COVID-19 vaccine

Moscow announces advanced trials for new COVID-19 vaccine (The Tribune: 2020827)


Moscow announces advanced trials for new COVID-19 vaccine
Photo for representation only.

The mayor of Moscow invited residents Wednesday to join trials of a coronavirus vaccine that Russia approved for use earlier this month in what officials described as a breakthrough on par with the Soviet Union's launch of the world's first satellite in 1957.

The world's first vaccine against the coronavirus to receive a government go-ahead has caused unease among international medical experts, who called Russia's fast-tracked approval and failure to share any data supporting claims of the vaccine's efficacy a major breach of scientific protocol.

Scientists around the world say any widely-used vaccine should first be tested in advanced trials involving tens of thousands of people to prove it is safe and effective before being licensed.

In his invitation to the Russian capital's residents, Moscow Mayor Sergei Sobyanin appeared to announce those kind of broad studies would be launched soon. He said the “post-registration research” will last six months and involve 40,000 people.

Sobyanin encouraged Moscow residents to sign up, arguing that the vaccine was based on longtime previous research and proven to be safe.

“We all were eager to see the creation of a vaccine, and now we have it,” Sobyanin said.

“Now, Moscow residents have a unique chance to become the main participants in clinical research that will help defeat the coronavirus.”
Scientists at the World Health Organization said last week that although they had begun discussions with Russia about its vaccine, they had not yet received any detailed data about it.

In announcing the vaccine's approval on August 11, Russian President Vladimir Putin said one of his two adult daughters already had been inoculated with it.

He said the vaccine underwent the necessary tests and was shown to provide lasting immunity to the coronavirus, although Russian authorities have offered no proof to back up claims of safety or effectiveness.

Experts warn that using an untested vaccine that has not yet proven to be safe or effective could ultimately undermine the response to the pandemic and cause more distrust among people about whether or not to be vaccinated.

As of Wednesday, Russia had reported a total of over 970,000 confirmed virus cases and 16,683 deaths. Russian officials have said the vaccine would initially be made available to high-risk groups, including medical workers and teachers before it comes to broad use.

The vaccine developed by the Gamaleya Institute in Moscow with assistance from Russia's Defense Ministry uses a different virus -- the common cold-causing adenovirus -- that's been modified to carry genes for the “spike” protein that coats the coronavirus, as a way to prime the body to recognize if a real COVID-19 infection comes along.

That's a similar technology as vaccines being developed by China's CanSino Biologics and Britain's Oxford University and AstraZeneca — but unlike those companies, Russian scientists haven't published any scientific information about how the vaccine has performed in animal tests or in early-stage human studies.

Putin said one of his daughters has received two doses, and had minor side effects such as slight fever, and was “feeling well and has a high number of antibodies.”

However, many international experts remained skeptical as the experimental shots so far have been tested on just a few dozen people and there's no published scientific evidence backing official claims of its efficiency.

The Russian Health Ministry said in a statement Tuesday that the vaccine is expected to provide immunity from the coronavirus for up to two years, citing its experience with vaccines made with similar technology.

Becoming the first country in the world to approve a vaccine was a matter of national prestige for the Kremlin as it tries to assert the image of Russia as a global power.

Putin repeatedly praised Russia's effective response to the outbreak in televised addresses to the nation, while some of Moscow's top officials – including the country's prime minister and Putin's own spokesperson – became infected.

Last month, the U.S., Britain and Canada accused Russia of using hackers to steal vaccine research from Western labs. Russia has denied involvement.
Several vaccines, including those developed by Oxford and the U.S. National Institutes of Health, are currently in advanced testing and hope to have results later this year. AP

**Health ministry recommends**

**Health ministry recommends COVID tests for all tuberculosis patients and vice versa (The Tribune: 2020827)**


Health ministry recommends COVID tests for all tuberculosis patients and vice versa

Photo for representation only.

Tuberculosis is associated with a 2.1-fold increased risk of a severe COVID-19 disease, the health ministry said on Wednesday, recommending that all newly-diagnosed tuberculosis patients or those currently on treatment should be tested for COVID-19 and vice versa.

The prevalence of tuberculosis among COVID-19 patients has been found to be 0.37 to 4.47 per cent in different studies, the ministry said and highlighted that there has been an overall decline in tuberculosis notification by 26 per cent during January to June, as compared to the previous year, due to the coronavirus pandemic.

In its "Guidance note on Bi-directional TB-COVID screening and screening of TB among ILI/SARI cases" issued on Wednesday, the ministry said studies have shown that a history of active as well as latent tuberculosis is an important risk factor for the SARS-CoV-2 infection.

"This not only results in increased susceptibility, but also rapid and severe symptom development and disease progression with poor outcomes. Tuberculosis is associated with a 2.1-fold increased risk of severe COVID-19 disease," the document said.

In addition, tuberculosis patients also tend to have comorbidities or living conditions (malnutrition, diabetes, smoking habit, HIV etc.) that increase their vulnerability. In order to address this dual morbidity of tuberculosis and COVID-19, activities such as Bi-directional TB-COVID screening, TB screening for influenza-like illness (ILI) cases and TB screening for severe acute respiratory illness (SARI) cases should be carried out, the ministry said.

Under Bi-directional TB-COVID screening, COVID screening for all diagnosed TB patients and TB screening for all COVID-positive patients should be conducted. Tuberculosis and COVID-19 are infectious diseases, which primarily attack the lungs. They present with similar symptoms of cough, fever and difficulty in breathing, although tuberculosis has a longer incubation period and a slower onset of disease, the document said. PTI
Sex difference in immune response to COVID-19 decoded

Female patients mounted a more robust and sustained immune response via the body's T cells than men.

Women with COVID-19 mount a more robust and sustained immune response via the body's T cells than men, according to a study that may help guide a sex-based approach to the treatment and care for those infected with the novel coronavirus.

The research, published in the journal Nature, assessed 98 patients -- aged 18 years or over -- admitted to the Yale New Haven Hospital in the US with mild to moderate disease, who had confirmed positive tests for novel coronavirus infection.

While previous research had shown that the severity of COVID-19 tends to be higher for men than for women, the underlying reasons for this discrepancy have remained unclear, according to the scientists, including those from Yale University in the US.

