



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Thursday 20201022

## COVID-19 vaccine

### Next up in hunt for COVID-19 vaccine: Testing shots in kids (The Tribune: 20201022)

<https://www.tribuneindia.com/news/health/next-up-in-hunt-for-covid-19-vaccine-testing-shots-in-kids-159126>

Next up in hunt for COVID-19 vaccine: Testing shots in kids

A woman holds a small bottle labeled with a 'Vaccine COVID-19' sticker and a medical syringe in this illustration taken April 10, 2020. Reuters file photo

The global hunt for a COVID-19 vaccine for kids is only just beginning---a lagging start that has some US paediatricians worried they may not know if any shots work for young children in time for the next school year.

Older adults may be most vulnerable to the coronavirus, but ending the pandemic will require vaccinating children, too.

Last week, Pfizer Inc. received permission to test its vaccine in US kids as young as 12, one of only a handful of attempts around the world to start exploring if any experimental shots being pushed for adults also can protect children.

“I just figured the more people they have to do tests on, the quicker they can put out a vaccine and people can be safe and healthy,” said 16-year-old Katelyn Evans, who became the first teen to get an injection in the Pfizer study at Cincinnati Children’s Hospital.

Multiple vaccine candidates are in final-stage studies in tens of thousands of adults, and scientists are hopeful that the next few months will bring evidence that at least some of them are safe and effective enough for widespread use.

But when the first shots arrive, they’re unlikely to be recommended for children. Vaccines can’t be given to youngsters unless they’ve been tested in their age group—a major hurdle in

efforts to reopen schools and resume more normal activities that are critical to families' well-being.

"The public doesn't understand that," said Dr. Evan Anderson of Emory University, who has been pushing for paediatric testing of COVID-19 vaccines. While he's encouraged by Pfizer's study in adolescents, he finds it "very concerning" that children younger than 12 may not have a vaccine by next fall.

Children represent about 10% of COVID-19 cases documented in the U.S. And while children are far less likely than adults to get seriously ill, about 120 have died in the US alone, according to a tally by the American Academy of Pediatrics. That's about how many US children die from flu in an average year. Additionally, a small number have developed a serious inflammatory condition linked to the coronavirus.

Overall, Anderson says COVID-19's impact on children is greater than some other diseases that require routine paediatric vaccinations.

Aside from their own health risks is the still unanswered question about how easily children can infect others. In a letter to federal health officials, the AAP cited recent evidence that those over age 10 may spread the virus just as easily as adults do.

Add missing school and other factors unique to children, and it's unethical "to allow children to take on great burdens during this pandemic but not have the opportunity to benefit from a vaccine," Dr. Sara Goza, president of the paediatrics academy, wrote.

Globally, paediatric studies are only hesitantly emerging. In China, Sinovac and SinoPharm have opened studies that can test children as young as 3.

A British study of a vaccine by AstraZeneca allows for testing of a low dose in certain children but the company says it won't be recruiting youngsters until it has "sufficient" safety data in adults.

In the US, Moderna Inc., Johnson & Johnson and Novavax all hope to begin some paediatric research later in the year, in varying age groups.

Doing so is critical, said Dr. Robert Frenck, who directs the Vaccine Research Center at Cincinnati Children's.

"If we immunise adolescents—and potentially move down into younger children—we're going to have the effect of keeping those children from getting infected. But then also they don't bring the infection home to parents and grandparents," he said.

Frenck is finding lots of interest in Pfizer's adolescent testing, with 90 families seeking more information in just a week after his team issued a call for 16- and 17-year-old volunteers. The researchers plan to enrol 12- to 15-year-olds soon.

Katelyn, the suburban Cincinnati volunteer, doesn't know if she got a dummy shot or the real vaccine. But the high school junior is excited to be part of the study. And with science class still fresh, she grasped the researchers' explanation of how Pfizer's vaccine works—using a piece of genetic code to train the body to recognize if the coronavirus comes along.

“I’ve learned about DNA and RNA and all that stuff in biology in freshman year. And I guess I didn’t really know, like, how it applied to the real world until now,” she said.

It makes sense to start paediatric testing in teenagers and gradually work down in age, Frenck said, because adolescents usually receive adult-sized doses of other vaccines—and so far with Pfizer’s shots, serious safety problems haven’t emerged in adult testing.

Assuming Pfizer’s shot is proven to work in adults, Frenck said the key will be if the vaccine revs up adolescents’ immune systems the same way—without different side effects. He said if all goes well, it’s possible scientists may have an answer about the 12-and-older group by spring.

But younger children need their own testing. Anderson, a paediatric infectious disease specialist at Children’s Healthcare of Atlanta, said those studies may be more complex because smaller tots may need different doses or, because of their typically more robust immune systems, show different reactions to the shots.

“It is quite important for us to begin the process because this will take some time to do the studies the right way,” he said. --- AP

## **COVID-19,**

### **Long Covid’ or long-term effects of COVID-19, affects all ages, warns UK drive (The Tribune: 20201022)**

<https://www.tribuneindia.com/news/health/long-covid-or-long-term-effects-of-covid-19-affects-all-ages-warns-uk-drive-159106>

Study suggests it affects around 10 pc of 18 to 49 year olds who become unwell with COVID-19

‘Long Covid’ or long-term effects of COVID-19, affects all ages, warns UK drive  
Medical workers help each other put on personal protective equipment before a mass coronavirus disease swab test in Petaling Jaya, Malaysia, on October 21, 2020. Reuters

The UK government on Wednesday launched a new campaign to highlight the far-reaching impact of “Long Covid”, or the long-term effects of COVID-19, and that it affects people of all ages.

The symptoms of “Long Covid” include fatigue, protracted loss of taste or smell, respiratory and cardiovascular symptoms and mental health problems. They are described in detail in a new film featuring people of different ages as part of the UK’s wider national “Hands, Face,

Space” campaign promoting hygiene and social distancing as ways of controlling the spread of coronavirus.

“I am acutely aware of the lasting and debilitating impact Long Covid can have on people of all ages, irrespective of the seriousness of the initial symptoms,” said UK Health Secretary Matt Hancock.

“The more people take risks by meeting up in large groups or not social distancing, the more the wider population will suffer, and the more cases of long Covid we will see. The powerful new film we’re releasing today sheds light on the long-term impact this devastating virus has and should act as a stark reminder to us all,” he said.

It comes as a new study from King’s College London, using data from the Covid Symptom Study App and health science company ZOE, shows one in 20 people with Covid-19 are likely to have symptoms for eight weeks or more. The study suggests Long Covid affects around 10 per cent of 18 to 49 year olds who become unwell with COVID-19.

“The Covid Symptom Study App has released key findings on Long Covid that show that older people, women and those with a greater number of different symptoms in the first week of their illness were more likely to develop Long Covid,” said Dr Claire Steves, clinical academic at KCL and lead scientist at Covid Symptom Study App.

“Around one in seven had Covid-19 symptoms lasting for at least four weeks, with around one in 20 staying ill for eight weeks and one in 50 suffering for longer than 12 weeks,” she said.

