. The recipient in the Rishikesh facility was yet to be discharged.

According to separate officials at each of these facilities, who asked not to be named, AIIMS Delhi used Bharat Biotech's Covaxin while the other two facilities used Serum Institute of India's Covishield. Across the country, a large majority of the vaccinations done on Saturday were using the Covishield vaccine since that has one of the highest volumes of ready stock.

"There is a set protocol to deal with adverse events post immunisation that will be followed across the centres conducting vaccination sessions. Protocols are also in place for systemic investigation and causality assessment of serious AEFIs, which doesn't end at hospitalising the recipient, rather it needs to be established whether the reaction happened due to vaccination or something else," said Agnani.

According to the ministry, a majority of adverse event following immunisation (AEFI) are minor in nature: pain, mild swelling at injection site, mild fever, body ache, nausea, giddiness, and mild allergic reactions such as rashes, etc.

In Delhi, the state health minister said a large number of health workers who had been registered and identified for immunisations on the first day did not turn up, and that the administration will make efforts to encourage them to get their shots.

"We will hold counselling sessions to create awareness so that apprehensions of the health workers could be allayed. They will also be called on phones to seek their confirmation and also to encourage them to come forward for taking the vaccines," a senior Delhi government official said, while asking not to be named.

On Saturday, only 53% of the 8,117 registered health workers scheduled for immunisations turned up.

"Some people decided not to turn up at the last moment. The vaccination programme is completely voluntary. We cannot ask anyone to compulsorily take the shot even if the person has registered for it," said Delhi health minister Satyendar Jain earlier in the day, while adding that those that miss their appointments will be given a second chance.

The Union health ministry official said that the Centre has advised states to keep vaccination sessions four days in a week to avoid disruption of routine health services.

While all states participated in the Covid-19 vaccination drive on Saturday, only six states did so on Sunday. In all, 17,072 more health care workers were vaccinated on Sunday at 553 sites.

The six that conducted vaccinations on Sunday are Andhra Pradesh, Arunachal Pradesh, Karnataka, Kerala, Manipur and Tamil Nadu.

States across the country have already disclosed their weekly schedules and on days there are holidays or routine immunisation drive planned, Covid-19 vaccines will not be administered.

Andhra Pradesh has opted for vaccinations six days a week because it has a robust system of a separate cadre for conducting routine immunisation, the Union health ministry official said. Some states have also gone for fewer than four days for coronavirus vaccinations.

“States that have decided to conduct vaccination session twice in a week is mainly because they have a small cohort of people to be vaccinated and those involved in vaccination activity, such as Goa, Himachal Pradesh and Uttar Pradesh,” said Agnani.

The country pulled off the highest number of Covid-19 vaccinations on day one in the world, the official added.

“It is higher than USA, the UK and France on day one. The Centre has held meetings with the states and Union territories today to review the progress made, and identify bottlenecks to plan corrective measures,” he added.

## **Vaccine**

### **Those skipping vaccine shot will be allotted another slot (Hindustan Times::20210118)**

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

On Saturday, around 8,100 health care workers in Delhi were slotted for the first day of the jabs. However, of these, just 4,319 (around 53%) turned up

Health care workers queue up to get vaccinated at Rajiv Gandhi Super Speciality Hospital in New Delhi on Saturday. PTI

New Delhi: Health care workers in Delhi who do not receive a Covid-19 vaccine shot despite being registered to get a dose will be allotted another slot, senior government officials said, as the administration looks to build confidence and minimise purported hesitancy among residents of the national capital.

“We have to work on building confidence. Those who do not turn up at vaccine centres in the first phase despite being registered will get another slot. However, we are yet to decide whether that window for healthcare workers should be accommodated before vaccination starts for frontline workers or after that,” said a senior official in the Delhi government who did not wish to be identified.

The official, who asked not to be named, said a health care worker’s name would be removed from the priority list, if they miss the second slot.

With the vaccination drive launched on Saturday, around 8,100 healthcare workers in Delhi were slotted for the first day of the jabs. However, of these, just 4,319 (around 53%) turned up at the 81 vaccine centres in the Capital. Around 240,000 healthcare workers in Delhi have been registered for the first phase of the drive, which will resume from Monday.

“The turnout figure in Delhi for the first day is at par with the rest of India. But the number is likely to increase in the days to come. The government is making its best efforts to ensure that,” Delhi’s health minister Satyendar Jain said in a press conference on Sunday.

