



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Tuesday 20201117

29,000 fresh cases, national coronavirus

At 29,000 fresh cases, national coronavirus surge lowest in 4 months

This is the 10th consecutive day when less than 50,000 cases have been reported in a day (The Tribune: 20201117)

<https://www.tribuneindia.com/news/nation/at-29-000-fresh-cases-national-coronavirus-surge-lowest-in-4-months-171585>

At 29,000 fresh cases, national coronavirus surge lowest in 4 months

People shop at a market in front of the Jama Masjid in the old quarters of Delhi. REUTERS

With 29,163 new coronavirus infections reported on Tuesday, India recorded its lowest daily surge since July 14, when 28,498 cases were added, before it spiralled out of control in August-September.

The number of new coronavirus infections reported in a day dropped below 30,000 after four months, taking India's COVID-19 caseload to 88.74 lakh while the number of people who have recuperated from the disease surged to 82,90,370 according to the Union Health Ministry data updated on Tuesday.

The total coronavirus cases mounted to 88,74,290 while the death toll climbed to 1,30,519 with 449 new fatalities, the data updated at 8 am showed.

The number of active cases remained below five lakh for the seventh consecutive day.

There were 4,53,401 active cases of coronavirus infection in the country as on date which comprises 5.11 per cent of the total caseload, the data stated.

The total recoveries have surged to 82,90,370 pushing the national recovery rate to 93.42 per cent, while the COVID-19 case fatality rate stands at 1.47 per cent.

India's COVID-19

India's COVID-19

India's COVID-19 tally had crossed the 20-lakh mark on August 7, 30 lakh on August 23 and 40 lakh on September 5. It went past 50 lakh on September 16, 60 lakh on September 28, 70 lakh on October 11 and crossed 80 lakh on October 29. (The Tribune: 20201117)

<https://www.tribuneindia.com/news/health/moderna-says-its-vaccine-is-94-5-effective-in-preventing-covid-19-171150>

According to the ICMR, a cumulative total of 12,65,42,907 samples have been tested up to November 16 with 8,44,382 samples being tested on Monday.

The 449 new fatalities include 99 from Delhi, 60 from Maharashtra, 53 from West Bengal, 26 from Chhattisgarh, 22 from Punjab and 21 from Uttar Pradesh.

A total of 1,30,519 deaths have been reported so far in the country including 46,034 from Maharashtra followed by 11,541 from Karnataka, 11,495 from Tamil Nadu, 7,714 from West Bengal, 7,713 from Delhi, 7,393 from Uttar Pradesh, 6,881 from Andhra Pradesh, 4,480 from Punjab and 3,808 from Gujarat.

The Health Ministry stressed that more than 70 per cent of the deaths occurred due to comorbidities.

“Our figures are being reconciled with the Indian Council of Medical Research,” the Ministry said on its website, adding that state-wise distribution of figures was subject to further verification and reconciliation. PTI

Moderna says its vaccine is 94.5% effective in preventing COVID-19
Second US vaccine with more than 90% efficacy; 60 million doses of vaccine can be available by the year-end

Moderna says its vaccine is 94.5% effective in preventing COVID-19
Vials with a sticker reading, "COVID-19/Coronavirus vaccine/Injection only" and a medical syringe are seen in front of a displayed Moderna logo. Reuters File

Moderna Inc said on Monday its experimental vaccine was 94.5 per cent effective in preventing COVID-19 based on interim data from a late-stage clinical trial, becoming the second US company in a week to report results that far exceed expectations.

Together with Pfizer Inc's vaccine, also shown to be more than 90 per cent effective, and pending more safety data and regulatory review, the United States could have two vaccines authorised for emergency use in December with as many as 60 million doses of vaccine available by the year's end.

Next year, the US Government could have access to more than 1 billion doses just from the two vaccine makers, more than needed for the country's 330 million residents.

The vaccines, both built using new technology known as messenger RNA or mRNA, represent powerful new tools to fight a pandemic that has infected 54 million people worldwide and killed 1.3 million. The news also comes at time when COVID-19 cases are soaring, hitting new records in the United States and pushing some European countries back into lockdowns.

"We are going to have a vaccine that can stop COVID-19," Moderna president Stephen Hoge said in a telephone interview.

Moderna's interim analysis was based on 95 infections among trial participants who received either a placebo or the vaccine.

Of those, only five infections occurred in those who received the vaccine, which is administered in two shots 28 days apart.

A key advantage of Moderna's vaccine is that it does not need ultra-cold storage like Pfizer's, making it easier to distribute. Moderna expects it to be stable at standard refrigerator temperatures of 2 to 8 degrees Celsius (36 to 48°F) for 30 days and it can be stored for up to six months at -20 degrees Celsius.

Pfizer's vaccine must be shipped and stored at minus 70 degrees Celsius, the sort of temperature typical of an Antarctic winter. At standard refrigerator temperatures, it can be stored for up to five days.

The data from Moderna's 30,000 participant-strong trial also showed the vaccine prevented cases of severe COVID-19, a question that still remains with the Pfizer vaccine. Of the 95 cases in Moderna's trial, 11 were severe and all 11 occurred among volunteers who got the placebo.

Moderna, part of the US Government's Operation Warp Speed programme, expects to produce around 20 million doses of the vaccine for the United States this year, millions of which the company has already made, and is ready to ship if it receives FDA authorisation.

"Assuming we get an emergency use authorisation, we'll be ready to ship through Warp Speed almost in hours," said Hoge.

"So it could start being distributed instantly."

Data Details

The 95 cases of COVID-19 included several key groups who are at increased risk for severe disease, including 15 cases in adults aged 65 and older and 20 in participants from racially diverse groups.

Most side effects were mild to moderate. A significant proportion of volunteers, however, experienced more severe aches and pains after taking the second dose, including about 10 per cent who had fatigue severe enough to interfere with daily activities while another 9 per cent had severe body aches. Most of these complaints were generally short-lived, said the company.