According to the latest analysis, most people recover from Covid-19 without needing special treatment and for the majority symptoms will clear after approximately two weeks.

But some of the persistent health problems reported for weeks and months after include continuing headaches, fatigue, respiratory symptoms such as lung inflammation, cardiovascular symptoms such as chest tightness, protracted loss or change of smell and taste and mental health problems, such as cognitive difficulties.

“The evidence is worrying – Covid-19 is clearly having a long-term impact on some people’s physical and mental health. We are moving quickly to stand up rehabilitation facilities and recovery services,” said Health Minister Lord James Bethell.

The National Health Service (NHS) recently announced 10 million pounds to run designated Long Covid clinics in every area across England where respiratory consultants, physiotherapists, other specialists and GPs will all help assess, diagnose and treat thousands of people who have reported symptoms ranging from breathlessness, chronic fatigue, “brain fog” to anxiety and stress.

The emotive new film released this week features stories four people aged between 22 and 48, who explain how their lives have been affected – weeks and months after being diagnosed with Covid-19.

They discuss symptoms such as breathlessness when walking up the stairs, intermittent fevers and chest pain. The film aims to raise awareness of the long-term impact of Covid-19 as the world learns more about the deadly virus.

“As we continue to learn more about Covid-19, it is clear that a significant minority of patients are suffering the after effects for weeks or months after contracting the virus,” said Professor Stephen Powis, NHS Medical Director.

Public Health England have found that around 10 per cent of Covid-19 cases who were not admitted to hospital have reported symptoms lasting more than four weeks and a number of hospitalised cases reported continuing symptoms for eight or more weeks after discharge. — PTI

## **Arthritis drug**

### **Arthritis drug improves survival in critically ill COVID-19 patients: Study (The Tribune: 20201022)**

<https://www.tribuneindia.com/news/health/us-trial-of-astrazeneca-covid-19-vaccine-may-resume-this-week-sources-159016>

Of the 3,924 patients included in the analysis, 433 received tocilizumab in the first two days of ICU admission

Arthritis drug improves survival in critically ill COVID-19 patients: Study  
Photo for representation only. Source: Thinkstock.

Anti-inflammatory drug tocilizumab has been shown to reduce mortality by 30 per cent among critically ill COVID-19 patients when administered within the first two days of hospitalisation, according to a study led by an Indian-origin researcher in the US.

Unlike steroids, which suppress the immune system more broadly, tocilizumab specifically inhibits the receptor for the pro-inflammatory cytokine, IL-6.

The researchers led by Shruti Gupta and David E. Leaf from Harvard-affiliated Brigham and Women's Hospital investigated the effects of the tocilizumab on critically ill patients with laboratory-confirmed COVID-19.

They found that when tocilizumab was administered within the first two days of intensive care unit (ICU) admission, there was a 30 per cent relative decrease in mortality compared to patients whose treatment did not include early use of tocilizumab.

"Tocilizumab has been used for several years to treat a condition known as cytokine release syndrome, which can be observed in cancer patients receiving certain types of immunotherapy," said Leaf, the senior author of the study published in the journal JAMA Internal Medicine.

"In the setting of COVID-19, it has been observed that much of the morbidity and mortality that occurs may be due to our own body's inflammatory response to the virus as opposed to the virus itself," Leaf said.

Tocilizumab is currently approved to treat rheumatoid arthritis and giant cell arteritis, an inflammatory condition affecting large blood vessels.

The study utilised data accumulated from over 4,000 critically ill patients with COVID-19 admitted to ICUs at 68 sites across the US.

Of the 3,924 patients included in the analysis, 433 received tocilizumab in the first two days of ICU admission.

The risk of death at 30-days was 27.5 and 37.1 per cent among tocilizumab-treated and non-tocilizumab-treated patients, respectively, the researchers said.

The beneficial effect of tocilizumab on survival was consistent across categories of age, sex, and illness severity, and was also observed in patients who either did or did not receive corticosteroids, they said.

Patients with a more rapid disease trajectory, defined as three days or fewer from symptom onset to ICU admission, benefited from tocilizumab to a greater extent than patients with a slower disease trajectory, according to the researchers.

"Though there are conflicting data from clinical trials regarding the efficacy of tocilizumab in COVID-19, our study differs from these trials in several important ways," said Gupta, lead author of the study.

"We specifically focused on critically ill patients. We focused on early use of tocilizumab (defined as the first 2 days of ICU admission), and we included a much larger number of patients (4,000 compared to approximately 400)," Gupta added. PTI

## **AstraZeneca COVID-19 vaccine**

### **US trial of AstraZeneca COVID-19 vaccine may resume this week: Sources (The Tribune: 20201022)**

Vaccines are seen as essential to helping end the pandemic that has battered economies around the world and claimed more than 1 million lives

US trial of AstraZeneca COVID-19 vaccine may resume this week: Sources  
Photo for representational purpose only. Reuters file

AstraZeneca Plc's COVID-19 vaccine trial in the United States is expected to resume as early as this week after the US Food and Drug Administration completed its review of a serious illness in a study participant, four sources told Reuters.

AstraZeneca's large, late-stage US trial has been on hold since September 6, after a participant in the company's UK trial fell ill with what was suspected to be a rare spinal inflammatory disorder called transverse myelitis.

The sources, who were briefed on the matter but asked to remain anonymous, said they have been told the trial could resume later this week. It was unclear how the FDA would characterize the illness, they said.

An FDA spokeswoman declined to comment.

The agency is requiring researchers conducting the trial to add information about the incident to consent forms signed by study participants, according to one of the sources.

UK regulatory officials previously reviewed the illness and determined there was "insufficient evidence to say for certain" that it was or was not related to the vaccine. It permitted the trial to resume in the UK, according to a draft of the updated consent form shared with Reuters.

"In this case, after considering the information, the independent reviewers and MHRA (Medicines and Healthcare products Regulatory Agency) recommended that vaccinations should continue," the draft consent form stated. "Close monitoring of the affected individual and other participants will be continued."

Regulators in Brazil, India and South Africa also previously allowed AstraZeneca to resume its vaccine trials there.

AstraZeneca, which is developing the vaccine with Oxford University researchers, had been seen as a frontrunner in the race to produce a vaccine for COVID-19 until its trials were put on hold to investigate the illness. Early data from large-scale trials in the United States of vaccines from Pfizer Inc and Moderna Inc are expected some time next month.

Johnson & Johnson last week paused its Phase III COVID-19 vaccine trial to investigate an unexplained illness in a study participant. At the time of the announcement, the company did not know whether the volunteer had been given its vaccine or a placebo.

A J&J spokesman on Tuesday said the study remains on pause as the company continues its review of medical information before deciding to restart the trial. J&J noted last week that its "study pause" was voluntary. By contrast, AstraZeneca's trial is on "regulatory hold," which is imposed by health authorities.

Vaccines are seen as essential to helping end the pandemic that has battered economies around the world and claimed more than 1 million lives -- over 220,000 of them in the United States.

Responding to a request about the AstraZeneca trial, British regulators shared with Reuters a draft of a form letter to UK vaccine trial participants, dated Oct. 14 and signed by the Oxford COVID-19 Vaccine Team. It says the US FDA had "completed their analysis" and said vaccination under the study in the United States would resume shortly.