According to data compiled from states by HT, 200,297 people across the country were vaccinated on Saturday, against an estimated 300,000 who were slated to receive their first dose of either the Covishield or Covaxin jab.

After health care workers, the vaccine will be given to front line workers, which include police officers, fire officials, home guards, sanitation employees, school teachers and employees of several agencies and departments that were engaged in Covid-19 management. Delhi has an estimated 600,000 front line workers, and the registration process for this category is underway.

The government will this week intensify its awareness drive to allay concerns regarding vaccination, said a second senior government official.

“Starting Sunday, all registered vaccine candidates will get a call from the district surveillance teams. The caller will try to engage with the candidate over potential risks, concerns and try to allay fears, if any.”

Currently, candidates receive text messages informing them of the date and time of the scheduled vaccination, as well as the location of the centre.

The second official said the government has also asked agencies and departments to start conducting group-counselling for their staff – largely frontline workers — to ensure they are ready to receive the vaccine when their turn arrives.

A senior doctor from All India Institute of Medical Sciences (AIIMS), who asked not to be named, said, “There are some who are extremely excited about the vaccination drive. However, some others would like to wait and see what happens, and some who prefer to avoid getting immunised at the moment. The fears especially revolve around potential adverse effects — both short and long-term.”

On Saturday, Delhi recorded 51 instances of minor adverse reactions such as mild fever, rashes and swelling at the site of injection, while one recipient — an AIIMS staffer — suffered a severe allergic reaction, or anaphylaxis, after receiving a dose of Covaxin. The staffer was admitted to hospital on Saturday, and discharged on Sunday, AIIMS director Dr Randeep Guleria confirmed.

Dr Suneela Garg, professor of community medicines department at Maulana Azad Medical College, said, “With time, more people will turn up. Efforts are being made on several fronts to ensure confidence building and reduce hesitancy. For counselling drives in the days to come, the government can also take help of people who have been vaccinated and engage them in group discussions with potential candidates.”

## **India's COVID-19 vaccination drive**

### **Injecting confidence: On India's COVID-19 vaccination drive (The Hindu: 20210118)**

<https://www.thehindu.com/opinion/editorial/injecting-confidence-the-hindu-editorial-on-indias-covid-19-vaccination-drive/article33595220.ece>

India must ensure appraisal of the prowess of the vaccines is disseminated widely

India began the largest vaccination drive in its history with over 2 lakh people vaccinated across the country in 3,350 sessions on the first day. Covishield manufactured at the Serum Institute of India was available in all States whereas only 12 States had vaccination sites where Bharat Biotech's Covaxin was administered. In the first tranche of vaccines, there are 11 million doses of Covishield and 5.5 million of Covaxin that will be administered to healthcare workers, sanitation workers and municipal workers in the coming days. The first day of the vaccine programme, inaugurated by Prime Minister Narendra Modi, included ceremonial inoculations across the country. It is significant that India has not lagged behind any other country in ensuring that frontline personnel stand to get vaccinated. It is only a year since the first reports of the novel coronavirus pandemic approaching India surfaced and that just 12 subsequent months of uncertainty, tragedy and upheaval have resulted in promising vaccines with the potential to save many lives and spark hope and optimism in millions. This is a commendable achievement. However, one cannot lose sight of the fact that this is a marathon. The optimism of day one has almost no bearing on the days that lie ahead. India's immediate plan, as has been announced, is to inoculate 3 crore frontline health workers, and later 27 crore of those most vulnerable to the disease by July. A lot is expected to change even before this deadline.

Establishing the efficacy based on final analysis of phase-3 trials and full licensure may take months. Till then, it is rational and scientific on the part of anyone to choose or decline a vaccine on the basis of whether the potential risks outweigh the benefits. Given India's experience with childhood immunisation and administering millions of doses in extremely diverse geographical conditions, there is reasonable confidence that the country has the executive ability to scale up vaccination. The approval of the vaccines earlier this month has seen divisions among scientists and doctors themselves on the sagacity of the government promoting both Covishield and Covaxin as being equivalent to one another. They are not. Covaxin is being administered as part of a clinical trial and its efficacy is not established. All the vaccines on offer in the United States or the United Kingdom have some — insufficient, nonetheless — efficacy data and therefore inspire greater confidence. Rather than dismiss concerns as 'rumour mongering' and 'politically motivated', the government has to work doubly hard to ensure that an honest appraisal of the vaccine's prowess is rapidly disseminated.