Moderna's data provides further validation of the promising but previously unproven mRNA platform, which turns the human body into a vaccine factory by coaxing cells to make certain virus proteins that the immune system sees as a threat and mounts a response against.

Moderna expects to have enough safety data required for US authorisation in the next week or so and the company expects to file for emergency use authorisation in the coming weeks.

The United States has the world's highest known number of COVID-19 cases and deaths with more than 11 million infections and nearly 250,000 deaths.

The Trump Administration has primarily relied on development of vaccines and treatments as its response to the pandemic.

Moderna has received nearly \$1 billion in research and development funding from the US Government and has a \$1.5 billion deal for 100 million doses. The US Government also has an option for another 400 million doses.

The company hopes to have between 500 million and 1 billion doses in 2021, split between its US and international manufacturing sites and dependent in part on demand.

The US government has said COVID-19 vaccines would be provided free to Americans, whether they have health insurance, are uninsured or are covered by government health programmes such as Medicare.

Moderna also said it would use its data to seek authorisation in Europe and other regions.

Other countries such as China and Russia have already begun vaccinations. Russia licensed its “Sputnik-V” COVID-19 vaccine for domestic use in August before it released data from large-scale trials. It said on November 11 that its vaccine was 92 per cent effective based on 20 infections in its large trial. Reuters

Injectable Covaxin a challenge

Vaccinating 130 crore people with injectable Covaxin a challenge: Bharat Biotech (The Tribune: 20201117)

<https://www.tribuneindia.com/news/health/vaccinating-130-crore-people-with-injectable-covaxin-a-challenge-bharat-biotech-171135>

Vaccinating 130 crore people with injectable Covaxin a challenge: Bharat Biotech
For representation only. Reuters file photo

Even as India's first indigenous coronavirus vaccine Covaxin is entering its third phase of human trials, Bharat Biotech on Monday raised the logistical query on "how to vaccinate 1.3 billion (130 crore) people with two injectable doses. Terming the exercise a "challenge" it also said that work was on single-dose nasal drop vaccine.

Bharat Biotech International Limited (BBIL) Chairman and Managing Director Krishna Ella said the company's Bio-Safety Level 3 (BSL-3) facility currently has limited capacity but hoped to reach one billion (100 crore) doses by next year.

"We have partnered with ICMR (Indian Council of Medical Research) for Covaxin and as we speak, we are entering phase III trials but I am not happy because it is a two-dose injectable vaccine. If we have to vaccinate 1.3 billion population with two dose vaccine, we need 2.6 billion (260 crore) syringes and needles," he said.

Ella was addressing Deccan Dialogue organised by the Indian School of Business (ISB) and supported by the Ministry of External Affairs (MEA) on 'Crisis and cooperation: Imperative in the times of pandemic'.

"We are working on another vaccine, a single dose nasal drop. We have experience of making Rotavirus and Polio nasal drop vaccines. We can scale up to 1 billion doses and my feeling is that by next year we will reach there," he said.

The Hyderabad-headquartered vaccine maker announced in September that it is collaborating with the Washington University School of Medicine in St Louis, Missouri to manufacture a billion doses of a single-dose intranasal vaccine.

"The challenge is to vaccinate 1.3 billion population. Six billion (600 crore) people in the developing world have to be vaccinated but the opportunity is if 20 per cent of them are vaccinated, I have done my job as a scientist. You partly need vaccine because there will be herd immunity," he added.

Ella also pointed out that 40,000 unknown viruses are existing. "10,000 viruses can hop from animal to animal and to human. What we are seeing today is only a sample. Because of its impact on economy it got more attention. We are yet to see lot many things." Indian Institute of Technology (IIT), Hyderabad's Prof M. Vidyasagar, who is also the chairman of the 'COVID-19 Indian National Supermodel Committee', however, said for this pandemic 30 to 40 per cent people needed to be vaccinated to achieve herd immunity.

"The challenge is whether the cold weather especially in north India exacerbate this pandemic and whether we can predict this by observing the course of the pandemic," he said.

He noted that India had more success in controlling the pandemic unlike other countries like the US, the UK and France who have death rate per million 7 to 8 times higher than that of India.

"These countries have gone back to second lockdown because they see so-called second wave. This raises the question could proper modeling have helped these countries to foresee that there will be second wave, whether it could have helped the countries to assess effectiveness of the first lockdown, would the second lockdown be more effective this time when it was apparently not successful the last time," said Prof Vidyasagar.

Arti Ahuja, Additional Secretary, Ministry of Health and Family Welfare, said India should be proud of what it has done to deal with the pandemic.

She said from just one public health institute conducting COVID-19 test, the country now has 2,000 laboratories. According to her, it was not just the government but the participation of all stakeholders, including the private sector which helped the country deal with the pandemic.

Rahul Chabra, Secretary, Economic Relations, Ministry of External Affairs, said the pandemic brought out new aspects of non-military threats to the security. Health security came up as major issue and multilateral cooperation now has to be part of strategic foreign policy engagement with all countries.

Vikram K. Doraiswamy, India's High Commissioner to Bangladesh, Prof Sarang Deo, Executive Director, Max Institute of Healthcare Management, ISB also addressed the session, which was moderated by Govindraj Ethiraj, Founder, IndiaSpend and BOOM.

COVID-19: Easier to spread indoors than outdoors

COVID-19: Easier to spread indoors than outdoors; winter perfect set-up for contagion: Dr Murthy

The US is worst-affected country with over 11 million cases and 2,46,000 deaths(The Tribune: 20201117)

<https://www.tribuneindia.com/news/health/covid-19-easier-to-spread-indoors-than-outdoors-winter-perfect-set-up-for-contagion-dr-murthy-171123>

COVID-19: Easier to spread indoors than outdoors; winter perfect set-up for contagion: Dr Murthy

It is easier for coronavirus to spread indoors than outdoors as people stay inside their homes during winter which is a perfect set-up for the contagion, according to Dr Vivek Murthy, the top Indian-American advisor to President-elect Joe Biden on COVID-19.