FDA “has come to the same conclusion as the other drug regulators including the MHRA,” the letter states.

The Health Research Authority, which helps oversee UK medical research, said in an email to Reuters that it vetted the communication to make sure it was suitable to ensure informed consent among study volunteers. It could not confirm that the letter had been issued.

An AstraZeneca spokeswoman said the communication is not from the company and it “cannot verify the content,” referring to the draft letter to study participants.

“We also cannot comment on a pending FDA decision,” she said. The Oxford study team did not respond to requests for comment.

In another of the documents directed at trial participants, the Oxford vaccine study team noted that there was not enough evidence to link the neurological problem seen in the UK trial to the vaccine.

Dr. Paul Offit, director of the Vaccine Education Center at Children’s Hospital of Philadelphia, who reviewed the document, said it can be difficult to link a rare side effect specifically to a vaccine to the exclusion of other potential causes.

Transverse myelitis, which the study volunteer is believed to have developed, typically occurs at a rate of 1-in-200,000 people, Offit said, so it would be unusual to see it in a trial of 9,000 individuals.

Other viruses including those that cause West Nile and polio can trigger the condition, as can physical trauma.

The regulators have to weigh whether a rare side effect is vaccine-related and could occur again against the sickness and deaths linked with COVID-19, Offit said. “That’s always the line that you walk.” Reuters

## **Covid-19: What you need to know today (Hindustan: 20201022)**

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

As some of the regular readers of this column know, my reading has expanded since March to include dense academic papers published in serious journals that make me wish I had paid more attention to science and math during my college years. Late Tuesday/early Wednesday, two papers that dropped on the journal Science’s website piqued my interest. One was titled “Neuropilin-1 is a host factor for SARS-CoV-2 infection” and another “Neuropilin-1 facilitates SARS-CoV-2 cell entry and infectivity”. The two papers are already beginning to make waves in epidemiological circles, and have also been reported by some specialised websites. There is a reason for this: 10 months into the pandemic’s run, there are still many unanswered questions about Covid-19 and the coronavirus that causes it. This isn’t surprising. What is surprising is

the pace of scientific research that has helped us answer many other questions about Covid-19 and Sars-CoV-2. Among the important unanswered (or partially unanswered, because we do know some part of the answer) questions are those about the virus's infectivity, and its ability to do more damage than typical respiratory infections do (which it does by targeting other body organs). And the two papers in Science provide answers to these, which would make them among the most important pieces of research on the coronavirus to be published in recent months.

The second paper, published by researchers from Munich's Technical University, University of Helsinki, and other institutions, finds that neuropilin-1 (NRP1) boosts the infectivity of Sars-CoV-2. Neuropilin 1 is a protein widely present in human cells. Previous studies have shown that the Sars-CoV-2 virus has a furin cleavage site. The S-protein of the virus has a site which can be cleaved by furin (a common human protein; it is an enzyme). Think of furin, then, as a can opener of sorts. The component of the viral protein thus cleaved interacts with ACE2, a cell surface receptor. ACE stands for angiotensin-converting enzyme. And it is this receptor that provides a channel for the viral protein to enter the cell. Clearly, furin is needed for cleavage (or breaking the spike protein), and ACE 2 for facilitating entry into the cell. And the paper found that infection of the virus increased in the presence of NRP1.

The first paper, by researchers from the University of Bristol and others, showed that while furin cleaves the S protein into "two associated" proteins, S1 and S2, one of these proteins (S1) binds well with neuropilin 1, facilitating the entry of the virus into cells, and boosting infectivity. Two independent studies then have arrived at the same conclusion. And because NRP1 is found in cells in several parts of the human body, it isn't surprising that Sars-CoV-2 is able to target several body organs and systems.

Interestingly, the second study found (on the basis of pathological analysis) that olfactory nerve cells in the nasal cavity that were infected by Sars-CoV-2 had NRP1 – something that could explain why the loss of a sense of smell is seen in some Covid-19 patients – and that a "SARS-CoV-2 mutant with an altered furin cleavage site did not depend on NRP1 for infectivity", a finding that shows a strong relationship between the presence of neuropilin 1 and the infectivity of the virus that causes Covid.

As the first paper puts it: "NRP1 thus serves as a host factor for Sars-CoV-2 infection and may provide a therapeutic target for COVID-19."

This could simply involve something that blocks NRP1. For instance, the second study found that an antibody that blocked neuropilin reduced Sars-CoV-2 infection by around 40%. Even as we pin hopes on a vaccine for Covid-19, research such as that detailed above points to possible therapeutical interventions that could save lives.

## Public health

### **A crucial season: On festivals in the time of COVID-19 (The Hindu: 20201022)**

<https://www.thehindu.com/opinion/editorial/a-crucial-season-the-hindu-editorial-on-festivals-in-the-time-of-covid-19/article32911700.ece>

Public health messaging must convince people that festivals can be celebrated safely

Coronavirus pandemic in India

A tool for thought: On coronavirus pandemic in India (The Hindu: 20201022)

<https://www.thehindu.com/opinion/editorial/a-tool-for-thought-on-coronavirus-pandemic-in-india/article32895575.ece>

Pandemic forecasts must be used to induce changes and avoid worst-case scenarios

A committee of experts — well-regarded mathematicians and infectious disease experts — appointed by the Department of Science and Technology to use mathematical modelling and forecast the course of the pandemic has brought good tidings. By their estimate, India passed its COVID-19 peak in September and the decline in the overall caseload being observed for nearly a month now is to continue. Active cases, about 7.5 lakh now, are expected to drop below 50,000 by December, and by February, the pandemic is likely to extinguish itself with only ‘minimal’ (not zero) infections. While it is reasonable to assume that the seven-member committee has been scrupulous, the caveat is that this is still a forecast based on mathematical modelling. There are some strong assumptions. The decline will continue only if there are no major mutations during winter, protective antibodies are durable, and current restrictions are maintained. There would be no significant gains from a strict lockdown beyond the district level, and current containment measures would suffice, except if there are local outbreaks that threaten to overwhelm health-care facilities there. Their calculation also showed a peak by July latest, with anything from six to 15 times the existing infections had there been no lockdown or if it had been delayed to April.

The purpose of pandemic modelling is to generate a probabilistic overview of the future and mathematical modelling has become a popular, creative exercise, with several models and forecasts being made available on pre-print servers and pending peer-review. The latest model is expected to be published in the Indian Journal of Medical Research this week, but it appears to be a quotidian exercise. The datasets it has relied on are publicly available and the modelling employs a category of models called SEIR that estimates, within a population, those Susceptible, Exposed, Infected and Recovered. It is extremely dependent on the quality of data

that is used as an input and relies as much on simplifying assumptions that sacrifice complexity for comprehension but there is nothing to suggest, from what is known about the exercise, that it is more likely to be true than similar estimates from scores of models the world over that subscribe to a certain degree of rigour. Experts associated with the pandemic have reiterated many times that mathematical modelling ought not to be taken literally. The latest assessment too should then be used not to critique or justify past decisions but dwell more on the future. For instance, if the model suggests that the pandemic would extinguish by February with a dramatic dip by December, then should the accelerated clinical trials of potential vaccines be top priority? Mathematical models, to be useful, must induce policy or behavioural change to avoid their own worst-case scenarios and this latest assessment must be seen — no more, no less — as a tool to this end.

