



## DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DA  
Monday 2020713

### Covid-19 vaccine

#### Russia 'first nation' to finish human trials for Covid-19 vaccine: Report (The Tribune: 2020713)

<https://www.tribuneindia.com/news/health/russia-first-nation-to-finish-human-trials-for-covid-19-vaccine-report-112036>

There was no information on commercial production of vaccine



Russia has become the first nation to complete clinical trials of Covid-19 vaccine on humans, and the results have proven the medication's effectiveness, the media reported on Sunday.

Chief researcher Elena Smolyarchuk, who heads the Center for Clinical Research on Medications at Sechenov University, told Russian news agency TASS on Sunday that the human trials for the vaccine have been completed at the university and they will be discharged soon.

"The research has been completed and it proved that the vaccine is safe. The volunteers will be discharged on July 15 and July 20," Smolyarchuk was quoted as saying in the report.

There was, however, no further information on when this vaccine would enter commercial production stage.

Russia had allowed clinical trials of two forms of a potential Covid-19 vaccine developed by the Gamaleya National Research Center for Epidemiology and Microbiology on June 18.

The first vaccine, in the form of a solution for intramuscular administration, was carried out at the Burdenko Military Hospital.

Another vaccine, in the form of a powder for the preparation of a solution for intramuscular administration, was carried out at Sechenov First Moscow State Medical University.

The first stage of research on the vaccine at Sechenov University involved a group of 18 volunteers and the second group involved 20 volunteers.

After vaccination, all volunteers were expected to remain in isolation in a hospital for 28 days.

Earlier, results of the COVID-19 vaccine tests performed on a group of volunteers in Russia showed that they were developing immunity to the coronavirus.

“The data obtained by the Gamalei National Research Center for Epidemiology and Microbiology, proves that volunteers of the first and second groups are forming an immune response after injections of the vaccine against the coronavirus,” according to an earlier statement from the Russian Defense Ministry.

Russia has reported 719,449 cases and 11,188 deaths to date.

There are at least 21 vaccines currently under key trials, according to the World Health Organisation (WHO).

The overall number of global COVID-19 cases was nearing 12.7 million, while the deaths have increased to more than 564,000, according to Johns Hopkins University in the US.

As of Sunday morning, the total number of cases stood at 12,681,472, while the fatalities rose to 564,420.

The US accounted for the world’s highest number of infections and fatalities at 3,245,158 and 134,764. Brazil came in the second place with 1,839,850 infections and 71,469 deaths. —

## **Arthritis**

**Mohali institute scientists formulate nanoparticle to reduce severity of rheumatoid arthritis**

**Particles contain chitosan and zinc gluconate (The Tribune: 2020713)**

<https://www.tribuneindia.com/news/health/mohali-institute-scientists-formulate-nanoparticle-to-reduce-severity-of-rheumatoid-arthritis-112006>

Scientists from the Institute of Nano Science and Technology (INST), Mohali, have formulated nano-particles with a zinc-based compound that will help reduce the severity of rheumatoid arthritis.

The particles contain chitosan and zinc gluconate. Zinc is vital for maintaining normal bone homeostasis and its levels are reported to get reduced in rheumatoid arthritis patients. It is also known that oral supplementation of zinc in the form of zinc gluconate has very low bioavailability in humans.

Chitosan is a biocompatible, biodegradable natural polysaccharide (a carbohydrate whose molecules consist of a number of sugar molecules bonded together). It is one of the most abundant biopolymers obtained from the exoskeleton of crustaceans (crab, lobster, shrimp, etc) have shown absorption promoting characteristics.

The INST team particularly chose chitosan as it is biodegradable, biocompatible, non-toxic, and muco-adhesive in nature. A previously published report in the journal 'Magnesium Research' exhibited that after intraperitoneal administration in rats, zinc oxide in standard form resulted in a slight increase in serum zinc level, whereas that in nano form resulted in significantly high serum zinc levels, thus increasing the zinc bioavailability. This motivated the INST team to develop the nanoformulation of zinc gluconate.

They prepared Zinc gluconate loaded chitosan nanoparticles using chitosan and sodium tripolyphosphate in double-distilled water and zinc gluconate was simultaneously added along with the synthesis of chitosan nanoparticles. These were characterised for various physicochemical properties and then anti-arthritic potential was investigated against collagen-induced arthritis in rats.

They observed that the treatment of rats with both zinc gluconate and zinc gluconate loaded chitosan nanoparticles reduced the severity of arthritis by reducing joint swelling, erythema, and edema.

The team assessed various parameters like biochemical analysis, histological observations, and immunohistochemical expression of inflammatory markers and suggested that zinc gluconate-loaded chitosan nanoparticles exerted superior therapeutic effects compared to the free form of zinc gluconate. This was attributed to the inflammatory potential of zinc gluconate-loaded chitosan nanoparticles.

“Nanobiotechnology provides several effective solutions for the problems that traditional pharmaceutical formulations are often not able to address as effectively, such as sustained and targeted release of drugs, bioavailability, and efficacy of drugs and nutraceuticals, etc. The nanoformulation of zinc gluconate-loaded chitosan nanoparticles developed at INST Mohali is a creative example of a superior therapeutics for rheumatoid arthritis,” said Prof Ashutosh Sharma, Secretary, Department of Science and Technology.

In the recent past, ionic gelation method has been widely employed for formulating chitosan nanoparticles, which may contain various medicinally active pharmacological agents.

## **COVID-19 symptoms outside lungs decoded**

### **COVID-19 symptoms outside lungs decoded A flood of the cytokines which normally clear up infected cells can spiral out of control in severe COVID-19 cases (The Tribune: 2020713)**

COVID-19 symptoms outside lungs decoded  
Photo for representation only.

Scientists, including those of Indian-origin, have provided the first extensive review of COVID-19's effects outside the lungs, and have recommended that physicians treat it as a multisystem disease with manifestations including blood clots, kidney failure, and neurological symptoms like delirium.

"I was on the front lines right from the beginning. I observed that patients were clotting a lot, they had high blood sugars even if they did not have diabetes, and many were experiencing injury to their hearts and kidneys," said Aakriti Gupta, a co-author of the study from Columbia University in the US.