In the current study, they found that female patients mounted a more robust and sustained immune response via the body's T cells than men.

The researchers noted that T cells played an essential part in the immune system with their roles including the killing of infected cells.

According to the scientists, including Akiko Iwasaki from the Yale University School of Medicine, poor T cell responses correlated with a worse disease outcome in male patients.

"We found that a poor T cell response negatively correlated with patients' age, and was associated with worse disease outcome in male patients, but not in female patients," the researchers wrote in the study.

Compared with healthy control individuals, they said patients with COVID-19 were found to have elevated levels of innate immune cytokines and chemokines, which are signalling molecules involved in the recruitment of immune cells to sites of inflammation.
However, the study noted that the levels of some of these molecules were higher in male patients than in female patients.

In female patients, the scientists said, higher levels of the cytokine molecules were associated with worse disease response.

Based on the results, they said male patients may benefit from therapies that elevate T cell responses whereas female patients may benefit from therapies that dampen early innate immune responses.

However, scientists caution that they were unable to rule out other underlying factors that may modify the risk of poor outcome in male and female patients with COVID-19. PTI

Phase 2 trial of Oxford Covid-19 vaccine

Phase 2 trial of Oxford Covid-19 vaccine candidate begins in Pune (The Tribune: 2020827)


Two male volunteers administered vaccine at Bharti Vidyapeeth’s Medical College and Hospital

Phase 2 trial of Oxford Covid-19 vaccine candidate begins in Pune

The Phase 2 clinical trial of the Oxford COVID-19 vaccine, being manufactured by the city-based Serum Institute of India (SII), began at a medical college and hospital here on Wednesday.

Two male volunteers were administered the vaccine at Bharti Vidyapeeth’s Medical College and Hospital, a senior office-bearer of the hospital said.

The trial began around 1 pm, he said.

“Doctors at the hospital administered the first shot of the ‘Covishield’ vaccine to a 32-year-old man after his reports of COVID-19 and antibodies tests came out negative,” Medical Director of Bharti Vidyapeeth’s Medical College, Hospital and Research Centre, Dr Sanjay Lalwani, said.

Another 48-year-old male volunteer was also given the vaccine, he added.

While the 32 year-old volunteer works for a private company, the other one is associated with the healthcare sector, he said.
“Before administering the vaccine, doctors checked their temperature, blood pressure and heart beats,” he said.

Five volunteers had enrolled themselves for the trial after the doses were received from the SII on Tuesday, he added.

“The COVID-19 and antibodies tests were conducted on all the five volunteers. Of them, the reports of three volunteers’ antibodies test came out positive. So they became ineligible for the trial,” Dr Lalwani said.

“The two other volunteers, who were administered the vaccines are being monitored,” he said.

According to Dr Lalwani, in all 25 candidates will given the vaccine in the next seven days.

SII, the world’s largest vaccine maker, has signed an agreement to manufacture the potential vaccine developed by the Jenner Institute of Oxford University in collaboration with British-Swedish pharma company AstraZeneca. PTI

**Nutrition and fitness**

**Nutrition and fitness go hand in hand (The Tribune: 2020827)**


Every year, we celebrate National Day of Sports to honour and commemorate the spirit of legendary sportsperson, Major Dhyan Chand who is regarded as the nation’s greatest hockey player ever.

The day was instituted to educate India’s youth on the importance of being fit and healthy, by practicing sports and other physical activities.

Along with a focused approach towards one’s fitness levels, it is equally important to supplement this routine with good nutrition, a balanced diet, and healthy snacking. Good nutrition paves the way to a healthy lifestyle, and is a small investment towards long-term health. This can be achieved by simply making small, yet relevant and impactful changes to the diet.

Stressing on the need to eat right to complement one’s sports schedule, Ritika Samaddar, Regional Head -Dietetics, Max Healthcare - Delhi, said: “The amount, composition and choice of food intake can profoundly affect a sports performance. Balancing nutritional needs while practicing a sport or form of exercise is very important as it helps build the foundation for success.”

According to Madhuri Ruia, Pilates Expert and Diet and Nutrition Consultant, “Sports and physical exercise are very important for the body’s overall growth and development. But, to
optimise your physical training it’s essential to consume balanced and nutritious diets including healthy snacks.”

According to a recent research from King’s College London, snacking on almonds everyday improved endothelial function of the arteries and also lowered “bad” LDL-cholesterol - both key indicators of heart health, she said.

Highlighting the need to snack right while engaging in physical activities, Sheela Krishnaswamy, Nutrition and Wellness Consultant, said: “People in India are increasingly understanding the significance of sports and regular physical activity. More so now, as there is a greater interest around immunity especially with regard to foods and practices that can help strengthen it. Research has also suggested that regular moderate intensity exercise can also strengthen immunity. This is important more so for children, as they continue to attend online classes at home without much physical activity. Parents must ensure that they setup a routine, so that the child engages in some sort of sport/physical activity every day. Also, be sure to augment this routine by adding snacks to the child’s diet.”

Fueling the body with the right foods is essential while playing any sport or even maintaining a proper fitness routine. This year, take a pledge and commit to your health goals by eating well and staying fit. IANS

**Delhi to double tests as Covid spike continues**

**CAPITAL CONCERN**

*Delhi to double tests as Covid spike continues*: CM says new infections on the rise, response to be scaled up (Hindustan Times: 2020827)

[https://epaper.hindustantimes.com/Home/ArticleView](https://epaper.hindustantimes.com/Home/ArticleView)
Covid-19 cases in Delhi are increasing, chief minister Arvind Kejriwal acknowledged on Wednesday as the government took note of persistently rising numbers at an emergency meeting, where it decided to double the number of daily tests from current levels to around 40,000 per day in an effort to catch and isolate more infections.

With 1,693 new cases reported on Wednesday, the last seven days have seen an average of 1,375 cases every day. This is the highest since the seven-day period ending in July 15, when the Capital recorded 1,732 cases on an average – and a trend that HT highlighted in news reports on August 23, 25 and 26.