Those lining up for shots are adults — and a significant fraction of them far more medically literate than the average Indian — and all arms of government must treat them so. It is their experience that will percolate and influence adoption of the vaccines among the larger population.

## **Covid vaccine, covid-19,**

### **An Expert Explains: Covid-19 vaccine route to healthy India (The Indian Express: 20210118)**

<https://indianexpress.com/article/explained/covid-19-vaccination-drive-atmanirbhar-covishield-covaxin-7150513/>

Covid-19 vaccination presents an opportunity. Given that many people unknowingly live with slow-onset non-communicable diseases such as diabetes and cancers, and the vaccination programme prioritises those with co-morbidities, the strategy can be dovetailed into a screening programme for such NCDs

covid vaccine, covid-19, covid vaccine drive, coronavirus vaccine, covid 19 vaccine in india, coronavirus vaccine in india, india covid 19 vaccine, covid vaccine latest news, covid 19 vaccine expert, india covid vaccineCovaxin vaccination at a district hospital in Pune on January 16, 2021 (Express Photo: Arul Horizon)

Today, India faces its greatest challenge in averting the second wave of the novel coronavirus pandemic that is raging through Europe and the Americas. But as India embarks on the world's greatest vaccination drive, there is hope that we will stop the pandemic.

## **Intestinal microorganisms**

### **Study uncovers connection between intestinal microorganisms, diet and ailments (New Kerala: 20210118)**

<https://www.newkerala.com/news/2021/9869.htm>

A study published in Nature Medicine shows that diets rich in plant-based foods empower the presence of gut microorganisms that are connected to a lower risk of regular ailments including coronary diseases.

The study has been led by researchers from King's College London, Massachusetts General Hospital (MGH), Harvard T.H. Chan School of Public Health, the University of Trento, Italy, and health start-up company ZOE.

An enormous scope worldwide study utilizing metagenomics and blood compound profiling has revealed a board of 15 gut microorganisms related with lower risks of normal conditions, for example, corpulence and type 2 diabetes.

The PREDICT 1 (Personalized Responses to Dietary Composition Trial 1) analyzed detailed data on the composition of participants' gut microbiomes, their dietary habits, and cardiometabolic blood biomarkers. It uncovered strong links between a person's diet, the microbes in their gut (microbiome) and their health.

Researchers identified microbes that positively or negatively correlate 'good' and 'bad' with an individual's risk of certain serious conditions such as diabetes, heart disease and obesity. Surprisingly, the microbiome has a greater association to these markers than other factors, such as genetics. Some of the identified microbes are so novel that they have not yet been named.

The researchers defined a "healthy" diet as one that contained a mix of foods associated with a lower risk of chronic disease. They found that trial subjects who ate such a diet, or one rich in plants, were more likely to have high levels of specific 'good' gut microbes which are associated with a low risk of common illnesses.

The researchers also found microbiome-based biomarkers of obesity as well as markers for cardiovascular disease and impaired glucose tolerance, which are key risk factors for COVID. These findings can be used to help create personalized eating plans designed specifically to improve one's health.

"As a nutritional scientist, finding novel microbes that are linked to specific foods, as well as metabolic health, is exciting. Given the highly personalised composition of each individuals' microbiome, our research suggests that we may be able to modify our gut microbiome to optimize our health by choosing the best foods for our unique biology," Dr. Sarah Berry, Reader in Nutrition Sciences at King's College London said.

For example, the findings reveal that having a microbiome rich in *Prevotella copri* and *Blastocystis* species was associated with maintaining a favourable blood sugar level after a meal. Other species were linked to lower post-meal levels of blood fats and markers of inflammation.

"When you eat, you're not just nourishing your body, you're feeding the trillions of microbes that live inside your gut," Professor Tim Spector, Epidemiologist from King's College London, who started the PREDICT study program and is scientific founder of ZO, said.

"We were surprised to see such large, clear groups of what we informally call 'good' and 'bad' microbes emerging from our analysis. It is also exciting to see that microbiologists know so

little about many of these microbes that they are not even named yet," Nicola Segata, PhD, professor and principal investigator of the Computational Metagenomics Lab at the University of Trento, Italy and leader of the microbiome analysis in the study, said.

"This is now a big area of focus for us, as we believe they may open new insights in the future into how we could use the gut microbiome as a modifiable target to improve human metabolism and health," Segata said.

