



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Wednesday

20210203

## Russia's COVID-19 vaccine

### Russia's COVID-19 vaccine shows over 91% efficacy in phase 3 trial: Lancet study (The Tribune: 20210203)

<https://www.tribuneindia.com/news/health/russias-covid-19-vaccine-shows-over-91-efficacy-in-phase-3-trial-lancet-study-2069423>)

Findings based on analysis of data from nearly 20,000 participants; Sputnik V is a two-part vaccine that includes two adenovirus vectors

Russia's COVID-19 vaccine shows over 91% efficacy in phase 3 trial: Lancet study

A shipment of doses of the Sputnik V (Gam-COVID-Vac) vaccine against COVID-19 is seen after arriving at Ezeiza International Airport, in Buenos Aires, Argentina. Reuters Filephoto

Russia's Sputnik V vaccine against COVID-19 has shown 91.6 per cent efficacy in the phase 3 trial without any serious side effects, according to an interim analysis of data published in The Lancet journal on Tuesday.

The findings are based on analysis of data from nearly 20,000 participants – three-quarters of whom received the two-dose regimen of the adenovirus-based vaccine, Gam-COVID-Vac, and one quarter received a placebo.

Serious adverse events or those requiring hospital admission were rare in both the placebo and vaccine groups and none were considered associated with vaccination, said the researchers.

Four deaths were reported in the trial, none of which were considered related to the vaccine, they said, adding most reported adverse events were mild, including flu-like symptoms, pain at injection site and weakness or low energy.

"Our interim analysis of the randomised, controlled, phase 3 trial of Gam-COVID-Vac in Russia has shown high efficacy, immunogenicity, and a good tolerability profile in participants aged 18 years or older," said study co-lead author Inna V Dolzhikova from Gamaleya National Research Centre for Epidemiology and Microbiology, Russia.

The Gam-COVID-Vac, called Sputnik V, is a two-part vaccine that includes two adenovirus vectors – recombinant human adenovirus type 26 (rAd26-S) and recombinant human adenovirus type 5 (rAd5-S).

These vectors have been modified to express the SARS-CoV-2 spike protein, which the virus uses to enter human cells.

The adenoviruses are also weakened so that they cannot replicate in human cells and cannot cause disease.

In the trial, participants were given one dose of rAd26-S, followed by a booster dose of rAd5-S 21 days later.

The researchers explained that using a different adenovirus vector for the booster vaccination may help create a more powerful immune response, compared with using the same vector twice, as it minimises the risk of the immune system developing resistance to the initial vector.

"Stopping the COVID-19 pandemic requires the introduction of different vaccines based on different mechanisms of action to cover diverse global health demands. Our vaccine, along with other SARS-CoV-2 vaccines, helps to diversify the world SARS-CoV-2 vaccine pipeline," said study co-lead author, Denis Logunov, from Gamaleya National Research Centre for Epidemiology and Microbiology, Russia.

Worldwide, 64 candidate COVID-19 vaccines are currently in clinical assessment, including 13 vaccine candidates at phase 3 and 173 vaccines are in preclinical analyses.

Phase 3 candidate vaccines include a variety of vaccine platforms, such as vector vaccines, mRNA vaccines, inactivated vaccines, and adjuvanted recombinant protein nanoparticles.

Between September 7 and November 24, 2020, a total of 21,977 adults were randomly assigned to receive the vaccine (16,501) or placebo (5,476).

The trial was conducted across 25 hospitals and polyclinics in Moscow and 14,964 participants in the vaccine group and 4,902 in the placebo group received two doses of the vaccine or placebo and were included in the primary interim efficacy analysis.

"From 21 days after receiving the first dose (the day of dose 2), 16 cases of symptomatic COVID-19 were confirmed in the vaccine group and 62 cases in the placebo group – equivalent to an efficacy of 91.6 per cent," said the researchers.

The vaccine induced a robust humoral response, also called antibody response, and cellular immune response (T-cell response) with data from 342 and 44 participants, respectively, they said.

Six of the 342 participants did not mount an immune response following vaccination, possibly due to older age or individual characteristics, said the researchers.

They noted that because COVID-19 cases were detected only when participants self-reported symptoms, followed by a PCR test, the efficacy analysis only includes symptomatic cases of COVID-19.

Further research is needed to understand the efficacy of the vaccine on asymptomatic COVID-19, and transmission, according to the researchers.

They noted that since median follow up was 48 days from the first dose, so the study cannot assess the full duration of protection.

The trial follows an earlier phase 1/2 trial that reported safety and immunogenicity of two different formulations, one frozen, one freeze-dried, of the two-part vaccine.

In the latest study, the liquid form of the vaccine was used, which requires storage at minus 18 degrees Celsius. Storage at 2-8 degrees Celsius has also been approved.

"The development of the Sputnik V vaccine has been criticised for unseemly haste, corner cutting, and an absence of transparency," said Professor Ian Jones, from University of Reading in the UK, and Professor Polly Roy, from London School of Hygiene & Tropical Medicine, UK.