The increase has been preceded by a drop in testing and an increased focus on the relatively less reliable rapid test – also an issue that this paper highlighted in a news reports on August 15 and August 16.

“For nearly one and a half months now, the Covid-19 situation in Delhi is under control. But, since August 17, cases have been increasing again. In today’s health bulletin, which will be released in the evening, Delhi recorded 1,693 cases. Yesterday, 1,544 cases were recorded,” said the chief minister in a press briefing over video.

Experts warned that the Capital, which was the first Covid-19 hot spot to get some measure of control over the disease, stands at a critical juncture in the fight against the highly contagious virus.

“Delhi is at the crux where the rise in the number of cases can be controlled, if it is not controlled now, we can enter a second wave in a few months. People are fed up and have become casual about using masks and maintaining social distancing, and we have to factor this in when planning a response to prevent resurgence,” said Dr Randeep Guleria, director, All India Institute of Medical Sciences (AIIMS) Delhi.
In light of these trends, the rate of testing will be doubled over the next week, Kejriwal added, while assuring that the situation was still under control. “Other parameters are in good shape. For instance, the death rate is low. For August, it is 1.4%, which is the best in the country. We have adequate hospital beds too. There are 14,130 total beds now, of which 10,448 beds are vacant. The recovery rate is good. And, the home isolation model has worked well. Since July 15, there has been no death in home isolation,” he said.

Home isolation has been one of the centrepieces of Delhi’s Covid-19 mitigation strategy, as has been the testing programme that has covered the highest number of people in per capita terms among major states. But, as reported on August 25, a slackening of testing coincided with a rise in positive rate – the proportion of samples confirming an infection – suggesting the city may have begun missing new infections.

In the 7-day period ending on Wednesday, the average positive rate for daily tests was 7.8%. The last time this number was this high was in the week ending July 18. Test positive rate can rise if there are fewer tests, but also if the outbreak is growing.

This is among five factors that data and circumstantial indicators suggest may be powering a spurt in cases in Delhi. The others are behavioural fatigue that could be reducing mask discipline, the reopening of the city that is leading to more crowding, a lag in reporting that could be leading to a statistical build-up, and the possibility that the rise may be part of a cyclical wave trajectory that epidemic disease outbreaks follow.

In statements offered separately, the chief minister’s office said the increase in cases was a “momentary situation” that does not, at the moment, require putting curbs on the economic activities that have been allowed, and the government still believes the Delhi Metro must be restarted.

“Our stand on the Delhi Metro remains the same. Such decisions, including opening of other economic activities, were taken keeping in mind all possible parameters. The prognosis of the current Covid-19 situation doesn’t call for any drastic or knee jerk decision. Going by the current infection rate, Delhi government is very well equipped to manage the case load and treat patients. We are certain that the situation will be brought further under control soon with the latest announcement of doubling tests and ensuring stricter enforcement of wearing masks and social distancing,” the chief minister’s office said.

According to the Kejriwal, tests will now be increased from “around 20,000 tests per day being conducted currently to 40,000 tests per day”. “Our strategy would remain the same – test and isolation,” he added, urging people to get themselves tested on feeling the slightest of influenza-like symptoms.

According to a government official, the announcement on testing reflects a reorientation in the chief minister’s approach to the outbreak. “During the past few weeks when the cases were on a decline, the chief minister had shifted his entire focus on reducing the number of Covid deaths in the city. The emphasis was on serious patients. Now, with Delhi recording more than 1,400 cases in a row, the CM has once again started reviewing the steps taken to control the infection rate in his daily meetings,” the official said, asking not to be named.

A second senior government who asked not to be named, said the increase in testing will be proportional for the two modes -- through nucleic acid lab tests, known as RT-PCR tests, as well as the rapid antigen test kits, which offer quick results but run a higher risk of throwing up false negatives. A way to ensure this is being worked on, this person added.
The first official cited above said the government will prod labs to increase RT-PCR tests, which are at present the most reliable. “Directions will soon be issued to all hospitals and private testing labs to conduct RT-PCR to their full capacity. The health department has also been asked to explore if capacity for RT-PCR tests can be increased beyond the current level of 11,000,” this person said, while adding: “But, rapid antigen tests will continue to be more in numbers compared to RT-PCR as is the current format.”

Experts welcomed the planned steps. “Cases are going up. At this stage, the government must go for aggressive testing, isolate positive cases and strengthen surveillance. People should always wear masks, adhere to social distancing norms and follow respiratory etiquettes. There is no room for complacency,” said Lalit Kant, the former head of epidemiology and communicable diseases department in the Indian Council of Medical Research (ICMR).

Wednesday’s meeting was attended by health minister Satyendar Jain, chief secretary Vijay Dev, and top officials of the health department. Kejriwal said the administration has also taken note of people struggling with residual symptoms after recovering from the disease and the government will now provide them pulse oximeters (which measure oxygen concentration in blood and can identify severe breathing issues) and oxygen concentrators free of charge if required.

The chief minister said he has also directed authorities to strengthen enforcement of rules. “People should wear masks and maintain social distancing. Confidence is good but it should not lead to complacency at any cost. We hope nobody is penalised. In case one gets fined, one must understand that it is for a greater good,” said Kejriwal.

**Delhi at inflection point in Covid-19 battle**

EXPERT VIEW: Rising cases a worry, city must act swiftly to avert resurgence ahead of the festive season in October (Hindustan Times: 2020827)

[https://epaper.hindustantimes.com/Home/ArticleView](https://epaper.hindustantimes.com/Home/ArticleView)
Experts say the turnaround time of test results must be reduced to 24 hours or less as the utility of testing lies in results being quick, particularly for RT-PCR tests. Sonu Mehta/HT PHOTO

The Capital is at a crucial stage where it needs to act swiftly before the growing number of Covid-19 cases builds into a second wave, top health experts in the country believe, identifying the period from now till the festive season in October as a crucial window for infection control measures.

There were 1,693 new cases reported on Wednesday, taking the average number of new cases over the last seven days to 1,375 -- the highest since the seven-day period ending in July 15. The proportion of samples turning positive has also been the highest it has been since then.