The 43-year-old former US surgeon general, who co-chairs the COVID-19 advisory board of Biden, told Fox News on Sunday that people are tired from the pandemic fatigue.

“What’s happening now in particular is that with winter, as people move indoors, this is actually the perfect set up for the virus because we know it’s easier to spread indoors than outdoors,” Murthy said.

There is one last component, which is really important, is the pandemic fatigue, he said.

“We’ve been at this pandemic now for many months and I get that. A part of that fatigue means that people are letting others into their bubble, they’re getting together for in-person dinner parties, game nights and public health departments are now tracing more and more cases back to these kinds of gatherings,” Murthy, who advises Biden on COVID-19, said.

All this put together has resulted in the recent explosion in COVID-19 cases in the US, he said.

The US is the worst-affected country with over 11 million cases and 2,46,000 deaths.

Murthy, who was asked to resign as the US surgeon general during the early part of the Trump administration, is speculated to get a prominent position in the next Biden-Harris administration.

He said that one of the most immediate things to do is to reduce the spread.

“It actually lies in our behaviour and the choices we make. It turns out that wearing masks, keeping our distance from others, washing our hands, these seem almost too simple, but very powerful in actually reducing the spread,” Murthy said.

Biden has talked about expanding the testing capacity and also increasing contact tracing so that the infection could be contained, he said.

“He wants to increase the production of personnel protective equipment so that all our healthcare workers have masks and gloves. And he wants to really put clear guidance together, evidence-based guidance so that schools and businesses, but also state organisations, huge sports leagues and families know how to operate safely,” he said.

None of this is going to be possible if public trust is not gained, Murthy said.

“The way you do that is by communicating honestly, by leading with science and scientists in the face of this pandemic and ultimately by delivering results,” Murthy observed.

Responding to a question, he said that that national lockdown is a last resort. The country has learnt a lot more about now than it was in the spring early this year.

“If we just lock down the entire country without targeting our efforts, then we are going to exacerbate the pandemic fatigue people are feeling, you’re going to hurt jobs and the economy, you’re going to shut down schools and hurt the education of our children. So, we go to approach this with a precision of a scalpel rather than the blunt force of an axe,” he said.

Delivering the vaccine, Murthy said, is the most challenging part of this pandemic response.

“We vaccinated Americans for many years in our country, but the campaign we’re going to have to build to vaccinate enough people, to create herd immunity in America will be the most ambitious vaccination campaign I believe in our country’s history. And being that requires people to trust that the vaccine is safe and that it’s effective.

“Unfortunately, we know from the recent polls that a significant number of people are worried that the process of developing the vaccine, approving it may have been politicised. So, now, the onus is on us to be as transparent as possible and helping them understand what the scientists say, having experts review the data, making that data readily, so that even people outside the government can review it,” Murthy said.

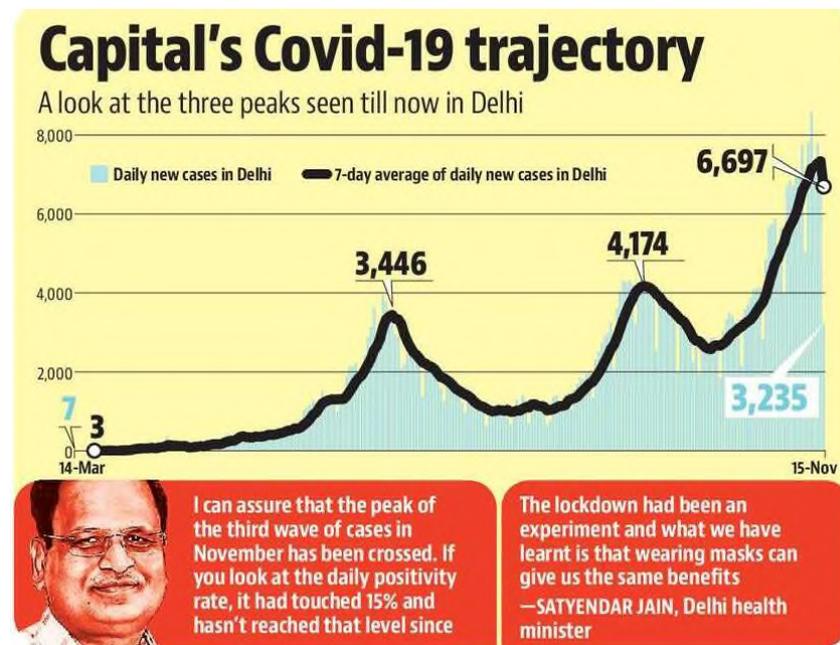
“That’s what we’re going to have to do, and ultimately, the way we allocate this vaccine has to be determined based on needs... We can’t afford to let politics creep in to decisions we make around the vaccine, because otherwise, we’re going to put lives at stake,” he added.

According to Johns Hopkins coronavirus tracker, the coronavirus has so far infected more than 54 million people and killed over 1.3 million others globally. PTI

Covid-19 Trajectory

DELHI COVID CASES 3rd peak over, no new lockdown: Delhi govt (Hindustan Times: 20201117)

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

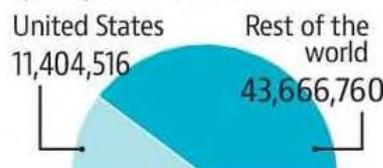


Tracking the virus

WORLD

55,071,276 CASES

1,327,990 DEATHS



INDIA

8,874,049 CASES

130,574 DEATHS

WORST-HIT STATES



DELHI

CASES 489,202 (+3,797)

DEATHS 7,713 (+99)

CASES LAST 5 DAYS



India data compiled by covid19india.org and cross-checked from inputs by HT's correspondents and news agencies

There will be no new lockdown in the national capital and the peak of the third wave of infections appears to have been crossed, Delhi's health minister Satyendar Jain said on Monday, a day after the Union government announced reinforcement of infrastructure and human resources to tackle what has been described as possibly the worst outbreak of Covid-19 anywhere in the country yet.