"But the outcome reported here is clear and the scientific principle of vaccination is demonstrated, which means another vaccine can now join the fight to reduce the incidence of COVID-19," said the researchers who were not involved in the study. PTI

## **WHO**

### **WHO team visits Wuhan virus lab at centre of speculation (The Tribune: 20210203)**

<https://www.tribuneindia.com/news/health/who-team-visits-wuhan-virus-lab-at-centre-of-speculation-207336>

The WHO team's visit to the Wuhan Institute of Virology is a highlight of their mission

WHO team visits Wuhan virus lab at centre of speculation

China has promoted also unproven theories that the virus may have originated elsewhere.

World Health Organisation investigators on Wednesday visited a research centre in the Chinese city of Wuhan that has been the subject of speculation about the origins of the coronavirus, with one member saying they intended to meet key staff and press them on critical issues.

The WHO team's visit to the Wuhan Institute of Virology is a highlight of their mission to gather data and search for clues as to where the virus originated and how it spread.

"We're looking forward to meeting with all the key people here and asking all the important questions that need to be asked," zoologist and team member Peter Daszak said, according to footage run by Japanese broadcaster TBS.

Reporters followed the team to the high-security facility, but as with past visits, there was little direct access to team members, who have given scant details of their discussions and visits thus far. Uniformed and plainclothes security guards stood to watch along the facility's gated front entrance, but there was no sign of the protective suits team members had donned Tuesday during a visit to an animal disease research centre.

One of China's top virus research labs, the institute built an archive of genetic information about bat coronaviruses after the 2003 outbreak of Severe Acute Respiratory Syndrome. That has led to unproven allegations that it may have a link to the original outbreak of COVID-19 in Wuhan in late 2019.

China has strongly denied that possibility and has promoted also unproven theories that the virus may have originated elsewhere or even been brought into the country from overseas with imports of frozen seafood tainted with the virus, a notion roundly rejected by international scientists and agencies.

The institute's deputy director is Shi Zhengli, a virologist who worked with Daszak to track down the origins of SARS that originated in China and led to the 2003 outbreak. She has published widely in academic journals and worked to debunk theories espoused by the former Trump administration and other American officials that the virus is either a bioweapon or a "lab leak" from the institute.

Following two weeks in quarantine, the WHO team that includes experts from 10 nations has visited hospitals, research institutes and a traditional wet market linked to many of the first cases. Their visit followed months of negotiations as China seeks to retain tight control over information about the outbreak and the investigation into its origins, possibly to avoid blame for alleged missteps in its early response.

Confirmation of the origins of the virus is likely to take years. Pinning down an outbreak's animal reservoir typically requires exhaustive research, including taking animal samples, genetic analysis and epidemiological studies. One possibility is that a wildlife poacher might have passed the virus to traders who carried it to Wuhan.

The first clusters of COVID-19 were detected in Wuhan in late 2019, eventually prompting the government to put the city of 11 million under a strict 76-day lockdown. China has since reported more than 89,000 cases and 4,600 deaths, with new cases largely concentrated in its northeast and local lockdowns and travel restrictions being imposed to contain the outbreaks.

New cases of local transmission continue to fall with just 15 reported on Wednesday as Chinese heed government calls not to travel for the Lunar New Year holiday later this month.—AP

39 per cent people in Himachal suffer from obesity, 11.5 per cent diabetic

The study also shows that around 31 per cent people in the state suffer from hypertension

## **Diabetic**

### **39 per cent people in Himachal suffer from obesity, 11.5 per cent diabetic (The Tribune: 20210203)**

<https://www.tribuneindia.com/news/health/39-per-cent-people-in-himachal-suffer-from-obesity-11-5-per-cent-diabetic-207319>

Thirty-nine per cent people in Himachal Pradesh suffer from obesity while 11.5 per cent are diabetic, according to a study by the Indian Council of Medical Research-India Diabetes (ICMR-INDIAB).

The nationwide study, under which findings for the state were released on Tuesday, also stated that around 77 per cent people in Himachal Pradesh suffer from dyslipidemia - abnormal levels of one or more kinds of lipids in the blood that leads to increased risk of heart diseases.

The survey covered nearly 4,000 people in the state and it was conducted from September 2019 to March 2020, the study's principal investigator Dr JK Mokta, who is a professor at the Indira Gandhi Medical College and Hospital's medicine department here, said.

"Himachal ranks seventh in the country in terms of prevalence of type-two diabetes, and has a higher prevalence than the national average as well as its neighbouring states of Punjab, Haryana and Uttarakhand," he said.

The prevalence is same among males and females, but is higher in urban areas as compared to rural areas, Mokta added.

He said that according to the study, around half of those suffering from diabetes have not been diagnosed with the disease and are unaware of the problem.

"Moreover, around 18 per cent people here are prediabetic, which means they have a 50 per cent chance of developing diabetes in the next 10 years," Mokta said, adding that Himachal is the fourth worst-hit state in terms of abdominal obesity, with 55 per cent people having a larger than normal waist circumference.

The study also showed that around 31 per cent people in the state suffer from hypertension.

The fifth National Family Health Survey released in December had come out with similar results for the state against the popular belief that residents of the hill-state are healthier on account of more physical activity in the mountainous terrain, it said.