“Delhi is at the crux where the rise in the number of cases can be controlled, if it is not controlled now, we can enter a second wave in a few months. People are fed up, and have become casual about using masks and maintaining social distancing, and we have to factor this in when planning a response to prevent resurgence,” said Dr Randeep Guleria, director, All India Institute of Medical Sciences (AIIMS), Delhi.

“I would say 3,000 cases daily will indicate resurgence, we have to keep the number of daily cases between 1,000 and 1,500. Delhi’s R-naught (R0) has gone up, which suggests the disease is spreading. R0 has increased to over 1 from a low of 0.71 on July 27, Delhi should focus on keeping the R0 below 1, anything approaching 2 is a huge concern,” he said.

R0 is the reproduction number that indicates the number of people infected by a single person. If the number is above 1, it implies the outbreak is growing. Once it breaches 2, the growth can become exponential.

“With opening up, cases will rise, this is the only way as life has to go on. Around 30% people have antibodies, which means 70% are still vulnerable, and the only protection is wearing a mask. There are no short cuts as we don’t know how protective these antibodies are as these are not neutralising, which offer longer protection,” said Dr SK Sarin, director, Institute of Liver and Biliary Sciences, New Delhi.

“There is bound to be some daily fluctuation … but the positivity rate is also rising, which is a cause for concern,” said Dr K Srinath Reddy, president, Public Health Foundation of India.

BITTER SOCIAL PILL

The experts said that encouraging discipline during the festive season – a period when people socialise and shop – will be crucial. “We should bring the R0 down to 1 to have stable numbers. Delhi has certainly done well, but opening public transport will pose a huge challenge. We all have to assume that everyone is infected and can transmit to us, and we can transmit to others. Keeping that in mind, we must use universal precautions,” he added.
The strategy must focus on addressing economic considerations as well. “We need to have a relook at the strategy keeping in mind human behaviour, economic activity, and newer interventions, including partial lockdown being implemented in many states like Kerala, Tamil Nadu, Karnataka and West Bengal,” said Dr Guleria.

He added that now is not the time to reopen schools and more public transport. “Opening public transport further is not a good idea as the festive season is about to begin, where people begin meeting family, friends and markets and public places; it is human nature. Much like Ganapati celebrations in Mumbai, public celebrations must be low key with restrictions on gatherings, crowding in marketplaces etc,” he said.

Data from across the world suggests cases have spiked wherever schools have opened. “Children and young children can’t follow social-distancing norms, India doesn’t have the capacity to control large classrooms,” Dr Guleria added.

Crowding must be stopped till there are clear reductions in daily cases, the experts said. “The government must forbid crowding, including in the festive season, till we see the last of the virus. In Europe, the virus appears to have got milder, with cases rising in the second wave but deaths not increasing correspondingly. Its evolutionary biology, but it takes several months. We have to slow infection by changing behaviour by avoiding crowds so we nudge the virus to a milder form, even as more people recover from infection,” said Dr Reddy.

UP TESTING

The turnaround time of test results must be reduced to 24 hours or less as the utility of testing lies in results being quick, particularly for RT-PCR tests. “Delhi needs to do more RT-PCR (reverse transcription- polymerase chain reaction) tests, which currently accounts for around 30 of the total tests, ratio of RT-PCR ad antigen testing should be reversed,” said Dr Guleria, adding: “antigen tests have higher positivity in symptomatic cases and does not pick up infection in close contacts, asymptomatic and mild cases. It’s useful for point-of-care testing and containment zones to quickly quarantine and isolate patients, but doing it on a large scale has limitations”.

FIGHT FATIGUE

Experts said the government response needs to focus on leading indicators, like identifying outbreaks early, than lagging indicators like death, which occurs after the epidemic has taken seed. Even the number of known cases is slightly lagging because people develop symptoms, get tested, and have the test reported to government, by when it is likely been a few days.

“The leading indicator is symptoms. The minute you find lots of people reporting symptoms, such as loss of smell, in any part of Delhi even before the tests come positive, you know that something is happening in this area, all the people in that area can be warned,” said Dr Anurag Agrawal, director, Institute of Genomics and Integrative Biology (Council of Scientific and Industrial Research

He agreed that public fatigue was a worrying factor, and that officials should consider a “smart, guided precautions communicated via a tool people trust”. “The closest thing we have to that is Aarogya Setu. But it must be made stronger so it adds value to people’s lives. Simply telling people to wear a mask is weak messaging, you have to value add so people get into the habit of checking their Aarogya Setu every time they step out to identify safe areas and avoid unsafe ones to help maximise mobility and minimizing risk,” said Agrawal.

FOCUS ON RESOURCES
Clinical preparedness must continue to manage cases and save lives, said ILBS’s Dr Sarin. “Our job is to ensure people know they have to go to the hospital first, where they must get treated. We have plasma bank facility and if applied early in first 72 hours, then definitely it gives benefits. I have always said that we have another year before we will settle down,” he said.

On a hopeful note, Dr Reddy added behaviour change may not be as tough as it appears. “We have been trained to work from home, now we must learn to socialise and pray from home,” Dr Reddy said.

Coronavirus Cases (The Asian Age: 2020827)


Mental health rehabilitation helpline

Social Justice Ministry to launch mental health rehabilitation helpline (The Hindu: 2020827)

https://www.thehindu.com/sci-tech/health/social-justice-ministry-to-launch-mental-health-rehabilitation-helpline/article32443797.ece

“Kiran” helpline number, 1800-599-0019, will offer support in 13 languages. Citing the prevalence of mental health issues and the unprecedented nature of the COVID-19 crisis, the Social Justice and Empowerment Ministry has said it
Draft health data management policy

Draft health data management policy released for public feedback (The Hindu: 2020827)


Focus on data privacy, consent management, data sharing and protection.
The National Health Authority (NHA) has released the Draft Health Data Management Policy of the National Digital Health Mission (NDHM) in the

Pulse oximeters

What you need to know about pulse oximeters (The Hindu: 2020827)


Pulse oximeters have been flying off the shelves during the COVID-19 pandemic. We decode how they work

Back when TikTok reigned strong in India, there were hundreds of videos of people showing that wearing a mask did not inhibit oxygen saturation. One user Emily Lyoness, who has moderate persistent asthma, recorded herself wearing a spectrum of masks — from a reusable fabric mask to a P100 mask — and tested her oxygen levels by clipping a pulse oximeter to her index finger. The oxygen reading on the device wavered between 98 and 99.