PREDICT is the largest in-depth nutritional study in the world. PREDICT 1 was an international collaboration to study links between diet, the microbiome, and biomarkers of cardiometabolic health. The researchers gathered microbiome sequence data, detailed long-term dietary information, and results of hundreds of cardiometabolic blood markers from just over 1,100 participants in the US and the UK. PREDICT 2 completed its primary investigations in 2020 with a further 1,000 U.S participants, and PREDICT 3 launched a few months ago.

## **Cancer cells**

### **Study: Cancer cells thrive due to Novel RNA factors (New Kerala: 20210118)**

<https://www.newkerala.com/news/2021/9851.htm>

During recent research it was found that Nucleic circ2082 disrupts the microRNA assembly line in glioblastoma cancer cells, making it a potential upstream target for cancer treatment.

The research conducted at Brigham and Women's hospital pinpoints critical changes in an enzyme known as DICER, which create a cascade of effects on this microRNAome. The team identified primary actors circ2082, a circular RNA, and RBM3, an RNA-binding protein, which form a complex with DICER to trap it in the nucleus of glioblastoma cells, therefore disrupting the cytoplasmic microRNAome.

Like Peter Pan, some cells never grow up. In cancer, undifferentiated stem cells may help tumors such as glioblastoma become more aggressive than other forms of the disease. Certain groups of genes are supposed to help cells along the path to maturity, leaving their youthful "stemness" behind. This requires sweeping changes in the microRNAome -- the world of small non-coding material, known as microRNAs, that control where and when genes are turned on and off.

Many microRNAs are tumor-suppressive; in cancer, the microRNAome is distorted and disrupted. Recent work by researchers at Brigham and Women's Hospital pinpoints critical changes in an enzyme known as DICER, which create a cascade of effects on this microRNAome.

The team identified primary actors circ2082, a circular RNA, and RBM3, an RNA-binding protein, which form a complex with DICER to trap it in the nucleus of glioblastoma cells, therefore disrupting the cytoplasmic microRNAome. Findings are published in Science Advances.

"We are always trying to find the magic bullet to fight cancer. The problem with the magic bullet is that it's only going to hit a few tumor cells, since the other tumor cells don't have that target. We are looking for the common vulnerability -- what is the common thing that we can target?" said Antonio Chiocca, MD, PhD, chair of the Brigham's Department of Neurosurgery. "With this discovery, we can target something way upstream a very common target at the epigenetic level."

Prior research showed the number of microRNAs expressed in cancer cells to be low when compared to non-cancerous cells. In addressing this observation, primary researchers Jakub Godlewski, PhD, and Agnieszka Bronisz, PhD, both formerly at the Brigham and now based at the Mossakowski Medical Research Centre of Polish Academy of Sciences, Warsaw, Poland, led a team that determined the absence of DICER enzyme is likely the cause of this cytoplasmic microRNA depletion. The team discovered DICER was being trapped in the nucleus by repressive interactions with RBM3 and circ2082.

In order to characterize these new actors, researchers used patient-derived glioblastoma cells, which allowed them to study outcomes genetically and phenotypically similar to real patient outcomes. The cells were studied both in vitro and in vivo through implantation into the brains of lab mice. The level of microRNA expression in these mice changed their survival rates.

If circ2082 was knocked down, the nuclear DICER complex of circ2082, DICER, and RBM3 was disrupted, more microRNAs were present in the cytoplasm, and the survival outcome was far greater. In these mice whose tumors had circ2082 knocked down, death by tumorigenesis never occurred, while their non-knockdown counterparts all experienced death by tumorigenesis.

The downstream effect of this circ2082 expression also heavily influenced morbidity in human patients whose tissues were retrospectively analyzed. Patients with circ2082-dependent signature-less widely expressed had overall longer lifespans after cancer diagnosis.

"Targeting these upstream tumor proliferators has the potential to dramatically change the cancer treatment landscape," said Chiocca. "We look forward to clinical translation of this research as we search for the right inhibitors."

## **Mild infection**

**Mild infection good sign, shows immune system responding to vax: AIIMS chief (New Kerala: 20210118)**

<https://www.newkerala.com/news/2021/9792.htm>

AIIMS Director Dr Randeep Guleria on Saturday joined scores of healthcare workers across the country who were administered Covid-19 vaccine shots on the first day of the nationwide vaccination drive. Dr Guleria said mild infection or adverse reaction after vaccination is a good sign because it shows the immune system of the body is reacting to the vaccine and creating antibodies.