Sixty-one per cent of the respondents, in fact, were found to be physically inactive, and only five per cent were highly active, the study found.

"Unhealthy food habits and an increasingly sedentary lifestyle seem to be responsible for all these disorders. The average cereal consumption in Himachal is 78 per cent wheat and 21 per cent rice. But people are largely consuming refined carbohydrates and not whole grains," Mokta said.

The milling process removes the dietary fibre and nutrients from the whole grain. They are also snacking on unhealthy foods in between meals, such as samosas, without indulging in additional physical activity, he said citing the study.

"Legumes, complex carbohydrates, fruits and vegetables are not adequately present in our diets. Our ancestors also took carbohydrate-rich diets but indulged in extensive physical work which is missing now on account of motor vehicles, machines and sedentary jobs," Mokta said.  
PTI

## **COVID-19 UK variant**

### **Scientists fear COVID-19 UK variant has mutated again (The Tribune: 20210203)**

<https://www.tribuneindia.com/news/health/scientists-fear-covid-19-uk-variant-has-mutated-again-206969>

Apprehend that mutation could evade immune system

Scientists fear COVID-19 UK variant has mutated again

People get off the bus on Ealing's high street where the new SARS-CoV-2 coronavirus variant originating from South Africa has been located, in West London. Reuters file

The highly transmissible and possibly deadlier variant of COVID-19 detected in southern England at the end of last year is showing signs of further mutation, UK scientists warned on Tuesday.

Tests conducted on samples of the Kent variant, named after the region in England where it was first detected, show a mutation, called 'E484K', already detected in the South Africa and Brazil variants.

There are fears that this mutation could evade the immune system and that the vaccines currently being administered may prove less effective against these further mutating variants of the SARS-CoV-2 virus.

The findings form part of yet-to-be peer-reviewed results of research at the Cambridge Institute of Therapeutic Immunology and Infectious Disease (CITIID), University of Cambridge, in collaboration with the National Institute for Health Research (NIHR) COVID-19 BioResource.

“Of particular concern, though, is the emergence of the E484K mutation, which so far has only been seen in a relatively small number of individuals. Our work suggests the vaccine is likely to be less effective when dealing with this (E484K) mutation,” said Professor Ravi Gupta, the lead researcher at the CITIID.

He said that the variant is expected to continue to acquire mutations seen in the other variants of concern.

“So we need to plan for the next generation of vaccines to have modifications to account for new variants. We also need to scale up vaccines as fast and as broadly as possible to get transmission down globally,” he said.

The data, which relates to a small sample of patients, also suggests that a significant proportion of over-80 olds may not be sufficiently protected against infection until they have received their second dose of the vaccine.

“Our data suggest that a significant proportion of people aged over 80 may not have developed protective neutralising antibodies against infection three weeks after their first dose of the vaccine. But it’s reassuring to see that after two doses, serum from every individual was able to neutralise the virus,” said Dr Dami Collier, the main co-investigator on the studies.

The scientists used blood samples from 26 individuals who had received their first dose of the Pfizer/BioNTech vaccine three weeks previously, to extract serum, which contains antibodies raised in response to the vaccine. The age range of the volunteers was 29 to 89 years.

The findings come as the UK is conducting urgent door-to-door surge testing in south-east England to try and trace every case of the South African variant of COVID-19, which was detected in two people within the community with no travel history connecting them to South Africa.

UK Health Secretary Matt Hancock has said he wanted to “come down hard” on the variant by “finding every case”. PTI AK According to Johns Hopkins University COVID-19 tracker, over 106,774 people have died and more than 3.8 million people have contracted the disease in the UK. PTI

## **Sars-Cov-2**

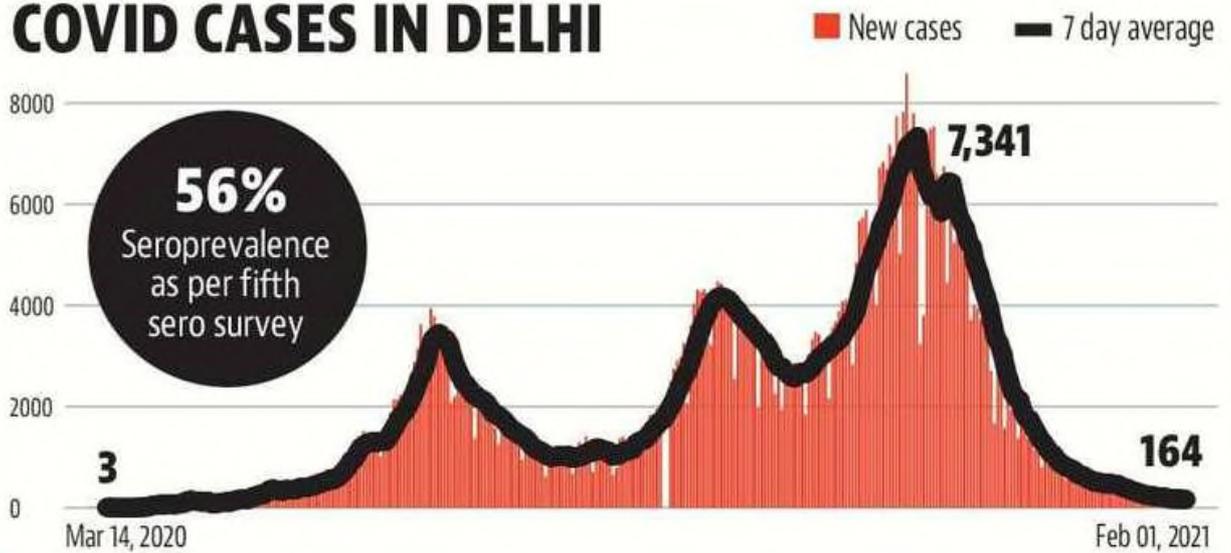
**Over 50% exposure to Sars-Cov-2 in 10 of 11 city districts: Sero survey  
(Hindustan Times: 20210203)**