According to the review of studies, published in the journal Nature Medicine, a substantial proportion of COVID-19 patients suffer kidney, heart, and brain damage.

The researchers recommended that doctors treat these conditions along with the respiratory disease.

"Physicians need to think of COVID-19 as a multisystem disease," Gupta said.

One of the non-respiratory complications most reported by studies is blood clotting, according to the researchers.

They said these clotting complications may stem from the virus' attack on cells that line the blood vessels.

The scientists explained that when the virus attacks blood vessel cells, inflammation increases, and blood begins to form clots, big and small.

These blood clots, according to the study, can travel all over the body and wreak havoc on organs, perpetuating a vicious cycle of inflammation.

"Scientists all over the world are working at an unprecedented rate towards understanding how this virus specifically hijacks the normally protective biological mechanisms. We hope that this would help in the development of more effective treatments for COVID-19 in the near future," said Kartik Sehgal, another co-author of the study from Harvard Medical School in the US.

According to the researchers, the formation of clots can lead to heart attacks.

However, they said the exact mechanism of heart damage in COVID-19 patients is currently unclear since the virus has not been frequently isolated from the heart tissue in autopsy cases.

The researchers believe the heart muscle may be damaged by systemic inflammation, and the accompanying release of immune system's signalling molecules, cytokines.

They said a flood of the cytokines which normally clear up infected cells can spiral out of control in severe COVID-19 cases.

Another surprising finding, according to the scientists, is the high proportion of COVID-19 patients in the ICU with acute kidney damage.

They said the ACE2 receptor molecule which is used by the virus to gain entry into human cells is found in high concentrations in the kidney, and could likely be responsible for the renal damage.

In New York City in the US, the scientists said, renal failure was reported in up to 50 per cent of patients in the ICU.

"About five to 10 per cent of patients needed dialysis. That's a very high number," Gupta said.

Describing the neurological symptoms of COVID-19, the researchers said these include headache, dizziness, fatigue, and loss of smell, which may occur in about a third of patients.

They said strokes caused by blood clots was observed in up to six per cent of severe cases, and delirium in eight to nine per cent of COVID-19 patients.

"COVID-19 patients can be intubated for two to three weeks: a quarter require ventilators for 30 or more days," Gupta said.

"This virus is unusual and it's hard not to take a step back and not be impressed by how many manifestations it has on the human body," said Mahesh Madhavan, another co-author of the study from Columbia University. PTI

## **BCG vaccine**

### **175 attendants of Covid patients get BCG vaccine in Rohtak's PGIMS (The Tribune: 2020713)**

<https://www.tribuneindia.com/news/health/175-attendants-of-covid-patients-get-bcg-vaccine-in-rohtaks-pgims-111605>

175 attendants of Covid patients get BCG vaccine in Rohtak's PGIMS

Photo for representational purpose only

The Postgraduate Institute of Medical Sciences (PGIMS) here has administered BCG (bacillus calmette guerin) vaccine to 175 attendants of Covid patients to see whether or not it proves to be effective in fighting the virus.

In this clinical trial, close contacts of patients, doctors, nurses, ward boys and sanitary workers have been administered the vaccine. The trial was kicked off on May 1.

Effectiveness on trial

The clinical trial aims at exploring whether or not the participants get infected from Covid. If yes, we want to know the intensity of severity. If no, it will prove that the vaccine is effective.—  
Dr Dhruv Choudhry, Head, Pulmonary and Critical care Medicine, PGIMS

All 175 persons have been kept under observation for 180 days. During this period, the effect of the vaccine will be studied in phases.

A mobile phone application has been developed to receive feedback about their health at regular intervals. The participants have been asked to inform doctors if they fall sick or if there is a swelling at the spot where the vaccine was administered. Mobile phone numbers of doctors have been shared with the participants, sources say.

“Blood samples of all participants will be taken for the antibody test after the completion of the observation period. The latest level of antibody of participants will be compared to the level of antibody recorded before administering the BCG vaccine. The vaccine will be considered effective if the level of antibody is higher before administering the vaccine,” said Dr Ramesh Verma, a co-investigator in the clinical trial and professor in the department of community medicine at the PGIMS.

## **Psoriasis injection**

### **Drug regulator Okays psoriasis injection for restricted emergency use in treating COVID-19 patients (The Tribune: 2020713)**

<https://www.tribuneindia.com/news/health/drug-regulator-okays-psoriasis-injection-for-restricted-emergency-use-in-treating-covid-19-patients-111494>

The average cost of treatment with this indigenous drug Itolizumab is lesser than other medicines

Drug regulator okays psoriasis injection for restricted emergency use in treating COVID-19 patients

Itolizumab, a monoclonal antibody drug being used in India to treat severe chronic plaque psoriasis — a skin condition — has now been granted the Restricted Emergency Use authorisation by the Drugs Controller General of India (DCGI) for administration to moderate and severe COVID-19 patients.

Pharma firm Biocon has been manufacturing and marketing this drug for the treatment of patients with moderate to severe chronic plaque psoriasis since 2013 under brand name Alzumab.

This indigenous drug has now been repurposed for COVID-19.

Biocon presented the Phase II clinical trial results generated in the COVID-19 patients to the DCGI. The results of these trials were deliberated in the Subject Expert Committee of the DCGI's office.

The details of the primary endpoint of mortality and other key endpoints of lung function such as improvement in oxygen saturation were presented. Key inflammatory markers were presented to have reduced significantly with the drug thereby preventing hyper-inflammation in COVID-19 patients.

After detailed deliberation and recommendations of the committee, the DCGI has decided to grant permission to market the drug under Restricted Emergency Use of the drug for the treatment of Cytokine Release Syndrome (CRS) in moderate to severe Acute Respiratory Distress Syndrome (ARDS) patients due to COVID-19, subject to some conditions such as informed consent of patients and a risk management plan to be used in the hospital setup only.

The drug will not be available off the shelf.

The average cost of treatment with this indigenous drug is also lesser than comparable drugs which are part of the “investigational therapies” indicated in the Clinical Management Protocol for COVID-19 of the Ministry of Health and Family Welfare.