## Palasma Therapy (The Asian Age: 20201022)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=15179777>

# Over 2,000 patients benefited from plasma therapy, says Jain

**New Delhi, Oct. 21:** Delhi health minister Satyendar Jain on Wednesday asserted that over 2,000 Covid-19 patients here have benefited from plasma therapy, a day after a top ICMR official indicated that the Centre was considering removing it from the clinical management protocol.

At a press conference, Jain also said these patients received convalescent plasma through the dedicated plasma banks of the city government, besides other people getting it directly from donors.

The first plasma bank was opened on July 2 by Chief Minister Arvind Kejriwal at the state-run Institute of Liver and Biliary Science (ILBS) in south Delhi. After that



Satyendar Jain

another bank was opened at L N J P Hospital, a dedicated coronavirus facility.

“We have been doing it (plasma therapy) trials after getting due permission. The ICMR-AIIMS study has not shown much breakthrough. But people are getting benefited from it here, and over 2,000 have benefitted by receiving plasma from the dedicated bank only,” Jain said, when asked about the Centre considering removing it from Covid-19 clinical management protocol.

The Delhi health minister, himself a Covid-19 survivor, asserted that

“this has helped save my life too”.

“Even America has acknowledged its benefit. And, research going on it world over. Delhi in a way is a pioneer in it and plasma therapy benefits have been seen. You should go and ask family members of those patients who were administered the plasma therapy,” he said.

The Centre is considering to remove convalescent plasma therapy from the national clinical management protocol for Covid-19, a top ICMR official had said on Tuesday.

Presently, the use of off-label convalescent plasma for treating Covid-19 patients in the moderate stage of the illness is allowed under “investigational therapies”. — PTI

## COVID- + VE (The Asian Age: 20201022)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=15179771>

# Covid +ve woman escapes from AIIMS, husband files report to mislead police

**New Delhi, Oct. 21:** In a bizarre turn of events, a 20-year-old woman who tested positive for coronavirus at AIIMS here allegedly escaped from the hospital, even as her husband filed a missing person complaint despite knowing her whereabouts, police said on Wednesday.

According to police, the woman went to the All India Institute of Medical Sciences (AIIMS) on October 18 as she was unwell. She got herself tested for the infectious disease and was found positive.

The hospital staff asked her to get admitted at the dedicated Covid centre, but she escaped from there, they said.

Meanwhile, the woman's husband filed a police complaint alleging that his wife has gone missing, police said.

During the course of investigation, it was found that the woman, after leaving the hospital, managed

to reach her rented house in Zamrudpur village in south Delhi. Fearing that she would be caught, she left for her maternal house, a senior police official said.

"Her relatives, however, said that she had not reached her maternal house," he said.

The police said the woman's husband was aware that she was Covid-19 positive and had escaped from AIIMS. He filed the missing person complaint to mislead the police.

A case has been registered under IPC section 188 (Disobedience to order duly promulgated by public servant) and 269 (Negligent act likely to spread infection of disease dangerous to life) at the Greater Kailash Police Station.

The matter is being investigated and teams have been formed to trace the couple," said the police. — PTI

## Toxic Air (The Asian Age: 20201022)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=15179776>

# Toxic air in India killed 1.16L infants in '19: Study

**New Delhi, Oct. 21:** Air pollution contributed to the death of 16.7 lakh people in India in 2019, with over a lakh of them less than a month old, a new global study by a US-based NGO has revealed. According to the State of Global Air, 2020, a report on global exposure to air pollution, released by Health Effects Institute (HEI) on Wednesday, air pollution is the biggest health risk in India.

"Outdoor and household particulate matter pollution contributed to the death of more than 1.16,000 Indian infants in their first month of life in 2019. More than half of these deaths were associated with outdoor PM2.5 and others were linked to the use of solid fuels such as char-

coal, wood, and animal dung for cooking.

"Long-term exposure to outdoor and household air pollution contributed to over 1.67 million annual deaths from stroke, heart attack, diabetes, lung cancer, chronic lung diseases, and neonatal diseases, in India in 2019," the report said. The report also said there is clear evidence linking air pollution and increased heart and lung disease, creating a growing concern that exposures to high levels of air pollution could exacerbate the effects of Covid-19.

Dan Greenbaum, the president of HEI, said an infant's health is critical to the future of every society and this newest evidence suggests an especially high risk for infants born in

**ALTHOUGH THERE has been a slow and steady reduction in household reliance on poor-quality fuels, air pollution from these fuels continues to be a key factor in the deaths of these youngest infants, said Dan Greenbaum, president of Health Effects Institute**

south Asia and sub-Saharan Africa.

"Although there has been a slow and steady reduction in household reliance on poor-quality fuels, air pollution from these fuels continues to be a key factor in the deaths of these youngest infants," he said.

Infants in the first month of life are already at a vul-

nerable stage. But a growing body of scientific evidence from multiple countries, including recent ICMR-supported studies in India, indicates that particulate air pollution exposure during pregnancy is linked to low birth weight and pre-term birth, the report said.

The new analysis reported in the State of Global Air this year estimates that nearly 21 per cent of neonatal deaths from all causes are attributable to ambient and household air pollution. "Addressing impacts of air pollution on adverse pregnancy outcomes and newborn health is really important for low- and middle-income countries, not only because of the high prevalence of low birth weight, preterm birth, and

child growth deficits but because it allows the design of strategic interventions that can be directed at these vulnerable groups," said Kalpana Balakrishnan, an expert in air pollution and health. The report said overall, air pollution is now the largest risk factor for death.

According to it, South Asian countries, including India, Bangladesh, Pakistan and Nepal, featured among the top 10 nations with the highest PM2.5 exposures in 2019.

"All of these countries experienced increases in outdoor PM2.5 levels between 2010 and 2019," the report stated, adding that since 2010, more than 50 million fewer people have been exposed to household air pollution. — PTI

## Maharashtra active case

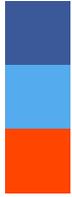
**1 India coronavirus numbers explained, Oct 22: Major drop in**