People with COVID-19 often need oxygenation support, so this tool, a staple for many doctors, has become something of a necessity for the layperson. Oximeters have been flying off the shelves for many households’ first aid kits, largely because they are non-invasive, low-cost, easy to use, and effective at detecting hypoxemia (low blood oxygen levels).

Device must-know’s
It comprises a monitor which contains the batteries and display; a probe, which consists of light emitting diodes or LEDs and a light detector called a photo-detector. This probe senses the user’s pulse.

There are two important readings: the pulse rate, recorded as beats per minute (60 to 100 is the safe range); and the oxygen saturation of haemoglobin in arterial blood, the reading of which
is recorded as SpO2). Normal readings range from 95% to 100%; anything less, and the user should get medical assistance from a doctor. If your oximeter has alarms, atypical readings will set them off.

The mechanism clips onto the user’s forefinger, though some oximeters have been known to be clipped onto one’s big toe or even the ear, depending on the model. According to the World Health Organization’s Pulse Oximetry Training Manual, one must use the oximeter with patience. Once clipped on, it requires about 10 seconds to get an accurate reading.

A pulmonologist based in Jaipur and chief editor of Lung India, Dr Virendra Singh points out that pulse oximeters are not COVID-19 detectors. He states, one cannot use the pulse oximeter as a sole detector for any respiratory issues. It is only meant to give readings for a small time interval.

When buying an oximeter, do be wary of the brand names. There are oximeters selling on e-commerce platforms that will work for a month at most before giving out, and may cost as much as about ₹2,000.

We’d suggest going to your pharmacy. Most Indian pharmacies have partnered with legitimate names in the medical device sub-industry to provide cost-effective and reliable pulse oximeters. Those who want to support India-made pulse oximeters can look to AmbiTech, Oxysat, or Home Medix, among other names.

**Vaccine nationalism**

**Explained: What is vaccine nationalism? (The Times of India: 2020827)**


Coronavirus (COVID-19) Vaccine: Countries such as the UK and UK have pre-booked more coronavirus vaccines than their populations need. This could end up putting vaccines out of reach for countries that need them. What is the way forward?

coronavirus vaccine, covid-19 vaccine, vaccine nationalism, covid-19 vaccine update, Covid-19 vaccine latest news, vaccine nationalism explained

X

Trials for Oxford-AstraZeneca vaccine begin in Pune on Wednesday. (Express Photo: Arul Horizon)

The United States has entered into multi-billion-dollar agreements with at least six big pharmaceutical companies for assured supplies of a combined 800 million doses of vaccines that they are separately developing for novel coronavirus. That is more than two doses for every American citizen. The agreements mean that if any of these companies are successful in developing a vaccine, they would be obligated to provide the agreed supplies to the United States before anyone else.
The United Kingdom has entered into similar agreements with multiple companies to secure about 340 million doses, or about five doses per capita. Similar arrangements have been reached by European Union, and some other countries like Mexico, as well.

A novel coronavirus vaccine is still some distance away — if we discount the vaccines developed by Russia and China for which the international demand is not very well evaluated. But the way countries are pre-booking vaccine supplies, often throwing billions of dollars at candidate vaccines whose success as of now is uncertain, has led to questions over the accessibility and affordability of a vaccine, whenever it is finally developed. It has also given rise to a term called “vaccine nationalism”.

Why is ‘vaccine nationalism’ a concern?
The concerns arise from the fact that these advance agreements are likely to make the vaccine inaccessible to large parts of the world that do not have the money to bet on candidates whose success is not guaranteed.

After all, there is limited capacity to produce a vaccine. The wait for a vaccine for these countries could get prolonged because whatever is produced in the first few months or years would have to be sent to the richer countries to fulfil the contractual obligations.

Also, not all the candidate vaccines are likely to succeed. The ones that do would be in great demand, especially from the countries that have entered into advance agreements that have clauses to enable increased supplies for more money. It would thus drive up the prices of the vaccine, making it potentially unaffordable for a large number of countries.

An ideal situation would be to ensure that the vaccines are first made available to whoever needs them the most. Experts agree that frontline health workers, those on emergency duties, the elderly and the sick, pregnant women, and other similarly vulnerable population groups across the world must be given first access to the vaccines. But that is not what seems to be happening.

Also in Explained | Who will get the first Covid-19 vaccine in India, other countries?

Why do countries hoard vaccines?
The coronavirus vaccine is being used by governments across the world as an opportunity to make an impression on their own people, as well as the international community. To their citizens, the governments want to show how concerned they are about their safety and health, for which they want to hoard as many vaccines as they potentially can. And for the international community, and also for their own public, they want to flaunt their scientific capability and expertise. This is also the reason why China and Russia have gone ahead in approving vaccines that have not yet completed necessary trials to prove they are safe and effective. There are political dividends for declaring oneself the first one to develop a vaccine.

coronavirus vaccine, covid-19 vaccine, vaccine nationalism, covid-19 vaccine update, Covid-19 vaccine latest news, vaccine nationalism explained Covishield, the Oxford-AstraZeneca vaccine candidate, being administered to a volunteer in Pune. (Express Photo: Arul Horizon)
Are there precedents of such pre-booking in other outbreaks?
Indeed, the fears about scarcity and unaffordability of the novel coronavirus vaccine are not unfounded. There have been precedents: In 2009, following an outbreak of H1N1 influenza, or swine flu, rich countries had hoarded vaccines in a way similar to the pre-booking happening now. As a result, many countries in Africa had no access to these vaccines for months. The US
and some European countries finally agreed to release 10% of their stocks for other countries, but only after it had become evident that they did not need the vaccines for themselves any longer.

Similarly, anti-retroviral drugs for the treatment of HIV patients were unavailable in Africa, the worst affected region, for several years after being developed in the 1990s.