## **Breastfeeding**

### **Pasteurising breast milk inactivates Covid-19 virus: Study (The Tribune: 2020713)**

<https://www.tribuneindia.com/news/health/pasteurising-breast-milk-inactivates-covid-19-virus-study-111015>

Researchers have found that pasteurising breast milk using a common technique inactivates severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) making it safe for use. According to the study, published in the CMAJ (Canadian Medical Association Journal), current advice is for women with coronavirus disease 2019 (Covid-19) to continue to breastfeed their infants.

In Canada, it is standard care to provide pasteurised breast milk to very-low-birth-weight babies in the hospital until their own mother's milk supply is adequate.

"In the event that a woman who is Covid-19-positive donates human milk that contains SARS-CoV-2, the method of pasteurisation renders milk safe for consumption," said study researcher Sharon Unger from the University of Toronto in Canada.

"Whether by transmission through the mammary gland or by contamination through respiratory droplets, skin, breast pumps and milk containers, this method is safe," Unger added.

The Holder method, a technique used to pasteurise milk in all Canadian milk banks (62.5°C for 30 minutes), is effective at neutralising viruses such as HIV, hepatitis and others that are known to be transmitted through human milk.

In this study, researchers spiked human breast milk with a viral load of SARS-CoV-2 and tested samples that either sat at room temperature for 30 minutes or were warmed to 62.5°C for 30 minutes and then measured for the active virus.

The study found that the virus in the pasteurised milk was inactivated after heating.

More than 650 human breast milk banks around the world use the Holder method to ensure a safe supply of milk for vulnerable infants, the researchers said.

The authors reported that the impact of pasteurisation on coronaviruses in human milk has not been previously reported in the scientific literature.

## **Medical procedures: WHO**

### **Airborne transmission of coronavirus can occur during medical procedures: WHO (The Tribune: 2020713)**

<https://www.tribuneindia.com/news/health/airborne-transmission-of-coronavirus-can-occur-during-medical-procedures-who-111021>

Airborne transmission of coronavirus can occur during medical procedures: WHO

The WHO on Tuesday acknowledged "emerging evidence" of the airborne spread of the novel coronavirus. Tribune photo: Manas Ranjan Bhui

The World Health Organisation (WHO) said on Thursday airborne transmission of the novel coronavirus can occur during medical procedures that generate aerosols.

The agency said some outbreak reports related to indoor crowded spaces have suggested the possibility of aerosol transmission, combined with droplet transmission, such as during choir practice, in restaurants or in fitness classes.

The WHO on Tuesday acknowledged "emerging evidence" of the airborne spread of the novel coronavirus, after a group of scientists urged the global body to update its guidance on how the respiratory disease spread.

## **Coronavirus disease (Covid-19)**

### **Three months later, 5 areas in Delhi still in containment SEALED OFF: A containment zone can be unsealed 28 days after the last Covid-19 case has recovered (Hindustan Times: 2020713)**

CRPF personnel next to barricades in Hauz Rani Containment zone. Amal KS/HT photo

Enclave's Block E was among the first 23 containment zones announced by the Delhi government in April to contain the spread of the coronavirus disease (Covid-19) in the city. But more than three months later, the northeast Delhi locality continues to be sealed off, and subject to stringent checks.

Like GTB Enclave, four other areas — blocks K and G in Jahangirpuri, Majlis Park in Adarsh Nagar and Hauz Rani, have remained containment zones for over three months.

While Savitri Enclave in Malviya Nagar figures in the Delhi government's containment zone list, the south district administration said it has been de-sealed. Nearly 58 localities were declared containment zones in May. As on Sunday, Delhi had 652 containment zones.

With new cases continuing to spring up in some of these areas, residents are beset by uncertainty, frustration and a longing for a return to normalcy.

District officials said there were still some major reasons because of which these zones have remained sealed for months. According to a district official, these include the presence of several medical professionals living in some zones, the 28-day rule for de-sealing a containment zone, and continuous movement of people within the zone despite strict curbs. District administration officials said they have raised the matter with the Delhi government. As per the Centre's orders, a containment zone can be de-sealed 28 days after the last Covid-19 case has recovered or tested negative. Senior Delhi government officials said they are considering writing to the Centre, asking for this policy to be re-examined.

A Delhi government spokesperson said, "We are adhering to the Central government's guidelines for containment zones. We can't modify it."

Divisional commissioner with the Delhi government Sanjeev Khirwar said, "We are thinking about writing to the Government of India to relook at the policy for de-sealing a containment zone with regard to length of the containment period. Our main aim is to control the spread of the infection. The decision to de-seal an area has to be taken as per the protocol set by the Union health ministry. Meanwhile, we have redrawn the boundaries of several containment zones to break them into smaller areas for better surveillance."

In a containment zone for 77 days, Naveen Jain (55), a stock market investor who lives in lane 3 in Majlis Park said he and other residents have approached district authorities to limit containment to houses where positive cases are kept in home isolation.

“One person was recently placed in home quarantine, because of which the entire lane is still a containment zone. The person has recovered 10 days ago. We have been in containment for 77 days and district authorities say we have to wait another 18-20 days. What if another case is reported in this period? How long will we have to stay the containment zone?” he said.

These areas continue to be containment zones, though some are much smaller now, even after the Delhi government in June redrew the boundaries of containment zones, breaking them into smaller clusters for better surveillance and control of the outbreak. The number of containment zones in the city jumped from 280 to 421 on June 28 after the boundaries were reworked. In June, the Centre and the Delhi government agreed to deploy a revamped strategy to fight Covid-19 and decided to remap containment zones.

A district magistrate said, “One of the main reasons we still see Covid-19 cases in these areas is because several medical professionals and health care workers live in these areas. But the 28-day rule should be re-examined, especially when we are reporting a large numbers of cases in these areas. By the time we are about to complete 28 days, a new case is reported in the containment zone.”

Several residents of GTB Enclave, which has over 1,000 flats, are medical professionals who work in nearby government-run facilities like Guru Teg Bahadur Hospital GTB, Rajiv Gandhi Super Specialty Hospital, Delhi State Cancer Institute and Swami Dayanand Hospital. Similarly, south Delhi’s Hauz Rani, which was declared a containment zone on April 16, houses several nurses who work in nearby private hospitals and nursing homes, a senior south district official said.