## Maharashtra active case (The Indian Express:20201022)

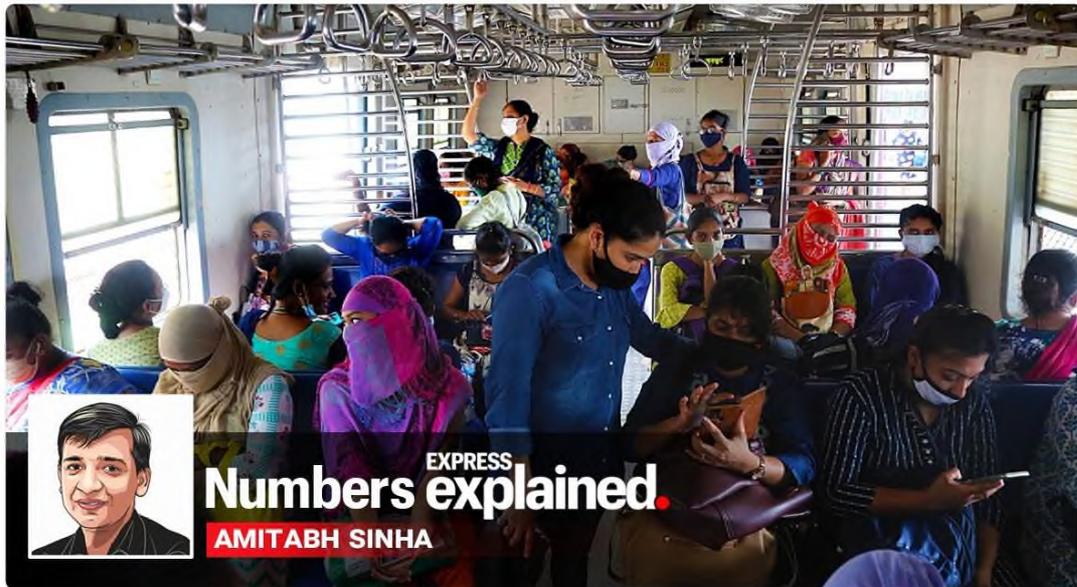
<https://indianexpress.com/article/explained/india-covid-numbers-explained-october-22->

[maharashtra-active-coronavirus-cases-6833213/](https://indianexpress.com/article/explained/india-covid-numbers-explained-october-22-maharashtra-active-coronavirus-cases-6833213/)

2 India coronavirus cases: In the last one week, active cases have declined in every major state except Delhi and West Bengal. Even Kerala, the fastest growing state right now, has seen a small drop in the active cases in the last week.



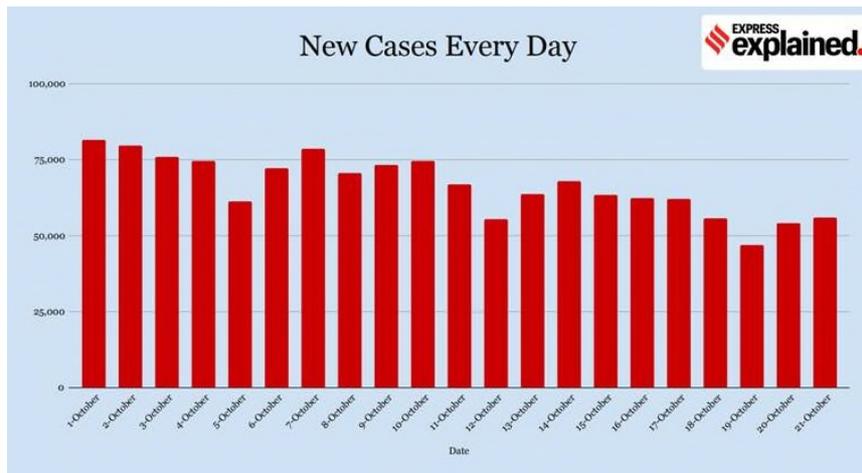
Written by **Amitabh Sinha** , Edited by Explained Desk | Gaya | October 22, 2020 11:19:26 am



**X** Women commuters travel in a Mumbai local train on the Harbour line on October 21, 2020. The Indian Railways has now allowed women, apart from essential workers, to board trains amid the Covid-19 pandemic. (Express Photo: Amit Chakravarty)

The number of active cases of **coronavirus** infection in the country are now more than three lakh lower than **the peak that was achieved** in the middle of October. There have been only five days since September 17 when detection of new infections has exceeded the number of people recovering from the disease.

Wednesday saw one of the biggest declines in active cases. About 56,000 new cases were detected while almost 80,000 patients were declared to have recovered. The total number of active cases has dropped to 7.15 lakh now. At its peak, it had crossed 10.17 lakh.



Daily increase in India's

Covid-19 cases.

Almost half of this reduction **has come from Maharashtra**, where the active cases have declined from over three lakh to less than 1.6 lakh now. In relative terms, the biggest drop has happened in Andhra Pradesh which has seen its active cases go down by almost 70 per cent in the last one and a half months. The state had more than one lakh active cases in the first week of September, which has steadily come down to just about 32,000 now.

For the last one week, Andhra Pradesh has been contributing less than 4,000 cases every day, a big improvement from the days it was regularly reporting over 10,000 new infections daily.

In the last one week, active cases have declined in every major state except Delhi and West Bengal. Even Kerala, the fastest growing state right now, has seen a small drop in the active cases in the last week. Bihar, which has slowed down considerably in the last one and a half months, has also seen a slight rise in the active cases during this time. 📣 **Click to follow**

***Express Explained on Telegram***

Except for the usual drop on Monday, Delhi has been continuing on an upward trend for more than a week now. This is now the third phase of rise happening in Delhi. In the second phase, it had touched a high of almost 4,500 new cases a day, before declining to almost 2,000 a day. For the last eight days, its daily detections have once again been over 3,000, and rising. On Wednesday, almost 3,700 new cases were found in Delhi, the maximum since September 25.

# TOP TEN STATES WITH MAXIMUM CASELOAD



STATE	TOTAL POSITIVE	NEW CASES	TOTAL RECOVERIES	DEATHS
Maharashtra	1,617,658	8,142	1,415,679	43,127
Andhra Pradesh	793,299	3,746	754,415	6,508
Karnataka	782,773	5,872	671,618	10,715
Tamil Nadu	697,116	3,086	650,856	10,780
Uttar Pradesh	461,475	2,321	425,356	6,755
Kerala	361,841	8,369	267,082	1,266
Delhi	340,436	3,686	310,191	6,128
West Bengal	333,126	4,069	291,303	6,244
Odisha*	274,181	1,931	254,913	1,234
Telangana	227,580	1,456	206,105	1,292

Data as on October 21, 2020; Odisha data from October 20, 2020

India coronavirus cases: Top 10 states with maximum caseload.

West Bengal has been adding between 3,000 and 4,000 cases, consistently for the last 45 days. Its numbers have not fluctuated even on Mondays, because the test numbers in Wednesday do not drop significantly on Sundays. In the last two days, however, the state has reported more than 4,000 cases for the first time. The state has about 36,000 active cases right now. It has also been consistently reporting between 50 and 60 coronavirus-related deaths since the start of September.

On Wednesday, Kerala was the largest contributor of new infections in the country. This is the third time in the last two weeks that Kerala has emerged as the single largest contributor of cases, reporting more cases than even Maharashtra or Karnataka. The state reported over 8,300 new infections on Wednesday, slightly more than Maharashtra which has seen a very rapid decline in its daily detections of cases in the last couple of weeks.

Coronavirus Explained

- [Quick Covid-19 test from IIT Kharagpur: How it works, why it matters](#)
- [How does Goa's beach shack tourist economy work?](#)
- [In genetic code of coronavirus, a number of 'silent' mutations](#)

[CLICK HERE FOR MORE](#)

Kerala has over 93,000 active cases right now, more than any other state barring Maharashtra and Karnataka. The state is also showing the most rapid growth in infection numbers anywhere

in the country. Its current growth rate of 2.37 per cent per day is more than three times the national rate.