Moments after Prime Minister Narendra Modi launched the vaccination drive across the country, the jab was administered to the AIIMS chief on live telecast. Dr Guleria was the third person to take the shot. The first jab was administered to a sanitation worker named Manish Kumar, who became the first to be vaccinated at AIIMS in the country.

Union Health Minister Harsh Vardhan and Dr V.K. Paul, who heads a government panel on vaccine strategy, were also present at AIIMS. Both Dr Paul and Dr Guleria received the Covaxin jab. However, Vardhan was not vaccinated on Saturday. "I will get it when the time will come," said Vardhan.

After a gap of nearly an hour, Dr Guleria appeared before the media to share his personal experience after vaccination. He said he was feeling absolutely fine and he had no adverse reaction even after one-and-a-half hour of receiving the vaccine jab.

He emphasised that there are absolutely no issues associated with the safety of both vaccines - - Covaxin and Covishield - and people should not at all be worried about vaccination. "I have received it and I am doing absolutely fine. I am right before you", said Dr Guleria, speaking to IANS.

Queried on issues about mild infection associated with the vaccine, Dr Guleria said "Mild infection or adverse reaction after vaccination is a good sign because the immune system of the body is reacting to the vaccine and creating antibodies."

He added that mild fever, body ache or joint pains could occur for a day or two, which will subside automatically, and people are free to contact the helpline where they would get the required assistance. "So, having fever and body ache for a day or two is nothing to be worried about," said Dr Guleria.

When queried on issues associated with mild infection among senior citizens who would receive the vaccine soon, he said "There is no data to suggest that there is anything to worry about."

On challenges associated with CoWin app, he said the challenge is that the app should be working very well, the data is uploaded on time and crowd management needs to be done. "As we begin to get more and more people for vaccination, the social distancing norms have to be followed," Dr Guleria said.

## **Depression**

### **Study: COVID-19 pandemic induced food inadequacy is connected to depression (New Kerala: 20210118)**

<https://www.newkerala.com/news/2021/9785.htm>

Study: COVID-19 pandemic induced food inadequacy is connected to depression

Washington , January 16: A study published in the American Journal of Preventive Medicine shows that a 25 per cent ascend in food deficiency during the COVID-19 hit pandemic is connected to demolished psychological wellness.

Food insufficiency, the most extreme form of food insecurity, occurs when families do not have enough food to eat. Among the nationally representative sample of 63,674 adults in the US, Black and Latino Americans had over twice the risk of food insufficiency compared to White Americans.

Jason Nagata, MD, MSc, assistant professor of pediatrics at the University of California, San Francisco and lead author on the study said "People of color are disproportionately affected by both food insufficiency and COVID-19. Many of these individuals have experienced job loss and higher rates of poverty during the pandemic."

Overall, 65% of Americans reported anxiety symptoms and 52% reported depressive symptoms in the week prior to completing the survey. Those who did not have enough to eat during that week reported worse mental health, with 89% of food-insufficient Americans reporting anxiety symptoms compared to 63% of food-sufficient Americans. Similarly, 83% of food-insufficient Americans, compared to 49% of food-sufficient, Americans reported depressive symptoms.

"Hunger, exhaustion, and worrying about not getting enough food to eat may worsen depression and anxiety symptoms," said Nagata.

Researchers found that receipt of free groceries or meals alleviated some of the mental health burdens of food insufficiency.

"Policymakers should expand benefits and eligibility for the Supplemental Nutrition Assistance Program (SNAP) and other programs to address both food insecurity and mental health," said Kyle Ganson, PhD, MSW, assistant professor at the University of Toronto, a co-author of the study.