Another district magistrate, who asked not to be named, said, “They are part of essential services and most of them work in dedicated Covid-19 hospitals. Their movement can’t be restricted. But due to this, cases are still being reported in these areas.”

With the government starting rapid antigen tests, with a focus on containment zones, from June 18, more people have tested positive for the infectious disease, said a Shahdara district official.

MM Tripathi, general secretary of E pocket GTB Enclave said, “For doctors and other medical staff, we have fixed timings for the gates to be opened. Of the five gates in the pocket, three are permanently closed.” He, however, said there are barely any restrictions on movement.

Dr Jugal Kishore, head of community medicine at Safdarjung Hospital, said, “The idea of containment zones was to contain the spread of the disease, especially in the initial stage when we were trying to ramp up our medical infrastructure. Now, when we have adequate hospital beds and alternative strategies such as home isolation in place, there is no need to have containment zones, especially when people’s movement within such an area is allowed,” he said.

While these continue to be containment zones, district administrations have redrawn the boundaries so that at least some parts of these areas can be de-sealed.

For instance, the Hauz Rani containment zone is much smaller now than what it was on April 16, when it was first declared a containment zone, a senior district official said. “There were three containment zones initially that were divided into five last month. Now we have just one containment area, which we are trying to de-seal,” a south district official said.

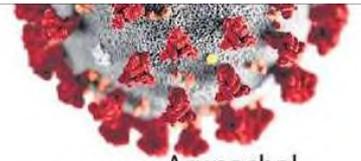
Similarly, in Majlis Park, there were three lanes declared as one containment zone on April 26. While two lanes have been de-sealed, one remains shut.

## **Diseases**

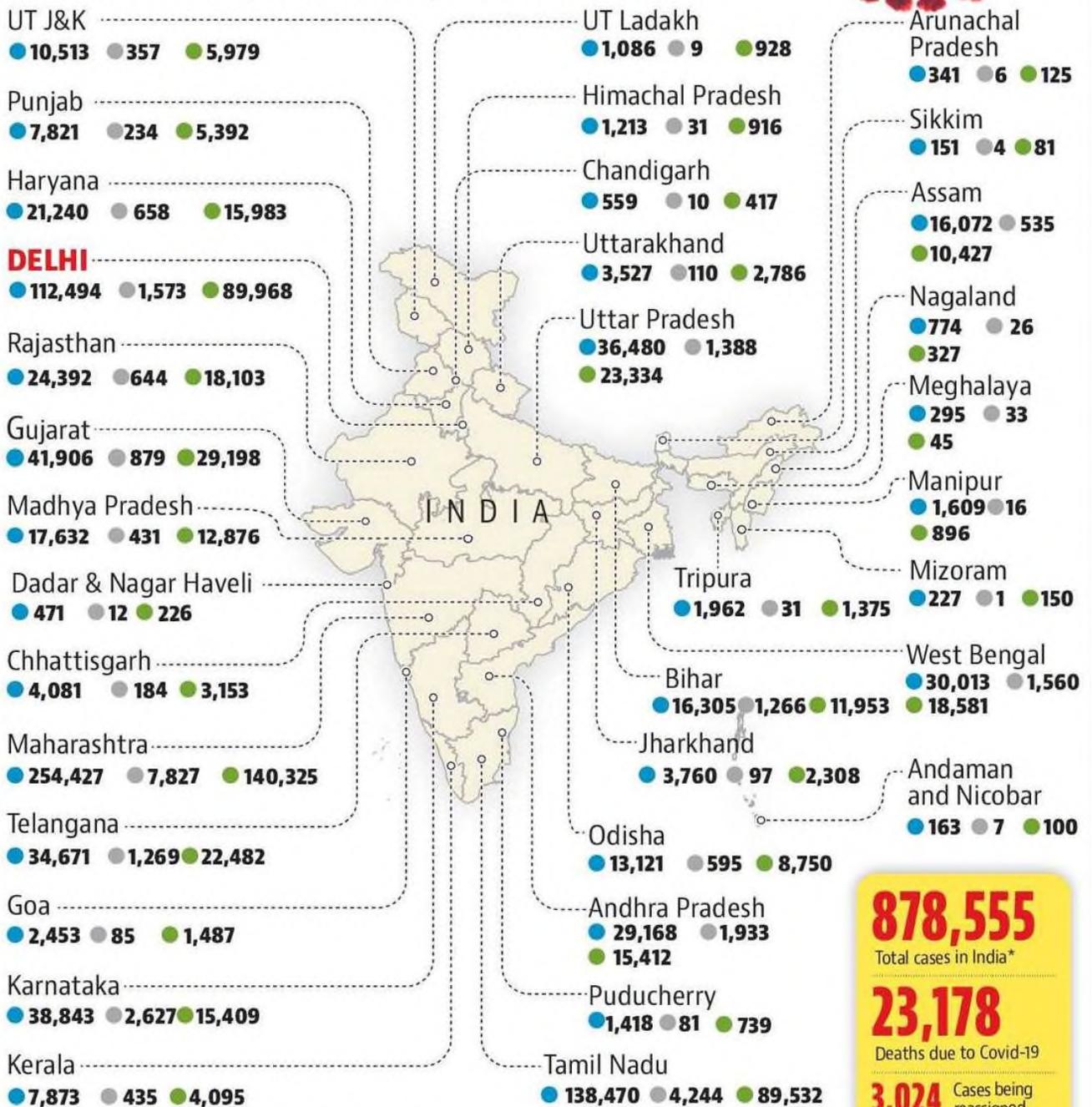
**On a strong footing in fight against Covid-19, says Shah 'NO PANIC': Union home minister hails leadership of PM Modi, says country will fight the disease with determination (Hindustan Times: 2020713)**

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

# THE SPREAD OF COVID-19



● Total confirmed cases including new cases added on July 12 ● New cases ● Recovered cases



**878,555**

Total cases in India\*

**23,178**

Deaths due to Covid-19

**3,024**

Cases being reassigned to states

\*Data compiled by covid19india.org and cross-checked from inputs by HT's correspondents and news agencies. 'Cases reassigned to states' is as per data released by the MOHFW. This figure has not been included in the calculation for the daily new cases.