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

# Stay cautious, wear masks: Jain

The seroprevalence is in sync with the outbreak's state in Delhi. Health min Jain said over last 10-12 days, city has added less than 200 cases a day

## COVID CASES IN DELHI

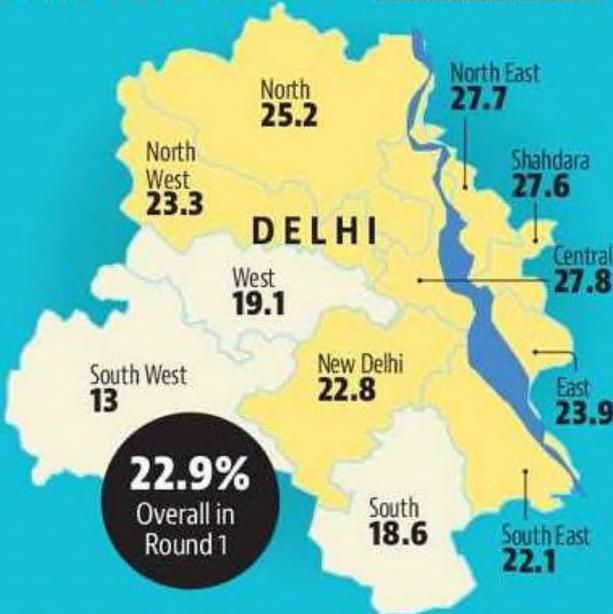


% of people found with antibody

<20	20-30	30-40	40-50	50-60	>60
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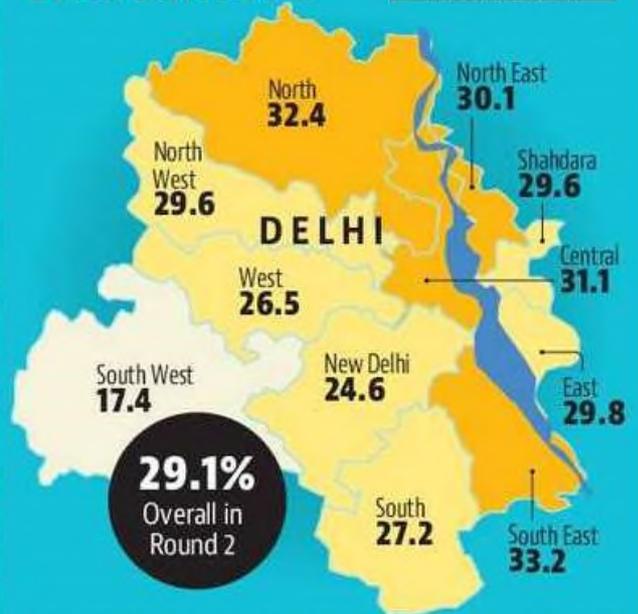
### SERO SURVEY 1

JUNE 27 TO JULY 10



### SERO SURVEY 2

AUGUST 1 TO 7



### SERO SURVEY 3

SEPTEMBER 1 TO 5



### SERO SURVEY 4

OCTOBER 15-21



The fifth serological survey in Delhi to detect Covid-19 antibodies showed that 56.13% of the 28,000 people sampled tested positive, state health minister Satyendar Jain said on Tuesday, releasing findings that suggest more than half of the Capital's population on average may have been exposed to the virus.

The data released by Jain showed that except for the north district, the other 10 districts had a seroprevalence of more than 50%. Of these, six had a seroprevalence of more than 55%. South-east district had the highest number at 62%.

These numbers now appear to fall in a territory that experts believe is similar to the herd immunity threshold – a point in seroprevalence (estimated to be 60-80% of the population in case of Sars-Cov-2) when there are too few people left for the virus to spread to, slowing an outbreak down.

But Jain cautioned that this should not be seen as having hit herd immunity, something that experts have separately said is uncertain in the case of natural infections since such immunity could wane and people still spread the disease while they are infected (contrary to what happens when someone is vaccinated).

“Some say herd immunity is achieved at 50%, others say it should be 60%. I don't think we should get into the debate of herd immunity now. This is a new form of virus or disease, we should not get lax with our precautionary measures because in October, we had thought the virus was brought under control, but then we got the third wave,” said Jain.