Scientists and experts have been maintaining that such a strategy might not work out very well even for the countries that are able to stock up on the vaccines. If some parts of the world continue to reel under the epidemic because of lack of access to the vaccine, it would keep the virus in circulation for much longer than it would otherwise have been. That would mean that other countries too would remain at risk, at least economically, because of continued disruptions in global supply chains due to movement, work and trade restrictions in large parts of the world.

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So, what is the way forward for addressing this issue?
It is not that there is no alternative way to this “me-first” approach that the richer countries have been taking. The World Health Organization (WHO), along with some other international alliances, have launched a platform called ACT (or Access to Covid19 Tools) Accelerator Programme. Its objective is to accelerate the development, production, and equitable access to Covid-19 vaccines, and also therapeutics and drugs. The vaccine part of the programme is called the COVAX facility.

COVAX is supposed to do for the world what the richer countries are doing at an individual level —invest money into the leading candidate vaccines to accelerate their development and production. But it also has another important objective — to ensure that the successful vaccines are made equally accessible to all, at an affordable price. It seeks to achieve this by ensuring that all participating countries are provided supplies to cover at least 20% of their populations, at a uniform price. Then as more vaccine doses become available, they would be distributed to countries in proportion to their population size and the extent of the problem they face.

Coronavirus Explained
Modern vaccine promises to be as effective among old as in young
What is vaccine nationalism?
How effective is UK’s ‘Eat Out to Help Out’ scheme?
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Like the US and other countries that are getting into advance agreements, COVAX is supposed to fund the research and development of multiple vaccine candidates. As of now, the facility is backing nine leading candidates. It is asking countries to join the platform and contribute funds, so that everyone can benefit. But while more than 170 countries are in discussions, very few of them have agreed to fund the initiative. Recently, the WHO noted that while it needed at least $100 billion for the COVAX facility, not even 10% of the amount had so far been collected.
Pain 'catastrophising'

Study links pain 'catastrophising' to little exercise, more sedentary lifestyle (New Kerala: 2020827)


August 26: Getting enough exercise plays a key role in chronic pain management. However, how people approach their pain can have a significant effect on whether they get enough physical activity - or if they spend more time sedentary.

In a study, a team led by Penn State researchers found that when people with knee osteoarthritis "catastrophised" -- feeling exaggerated helplessness or hopelessness -- about their pain more than usual, they were less likely to be physically active later in the day, contributing to a domino effect of sedentary behaviour followed by even more pain catastrophising.

According to the researchers, the results -- recently published in the journal PAIN -- have potential implications for pain management and wellness in older adults and suggest that pain catastrophising could be an important therapeutic target for interventions and pain treatment.

"Reducing daily pain catastrophising may help older patients to be more active and less sedentary on a daily basis. This could help improve their chronic pain condition, physical function, and overall health, and reduce the possibility of hospitalisation, institutionalisation, and healthcare costs in the long term," said Ruixue Zhaoyang, assistant research professor.

According to the researchers, chronic or persistent pain affects between 60 and 75 per cent of older adults in the US, making pain management strategies like engaging in enough physical activity an important part of many older adults' lives.

Zhaoyang said catastrophising about pain -- thought patterns like "the pain is terrible and is never going to get any better" or "I can't stand the pain anymore" -- may lead some older adults to avoid exercise in an effort to also avoid pain. But if exercise is put off for too long, it can lead to spirals of depression and even worse pain.

"Staying physically active is one of the most important self-management strategies for chronic pain patients. However, many chronic pain patients avoid physical activities that they are actually capable of doing. Our study focused on one critical psychological factor that may explain why patients avoid physical activity despite its importance for pain management their catastrophic thinking about their pain," said Lynn Martire, professor of human development and family studies.

For the study, the researchers used data from 143 older adults with knee osteoarthritis. The participants kept daily diaries and wore accelerometers -- a wearable device for measuring physical activity -- for 22 days. Each morning, the participants would report how they felt about their pain that day and the accelerometer would gather information on physical activity and sedentary behaviour.
After analysing the data, the researchers found that on the mornings when participants catastrophised about their pain more than usual, they ended up engaging in less moderate to the vigorous physical activity later that day.

Additionally, the researchers found that catastrophising about pain in the morning leads to more time in sedentary behaviour the same and the following day, as well. In turn, more time spent sedentary leads to increased pain catastrophising on the following day.

"One particularly interesting finding is that the detrimental influence of catastrophising thinking about pain is independent of the pain experience itself. In other words, how patients think about their pain, rather than the level of experienced pain, had a more powerful impact on their daily physical activity," Zhaoyang said.

Martire said the results suggest that pain catastrophising can kick-start a potentially harmful cycle -- greater pain catastrophising in the morning leads to avoidance of physical activity, which in turn worsens catastrophising about pain on the following day.

The researchers added that these findings suggest that pain catastrophising could be a good target for interventions aimed at managing chronic pain and increasing physical activity.

"Our study demonstrated that patients' catastrophising thinking can change from day to day and can be modified by their everyday activity behaviour. Future interventions may get better results from using mobile technology to monitor patients' activity levels in everyday life and provide just-in-time adaptive interventions targeting patients' pain catastrophising to reduce their sedentary behaviour," Martire said.

The researchers added that while their study looked specifically at people with knee osteoarthritis, catastrophising can happen with any type of pain. They said the implications of their findings could potentially apply to pain management in patients with other types of chronic pain.

**Depression**

**Many BP drugs may not increase depression risk: Study (New Kerala: 2020827)**


None of the 41 most common high blood pressure medications increased the risk of depression while nine medications appeared to lower it, say researchers. Depression is common among patients with high blood pressure (also called hypertension), heart disease and stroke.

The study, published in the journal 'Hypertension,' systematically investigated whether individual blood pressure medications might influence the risk of developing depression.
"It was highly surprising that none of the 41 most used anti-hypertensives was associated with increased risk of developing depression," said study lead author Lars Vedel Kessing from the University of Copenhagen in Denmark. "And that some within each of the three classes of anti-hypertensives showed protective effects against depression," Kessing added.

For the study, the research team analysed real life data on more than 3.7 million adults who took any of the 41 most commonly prescribed high blood pressure medications, as reported in health records across several Danish health registries from 2005 to 2015. Thirty seven of these medications are approved for use in the US by the Food and Drug Administration.