## HT Correspondent

letters@hindustantimes.com

New Delhi : Home minister Amit Shah said on Sunday said that India, despite being densely populated, had coped well with the Covid-19 crisis under Prime Minister Narendra Modi while the health services of most developed nations collapsed because of the pandemic. He added that there was no sense of panic in India over the outbreak.

Shah was speaking at an event organised by the Central Armed Police Forces (CAPFs), or central paramilitary forces, for a mega plantation drive with a target of planting 13.7 million saplings by end of this month across the country. “The battle against Covid-19 is being carried out under the leadership of the Prime Minister Narendra Modi with people’s participation. Today India is leading a successful fight in managing the pandemic in the country. At a time when the health services of even the most developed countries were collapsing under its impact, the whole world was concerned how would India — such a big, densely populated country with a federal structure — fight this pandemic, but today, the most successful fight against this pandemic has been fought in India under the leadership of Prime Minister Narendra Modi,” Shah said.

He added: “We are on a strong pedestal in the fight against Covid-19 under the leadership of the Prime Minister with the motto ‘One People, One Thought, One Nation’.”

Unlike in other parts of the world, where only the governments are fighting the pandemic, in India, 1.3 billion citizens and state governments in India are united in fighting the threat, Shah said. “Nowhere across the country is there is a state of panic, in fact we are committed in facing this challenge and are resolute in overcoming this pandemic,” Shah added.

The home minister lauded CAPFs for the role they were playing in fighting Covid-19,

### **New Cases (The Asian Age: 2020713)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=14987926>

# 28,637 new cases, 551 more deaths in 24 hrs a record

AGE CORRESPONDENT  
NEW DELHI, JULY 12

India on Sunday registered a record 28,637 new coronavirus cases, taking the nation's overall tally to 8,49,553, while the death toll reached 22,674 with 551 new fatalities. Despite the huge number of cases, home minister Amit Shah sounded optimistic, saying India was on a strong pedestal in the fight against Covid-19. The government has indicated Parliament's monsoon session could be held by September if the situation improves further.

"Today India is leading a successful fight in managing the pandemic in the country. At a time when the health services of even the most developed countries were collapsing under its impact, the whole world was concerned how would India fight this pandemic. But today the most successful fight against this pandemic has been fought in India under the leadership of Prime Minister Narendra Modi," Mr Shah said.

Several cases related to prominent people in Mumbai were detected on Sunday. Besides superstar Amitabh Bachchan and his son Abhishek,

**COVID WATCH**

**8,49,533**  
CASES ACROSS NATION

▶ **A DAY AFTER** Amitabh Bachchan and his son Abhishek were found Covid-positive, Aishwarya Rai Bachchan and her daughter Aaradhya also tested positive

who were found Covid-positive on Saturday, Aishwarya Rai Bachchan and her daughter Aaradhya have also tested positive. All his four bungalows were sealed and all his staff are being tested. Actor Anupam Kher is himself negative but his entire clan, including his mother, tested positive. Actress Rekha's bungalow was sealed after her guard tested positive; while 18 staffers at Mumbai's Raj Bhavan were also found to have Covid-19.

India's recovery rate has reached 62.95 per cent. In the last 24 hours, 19,235 persons were discharged, taking total recovered numbers to 5,34,620, while 2,92,258 active cases are still under medical attention.

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=14987623>

# Plan to convert stadiums into Covid centres on hold

**New Delhi, July 12:** Authorities in Delhi have put on hold their plan to use stadiums as makeshift Covid care centres for now in view of the city witnessing a good recovery rate, officials said on Sunday.

Seeing the current situation, there is no need to convert stadiums into Covid care facilities, an official in the East Delhi district administration said. However, he said, the stadiums can be converted into Covid facilities in the coming days if the need arises.

Last month, a Delhi government panel constituted by Lt governor Anil Baijal had suggested to use Pragati Maidan, Talkatora Indoor Stadium, Indira Gandhi Indoor Stadium, JLN Stadium, Thyagaraj Indoor Stadium and Dhyanchand National Stadium for the purpose.

▶ **LAST MONTH**, a Delhi government panel constituted by Lt governor Anil Baijal had suggested to use Pragati Maidan, Talkatora Indoor Stadium, Indira Gandhi Indoor Stadium, JLN Stadium, Thyagaraj Indoor Stadium and Dhyanchand National Stadium for the purpose

A government study on Saturday said that there has been a "sharp decline" in daily fatality figures in the city in the past two weeks.

The recovery rate of patients stood at a little over 79 per cent on Saturday.

"We can use them (stadiums) for such facility, but it would be an unnecessary step because many people are under home isolation and recovering

from the virus," the official of the East Delhi district administration stressed.

Another official in the south district administration said, "We are closely monitoring the situation. As of now, there is no need to use any stadium for the Covid care facility".

According to a Northwest Delhi official, the number of coronavirus cases in the city is under control as the recovery rate is improving every day.

Earlier in the day, chief minister Arvind Kejriwal termed pulse oximeter a 'suraksha kavach' (protective shield) that has helped minimise deaths of patients under home isolation here.

The city government has provided pulse oximeters to asymptomatic and mild symptom coronavirus patients under home isolation. — PTI

**Covid -19 (The Asian Age: 2020713)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=14987624>



A movie of Amitabh Bachchan is screened for the entertainment of patients at CWG Village Covid Care Centre in New Delhi on Sunday. Mr Bachchan and his son Abhishek Bachchan have tested positive for Covid-19. — PTI

# Govt asks DMs to document initiatives to deal with Covid

1,573 new cases take tally to 1,12,494, recovery rate nears 80%

AGE CORRESPONDENT  
NEW DELHI, JULY 12

The national capital, on Sunday, recorded the highest single-day jump with 1,573 fresh novel coronavirus cases in the last 24 hours thereby pushing the total number of virus cases towards 1,12,500.

With 1,573 more patients testing positive in city since Saturday, Delhi's Covid count rose to 1,12,494 with the recovery rate improving to nearly 80 per cent, according to the government. Along with that, the death toll increased to 3,371 after 37 more fatalities were reported since Saturday, it said.