According to Jain, the latest round – which was conducted between January 15 and January 23, and included 100 samples from each of the city's 272 wards – was the largest in the Capital yet. “It is also the largest in the country so far. Delhi has largely won over Covid-19, but we should continue to practise Covid-19 appropriate behaviour,” Jain said.

The latest figure is an over 30 percentage point jump over the last sero survey that was held in October, before the city entered the third wave of infections.

The high seroprevalence is also in sync with the state of the outbreak in the Capital. Jain stated that over the past 10-12 days, Delhi has been reporting less than 200 Covid-19 cases every day and the positivity rate, which at one point had touched 15%, is now stable at lower than 1% for the past one month.

“Still, I want to urge everyone to continue wearing masks for a few more months. In the past two months, the compliance has improved substantially, the result of which is in front of everyone -- Covid cases have drastically come down. If people continue to wear masks this way, we will be able to totally control the virus in the next few months,” the minister said.

The minister said the full report of the latest serological survey will be released in a day or two after further examination of the findings.

“Like the results in the previous surveys, this time too the number of females having antibodies was more than that of males. There means that all these people had Covid at some point and now have fully recovered. We can say that antibodies have been found in 49.09% to 62.18% of the people in Delhi, and the average percentage of people who have been found positive is 56.13%,” Jain said.

Dr Nutan Mundeja, director general of health services (Delhi state health mission) said this time, the sero survey was not just bigger in scale, but also better technology was used.

“We have used CLIA technology this time, which is more sensitive than the ELISA technology, as a result of which results come out more accurate. All the samples were tested at the ILBS

hospital to ensure uniformity. The survey was conducted in association with Maulana Azad Medical College. The samples were collected from people of all socio-economic strata and from across all kinds of population and age groups,” said Mundeja.

Delhi’s first serological survey was done in the city in June-July and it had shown that 23.4% of people surveyed had developed antibodies against the virus. Similar surveys in August showed that 29.1% of people had antibodies, 25.1% in September, and 25.5% in October. A positive result implies that the person has developed antibodies against the virus. This means that the person was infected at some point and developed immunity against it.

Jain said earlier, the Delhi government was conducting sero survey every month.

“But, now we are doing it after 1.5-2 months. The next survey will also be done after about 2 months,” he said.

T Jacob John, former head of clinical virology at Christian Medical College, Vellore said the latest sero survey result is a representation of the third wave of the Covid-19 pandemic which had hit the national Capital in mid-November when the peak daily cases had touched around 8,500.

“This sero survey does not include those who got infected in the first and second wave because the tests detect antibodies which lasts only for about 2-3 months. So, in general more than 56.13% people in Delhi have got infected and recovered. Also, loss of antibodies, which is not the last word on immunity, does not mean loss of protection,” he said.

John said herd immunity will be better achieved once vaccination is rolled out in a larger way.

“Senior citizens and those with co-morbidities, school staff and essential service providers should be vaccinated at the earliest so that Delhi can inch towards herd immunity,” he said.

### **Covid Antibodies (The Asian Age: 20210203)**

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=15385619>

# 56.13% Delhiites developed Covid antibodies: Jain

AGE CORRESPONDENT  
NEW DELHI, FEB. 2

Delhi health minister Satyendar Jain, on Tuesday, said that 56.13 per cent of those covered under the latest serological survey in the city in January have developed antibodies against coronavirus.

The minister also said that Delhi was "moving towards herd immunity, but only experts will be able to give a clear picture."

The fifth sero survey, the largest in the country so far, was conducted from January 15 to January 23, he said.

At 62.18 per cent, Southwest Delhi reported maximum seroprevalence. North Delhi at 49.09 per cent recorded the lowest,

## Hospitals relieved as govt reduces number of reserved Covid-19 beds

AGE CORRESPONDENT  
NEW DELHI, FEB. 2

A healthcare providers' association told the Delhi high court, on Tuesday, that various private hospitals, which were earlier asked to reserve 80 per cent ICU beds for Covid patients, were satisfied with the Delhi government's recent decision to reduce the number to 25%.

Justice Navin Chawla was informed by the counsel for the association of healthcare providers that he has instructions to withdraw the petition seeking

Mr Jain said.

"A new, better technology

quashing of the government's September 12, 2020, order to reserve 80% ICU beds for patients in 33 private hospitals, which are its members. The HC allowed the prayer for withdrawing the petition and disposed of the plea.

Advocate Sanyam Khetarpal, representing the petitioner association, said the hospitals were satisfied with the government's January 15 order by which the reservation of Covid-19 ICU beds in private hospitals here was reduced from 40 per cent to 25 per cent which have over 100 beds.

was used during the survey. Samples were collected

from every ward. In all, 28,000 samples were taken," a senior official said. The minister said that the number of cases, fatalities, and hospital admissions have declined significantly but insisted that people should continue to use masks for a few more months and maintain "Covid-19 appropriate behaviour."

Mr Jain said three major changes were incorporated during the latest survey. "We increased the sample size. Samples were collected on the basis of socio-economic conditions. A new, more sensitive kit was used and the testing was conducted at the Institute of Liver and Biliary Sciences," he said.