## Vaccination (Hindustan: 20210118)

[https://epaper.livehindustan.com/imageview\\_581074\\_87670798\\_4\\_1\\_18-01-2021\\_0\\_i\\_1\\_sf.html](https://epaper.livehindustan.com/imageview_581074_87670798_4_1_18-01-2021_0_i_1_sf.html)

स्वास्थ्य मंत्री ने कहा- अग्रिम मोर्चे पर तैनात सभी लोगों को फरवरी तक टीका लगेगा

# जून तक 30 करोड़ लोगों का टीकाकरण: हर्षवर्धन

नई दिल्ली | एजेसी

केंद्रीय स्वास्थ्य मंत्री डॉक्टर हर्षवर्धन ने रविवार को कहा कि देश के 30 करोड़ लोगों का जून-जुलाई तक टीकाकरण कर लिया जाएगा। अग्रिम मोर्चे पर तैनात कर्मियों को फरवरी तक टीका लगाने का लक्ष्य है। वहीं, स्वास्थ्य मंत्रालय ने कहा कि बीते दो दिनों में 2.24 लाख लोगों को टीके लगाए गए लेकिन सिर्फ 447 लोगों को ही मामूली दिक्कत आई।

**बुजुर्गों को तीसरे चरण में मौका:** स्वास्थ्य मंत्री ने कहा, हमने सभी राज्यों से अग्रिम मोर्चे पर तैनात कर्मचारियों से जुड़े आंकड़े 26 जनवरी तक डिजिटल प्लेटफॉर्म पर अपलोड करने के लिए कहा है। करीब तीन करोड़ स्वास्थ्यकर्मियों और फ्रंटलाइन कर्मचारी होने का अनुमान है। तीसरे चरण में 50 वर्ष से ऊपर तो चौथे चरण में इससे नीचे की उम्र के लोगों का टीकाकरण किया जाएगा। सरकार की तैयारी पूरी है, कोई दिक्कत नहीं आएगी।

**आधार से पहचान:** स्वास्थ्य मंत्री के अनुसार, इस समय सबसे अहम टीका लगवाने वालों की पहचान और निगरानी करना है। इसलिए 'कोविन' ऐप तैयार किया गया है। लाभार्थियों की पहचान के लिए आधार कार्ड की मदद ली जा रही है, ताकि उन्हें दूसरी खुराक समय पर



कर्नाटक के बेंगलुरु में रविवार को भी कोरोना टीकाकरण जारी रहा। • एएनआई

**दिल्ली: टीका न लगवाने पर दूसरों को मौका दिया जाएगा**

स्वास्थ्य विभाग ने बताया कि पहले दिन कई लोग ऐन मौके पर टीकाकरण के लिए नहीं आए। सरकार लाभार्थियों को फोन कर पूछेगी कि वे आएंगे या नहीं, न आने पर दूसरों को मौका मिलेगा।

**सप्ताह में चार दिन टीके लगेगे**

केंद्र सरकार ने सभी राज्य सरकारों से कहा है कि हफ्ते में कम से कम चार दिन टीकाकरण किया जाए। किसी तरह की दिक्कत होने पर जानकारी दें। >ब्योरा पेज 11

उपलब्ध कराई जा सके। एक लाख से अधिक कर्मचारियों को प्रशिक्षित किया गया है ताकि टीकाकरण में दिक्कत न हो।

**दोनों वैक्सीन कोविड के खिलाफ संजीवनी:** स्वास्थ्य मंत्री ने 'कोवैक्सीन'

**यूपी: अगला चरण 22 जनवरी से, केंद्र चुनने की प्रक्रिया शुरू**

प्रदेश में टीकाकरण का दूसरा चरण 22 जनवरी से होगा। स्वास्थ्य विभाग केंद्रों का चयन कर रहा है। इसके बाद सूची बनाकर दो से तीन दिनों में टीकाकरण का काम तेज कर दिया जाएगा।

और 'कोविशील्ड' को कोरोना से जंग में 'संजीवनी' करार दिया। कोवैक्सीन टीके पर कुछ नेताओं के सवाल उठाने पर हर्षवर्धन ने कहा, पूरा देश आम जनजीवन के पटरी पर लौटने का इंतजार

## 2.24

लाख लोगों को दो दिन में टीका, छह राज्यों में रविवार को भी टीकाकरण

**सियासत**

- कांग्रेस प्रवक्ता रणदीप सुरजेवाला ने पूछा कि केंद्र के मंत्रियों को टीका क्यों नहीं लगाया जा रहा। ब्राजील को टीका क्यों दिया जा रहा है।
- गृहमंत्री अमित शाह ने पलटवार करते हुए कहा कि भारत में बनी दोनों वैक्सीन पूरी तरह सुरक्षित हैं और लोगों को कांग्रेस की बातों में नहीं आना चाहिए।