There are currently 19,155 active patients in the national capital while 89,968 patients have been discharged or have migrated after recovering from the highly contagious disease. Meanwhile, the Delhi government has asked all the district magistrates (DMs) to document the initiatives taken by them in their respective areas to deal with the Covid, a move aimed at showcasing efforts to control the infection, officials said.

## 64 fresh cases in Noida push Covid tally to 3,410

**Noida, July 12:** Uttar Pradesh's Gautam Buddha Nagar on Sunday recorded 64 new patients of Covid which pushed its tally of cases to 3,410, the highest for any district in the state so far, official data showed. The district has so far recorded 33 infection deaths, it added.

The number of active cases, however, came down to 893 from 918 on Saturday as 88 more patients got discharged after recovery, according to the data released by UP

health department for a 24-hour period. So far, 2,484 Covid patients have got discharged in the district, the data showed.

The recovery rate of patients rose to 72.84 per cent, up from 71.58 per cent on Saturday, according to official statistics.

Gautam Buddha Nagar (893) currently has the third highest active cases of Covid after adjoining Ghaziabad district (1,322) and Lucknow (1,294) in the state, the data showed.

— PTI

Northwest district, railway coaches were converted into insulation wards for Covid patients.

In several districts, hotels were converted into Covid care facilities. An artificial intelligence enabled coronavirus mobile testing bus was launched last month.

"A need was felt to showcase all such initiatives taken by the district magistrates so that their efforts are reflected in the documents. All the DMs have been asked to make proper documentation of these initiatives introduced by them to deal with the Covid situation," an official said.

He said that although no deadline has been fixed for DMs to prepare such documents, they have been asked to come up with it as soon as possible.

"Authorities in districts are busy with routine works to ensure that all things are in order. We will soon prepare a detailed document of the initiatives taken by us and submit the same," said a district magistrate who did not wish to be named. Another DM said that they will submit this document in the next 15 days.

The DMs have been asked to also mention the difficulties they faced while executing new initiatives in their districts to combat the spread of the novel coronavirus. A senior government official said several districts have taken effective steps to ramp up the medical infrastructure and take other measures, including an application for robust surveillance and

testing facilities on a bus.

For instance, the South Delhi district administration has set up a 10,000-bed Sardar Patel Covid centre, one of the "largest" such facilities in the world, at the Radha Soami Satsang Beas. It approached several agencies to set up this facility. Similarly, a 500-bed Covid care facility was set up at the CWG Village in East Delhi. Also, in

## **Mental health**

### **Study reveals short, frequent walks near water bodies can benefit mental health (New Kerala: 2020713)**

<https://www.newkerala.com/news/2020/124265.htm>

Barcelona [Spain], July 12: While walking is good for cardiovascular health, a recent study has found additional benefits of the activity. According to a new study, taking frequent, short walks near water bodies, like beaches, lakes, rivers, or even fountains may have a positive effect on people's wellbeing and mood

The study was led by the Barcelona Institute for Global Health (ISGlobal), a centre supported by the "la Caixa" Foundation. Conducted within the BlueHealth project and published in Environmental Research, the study used data on 59 adults. Over the course of one week, participants spent 20 minutes each day walking in a blue space.

In a different week, they spent 20 minutes each day walking in an urban environment. During yet another week, they spent the same amount of time resting indoors. The blue space route was along a beach in Barcelona, while the urban route was along city streets. Before, during, and after each activity, researchers measured the participants' blood pressure and heart rate and used questionnaires to assess their well-being and mood.

"We saw a significant improvement in the participants' well-being and mood immediately after they went for a walk in the blue space, compared with walking in an urban environment or resting," commented Mark Nieuwenhuijsen, Director of the Urban Planning, Environment, and Health Initiative at ISGlobal and coordinator of the study.

Specifically, after taking a short walk on the beach in Barcelona, participants reported improvements in their mood, vitality, and mental health.

The authors did not identify any cardiovascular health benefits, although they believe this may be due to the design of the study.

"We assessed the immediate effects of taking a short walk along a blue space. Continuous, long-lasting exposure to these spaces might have positive effects on cardiovascular health that we were not able to observe in this study," commented ISGlobal researcher Cristina Vert, lead author of the study.

"Our results show that the psychological benefits of physical activity vary according to the type of environment where it is carried out, and that blue spaces are better than urban spaces in this regard," commented Vert.

Numerous ISGlobal studies have identified health benefits associated with green spaces, including a lower risk of obesity, better attention capacities in children, and slower physical decline in older adults. The new study provides evidence showing that blue spaces are an environment favourable to mental health.

"According to the United Nations, 55 per cent of the global population now lives in cities. It is crucial to identify and enhance elements that improve our health--such as blue spaces--so that we can create healthier, more sustainable, and more liveable cities," explained Nieuwenhuijsen.

## **Physical activity**

### **Study suggests physical activity of older people needs tailored monitoring (New Kerala: 2020713)**

<https://www.newkerala.com/news/2020/124254.htm>

Helsinki [Finland], July 12: With ageing, the ability to move swiftly tends to deteriorate, a phenomenon which needs to be considered when assessing physical activity in older people. A study on active ageing examined movement that exceeds the intensity of preferred walking speed in older people.

Improving physical performance requires exercising regularly beyond one's usual level of exertion. The body then adapts to the new level of exertion by improving performance. Many activity monitors on the market have been developed for young and middle-aged people who have higher physical performance than older adults. Therefore, activity monitors may underestimate the exertion level of older adults' activity.

In the study at the University of Jyväskylä, preferred walking speed was measured in a six-minute walking test. In addition, the participants wore an activity monitor while living their day-to-day life.

"By measuring their preferred walking speed we were able to assess the time that our participants exercised more strenuously than what is their usual exertion level and what is beyond their comfort zone," explained postdoctoral researcher Laura Karavirta from the Gerontology Research Center and Faculty of Sport and Health Sciences.

The participants in the study accumulated 62 minutes of activity, on average, beyond the intensity of their preferred walking speed. Interestingly, the amount of activity was similar in 75-, 80- ad 85-year-old people, regardless of age.