Patients who had been diagnosed with depression or previously prescribed antidepressants were excluded.

The four main categories of blood pressure-lowering medications were reviewed angiotensin agents (angiotensin converting enzyme inhibitors, ACE inhibitors and angiotensin II receptor blockers, or ARBs); calcium antagonists; beta-blockers; and diuretics.

The analysis found that none of the 41 most common high blood pressure medications increased the risk of depression. Nine medications - a few within each category - significantly lowered depression risk 2 of 16 angiotensin agents, 3 of 10 calcium antagonists and 4 of 15 beta-blockers.

According to the study diuretic medications showed no impact on depression risk. The nine individual high blood pressure medications found to significantly lower depression risk are enalapril and ramipril (angiotensin agents); amlodipine, verapamil and verapamil combinations (calcium antagonists); and propranolol, atenolol, bisoprolol and carvedilol (beta-blockers).

"It is possible that the mechanism involved in decreasing the risk of depression is the anti-inflammatory effect among these nine medications," Kessing continued. "In the future, it will be important to compare the inflammatory properties of these nine hypertensives that lowered depression risk," the study authors wrote.

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**COVID-19 complications**

**Obese people at higher risk of COVID-19 complications: Study (New Kerala: 2020827)***


From COVID-19 risk to recovery, the odds are stacked against those with obesity, and a new study led by the University of North Carolina at Chapel Hill raises concerns about the impact of obesity on the effectiveness of a future COVID-19 vaccine.

Researchers examined the available published literature on individuals infected with the virus and found that those with obesity (BMI over 30) were at a greatly increased risk for hospitalization (113%), more likely to be admitted to the intensive care unit (74%), and had a higher risk of death (48%) from the virus.
A team of researchers at UNC-Chapel Hill's Gillings School of Global Public Health, including lead author Barry Popkin, a professor in the Department of Nutrition and member of the Carolina Population Center, collaborated with senior author Meera Shekar, a World Bank health and nutrition specialist, on the paper published in Obesity Reviews.

For the paper, researchers reviewed immunological and biomedical data to provide a detailed layout of the mechanisms and pathways that link obesity with increased risk of COVID-19 as well as an increased likelihood of developing more severe complications from the virus.

Obesity is already associated with numerous underlying risk factors for COVID-19, including hypertension, heart disease type 2 diabetes, and chronic kidney and liver disease.

Metabolic changes caused by obesity - such as insulin resistance and inflammation - making it difficult for individuals with obesity to fight some infections, a trend that can be seen in other infectious diseases, such as influenza and hepatitis.

During times of infection, uncontrolled serum glucose, which is common in individuals with hyperglycemia, can impair immune cell function.

"All of these factors can influence immune cell metabolism, which determines how bodies respond to pathogens, like the SARS-CoV-2 coronavirus," says co-author Melinda Beck, professor of nutrition at Gillings School of Global Public Health. "Individuals with obesity are also more likely to experience physical ailments that make fighting this disease harder, such as sleep apnea, which increases pulmonary hypertension, or a body mass index that increases difficulties in a hospital setting with intubation."

Previous work by Beck and others has demonstrated that the influenza vaccine is less effective in adults with obesity. The same may be true for a future SARS-CoV-2 vaccine, says Beck.

"However, we are not saying that the vaccine will be ineffective in populations with obesity, but rather that obesity should be considered as a modifying factor to be considered for vaccine testing," she says. "Even a less protective vaccine will still offer some level of immunity."

Roughly 40 per cent of Americans are obese and the pandemic's resulting lockdown has led to a number of conditions that make it harder for individuals to achieve or sustain a healthy weight.

Working from home, limiting social visits and a reduction in everyday activities - all in an effort to stop the spread of the virus - means we're moving less than ever, says Popkin.

The ability to access healthy foods has also taken a hit. Economic hardships put those who are already food insecure at further risk, making them more vulnerable to conditions that can arise from consuming unhealthy foods.

"We're not only at home more and experience more stress due to the pandemic, but we're also not visiting the grocery store as often, which means the demand for highly processed junk foods and sugary beverages that are less expensive and more shelf-stable has increased," he says. "These cheap, highly processed foods are high in sugar, sodium and saturated fat and laden
with highly refined carbohydrates, which all increase the risk of not only excess weight gain but also key noncommunicable diseases."

Popkin, who is part of the Global Food Research Program at UNC-Chapel Hill, says the findings highlight why governments must address the underlying dietary contributors to obesity and implement strong public health policies proven to reduce obesity at a population level.

Other countries, like Chile and Mexico, have adopted policies from taxing foods high in sugar to introducing warning labels on packaged foods that are high in sugar, fats and sodium and restricting the marketing of junk foods to children.

"Given the significant threat COVID-19 represents to individuals with obesity, healthy food policies can play a supportive - and especially important - role in the mitigation of COVID-19 mortality and morbidity," he says.

**Covid-19 infection**

**Lowest possibility of Covid-19 infection via air travel: Official (New Kerala: 2020827)**


The possibility of getting an in-flight Covid-19 infection is negligible, as borne out by empirical data, a senior Civil Aviation Ministry official said.

Joint Secretary, Civil Aviation, Usha Padhee, told IANS that only about 2,000 passengers have been reported to be Covid positive after reaching their destination out of the over 6 million people, who travelled on domestic flights post resumption till August 24.

"This figure even includes individuals who have been identified via contact tracing," she said.

"If you see the empirical data, we can certainly say that air travel is the safest and fastest mode of travel."

A total of 6.5 million passengers have travelled from May 25 onwards till August 24.

Currently, the Centre has permitted only 45 per cent capacity utilisation in the domestic sector with effect from June 27, post the initial re-start of operations of scheduled domestic flights, with effect from May 25.

In addition, special and charter flights are operated with the government's permission for repatriating Indians and foreign citizens.
"As and when the situation improves, more capacity will be allowed. Till now, a sequential growth can be seen in passenger traffic," Padhee said.

"At present, on an average, over 90,000 passengers travel on a daily basis. This number will definitely rise. We have also instituted a fare band which is a win-win for the passengers as well as the industry."