The minister also informed that frontline workers will start getting

Covid-19 vaccine jabs this week. Nearly six lakh frontline workers, including government school teachers, MCD employees, police personnel, and ASHA and ANM workers, are expected to be administered the vaccine.

A new, better technology was used during the survey. Samples were collected from every ward. In all, 28,000 samples were taken, director general health services (DGHS) Dr Nutan Mundeja said.

"We conducted this sero-survey along with Maulana Azad Medical College and used CLIA technology, which is a more sensitive technology than ELISA technology. The samples were tested at ILBS so that there is uniformity across the city," she said.

## Medical board on abortion

### Medical board on abortion 'unfeasible', says study (The Hindu: 20210203)

<https://www.thehindu.com/news/national/medical-board-on-abortion-unfeasible-says-study/article33711124.ece>

82% of obstetrics-gynaecology, paediatric and other specialist posts vacant

A panel of doctors to decide on termination of pregnancy beyond 24 weeks as proposed in the Medical Termination of Pregnancy (MTP) Amendment Bill,

## **Coronaviru**

### **Coronavirus | India fought COVID-19 pandemic much better than other nations: Harsh Vardhan (The Hindu: 20210203)**

<https://www.thehindu.com/sci-tech/health/india-fought-covid-19-pandemic-much-better-than-other-nations-varadhan/article33709814.ece>

India was the first country to respond within an hour when WHO declared COVID-19 a pandemic

India was able to fight the COVID-19 pandemic much better than other countries because of its 'whole of government' and 'whole of society' approach, Health Minister Harsh Vardhan has said.

## **Asthma**

### **In survey of those with uncontrolled asthma, half smoked cannabis (New Kerala: 20210203)**

<https://www.newkerala.com/news/2021/20365.htm>

A new survey showed that of those who used cannabis, about half smoked it while a third vaped, both inhalation routes are likely to affect one's lungs.

The findings of the survey were published in the journal 'Annals of Allergy, Asthma, and Immunology'.

"It surprised me that over half of the cannabis users in this study who have asthma were smoking it," said Joanna Zeiger, PhD, principal investigator for the study.

"And further, of those with uncontrolled asthma, half reported smoking cannabis. We also found that people with asthma are not routinely being asked or advised by their physician about cannabis and how they are consuming it," added Zeiger.

Eighty-eight (18 per cent) of the 489 adults with allergy/asthma who completed the survey reported current cannabis use. The majority of those responding were younger than 50 years, female, and White. Among non-cannabis users, 2.5 per cent reported an allergy to cannabis.

Two-thirds of current cannabis users did so for medical or medical/recreational purposes. The anonymous survey, conducted in collaboration with Allergy and Asthma Network, was of those 18 years and older and looked at cannabis knowledge, attitudes, and patterns of use.

"Strikingly, among current cannabis users, only about 40 per cent report having their physicians inquire about cannabis use, and about the same number of patients want to discuss cannabis with their physicians," said allergist William Silvers, MD, study co-author, ACAAI member and expert on cannabis allergy.

"In order to more completely manage their allergy/asthma patients, allergists should increase their knowledge about cannabis and inquire about cannabis use including types of cannabinoid, route of use, reasons for use, and adverse effects," said Dr Silvers.

"As with cigarette smoking, efforts should be made to reduce smoking of cannabis, and recommend other potentially safer routes such as edibles and sublingual tinctures," added Dr Silvers.

Positive effects of cannabis use (e.g., reduced pain, calm, improved sleep) were reported significantly more frequently than adverse effects (e.g., cough, increased appetite, anxiety). Of concern, about 20 per cent of survey respondents reported coughing from cannabis, which was significantly related to smoking cannabis.

Almost 60 per cent of the cannabis users in the survey reported current asthma, of whom 40 per cent were uncontrolled by the Asthma Control Test.

Dr Zeiger noted, "We look forward to future studies of larger, more diverse cohorts to better explore more deeply the effect of cannabis use on asthma and other allergic disorders."

## **Covid-19 vaccinations**

### **Covid-19 vaccinations for all Germans by summer end: Merkel (New Kerala: 20210203)**

<https://www.newkerala.com/news/2021/20281.htm>

German Chancellor Angela Merkel has reaffirmed that the government will make sure that every citizen is vaccinated against the novel coronavirus by the end of summer.

Merkel made the remarks on Monday after a video meeting with leaders of federal states on possible improvement for the rollout of the country's vaccination program, reports Xinhua news agency.

Given the current supply commitments, Merkel said, this target was possible even with the three vaccines already approved by the EU, from BioNTech/Pfizer, Moderna and AstraZeneca.

With further approvals, there could be even larger supply.

Before the meeting however, Health Minister Jens Spahn had told local media that a few more weeks of vaccine shortages could still be expected.

To date, the total number of vaccinations in Germany stands at 2,467,918.

As of Tuesday, Germany has reported a total of 2,232,327 coronavirus cases and 57,496 deaths.

## **Alzheimer's disease**

### **Writing tests could help predict Alzheimer's disease: Study (New Kerala: 20210203)**

An analysis of writing patterns may help spot early signs of Alzheimer's disease years before the onset of the symptoms, says a new study by IBM researchers.