"The new method enables us to investigate physical activity as individual behaviour, which is not influenced by fitness level. A physically active lifestyle is about challenging oneself according to one's own abilities. Light intensity movement is also important, but at least moderate exertion is required for improving physical performance," Karavirta explained.

The prevailing recommendation for all adults is a minimum of 150 minutes of at least moderate-intensity physical activity per week. The general definition for moderate-intensity is equivalent to exceeding three times the energy consumption of rest. Individual exertion at this intensity varies according to a person's fitness level.

"For most young adults, it feels easy and corresponds to slow walking but for some older adults it may be the hardest effort they can perform," Karavirta said.

The study is part of a larger AGNES study for 75-, 80-, and 85-year-old people living independently in Jyväskylä, which is funded by the Academy of Finland and the European Research Council.

Out of 1,021 participants, 444 took part in this study, where a motion sensor was attached to the thigh for a week, and preferred walking speed was measured in the laboratory as the average speed in a self-paced six-minute walking test.

## **Brain cells**

### **Scientists spot brain cells that trigger sugar cravings in humans (New Kerala: 2020713)**

<https://www.newkerala.com/news/2020/124200.htm>

In what could control an unchecked sweet tooth in some people that leads to diabetes and obesity, new research has identified specific brain cells that control how much sugar you eat and how much you crave sweet tasting food.

The new study focused on actions of a hormone called fibroblast growth factor 21 (FGF21). This hormone is known to play a role in energy balance, body weight control, and insulin sensitivity.

The research team from the University of Iowa in the US and the University of Copenhagen in Denmark has shown, for the first time, which brain cells respond to FGF21's signals and how that interaction helps regulate sugar intake and sweet taste preference.

The study, published in the journal Cell Metabolism, also revealed how the hormone mediates its effects.

"This is the first study that's really identified where this hormone is acting in the brain and that has provided some very cool insights to how it's regulating sugar intake," said Matthew Potthoff, associate professor of neuroscience and pharmacology in the University of Iowa Carver College of Medicine.

Understanding the biological mechanisms that control sugar intake and preference for sweet taste could have important implications for managing and preventing these health problems.

Although it was known that FGF21 acted in the brain, identifying the exact cellular targets was complicated by the fact that the hormone's receptor is expressed at very low levels and is therefore difficult to "see."

Using various techniques, the researchers were able to precisely identify which cells express the receptor for FGF21.

By investigating these cells, the study shows that FGF21 targets "glutamatergic" neurons in the brain to lower sugar intake and sweet taste preference.

The researchers also showed that FGF21's action on specific neurons in the ventromedial hypothalamus reduce sugar intake by enhancing the neurons' sensitivity to glucose.

Several drugs based on a modified form of FGF21 are already being tested as treatments for obesity and diabetes.

The new findings could potentially lead to new drugs that more precisely target the different behaviors controlled by FGF21, which might help to control how much sugar a person eats, the authors said.

### **Plasma Therapy (Navbharat Times: 2020713)**

[https://epaper.navbharattimes.com/imageview\\_1654\\_75476\\_4\\_13\\_13-07-2020\\_0\\_i\\_1\\_sf.html](https://epaper.navbharattimes.com/imageview_1654_75476_4_13_13-07-2020_0_i_1_sf.html)

# प्लाज्मा थेरपी से RML में भी अब होगा इलाज

File Photo

■ प्रमुख संवाददाता, नई दिल्ली

राजधानी के एक और सरकारी अस्पताल- राम मनोहर लोहिया में कोरोना मरीजों को प्लाज्मा थेरपी देने की अनुमति मिल गई है। इस अस्पताल में प्लाज्मा थेरपी के अलावा प्लाज्मा दान भी किया जा सकेगा। अस्पताल में ऐसे डोनर की लिस्ट तैयार हो रही है। थेरपी पर आरएमएल अस्पताल के डीन डॉक्टर राजीव सूद ने कहा कि तैयारी लगभग पूरी हो चुकी है, जल्द इसे शुरू किया जाएगा।

अभी राजधानी में दिल्ली सरकार के दो अस्पतालों में प्लाज्मा थेरपी दी जा रही है। ये हैं - LNJP और राजीव गांधी हॉस्पिटल। लेकिन यहां प्लाज्मा डोनेशन नहीं होता है। जीटीवी अस्पताल में भी प्लाज्मा थेरपी शुरू होने वाली है। ▶▶ पेज 3



**दिल्ली में 1573 नए मरीज, 2276 ठीक**

राजधानी में रविवार को कोरोना के 1573 नए मामले आए। इस दौरान 2276 लोग ठीक भी हुए। वहीं, 37 लोगों की मौत हुई। दिल्ली में कुल मरीजों का आंकड़ा 112,494 हो गया है। अबतक 89,968 लोग कोरोना से जंग जीत चुके हैं। ▶▶ पेज 3

# दावा: स्वस्थ होने के बाद भी 87% लोगों का जीवन सामान्य नहीं

नई दिल्ली | मदन जैड़ा

कोरोना से जंग जीतकर जो लोग घर लौट रहे हैं, क्या वे वास्तव में पूरी तरह स्वस्थ हैं? क्या वे तत्काल सामान्य जीवन में लौट आते हैं? इसे लेकर पहला वैज्ञानिक अध्ययन सामने आया है। इसके मुताबिक, स्वस्थ होने के बाद भी 87 फीसदी लोगों का जीवन सामान्य नहीं है।

जर्नल ऑफ अमेरिकन मेडिकल एसोसिएशन में प्रकाशित यह शोध इटली में कोरोना मरीजों पर किया गया है, लेकिन भारत के संदर्भ में भी इसकी प्रासंगिकता है। रोम की यूनिवर्सिटी ऑफ मेडिसिन के शोधकर्ताओं ने कोरोना के

थकान और सांस लेने में तकलीफ

50 43 33

फीसदी थकान % को सांस प्रतिशत को से परेशान में समस्या जोड़ों में दर्द

55 प्रतिशत कोरोना संक्रमित मरीजों में तीन लक्षण पाए गए

143 ठीक हुए मरीजों पर दो महीने के बाद यह अध्ययन किया। ये मरीज दो सप्ताह अस्पताल में वेंटीलेटर पर भर्ती रहे थे।