The total number of people who have so far been infected with the virus crossed 77 lakh on Wednesday. The United States which has been witnessing a fresh resurgence in cases has so far recorded over 81 lakh infections. The US is currently contributing more cases every day than India.

## **Flavanol diet**

### **Study reveals high flavanol diet may lead to lower blood pressure (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185541.htm>

People who consume a diet including flavanol-rich foods and drinks, including tea, apples and berries, could lead to lower blood pressure, according to the first study using objective measures of thousands of UK residents' diet.

The findings, published in Scientific Reports, studied the diet of more than 25,000 people in Norfolk, UK and compared what they ate with their blood pressure. In contrast to most other studies investigating links between nutrition and health, the researchers did not rely on study participants reporting their diet but instead measured flavanol intake objectively using nutritional biomarkers - indicators of dietary intake, metabolism or nutritional status that are present in our blood.

The difference in blood pressure between those with the lowest 10% of flavanol intake and those with the highest 10% of intake was between 2 and 4 mmHg. This is comparable to meaningful changes in blood pressure observed in those following a Mediterranean diet or Dietary Approaches to Stop Hypertension (DASH) diet. Notably, the effect was more pronounced in participants with hypertension.

Professor Gunter Kuhnle, a nutritionist at the University of Reading who led the study said

"Previous studies of large populations have always relied on self-reported data to draw conclusions, but this is the first epidemiological study of this scale to objectively investigate the association between a specific bioactive compound and health. We are delighted to see that in our study, there was also a meaningful and significant association between flavanol consumption and lower blood pressure.

"What this study gives us is an objective finding of the association between flavanols - found in tea and some fruits - and blood pressure. This research confirms the results from previous

dietary intervention studies and shows that the same results can be achieved with a habitual diet rich in flavanols. In the British diet, the main sources are tea, cocoa, apples and berries.

"The methodology of the study is of equal importance. This is one of the largest ever studies to use nutritional biomarkers to investigate bioactive compounds. Using nutritional biomarkers to estimate intake of bioactive food compounds has long been seen as the gold standard for research, as it allows the intake to be measured objectively. The development, validation and application of the biomarker were only possible because of the long-term commitment of all collaborators. In contrast to self-reported dietary data, nutritional biomarkers can address the huge variability in food composition. We can therefore confidently attribute the associations we observed to flavanol intake."

An international team from the University of Reading, Cambridge University, the University of California Davis, and Mars, Incorporated studied 25,618 participants from the European Prospective Investigation into Cancer (EPIC) Norfolk study and found that the biggest difference was observed in participants with the highest blood pressure. This suggests if the general public increased its flavanol intake, there could be an overall reduction in cardiovascular disease incidence.

Hagen Schroeter, Chief Science Officer at Mars Edge, said

"This study adds key insights into a growing body of evidence supporting the benefits of dietary flavanols in health and nutrition. But, perhaps even more exciting was the opportunity to apply objective biomarkers of flavanol intake at a large scale. This enabled the team to avoid the significant limitations that come with past approaches which rely on estimating intake based on self-reported food consumption data and the shortcomings of current food composition databases."

## **Right nutrition**

### **Right nutrition increases physical, cognitive performance: Study (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185470.htm>

Right nutrition not only fuels our bodies and improves fitness, but gives us an edge mentally too as researchers have found that the right nutrition is directly linked to physical fitness and cognitive performance in men and women.

The double-blind study, published in the journal *Scientific Reports*, examined the effectiveness of optimal nutrition and exercise to enhance fitness and cognitive performance among a population of active-duty men and women in the US Air Force.

"The physical and mental health benefits of exercise are well known, but this study demonstrates how optimal nutrition can help boost brain function as well," said lead study author Chris Zwilling at the University of Illinois, Urbana-Champaign in the US.

For the findings, researchers divided the 148 study participants into two groups for 12 weeks.

Both groups performed the same training program, which included a balanced exercise program comprised of aerobic and resistance training performed five days per week.

In addition to the training program, one group was given a prototype nutritional drink, the other group received a placebo.

The study showed that exercise, along with the addition of a high-protein nutrition drink containing lutein, omega-3 fatty acids, phospholipids, vitamin D, and beta-hydroxy-beta-methyl butyrate (HMB), led to statistically significant changes to the following compared to exercise alone.

The study found that right nutrition improved working memory by 11 per cent (i.e., information processing and problem-solving), which predicts multitasking and is often impaired under stress.

It improved reaction time by six per cent - participants became faster and more accurate and increased muscle mass by more than two pounds.

"We are excited by the results because they provide critical insights into how simple dietary changes can make a big difference in helping people be as efficient and productive as possible in today's world," Zwilling said.

These results confirm that by combining the right nutrition and exercise, people who are facing high-pressure situations can stay sharp physically and mentally when they need it most.

"It is clear that nutrition is a critical component for developing and maintaining the physical and cognitive performance of the men and women," the authors wrote.

This research confirms that a nutritional supplement with the right nutrients can support and facilitate those improvements when paired with balanced exercise training.

"We hope to use this knowledge now and, in the future, to better prepare them for the complex and diverse mission sets they are facing," the researchers noted.

## **Effective ventilation**

**Effective ventilation key factor to stop Covid-19 spread: Study (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185285.htm>

London, Oct 21 : New research adds to the growing body of evidence that effective or proper indoor ventilation may be a key factor in preventing the spread of Covid-19 virus.

The study, published in the journal Environment International, found that SARS-CoV-2 is rather moderately infectious and a person would need to remain in a poorly ventilated room for a considerable amount of time to receive an infectious dose of SARS-CoV-2.

"Multiple studies provided quickly strong scientific evidence for successful indoor airborne transmission of Covid-19 in inadequately ventilated environments," said study author Jarek Kurnitski from Estonian Research Council in Estonia.

"The virus is transmitted via saliva droplets with a size from 0.5 micrometres up to a few thousand micrometres produced by a person by talking, sneezing, coughing, or even just breathing," Kurnitski added.

According to the researchers, the point is that small and large droplets act completely differently. Tiny droplets below 5 micrometres do not settle on surfaces, they remain airborne and follow airflow streamlines for tens of metres.

Large droplets above 100 micrometres in diameter fall down like rocks - they do not travel farther than 1.5 metres even by coughing.

The air exhaled by humans contains mainly droplets with a diameter in the range of 1-10 micrometres.

Until this spring, it was held in the medical literature and guidelines that droplets larger than 5 micrometres fall down at the distance of up to two metres (which is why it was concluded that 2-metre social distancing would ensure complete safety).

By now, however, scientists have found out that this was a misconception or even a long-persisting erroneous medical dogma.

Aerosol physics shows convincingly that in reality only droplets larger than 50 micrometres fall down at a distance of two metres, while smaller ones remain suspended in the air and travel farther.

Thus, acknowledging this tenfold error fundamentally changed the understanding of the spread of virus particles and it was realised that the largest number of exhaled droplets travel far and the virus can remain infectious in aerosol particles for up to three hours.