In the study published in *The Lancet EclinicalMedicine*, the researchers found that older adults who were more repetitive in word usage, made spelling errors, and missed words like "the," "is" and "are" even when they were cognitively normal were more likely to develop Alzheimer's disease later.

The study involved a group of 80 men and women in their 80s, *The New York Times* reported on Monday.

They were participants in the Framingham Heart Study, a multi-generational study initiated in 1948 that has spurred thousands of health studies.

As part of it, they took a writing test. At that time, none of the 80 participants developed Alzheimer's disease.

The IBM researchers used an artificial intelligence (AI) programme that analysed subtle differences in language to examine the word usage by the participants.

The AI programme identified that one group of the participants was more frequent in repeating some words.

They also used a simple grammatical structure in their language and tended to miss words like "the," "is" and "are."

The members of that group went on to develop Alzheimer's disease later.

In predicting who would get Alzheimer's disease, the AI programme was found to be 75 per cent accurate, according to the study, said the NYT report.

"We had no prior assumption that word usage would show anything," Ajay Royyuru, Vice President of health care and life sciences research at IBM Thomas J. Watson Research Center in Yorktown Heights, New York, where the A.I. analysis was done, was quoted as saying.

## **Air pollution**

### **Lowering BP may reduce CVD risk in people exposed to air pollution (New Kerala: 20210203)**

<https://www.newkerala.com/news/2021/20168.htm>

Lowering BP may reduce CVD risk in people exposed to air pollution

Intensive lowering of blood pressure (BP) is effective in reducing cardiovascular risk in patients exposed to high levels of air pollution, a new study suggests.

The findings indicated that intensive BP lowering (defined as goal systolic blood pressure lower than 120 mmHg) led to significant reduction in cardiovascular events (combination of heart attacks, strokes, heart failure, or death from cardiovascular diseases) especially in patients exposed to higher pollution levels.

"Air pollution impacts socio-economically disadvantaged patients to a higher degree. Living within a particular neighbourhood should not mean you are more likely to suffer from cardiovascular diseases," said lead author Sadeer Al-Kindi, Assistant Professor at the Case Western Reserve University in the US.

Air pollution, particularly fine particulate matter, has been implicated in cardiovascular risks, partly through effects on BP.

Particulate matter smaller than 2.5 microns is concentrated particles that develop from human impact on the environment, such as automobile exhaust, power generation and other fossil fuels. According to researchers, it poses the greatest threat to global health.

Earlier studies have shown that exposure to particulate matter smaller than 2.5 microns is associated with acute and chronic increases in BP as well as hypertension.

For the study, published in the journal Hypertension, the team sought to determine if intensive BP lowering on cardiovascular events is modified by air pollution exposure.

They linked integrated satellite-derived air pollution exposures with residential addresses for 9,286 patients enrolled in the trial.

The authors concluded that ambient air pollution may influence the benefit of intensive lowering of BP.

Lowering of BP is particularly beneficial for patients who are exposed to high levels of fine particulate matter, the researchers said.

## **Parkinson's disease**

### **Prostate drug may lower Parkinson's disease risk in men (New Kerala: 20210203)**

<https://www.newkerala.com/news/2021/20158.htm>

aking a particular type of medication to treat an enlarged prostate is associated with a reduced risk of developing Parkinson's disease among men, a new study suggests.

The findings, published in the journal JAMA Neurology, provide compelling evidence that terazosin, and similar medications, might have the potential to prevent or delay the development of Parkinson's disease.

"Men taking terazosin were 12 per cent to 37 per cent less likely to develop Parkinson's disease during follow-up than men taking tamsulosin," said Jacob Simmering, Assistant Professor at the University of Iowa in the US.

The findings build on previous preclinical research by the team, which showed that terazosin enhances cellular energy levels and can prevent or slow the progression of Parkinson's disease in animal models.

In this earlier study, the team also used the Truven database to show that men with Parkinson's disease who were also taking terazosin and related drugs had reduced signs, symptoms, and complications of Parkinson's disease.

Tamsulosin is another drug commonly used to treat an enlarged prostate, but unlike terazosin, tamsulosin has no effect on cellular energy production, which the team's lab studies suggest is important in terazosin's protective effect.

The new study extends these findings to investigate whether terazosin and related drugs that can also enhance cellular energy production, are associated with a reduced risk of developing Parkinson's disease.

For the study, the team identified 150,000 men newly started on terazosin or similar medications and matched them, based on age and clinical history to 150,000 men newly started on tamsulosin.

Additionally, the study found that longer duration of use of the energy-enhancing prostate drugs was associated with increased protective effects.