In the last week, Delhi has recorded an average of 7,341 cases every day, compared to 4,174 during its second wave of infections in September and 3,446 during the first wave in June. This number was a mere 2,885 a month ago, before the situation rapidly deteriorated as festive seasons crowds gathered across the Capital.

"I can assure that the peak of the third wave of cases in November has been crossed. If you look at the daily positivity rate, it had touched 15% and hasn't reached that level since. It takes about a week for the numbers to go down from the peak," said Jain, stating that the peak positivity rate during the surge in June had reached up to 37% and in September to about 14%.

But experts said Jain's contention may be premature, since there are likely to have been fewer tests due to festivities over the weekend. The government's health bulletin on Sunday – which carried numbers reported on Diwali, the day before – added around 3,200 cases from roughly 21,000 tests. The number of tests was close to a third of what they are on a usual week day. On Monday, there were 3,797 new cases reported from the 29,821 tests that were done on Sunday. The death toll rose by 99 to reach 7,713 on Monday.

The surge triggered speculation of new restrictions, but the minister denied any plans for it. "The lockdown had been an experiment and what we have learnt that wearing masks can give us the same benefits," said Jain, citing the examples of hospitals where he said infections are low since doctors take precautions. "If everyone follows precautions the spread of the infection can be prevented. And, when it comes to lockdown, some people still go out and they can bring the infection back to their family members."

On Sunday, Union home minister Amit Shah held a meeting with top ministers and officials from the Centre and the Delhi government, including chief minister Arvind Kejriwal and the two health ministers. The government announced a series of measures, including adding hundreds of intensive care unit (ICU) beds, doubling the rate of testing and the deployment of central paramilitary doctors.

During the meeting, Niti Aayog's VK Paul opened with a presentation describing Delhi's situation as "unprecedented" and "likely to become worse". The official highlighted a particularly worrying trend: on November 11, a day when it reported 8,593 new cases, Delhi recorded 361 cases per million of population, a level not seen before in India, not even in Maharashtra during its worst days.

On Monday, the Union home ministry followed up on these measures by announcing a list of "multidisciplinary teams" that will visit all private hospitals and submit within two days a report of whether they are following protocols on Covid-19 treatment and access to services as per rules.

Earlier in the day, Union home secretary Ajay Kumar Bhalla met Union health secretary Rajesh Bhushan and Delhi's chief secretary Vijay Kumar Dev to fine-tune other decisions taken on Sunday, according to people familiar with the matter.

Among these were ways to strengthen the containment strategy of Delhi as well as using resources of various departments such as the municipal corporations of Delhi, central armed police forces, Indian Council of Medical Research and Defence Research and Development

Organisation, one of these officials said, asking not to be named. “Central paramilitary forces will provide 75 doctors and around 250 paramedics to Delhi from their different centres across the country,” this person said. “These doctors and paramedics will be flown into Delhi in the next week .”

Individual departments involved in the ramping up of the response – from the Delhi as well as the central administrations – too held separate meetings, this person added. The ministry of home affairs will monitor the progress on a daily basis while the Delhi government and these departments — which includes MCDs — will implement the directions issued by the home minister.

Bhalla is learnt to have stressed during the meeting on the need for robust public awareness campaigns for people to avoid crowds in markets and public places. Delhi Police has also been asked to assist the Delhi government in its efforts to fight the pandemic, the person quoted above added.

Experts said the crisis is unlikely to have passed just yet. “There was a dip in numbers, but it is too soon to say whether the infections have peaked. In fact, I think that it isn’t even true decline. With Diwali, fewer people might have gotten tested. We are likely to see these cases on Monday again,” said Dr Vikas Maurya, director, department of pulmonology and sleep disorders at Fortis Hospital, Shalimar Bagh.

Covid-19: What you need to know today (Hindustan Times: 20201117)

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

Just how bad is the third wave of the coronavirus pandemic in Delhi? And how does it compare with what the US and Europe are going through right now?

The trajectory of Covid-19 in Delhi is different from that of any other Indian state or Union territory. No other Indian region has seen a clear second wave (many have just seen the end of the first). Delhi hasn’t just seen, but also seen off a second and is now in its third — although, as I’ve pointed out in this column, the peak of the curve of the first wave was too sharp (which is rare), and poor testing strategy may have been responsible for the optics of the entire second wave.

Still, on paper, Delhi is now seeing its third wave, and like the ongoing third wave in the US and the second wave in Europe, it is bad.

To return to the original question, how bad?

A measure of new cases per million — both daily and a seven-day average — provides the answer.

This number has steadily increased (barring blips caused by lower testing) as shown in the accompanying graphic. The first wave peaked in late June and then fell off sharply — too sharply, perhaps. The second wave started in late August, peaked in mid-September, and then fell off, and the third wave started in mid-October.

Since November 3, the number of daily cases per million of population in the Capital has been in excess of 300 (barring November 15, when it was low on account of a national holiday on Saturday). This column is being written before the day's numbers are out but it is Monday's too will be low, on account of low testing on Sunday. The 7-day average has been in excess of 300 since November 6 and was at 370.5 on November 14. It's important to note that while many states and Union territories report their Covid numbers late in the day, Delhi reports its earlier — but its numbers are the previous day's.