**सहयोग**

भारत अपने पड़ोसी देशों को टीका मुहैया कराने के साथ, मित्र राष्ट्रों को भी खुराक देने जा रहा है। ब्राजील ने 20 लाख टीके की खुराक के लिए सीरम से समझौता किया है। इसे लेने के लिए विशेष विमान पुणे पहुंच चुका है। वहीं, बांग्लादेश और नेपाल में भी टीका जल्द भेजा जाना है।

कर रहा है। टीके पर सवाल उठाकर दूसरों को गुमराह करने वाले न सिर्फ आम लोगों की ओर से दिए गए बलिदान, बल्कि समाज के भविष्य के प्रति भी अनुचित कार्य कर रहे हैं।

## **Surgery (Hindustan: 20210118)**

[https://epaper.livehindustan.com/imageview\\_581075\\_87645560\\_4\\_1\\_18-01-2021\\_2\\_i\\_1\\_sf.html](https://epaper.livehindustan.com/imageview_581075_87645560_4_1_18-01-2021_2_i_1_sf.html)

# एम्स में बर्न और प्लास्टिक सर्जरी ब्लॉक शुरू होगा

नई दिल्ली | कार्यालय संवाददाता

## सुविधा

एम्स में सोमवार से बर्न और प्लास्टिक सर्जरी ब्लॉक की शुरुआत हो जाएगी। नए ब्लॉक का उद्घाटन केंद्रीय स्वास्थ्य मंत्री डॉ. हर्षवर्धन द्वारा किया जाएगा।

एम्स परिसर में इस ब्लॉक को बनाया गया है। जिससे जले हुए मामलों से पीड़ित मरीजों और प्लास्टिक सर्जरी कराने वाले मरीजों को राहत मिलेगी। इस ब्लॉक में 100 बेड की व्यवस्था होगी। दिल्ली एम्स में अभी 2792 बिस्तर हैं। यहां पिछले एक साल में 44,14,490 मरीजों ने ओपीडी में उपचार कराया। वहीं, 268144 मरीजों

- केंद्रीय स्वास्थ्य मंत्री डॉ. हर्षवर्धन आज नए ब्लॉक का उद्घाटन करेंगे
- शुरू हो रहे नए ब्लॉक में 100 बेड की व्यवस्था होगी

को साल भर में भर्ती किया गया। इनके अलावा 201707 मरीजों का ऑपरेशन भी किया गया।

बता दें कि 200 बिस्तरों वाला जीरिएट्रिक ब्लॉक भी 80 फीसदी बनकर तैयार है। तीन महीने में यह ब्लॉक भी प्रबंधन के हवाले कर दिया जाएगा।

**New Coronacases (Hindustan: 20210118)**

[https://epaper.livehindustan.com/imageview\\_581076\\_87608068\\_4\\_1\\_18-01-2021\\_3\\_i\\_1\\_sf.html](https://epaper.livehindustan.com/imageview_581076_87608068_4_1_18-01-2021_3_i_1_sf.html)

# कोरोना के घटते केस से पाबंदियों में छूट की उम्मीद

दिल्ली में कोरोना के मामले लगातार कम हो रहे हैं। साथ ही टीकाकरण भी शुरू हो चुका है। ऐसे में दिल्ली सरकार आने वाले समय में कुछ पाबंदियों में छूट और ढील दे सकती है। दिल्ली में मौजूदा समय में बसों में सफर करने से लेकर शादियों और शोक समारोहों में तय सीमा तक लोगों के आने की छूट है। इनमें दिल्ली सरकार की ओर से आने वाले दिनों में छूट दी जा सकती है।

## बसों में खड़े होकर यात्रा

दिल्ली में मौजूदा समय में बसों में खड़े होकर यात्रा करने की छूट नहीं है। बसों को लोगों के बैठने की पूरी क्षमता के साथ चलाया जा रहा है। दिल्ली में बसों की संख्या आबादी के अनुपात में काफी कम है। ऐसे में कई यात्रियों को लंबे समय तक बसों का इंतजार करना पड़ता है। कोरोना के घटते मामलों को देखते हुए दिल्ली सरकार बसों में खड़े होकर सफर की छूट देने पर विचार कर रही है, जिससे बसों को उनकी पूरी क्षमता (खड़े और बैठने) से चलाया जा सके।