By breaking this medical dogma, researchers also gave an important signal regarding the measures applied to prevent the spread of Covid-19 that led to the paralysis.

"Measures can and must be applied taking into account the known transmission routes, which is why it is important to know that the disease is transmitted by aerosols, i.e. tiny droplets suspended in the air," the authors wrote.

This means that people can get the virus in two ways in close contact, where the concentration of aerosols and larger droplets in close proximity of the infected person is very high.

"Or farther away in inadequately ventilated rooms, where the concentration of aerosols remains so high that a person can get an infectious dose for example within an hour spent in the same room with an infected person," Kurnitski noted.

## **Cholesterol medications**

### **Cholesterol medications linked to lower cancer-related deaths in women, finds study (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185251.htm>

Among women with breast cancer, colorectal cancer, or melanoma, those who were taking cholesterol-lowering medications, were less likely to die from cancer, according to an analysis published in the British Journal of Clinical Pharmacology.

The analysis included 20-046-11-719 and 6,430 women in Australia who were diagnosed with breast cancer, colorectal cancer, and melanoma, respectively, from 2003 to 2013. The women had been prescribed cholesterol-lowering medications such as statins before their diagnosis.

The more consistently women took these medications in the year after being diagnosed with cancer, the lower their likelihood of dying from the disease, suggesting that the drugs may have anti-tumour effects.

"If this inverse adherence-response relationship is confirmed, cholesterol-lowering medications -- primarily statins -- could be repurposed as adjuvant therapy to improve cancer prognosis," said co-author Jia-Li Feng, BMed, MMed, PhD, of QIMR Berghofer Medical Research Institute.

## **Dementia risk**

### **Study reveals community noise may affect dementia risk (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185249.htm>

Results from new study support emerging evidence suggesting that noise may influence individuals' risk of developing dementia later in life.

The study was published in the journal Alzheimer's and Dementia.

Researchers studied 5,227 participants of the Chicago Health and Aging Project who were aged 65 years or older, of whom 30% had mild cognitive impairment and 11% had Alzheimer's disease. They found that persons living with 10 decibels more noise near their residences during the daytime had a 36% higher odds of having a mild cognitive impairment and a 30% higher odds of having Alzheimer's disease.

"These findings suggest that within typical urban communities in the United States, higher levels of noise may impact the brains of older adults and make it harder for them to function without assistance. This is an important finding since millions of Americans are currently impacted by high levels of noise in their communities," said senior author Sara D. Adar, ScD, of the University of Michigan School of Public Health, Ann Arbor. Professor Adar added that "although noise has not received a great deal of attention in the United States to date, there is a public health opportunity here as there are interventions that can reduce exposures both at the individual and population level."

## **Infertility**

### **Coronavirus can cause male infertility: Study (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185235.htm>

Covid-19 can cause male infertility by harming the testicular cells which produces sperms thereby making it difficult to make the female pregnant, says a new study done by the scientists of Israel.

The study, published in the journal of Fertility and Sterility, claims that the studied men had a reduction of around 50 percent on average of the number of sperm per milliliter, total volume of ejaculate, and motility of sperm.

Nobody knows yet how severe this problem is and these effects are reversible or not. Infection is accepted as a possible underlying cause of male infertility. For example mumps may have a long term effect on fertility of male patients and can cause azoospermia, so we know viruses can have such an impact.

Dr Shobha Gupta, Medical Director and IVF Specialist from Mother's Lap IVF Centre says "I wouldn't be surprised if this virus causes a temporary down in sperm production. People who get corona virus are probably quite unwell, they are having low immunity even influenza will cause a decline in sperm count temporarily. The question is how long it will last and whether it is recoverable."

"Every time there is a new thing coming up with this virus, we are still learning and if the person has low immunity and is prone to catch the infection in any way the sperm count is affected and can cause male infertility" she added.

Dr Shweta Goswami, Sr. Consultant IVF from Jaypee Hospital Noida and IVF Consultant from Zeeva Clinic explains "Any viral infection but just Covid-19 can lead to high grade fever and decrease in sperm count and motility at least temporarily. It's too early to suggest anything for Covid-19 as semen changes can take up to 3-4 months post infection and numbers are too low at present but it could potentially cause harm and any sort of illness fever can reduce sperm count and motility and this may hold for corona virus as well."

Mask-wearing can help to protect their fertility during the pandemic, even if one ultimately becomes infected.

"Men who have moderate or serious Covid-19 infections could find their fertility impaired for an unknown amount of time. Because mild cases don't seem to affect fertility, I would advise men to wear facemasks. This way, even if they get sick, their immune systems will be dealing with a smaller viral load and consequently they'll have a milder form of the disease and there has to be more studies to confirm how severe this problem is, once the patient recovers semen parameters may improve" said Dr. Anubha Singh, another city based Gynecologist and IVF Specialist from Shantah Fertility Centre.

"If people are protected by a mask, and the smaller the load of catching the infection, the better the immune system's chances of beating the virus while still in the mild stage and having minimal impact on sperm" added Dr. Anubha Singh.

Choose a healthy life and take precautions, as this virus is very new and nobody knows how to recover from it or how not to catch the infection. So we have to be our on guard till the vaccine comes. Follow these advices as precautions to protect fertility

Wear Masks and do proper sanitizing

Avoid being overweight

Do not smoke and refrain yourself as much as you can from consuming alcohol

Do not wear tight underwear as it can affect the circulation of blood in the genital region and raise the temperature of the testicles which further decreases the sperm count

Avoid keeping mobile phones near genital area as it causes radiation also do not place laptops on your lap as it can raise the scrotum temperature

Eat nutritious food and exercise regularly to maintain healthy immunity

## **Infectious**

### **Mild, asymptomatic COVID-19 patients may not be infectious for more than 10 days: Study (New Kerala: 20201022)**

<https://www.newkerala.com/news/2020/185220.htm>

Recent studies have suggested that people with mild or no symptoms of coronavirus may be infectious for not more than about 10 days.

The review published in the journal Infection Control and Hospital Epidemiology.

A review of dozens of studies by researchers at Oregon Health and Science University and Oregon State University suggests that people may shed virus for prolonged periods. People who are severely ill from COVID-19 may be infectious for as long as 20 days.

This is in line with the guidance provided by the US Centers for Disease Control and Prevention, confirming recommendations for the length of time people should isolate following infection with SARS-CoV-2.

"Detection of viral RNA may not correlate with infectivity since available viral culture data suggests shorter durations of shedding of viable virus," as per the authors. "Additional data is needed to determine the duration of shedding of viable virus and the implications for risk of transmission."

Researchers decided to conduct the review to gain more information on transmission and to help inform infection control practices, said co-author Monica Sikka, MD, assistant professor of medicine (infectious diseases) in the OHSU School of Medicine.

"Even though people can shed virus for a prolonged period of time, the studies we reviewed indicated that live virus, which may predict infectiousness, was only detected up to nine days in people who had mild symptoms," Sikka said.