The Delhi cases-per-million number is comparable to that in Europe and the US. The latter's is higher, in the mid-400s, but the former's is currently just around where the Delhi number is. And their trajectory looks the same too. Delhi, then, is an outlier whose coronavirus disease trajectory is completely different from the national trend.

Some of Delhi's current problems can be attributed to its botched approach to testing. In late June, as the first wave roared through it, Delhi decided to accelerate and expand its testing through the use of rapid antigen tests. These are unreliable, returning false negatives 50% of the time (this means they identify infected people as uninfected). Every region that uses such tests has seen an immediate improvement (a fall) in its positivity rate (proportion of people testing positive to those tested), which tells the story. Uttar Pradesh and Bihar have almost exclusively depended on such tests and their respective Covid dashboards, too, tell the same story.

Over the past month, Delhi has increased its testing capacity for the reliable RT-PCR test, but at a peak of around 20,000 a day last week, these still accounted for just a third of the total tests carried out in the Capital.

This has interfered with the accuracy and representativeness of Delhi's positivity rate — Dispatch 156 on September 12 explained how rapid antigen tests, while useful in certain contexts, can do this when used indiscriminately, the way Delhi, UP and Bihar have done — presenting and perhaps amplifying a false sense of safety and security. In contrast, Tamil Nadu, used only RT-PCR tests and its positivity rate saw an extremely long plateau before dipping (Dispatch 192 on October 29).

And this misplaced sense of safety and security manifested itself in several ways. Checks at airports of incoming passengers became lax; containment zones were honoured more in the breach than in the observance; and citizens started behaving as if they had nothing to fear.

A final caveat: Delhi's overall cases-to-date-per-million number is magnified by its lower population when compared to other states (it's the same reason Goa tops the cases-to-date-per-million chart, and Ladakh comes second) but the number is bad by any measure. Delhi is seventh on the list of states and Union territories in terms of case numbers. And only Maharashtra and Kerala have more active cases than the Capital.

Antibiotics

Why antibiotics should not be given to kids below 2 (New Kerala: 20201117)

<https://www.newkerala.com/news/2020/199668.htm>

Antibiotics administered to children younger than two are associated with several ongoing illnesses or conditions, ranging from allergies to obesity, warn researchers.

For the study, published in the journal Mayo Clinic Proceedings, the research team from Mayo Clinic in the US analysed data from over 14,500 children.

About 70 per cent of the children had received at least one treatment with antibiotics for illness before age 2.

The findings showed that children receiving multiple antibiotic treatments were more likely to have multiple illnesses or conditions later in childhood.

Types and frequency of illness varied depending on age, type of medication, dose and number of doses. There also were some differences between boys and girls.

Conditions associated with early use of antibiotics included asthma, allergic rhinitis, weight issues and obesity, food allergies, attention deficit hyperactivity disorder, celiac disease, and atopic dermatitis.

The authors speculate that even though antibiotics may only transiently affect the microbiome, the collection of microbes in the body, this may have long-term health consequences.

"These findings offer the opportunity to target future research to determine more reliable and safer approaches to timing, dosing and types of antibiotics for children in this age group," said study author Nathan LeBrasseur from the Mayo Clinic.

While recent data show an increase in some of the childhood conditions involved in the study, experts are not sure why.

Other than the issue of multi-drug resistance, antibiotics have been presumed safe by most paediatricians.

Researchers also noted the ultimate goal is to provide practical guidelines for physicians on the safest way to use antibiotics early in life.

Healthy sleep habits

Healthy sleep habits help lower risk of heart failure: Study (New Kerala: 20201117)

<https://www.newkerala.com/news/2020/199572.htm>

Researchers have revealed that adults with the healthiest sleep pattern have 42 per cent lower risk of heart failure regardless of other risk factors compared to adults with unhealthy sleep patterns.

Healthy sleep patterns are rising in the morning, sleeping 7-8 hours a day and having no frequent insomnia, snoring or excessive daytime sleepiness, the study published in the journal Circulation said.

"Our findings highlight the importance of improving the overall sleep patterns to help prevent heart failure," said study author Lu Qi from the Tulane University in the US.

This observational study examined the relationship between healthy sleep patterns and heart failure and included data on 408,802 UK Biobank participants, ages 37 to 73 at the time of recruitment (2006-2010).

Incidence of heart failure was collected until April 1, 2019. Researchers recorded 5,221 cases of heart failure during a median follow-up of 10 years.

Researchers analysed sleep quality as well as overall sleep patterns.

The measures of sleep quality included sleep duration, insomnia and snoring and other sleep-related features, such as whether the participant was an early bird or night owl and if they had any daytime sleepiness.

"The healthy sleep score we created was based on the scoring of these five sleep behaviors," Qi said.

Sleep behaviors were collected through touchscreen questionnaires.

Sleep duration was defined into three groups short, or less than seven hours a day; recommended, or even to eight hours a day; and prolonged, or 9 hours or more a day.

The findings showed that participants with the healthiest sleep pattern had a 42 per cent reduction in the risk of heart failure compared to people with an unhealthy sleep pattern.

They also found the risk of heart failure was independently associated and eight per cent lower in early risers, 12 per cent lower in those who slept 7 to 8 hours daily, 17 per cent lower in those who did not have frequent insomnia and 34 per cent lower in those reporting no daytime sleepiness.

The researchers noted other unmeasured or unknown adjustments may have also influenced the findings.

Depression

Two-thirds of older adults say they won't treat their depression, finds study (New Kerala: 20201117)

<https://www.newkerala.com/news/2020/199571.htm>

Nearly two-thirds (61 per cent) of Americans aged 65 or older who have concerns about having depression will not seek treatment according to a new nationwide poll, the GeneSight Mental Health Monitor.

In fact, nearly one in three (33 per cent) seniors who are concerned they might be suffering from depression believe they can "snap out" of it on their own.