शोधकर्ताओं ने कहा कि महज 13 फीसदी लोग ऐसे थे जिन्हें कोई शारीरिक दिक्कत नहीं हो रही थी और वह सामान्य

बना सकता है दिव्यांग

शोधकर्ताओं ने कहा कि यह अध्ययन छोटा है, पर संकेत करता है कि अस्पताल में भर्ती गंभीर रोगियों पर बीमारी का लंबे समय तक असर रह सकता है। कोरोना बीमारी मरीजों को अस्थायी तौर पर दिव्यांग भी बना सकती है।

रूप से पुरानी जिंदगी में लौट आए थे। अस्पताल से डिस्चार्ज होते समय सभी मरीजों का कोरोना टेस्ट किया गया था जो निगेटिव निकला। दो महीने के बाद किसी मरीज को दोबारा बुखार नहीं हुआ। लेकिन मरीजों में कई ऐसे लक्षण दिखे जो बीमारी के दौरान होते हैं।

# दुनिया की पहली कोरोना वैक्सीन का परीक्षण पूरा

मास्को | एजेसी

रश्विक महामारी कोरोना वायरस के प्रचार को लेकर रूस में बड़ी राहत की उम्मीद नजर आई है। दुनिया की सबसे पहली कोविड-19 वैक्सीन के नैदानिक परीक्षणों को सेचनोव फर्स्ट मास्को स्टेट मेडिकल यूनिवर्सिटी में स्वयंसेवकों पर सफलतापूर्वक पूरा कर लिया गया है।

इंस्टीट्यूट फॉर ट्रांसलेशनल मेडिसिन एंड बायोटेक्नोलॉजी के निदेशक वादिम तारासोव ने बताया कि 18 जून को गेमली इंस्टीट्यूट ऑफ एपिडेमियोलॉजी एंड माइक्रोबायोलॉजी द्वारा निर्मित टीके के नैदानिक परीक्षण

## उम्मीद

- रूसी विश्वविद्यालय ने क्लिनिकल ट्रायल सफल होने का दावा किया
- मानव स्वास्थ्य के लिए वैक्सीन के सुरक्षित होने की पुष्टि की

शुरू किए थे। इस विश्वविद्यालय के अनुसार, अध्ययन के इस चरण का उद्देश्य मानव स्वास्थ्य के लिए वैक्सीन की सुरक्षा को दिखाना था, जो सफलतापूर्वक किया गया। टीके के सुरक्षित होने की पुष्टि की जाती है। यह उन टीकों की सुरक्षा से संबंधित है जो वर्तमान में बाजार में उपलब्ध हैं।

# Coronavirus Patient (Hindustan: 2020713)

[https://epaper.livehindustan.com/imageview\\_192855\\_86516822\\_4\\_1\\_13-07-2020\\_5\\_i\\_1\\_sf.html](https://epaper.livehindustan.com/imageview_192855_86516822_4_1_13-07-2020_5_i_1_sf.html)

## राहत: अन्य राज्यों में बड़े मगर दिल्ली में 14 दिन से घट रहे सक्रिय मरीज

स्कूल फीस मांगने का विरोध करेंगे

नई दिल्ली। बरिष्ठ संवाददाता

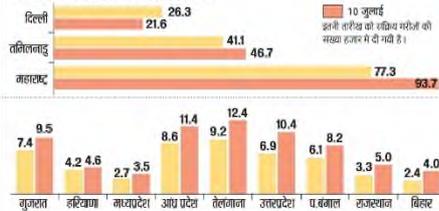
दिल्ली में कोरोना सक्रिय मरीज तेजी से कम हो रहे हैं, जबकि अन्य कई राज्यों में मरीजों की संख्या बढ़ी है। दिल्ली में अस्पतालों में भर्ती मरीजों की संख्या भी पांच हजार से कम हो गई है। बीते 15 दिनों से देश में दिल्ली के अलावा अन्य सभी राज्यों में कोरोना के सक्रिय मरीजों की संख्या लगातार बढ़े हैं।

**20 हजार से कम** : दिल्ली में शनिवार तक कोरोना के कुल 19155 सक्रिय मरीज हैं। इनमें से 4315 मरीज दिल्ली के विभिन्न अस्पतालों में भर्ती हैं। पुरी दिल्ली के विभिन्न क्षेत्रों

में मिल रहे कोरोना संक्रमितों को देखते हुए लगातार हॉस्पिटल सील किए जा रहे हैं। दिल्ली में अभी तक 652 हॉस्पिटल सील किए जा चुके हैं। इन सभों जगहों पर तेजी से जांच प्रक्रिया चल रही है।

**4 फीसदी कम हुए सक्रिय मरीज** : दिल्ली स्वास्थ्य विभाग के मुताबिक यहां 3 जून तक कोरोना के 26,594 मामले थे, जिसकी संख्या अब घटकर 19155 हो गई है। यानी, दो सप्ताह में सक्रिय मरीज चार फीसदी कम हुए हैं। वहीं, अन्य सक्रिय मरीज जिनमें तमिलनाडु, महाराष्ट्र, गुजरात और उत्तर प्रदेश इनमें एक्टिव मरीजों की संख्या बढ़ी है।

सक्रिय मरीजों की संख्या हजार में



दिल्ली : लगातार नीचे आ रहा ग्राफ



नई दिल्ली (भा.सं.)। निजी चक्रों द्वारा अभिभावकों से स्कूल फीस मांगने के विरोध में मेमनल अकाली दल की महिला विंग सदस्यों पर उत्तरांचल प्रदर्शन कोषी।

दल के राष्ट्रीय अध्यक्ष परमजीत सिंह ने कहा कि स्कूल फीस जमा करने के लिए अभिभावकों पर दबाव बना रहे है, जबकि सरकार मुकदमा चला रही है। लॉकडाउन के समय बंद रहे स्कूलों की फीस स्कूल प्रबंधन थाक कर। फीस में 50 फीसदी की छूट दे। वे अभिभावकों की आवाज बाकार तक पहुंचाए। इस मुकदमा धरती में था बच्चों के परिवार के साथ नहीं खड़े हैं। स्कूल प्रबंधक शिक्षकों को वेतन देने का बहाल बनाकर फीस मांग रहे हैं।