The researchers identified 77 studies worldwide, including 59 that had been peer-reviewed, and combed through the results. All studies reported assessments of viral shedding using standard methods to identify the virus by replicating it through a process called a polymerase chain reaction, or PCR.

"Although PCR positivity can be prolonged, culture data suggest that virus viability is typically shorter in duration," the authors added.

## Delhi Air Pollution

### Delhi Air Pollution LIVE: दिल्ली-NCR में आज भी प्रदूषण, हवा की गुणवत्ता 'बेहद खराब' श्रेणी में (Navbharat Times: 20201022)

<https://navbharattimes.indiatimes.com/metro/delhi/other-news/delhi-air-pollution-air-quality-index-in-ncr-remains-in-very-poor-category-live-updates/articleshow/78801094.cms>

Delhi Air Pollution: देश की राजधानी दिल्ली में वायु प्रदूषण अभी भी बरकरार है। दिल्ली-एनसीआर के अलग-अलग इलाकों में एयर क्वालिटी इंडेक्स 300 के पार बना हुआ है जो 'बेहद खराब' श्रेणी में आता है।

#### Air-Quality

अक्षरधाम इलाके में आज सुबह की तस्वीर नई दिल्ली

सर्दियों की सुगबुगाहट के साथ ही दिल्ली-एनसीआर में प्रदूषण में भी तेजी देखने को मिल रही है। गुरुग्राम और नोएडा समेत आज दिल्ली-एनसीआर में हवा की गुणवत्ता 'बेहद खराब' श्रेणी में है। आज भी सुबह दिल्ली के आसमान में चारों तरफ धुंध छाया रहा। क्या आप एक जिम्मेदार निवेशक हैं?

NCR में एयर क्वालिटी इंडेक्स 300 के पार

दिल्ली-एनसीआर में प्रदूषण का स्तर आज भी ज्यादा है। दिल्ली में एयर क्वालिटी इंडेक्स 326, गुरुग्राम में 305 और नोएडा में 311 है। तीनों जगहों पर हवा की गुणवत्ता 'बेहद खराब' श्रेणी में है।

सुबह दिल्ली के आसमान में छाया रहा धुंध

हवा की क्वालिटी खराब होने के वजह से दिल्ली के आसमान में सुबह धुंध छाया रहा। इस दौरान आईटीओ में एयर क्वालिटी इंडेक्स 254 और पटपड़गंज में 246 देखा गया। ये तस्वीरें दिल्ली के अक्षरधाम इलाके की हैं।

लोगों को सांस लेने में हो रही है दिक्कत

दिल्ली में हवा की क्वालिटी खराब होने से आम लोगों को सांस लेने में दिक्कतों का सामना करना पड़ रहा है। सुबह-सुबह राजपथ पर साइकलिंग करने आए शुभम भदौरिया का कहना है कि हवा खराब होने से साइकलिंग के दौरान सांस लेने में परेशानी महसूस होती है।

## Corona cases in India

**Corona cases in India: देश में लगातार घट रहे ऐक्टिव कोविड केस, अब सिर्फ 7.15 लाख, पिछले 24 घंटे में 702 मौतें(Navbharat Times: 20201022)**

<https://navbharattimes.indiatimes.com/india/active-covid-cases-are-decreasing-in-the-country-now-only-7-15-lakh-702-deaths-in-last-24-hours/articleshow/78801649.cms>

देश में पिछले 24 घंटों में कोविड- 19 के 55,838 नए मामले आने के बाद देश में पॉजिटिव मामलों की संख्या 77,06,946 हुई। 702 नई मौतों के बाद कुल मौतें 1,16,616 हुईं। बीते 24 घंटों में 24,278 की कमी के साथ सक्रिय मामले 7,15,812 हुए। 79,415 डिस्चार्ज के बाद ठीक हुए मामले 68,74,518 हुए।

### Corona-Test

सांकेतिक तस्वीर।

क्या आप एक जिम्मेदार निवेशक हैं?

नई दिल्ली

भारत में कोरोना वायरस लगातार कमजोर पड़ता जा रहा है। यही वजह है कि पिछले तीन दिनों से ऐक्टिव कोविड केस की संख्या सात लाख से आसपास ही है। बुधवार को 24 घंटों में ऐक्टिव मरीजों की संख्या में 24,278 की गिरावट दर्ज की गई और अब यह 7,15,812 पर आ चुका है। केंद्रीय स्वास्थ्य मंत्रालय ने गुरुवार को पिछले 24 घंटों के कोविड-19 महामारी का आंकड़ा जारी किया। इसमें बताया गया है कि देश में पिछले 24 घंटों में कोविड- 19 के 55,838 नए मामले आने के बाद देश में पॉजिटिव मामलों की संख्या 77,06,946 हुई। 702 नई मौतों के बाद कुल मौतें 1,16,616 हुईं।

वहीं, भारतीय चिकित्सा अनुसंधान परिषद (ICMR)ने बताया कि कल 21 अक्टूबर तक कोरोना वायरस के लिए कुल 9,86,70,363 सैंपल टेस्ट किए गए, जिनमें से 14,69,984 सैंपल कल टेस्ट किए गए।

अमेरिका के बाद सबसे ज्यादा टेस्ट भारत में

इस हफ्ते भारत में 10 करोड़ टेस्ट पूरे किए जा सकते हैं। बुधवार तक ही देश में 9.72 करोड़ टेस्ट किए जा चुके हैं। इससे ज्यादा 12.7 करोड़ टेस्ट अब तक सिर्फ अमेरिका में किए गए हैं। दिल्ली में हर दिन 10 लाख लोगों पर 2 लाख टेस्ट, आंध्र में 1.37, तमिलनाडु में 1.2 लाख, केरल में 1.14 लाख, कर्नाटक में एक लाख, बिहार में 78,563, महाराष्ट्र में 67,500, यूपी में 59,764, राजस्थान में 45,611 और पश्चिम बंगाल में 42,088 टेस्ट किए जा रहे हैं।

कोरोना वायरस पर जीत की ओर आंध्र प्रदेश, रिकवरी रेट 95%

कोविड से पता चला- सार्वजनिक स्वास्थ्य में निवेश कितना जरूरी: WHO

उधर, विश्व स्वास्थ्य संगठन (WHO) की मुख्य वैज्ञानिक सौम्या स्वामीनाथन ने कहा है कि कोविड-19 महामारी ने सार्वजनिक स्वास्थ्य और प्राथमिक स्वास्थ्य सेवाओं में निवेश के महत्व को रेखांकित किया है। स्वामीनाथन ने कहा कि हमारे पास अगले साल की शुरुआत में कोरोना वायरस के कम से कम दो टीके उपलब्ध हो सकते हैं। जिनेवा से 15वें जेआरडी टाटा स्मृति व्याख्यान को संबोधित करते हुए संगठन की प्रमुख वैज्ञानिक ने शिक्षा, महिलाओं के खिलाफ हिंसा आदि पर कोविड-19 के प्रभाव का जिक्र किया। उन्होंने कहा, 'मैंने बीते नौ-10 महीनों में जाना है कि सार्वजनिक स्वास्थ्य और प्राथमिक स्वास्थ्य सेवाओं में निवेश बहुत अहम है।'