"The 'pull yourself up by your bootstraps' mindset of some seniors and reluctance to talk about mental health are hindering them from getting the help they need - especially now when the pandemic is having an enormous impact on the mental health of older Americans," said Dr Mark Pollack, chief medical officer of Myriad Neuroscience, makers of the GeneSight test.

"People will seek treatment for conditions like heart disease, high blood pressure or diabetes. Depression is no different. It is an illness that can and should be treated" he said.

Yet, while depression is a condition that needs to be treated 61 per cent of respondents who are concerned they might have depression would not treat it because "my issues aren't that bad." About four in 10 (39 per cent) of these consumers think they can manage depression without a doctor's help.

"In my experience, there is a commonly held view that depression is a normal part of ageing; it is not," said Dr Parikshit Deshmukh, CEO and medical director of Balanced Wellbeing LLC in Oxford, Florida, which provides psychiatric and psychotherapy services to nursing and assisted living facilities. "I've found older adults have a very difficult time admitting that they have depression. When they do acknowledge it, they are still reluctant to start treatment for a wide variety of reasons," Deshmukh said.

Depression remains a taboo topic among older Americans, despite about one-third of those over the age of 65 who are concerned they have depression recognizing that depression has interfered with their relationships and their ability to enjoy activities.

"There is such a stigma about depression among people my age," said Carmala Walgren, a 74-year-old resident of New York. "I am proof that you do not have to accept living with depression. Although it may not be easy to find a treatment that helps you with your symptoms without causing side effects, it is certainly worth it."

Walgren's doctor used information from the results of her GeneSight test, a genetic test that identifies potential gene-drug interactions for depression medications, to help inform Walgren's medication selection.

"The GeneSight test made such a difference in my life," said Walgren. "My doctor has used the test results to find medications that helped me."

'Bad' cholesterol

This drug may reduce 'bad' cholesterol by half in high risk patient (New Kerala: 20201117)

<https://www.newkerala.com/news/2020/199522.htm>

The investigational drug 'evinacumab' reduces low-density lipoprotein (LDL) 'bad' cholesterol by 50 per cent in patients with severe hypercholesterolemia, researchers said.

Hypercholesterolemia, also called high cholesterol, is the presence of high levels of cholesterol in the blood, the study, published in the New England Journal of Medicine, reported.

According to the researchers, evinacumab is a fully human monoclonal antibody that works through a different mechanism than existing drugs to bring dangerously high cholesterol to normal levels.

"Our study assessing the safety and efficacy of evinacumab shows that it can lower LDL cholesterol by half in patients unable to attain target guidelines despite maximally tolerated lipid lowering therapy," said study author Robert Rosenson from Mount Sinai Hospital in the US.

Evinacumab is a fully human monoclonal antibody that inhibits angiotensin like protein 3 (ANGPLT3) and lowers LDL cholesterol through an LDL receptor independent pathway.

Genetic studies have shown that people who are missing or have low levels of ANGPTL3 are known to have very low lifelong levels of LDL cholesterol and rarely suffer from atherosclerotic cardiovascular disease.

The phase two, double-blinded, placebo-controlled study of evinacumab included 272 patients with primary high cholesterol including a majority having a diagnosis of heterozygous familial hypercholesterolemia (HeFH).

HeFH is an inherited form of hypercholesterolemia most often caused by mutations in the LDL receptor gene.

The research team found that subcutaneous administration of the agent at 450 mg weekly resulted in LDL cholesterol lowering of 56 per cent, and 52.9 per cent at 300 mg weekly compared to the placebo group.

With monthly intravenous administration of evinacumab at 15 mg/kg, LDL cholesterol reduction was 50.5 per cent compared to the placebo group.

"Our study demonstrates that a regimen of either subcutaneous or intravenous evinacumab can have a significant impact on LDL cholesterol," said Rosenson.

"If approved for use in this setting, evinacumab could potentially arm cardiologists with a major new add-on therapy to bring patients with HeFH to or closer to their cholesterol-lowering goal," Rosenson noted.

Rapid Covid test

Rapid Covid test accuracy may be lower than thought: Study (New Kerala: 20201117)

<https://www.newkerala.com/news/2020/199405.htm>

After Tesla CEO Elon Musk raised questions over the efficacy of the rapid tests to spot Covid-19, new research has claimed that the accuracy of a rapid finger-prick antibody test for Covid-19 infection may be considerably lower than previously suggested.

The results, published in the journal The BMJ, suggest that if 10 people of people given the test had previously been infected, around one in five positive test results would be incorrect (false positive results).

"These conclusions contrast with an earlier (not yet peer reviewed) study suggesting that the test gives no false positive results," said study authors from Imperial College London in the UK.

The findings suggest the test can deliver a sufficient degree of accuracy for surveillance studies of the population, but laboratory confirmation of positive results is likely to be needed if these tests are to be used to provide evidence of protection from the virus.

The AbC-19TM Rapid Test uses a drop of blood from a finger-prick to see if it's likely that someone has previously been infected with SARS-CoV-2.

It gives results in 20 minutes, without the need to go to a laboratory, and is approved for use by health professionals in the UK and EU.

For the results, scientists tested blood samples in a laboratory from 2,847 key workers (healthcare, fire, and police staff) in England.

Of these, 268 had a previous PCR (positive polymerase-chain reaction) positive result so were 'known positives' while the remaining 2,579 had unknown previous infection status.

A further 1,995 pre-pandemic blood samples were also tested as 'known negatives.'

Based on a series of analyses, the researchers estimated the specificity of the AbC-19 test (ability to correctly identify a true negative sample) to be 97.9 per cent, meaning that 2.1 per cent of people who did not have a previous SARS-Cov-2 infection incorrectly tested positive.

They estimated the sensitivity of the AbC-19 test to be 92.5 per cent based on PCR confirmed cases but considerably lower (84.7 per cent) in people with unknown previous infection status prior to antibody testing.