## शादी में अधिक मेहमान

दिल्ली में 20 जनवरी के बाद से शादियों का दौर शुरू हो जाएगा। मौजूदा समय में 50 मेहमानों के शामिल होने की इजाजत सरकार की ओर से है। घटते मामलों को देखते हुए सरकार इस छूट को 50 से बढ़ाकर 100 या अधिक कर सकती है। इसके लिए जल्द ही नई एसओपी जारी की जा सकती है। किसी की मृत्यु के समय भी 20 से अधिक लोगों को एकजुट होने की छूट नहीं है। सरकार इसमें भी बढोतरी कर 50 लोगों तक की छूट दे सकती है।

## ऐसे सुघरते गए दिल्ली के हालात

तारीख	सक्रिय मामले	संकमण दर
14 नवंबर	44,456	14.8%
21 नवंबर	39,741	12.9%
28 नवंबर	36,578	7.2%
5 दिसंबर	26,678	4.2%
12 दिसंबर	17,373	2.6%
19 दिसंबर	10,358	1.3%
26 दिसंबर	6,911	0.9%
2 जनवरी	5,342	0.7%
9 जनवरी	3,683	0.6%
16 जनवरी	2,691	0.4%

## मेट्रो स्टेशन के और गेट खुल सकेंगे

मेट्रो स्टेशनों पर निकासी और प्रवेश के लिए सिर्फ एक-एक द्वार ही खुले हैं। सिर्फ बड़े स्टेशनों पर एक से अधिक द्वार खुले हैं। जल्द इसमें राहत मिलने की उम्मीद है।

## मल्टीप्लेक्स में पूरे दर्शक

दिल्ली में मौजूदा समय में सिनेमा हॉल में सिर्फ 50 प्रतिशत क्षमता तक दर्शकों को बैटाने की छूट है। वहीं स्या सेंटर भी नहीं खुले हैं। सरकार जल्द दोनों ही मामलों में दिल्ली वालों को बड़ी राहत दे सकती है।

# रिपोर्ट : कोरोना के 246 मरीज मिले

नई दिल्ली | कार्यालय संवाददाता

राजधानी में कोरोना संक्रमण की दर में लगातार गिरावट जारी है। दिल्ली में रविवार को अब तक की सबसे कम संक्रमण दर 0.36 फीसदी दर्ज की गई। वहीं, कोरोना के 246 नए मरीज मिले। ठीक होने वाले मरीजों की संख्या 385 रही। एक दिन में कोरोना के चलते आठ लोगों की मौत हुई। बीते दस दिनों पर आधारित मृत्यु दर 2.84 फीसदी रही।

बीते शुक्रवार को दिल्ली के स्वास्थ्य मंत्री सत्येंद्र जैन ने ट्वीट कर 0.44 फीसदी कोरोना संक्रमण की दर को सबसे कम बताया था। वहीं, स्वास्थ्य विभाग द्वारा जारी बुलेटिन के अनुसार, 67463 सैंपल की जांच हुई, जिसमें रैपिड एंटीजन टेस्ट से 27361 और आरटीपीसीआर से 40102 लोगों की जांच की गई। जांच में संक्रमण की दर



1154

मरीजों का उपचार  
होम आइसोलेशन में  
हो रहा है

0.36 फीसदी दर्ज हुई। कोरोना को लेकर अब तक 9873068 सैंपल की जांच हो चुकी है। होम आइसोलेशन में कोरोना के 1154 मरीजों का उपचार जारी है।

**1101 मरीज भर्ती :** स्वास्थ्य विभाग के रिपोर्ट के मुताबिक, अस्पताल में कोरोना महामारी के इलाज के लिए 1101 मरीज भर्ती हैं। इसके अलावा कोविड केयर सेंटर में 34 और

**9987** बेड राजधानी के अस्पतालों में खाली हैं कोरोना मरीजों के लिए वर्तमान में

**385** मरीज कोरोना महामारी को हराकर अपने घरों को वापस लौटे रविवार को राजधानी में

कोविड हेल्थ सेंटर में 09 मरीज हैं। कोविड केयर सेंटर में 232 बेड पर वंदे भारत मिशन सहित बबल फ्लाइट से आने वाले यात्री क्वारंटाइन हैं।

**2544 सक्रिय मरीज :** दिल्ली में कोरोना के 2544 सक्रिय मरीज हैं। अलग-अलग अस्पतालों में 9987 बेड खाली हैं। दिल्ली में कंटेनमेंट जोन की संख्या 2269 रह गई है। कोरोना के कुल 632429 मामले सामने आ चुके हैं। इसमें 619139 मरीजों ने कोरोना को मात दी है।