## **Coronavirus Cases (Hindustan: 20210203)**

<https://epaper.livehindustan.com/epaperimages/03022021/03022021-NG1R-DEL-03/84306402.jpg>

# सुखद: कोरोना मरीज सिर्फ डेढ़ लाख रह गए

नई दिल्ली | हिन्दुस्तान ब्यूरो

भारत धीरे-धीरे कोरोना के खिलाफ जंग जीतता नजर आ रहा है। मंगलवार को सिर्फ 8,635 नए मामले दर्ज किए गए जो पिछले आठ महीने में सबसे कम हैं। महामारी से रोजाना जान गंवाने वालों की संख्या भी 100 से नीचे पहुंच गई है। अब करीब डेढ़ लाख कोरोना मरीज ही बचे हैं, जिनका इलाज किया जा रहा है।

## मृत्युदर डेढ़ फीसदी से नीचे:

स्वास्थ्य मंत्रालय ने बताया कि मंगलवार को 94 लोगों की मौत हुई। यह 12 मई के बाद एक दिन में मृतकों की सबसे कम संख्या है और लगातार इसमें कमी दर्ज की जा रही है। देश में अब तक कोरोना के 1.07 करोड़ मरीज मिले हैं पर इनमें से 97 फीसदी से ज्यादा लोग महामारी को मात दे चुके हैं। मृत्युदर भी गिरकर 1.43% तक पहुंच गया है। इससे पता चलता है कि खतरा कम हो रहा है।

## ज्यादातर मरीज में करा रहे इलाज:

कोविड 19 इंडिया के मुताबिक, देर रात तक सिर्फ 1.55 लाख मरीज ही बचे हैं जिनका इलाज किया जा रहा है।

## राहत के संकेत

- 16** राज्यों एवं केंद्रशासित प्रदेशों में मंगलवार को इस बीमारी से किसी की मौत नहीं हुई
- 04** महीने से नए मरीजों की संख्या में लगातार गिरावट देखने को मिल रही है
- 06** राज्यों में ही 80% नए मामले मिल रहे, यूपी-बिहार समेत ज्यादातर राज्यों में हाल बेहतर
- 41** लाख लोगों का देशभर में मंगलवार शाम तक टीकाकरण किया जा चुका था

अफसरों के मुताबिक, इनमें से भी महज कुछ हजार लोग ही अस्पतालों में भर्ती हैं और ज्यादातर मरीज अपने घरों में ही रहकर इलाज करा रहे हैं।

**केरल-महाराष्ट्र में चिंता:** देश में जितने भी नए मामले आ रहे हैं उनमें से आधे महाराष्ट्र और केरल में दर्ज किए जा रहे हैं। केंद्र ने वहां अपनी टीम भेजी है ताकि नियंत्रण में मदद की जा सके।

➤ दिल्ली में सीरो सर्वे पेज **05**

# प्रदूषण घटा पर स्तर मानक से ज्यादा

## रिपोर्ट

नई दिल्ली | विशेष संवाददाता

कोरोना महामारी से निपटने के लिए लगाए गए लॉकडाउन के दौरान दिल्ली में पिछले साल पीएम 2.5 के स्तर में 43 फीसदी की कमी दर्ज की गई है। इसके बावजूद एक रिपोर्ट के अनुसार, यह तय मानकों से ज्यादा पाया गया।

दि एनर्जी रिसोर्स इंस्टीट्यूट (टेरी) ने तीन स्थानों इंडिया हैबिटेड सेंटर, लक्ष्मीनगर और पटेल नगर में की गई निगरानी में पाया कि पीएम 2.5 का तय मानकों से ऊंचा स्तर बना हुआ था जो स्वास्थ्य के लिए घातक है। टेरी ने

## वायु गुणवत्ता प्रबंधन की तैयारी शुरू करनी होगी

अर्थ साइंस एंड क्लाइमेट चेंज डिवीजन के निदेशक डॉ. सुमित शर्मा ने कहा कि लॉकडाउन और गर्मियों में मौसम के हानिकारक प्रदूषकों के वायुमंडल में दूर-दूर तक फैले होने के बावजूद अधिकांश दिनों में प्रदूषण का स्तर निर्धारित मानक से कहीं अधिक था। केवल शहर स्तर की योजनाओं पर ध्यान केंद्रित करना पर्याप्त नहीं होगा बल्कि भारत में क्षेत्रीय स्तर की वायु गुणवत्ता प्रबंधन योजनाओं की तैयारी और कार्यान्वयन शुरू करना होगा।

ब्लूमबर्ग फिलॉन्श्रापीज के सहयोग से तैयार की गई रिपोर्ट में यह दावा किया है। रिपोर्ट मंगलवार को जारी की गई है। इसमें कहा गया है कि निगरानी किए गए स्थानों पर 31 से 60 दिनों में पीएम 2.5 ज्यादा पाया गया। रिपोर्ट में कहा गया है कि आर्थिक गतिविधियों के सीमित होने के बावजूद हवा का प्रवाह

धीमा रहने की वजह से लॉकडाउन के दौरान दिल्ली में कई दिनों तक प्रदूषण का स्तर सामान्य से ज्यादा रहा है।

टेरी के महानिदेशक डॉ. अजय माथुर ने कहा कि जब तक हम क्षेत्रीय स्रोतों को समान और अधिक तीव्रता से नहीं सुलझाएंगे तब तक वायु गुणवत्ता के मानकों को प्राप्त नहीं कर सकते।

# सुखद: कोरोना मरीज सिर्फ डेढ़ लाख रह गए

नई दिल्ली | हिन्दुस्तान ब्यूरो

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