This difference is probably due to the test being more sensitive when antibody levels are higher, the researchers explained .

As people with a positive PCR result tended to have more severe disease, it is likely that they would have produced more antibodies.

The researchers said that the lower figure of 84.7 per cent is probably a more realistic estimate of test sensitivity in the real world, if people were to choose to take the test to find out their own previous infection status.

"This means that 15.3 per cent of people with a previous SARS-CoV-2 infection would be missed," the authors noted.

On November 13, Musk tweeted "Something extremely bogus is going on. Was tested for covid four times today. Two tests came back negative, two came back positive.

"Same machine, same test, same nurse. Rapid antigen test from BD."

Vaccine (Hindustan: 20201117)

https://epaper.livehindustan.com/imageview_457995_85483554_4_1_17-11-2020_0_i_1_sf.html

दावा : मॉडर्ना का टीका 95 फीसदी असरदार

कैम्ब्रिज | एजेसी

कोरोना वायरस के खिलाफ लड़ाई में इस महीने दूसरी अच्छी खबर सामने आई है। अमेरिकी फार्मा कंपनी मॉडर्ना ने सोमवार को दावा किया कि उसका कोरोना टीका वायरस से लड़ने में 94.5 फीसदी से ज्यादा प्रभावी पाया गया है। अमेरिका

समेत पूरी दुनिया के वैज्ञानिक इसे बड़ी उम्मीद के तौर पर देख रहे हैं। भारत सरकार भी मॉडर्ना के संपर्क में है।

मॉडर्ना के मुताबिक, तीसरे चरण के ट्रायल के दौरान जो आंकड़े सामने आए हैं, उससे उम्मीद बढ़ती है। एक सप्ताह पहले फाइजर इंक ने भी ऐसी ही घोषणा की थी। दोनों कंपनियों टीके के आपात

इस्तेमाल के लिए अनुमति मांगने के लिए आवेदन करने पर विचार कर रही हैं। दिसंबर के अंत तक मंजूरी संभव है।

मॉडर्ना के अध्यक्ष डॉक्टर स्टीफन होज ने कहा कि नतीजे काफी आश्चर्य करने वाले हैं। हम सबको उम्मीद करनी चाहिए कि वास्तव में एक टीका इस महामारी को रोकने में सफल होने जा रहा

है। महामारी से निपटने के लिए कई टीकों की जरूरत होगी। यदि अमेरिका का फूड एंड ड्रग प्रशासन मॉडर्ना या फाइजर कंपनी के टीके को आपात इस्तेमाल के लिए अनुमति देता है तो इस साल के अंत तक इसकी सीमित आपूर्ति ही होगी।

► देसी टीके पर ट्रायल पेज 17

Pollution (Hindustan: 20201117)

https://epaper.livehindustan.com/imageview_457998_85777902_4_1_17-11-2020_4_i_1_sf.html

रविवार को वायु गुणवत्ता सूचकांक 435 के स्तर पर पहुंच गया था, 24 घंटे के अंदर 214 अंकों की गिरावट दर्ज की गई

दिल्ली को 15 दिन बाद प्रदूषण से बड़ी राहत



नई दिल्ली | सजय कुशवाहा

मौसम की मेहरबानी से सोमवार को 15 दिनों बाद दिल्लीवालों को साफ हवा मिली। केंद्रीय प्रदूषण नियंत्रण बोर्ड के मुताबिक, सोमवार को वायु गुणवत्ता सूचकांक 221 अंक पर रहा। इसकी तुलना अगर रविवार से करें तो वायु गुणवत्ता 435 अंक पर थी। 24 घंटे के भीतर सूचकांक में 214 अंकों की गिरावट आई है।

दिल्ली के लिए नवंबर का महीना पहले दिन से ही खराब साबित हो रहा है। अब तक लोगों को भारी प्रदूषण झेलना पड़ा, लेकिन पश्चिमी विक्षोभ के चलते रविवार शाम को हुई बारिश ने राहत दी। दिवाली के दिन हुई आतिशबाजी से रविवार को अंतिम वायु गुणवत्ता सूचकांक 435 के अंक पर यानी गंभीर श्रेणी में था। सोमवार को सूचकांक 221 के अंक पर रहा। दिल्ली के आसमान पर दिन भर ऊंचाई वाले बादल छाए रहे और हवा की दिशा ज्यादातर समय पूर्व की तरफ से रही।

प्रदूषक कणों की मात्रा में भारी गिरावट - रविवार शाम को दिल्ली की हवा में प्रदूषक कण पीएम 10 की मात्रा 470 और पीएम 2.5 की मात्रा 345 माइक्रोग्राम प्रति घन मीटर रही। इसकी तुलना अगर सोमवार शाम पांच बजे पीएम 10 और पीएम 2.5 की मात्रा से करें तो अंतर साफ पता चलता है। सोमवार को शाम को पांच बजे पीएम 10 की मात्रा 141 और पीएम 2.5 की मात्रा 92 माइक्रोग्राम प्रति घन मीटर रिकॉर्ड की गई। दिल्ली की हवा में घुले प्रदूषक कण काफी हद तक साफ हो गए हैं। लंबे अरसे के बाद दिल्ली की हवा इस करार साफ हुई है।

एक दिन और राहत - दिल्ली को भारी प्रदूषण वाली हवा से अभी एक दिन की राहत और मिलने की संभावना है। मौसम विभाग का अनुमान है कि मंगलवार को दोपहर बाद से हवा की दिशा फिर से पंजाब-हरियाणा की तरफ से होने की संभावना है।



दिल्ली में सोमवार को प्रदूषण से राहत मिलने के बाद बड़ी संख्या में लोग इंडिया गेट पर मौसम का आनंद लेने पहुंचे। • संजीव वर्मा

प्रदूषण मीटर

वायु गुणवत्ता सूचकांक		कहां-कितनी जहरीली रही हवा	
15 नवंबर	16 नवंबर	जमाह	एवयुआई
435	221	अशोक विहार	251
		पंजाबी बाग	239
		विक्रम विहार	236
		नजफगढ़	236
		बयाना	234

(हवा में प्रदूषक कणों के स्तर से वायु गुणवत्ता सूचकांक। एवयुआई। तैयार किया जाता है। दिल्ली में हवा की गुणवत्ता मापने के 40 केंद्र हैं।)

वायु गुणवत्ता सूचकांक के ये हैं मानक

0-50	51-100	101-200	201-300	301-400	401-500
अच्छ	संतोषजनक	मध्यम	खराब	बेहद खराब	गंभीर

पराती का धुआं सिर्फ एक फीसदी रह गया

दिल्ली के प्रदूषण में पराती के धुएँ की हिस्सेदारी कम हुई है। सफर के मुताबिक, सोमवार को वह सिर्फ एक फीसदी रही। रविवार को यह 4 फीसदी थी। शनिवार को तेज उछाल आया था और यह 32 फीसदी थी। हवा की दिशा अलग होने के चलते पंजाब व हरियाणा में चलने वाली पराती का असर नहीं दिख रहा है। रविवार को पराती चलने की केवल 282 घण्टाएं दर्ज की गईं।

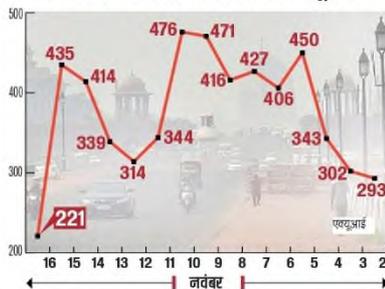
आठ दिन गंभीर

नवंबर के पहले पखवाड़े में दिल्ली के लोगों ने सबसे ज्यादा प्रदूषण झेला। इन 15 दिनों में आठ दिन ऐसे रहे जब वायु गुणवत्ता सूचकांक 400 के अंक के ऊपर यानी गंभीर श्रेणी में रहा। जबकि, छह दिन ऐसे रहे जब वायु गुणवत्ता सूचकांक बेहद खराब श्रेणी में रहा। एक सप्ताह पहले हातात ऐसे भी हो गए कि राजधानी में कई जगहों की हवा आमतौर पर गंभीर में पहुंच गई। लेकिन बारिश के बाद अचानक वायु गुणवत्ता सूचकांक में बड़ा सुधार हुआ है।

221 के स्तर पर सोमवार को वायु गुणवत्ता सूचकांक रहा राजधानी दिल्ली का

223 अंक पर था सूचकांक 20 अक्टूबर को, 11 अक्टूबर को 216 था

नवंबर में ऐसे घटता-बढ़ता रहा है प्रदूषण



70% लोगों ने नहीं जलाए पटाखे: राय

नई दिल्ली | प्रमुख संवाददाता

दिल्ली के पर्यावरण मंत्री गोपाल राय ने सोमवार को कहा कि 70 फीसदी दिल्ली के लोगों ने इस दिवाली पर पटाखे नहीं जलाए। उन्होंने डम्मीद जताई कि अगले साल दिवाली पर धुआं और भी कम होगा।

वाहन प्रदूषण कम करने के लिए चलाए जा रहे 'रेड लाइट ऑन, इंजन ऑफ' अभियान के दूसरे चरण की आईटीओ पर शुरुआत करते हुए पर्यावरण मंत्री ने कहा कि सरकार हर चीज को लेकर एक स्थायी समाधान की तरफ बढ़ रही है। उन्होंने कहा कि जहां तक पटाखों की बात है तो दिल्ली सरकार ने किसी भी तरह के पटाखों को जलाने पर प्रतिबंध लगाया था।

दिल्ली में लगभग 70 फीसदी लोगों ने इसका पालन किया। उन्होंने कहा कि डम्मीद है कि अभियान को आगे बढ़ाए जाने पर लोगों का सहयोग मिलेगा।

30 नवंबर तक अभियान - दिल्ली सरकार द्वारा चलाए जा रहे लाल बत्ती ऑन, इंजन बंद अभियान का दूसरा चरण 30 नवंबर तक चलेगा। इस दौरान सौ चौराहों पर ढाई हजार पर्यावरण मार्शल तैनात रहेंगे।



आईटीओ रेड लाइट पर इंजन बंद अभियान के दौरान सोमवार को वाहन चालकों को बढ़ते प्रदूषण को लेकर जागरूक करते उपमुख्यमंत्री मनीष सिसोदिया। • सोनू मेहता

आसपास से ज्यादा प्रदूषण : सिसोदिया

दिल्ली के उप मुख्यमंत्री मनीष सिसोदिया ने कहा कि दिवाली पर दिल्ली में तो कम पटाखे चले, लेकिन आसपास के क्षेत्रों में प्रतिबंध के बावजूद बहुत पटाखे जलाए गए।

उन्होंने कहा कि मुख्यमंत्री अरविंद केजरीवाल की लोगों से की गई लाल बत्ती पर इंजन बंद करने की अपील बहुत सार्थक रही है। अभियान के पिछले 25 दिनों में लाखों लोगों ने

लालबत्ती पर इंजन बंद किए हैं। कोरोना संक्रमण पर उन्होंने कहा कि पिछले सप्ताह हमारे यहाँ साढ़े आठ हजार मामलों के साथ कोरोना पीक पर था। लेकिन, अब पिछले दो-तीन दिनों से नए केस में गिरावट देखने को मिल रही है। लॉकडाउन को लेकर पूछे गए सवाल के जवाब में उन्होंने कहा कि मुझे नहीं लगता है कि दिल्ली में लॉकडाउन की परिस्थितियां बनेंगी।