Last month, the Centre had extended the time period for limited domestic passenger flight operations and the air fare cap till November 24.

In terms of the fare structure, air routes have been divided into seven sections based on travel time. Each such section has its minimum and maximum fare.

Padhee also said "The regulator is also carrying out strict financial audits so that safety protocols are not scarified due to financial constraints."

Besides, she pointed out that the Centre has brought in bio-security or public health components in air travel via a multi-level approach.

Padhee also said that domestic airlines will be encouraged to expand international operations and that they should use this period to gain experience in operating long-haul flights.

"There has been massive international expansion by some of the domestic airlines in this period. It is encouraging as post-Covid-19, in the new normal, more passengers will be flown out by Indian carriers," she said.

**Mental health**

**For mental health issues, call helpline 1800-599-0019 (New Kerala: 2020827)**


People across the country seeking mental health rehabilitation services can avail of the facility from Thursday through 'KIRAN', a free helpline being started by the Central government.

The helpline 1800-599-0019, developed by the Social Justice and Empowerment Ministry, along with its partners aims at providing support for early screening, first-aid, psychological support, distress management, mental wellbeing, preventing deviant behaviour and psychological crisis management.

Besides offering mental health rehabilitation services, the helpline aims to resolve stress, anxiety, depression, panic attack, adjustment disorder, post-traumatic stress disorder, substance abuse, suicidal thoughts, pandemic-induced psychological issues and mental health emergencies.
The helpline will offer support in 13 languages for any individual, family, NGOs, DPOs, parent associations, professional associations, rehabilitation institutes, hospitals or anyone in need of support across the country, including Ladakh, Jammu and Kashmir, eight north-eastern states, Andaman and Nicobar Islands and Lakshadweep.

Union Minister for Social Justice and Empowerment Thawar Chand Gehlot will launch 'KIRAN' on Thursday through virtual mode. During the virtual inaugural of the helpline, its poster, brochure and resource book will be released.

The helpline will be supported by 660 volunteers, clinical and rehabilitation psychologists and 668 volunteer psychiatrists along with 75 experts at 25 helpline centres which will have a capacity of handling 300 clients per hour.

There is a three-level mechanism of support, the caller will first be connected to the location-based helpline centre and then as per need referred to rehabilitation, clinical psychologists and psychiatrists.

Follow-up and support will be extended at the third-level. For training of mental health centres three training programmes have been conducted.

The helpline will be coordinated by the National Institute for the Empowerment of Persons with Multiple Disabilities (NIEPMD, Chennai) and the National Institute of Mental Health Rehabilitation (NIMHR, Sehore). Collaboration for the helpline has been received from the Indian Association of Clinical Psychologists (IACP), Indian Psychiatrists Association (IPA) and Indian Psychiatric Social Workers Association (IPSWA).

The idea was conceived by Shakuntala D. Gamlin, Secretary, Department of Empowerment of Persons with Disabilities (DEPwD), based on the prevalence of mental health issues in India and the need to create an access to emergency relief and support for the vulnerable population experiencing psychological issues due to the Covid-19 pandemic.

Prabodh Seth, Joint Secretary, DEPwD mentored the helpline project and coordinated with all national institutes and composite regional centres across the country for the effective execution of the helpline.

**Heart disease**

**Long afternoon naps may up heart disease, death risk: Study (New Kerala: 2020827)**


Many believe that lying down for a snooze is a harmless activity but now, a new study shows that napping for longer than an hour is linked to higher risk of heart disease and death.
Previous research on the link between daytime naps and death or cardiovascular disease has produced conflicting results. In addition, it did not account for the duration of night-time sleep.

This study, presented at 'ESC Congress 2020 The Digital Experience', summarised the available evidence to assess the relationship between napping and the risks of all-cause death and cardiovascular disease.

A total of 3,13,651 participants from more than 20 studies were included in the analysis. Some 39 per cent of participants took naps.

"Daytime napping is common all over the world and is generally considered a healthy habit," said study author Dr. Zhe Pan of Guangzhou Medical University, China.

"A common view is that napping improves performance and counteracts the negative consequences of 'sleep debt'. Our study challenges these widely held opinions," Pan added.

The analysis found that long naps (more than 60 minutes) were associated with a 30 per cent greater risk of all-cause death and 34 per cent higher likelihood of cardiovascular disease compared to no napping.

When night-time sleep was taken into account, long naps were linked with an elevated risk of death only in those who slept more than six hours per night.

Overall, naps of any length were linked with a 19 per cent elevated risk of death.

The connection was more pronounced in women, who had a 22 per cent greater likelihood of death with napping compared to no napping, and older participants, whose risk rose by 17 per cent with naps.

Short naps (less than 60 minutes) were not risky for developing cardiovascular disease.

"The results suggest that shorter naps (especially those less than 30 to 45 minutes) might improve heart health in people who sleep insufficiently at night," Dr. Pan said.

The reasons why napping affects the body are still uncertain, some studies have suggested that long snoozes are linked with higher levels of inflammation, which is risky for heart health and longevity.

"Other research has connected napping with high blood pressure, diabetes, and poor overall physical health," the study authors wrote.
Nursing home study suggests dialysis patients at greater risk of SARS-CoV-2 infection (New Kerala: 2020827)


According to a new study led by researchers at Johns Hopkins Medicine, residents receiving hemodialysis for chronic kidney disease may be at even greater risk for infection from SARS-CoV-2 virus.

It's widely known that the causative agent for COVID-19, the SARS-CoV-2 virus, can spread rapidly among residents in nursing homes and other long-term care facilities, leading to high numbers of cases and deaths in a very vulnerable population.

The finding was reported in the issue of the Morbidity and Mortality Weekly Report, was published by the U.S. Centers for Disease Control and Prevention (CDC).

For their study, the researchers investigated an outbreak of COVID-19 that occurred in April 2020 in a 200-bed Maryland nursing home with an independently operated, on-site hemodialysis centre. Of the 170 residents at the facility, 32 received dialysis treatment between April 16 and April 30. By the end of the study period, testing for exposure to SARS-CoV-2 was conducted on all but three of the residents (they refused and were counted as negative).

The researchers reported that 15 of the 32 residents (47%) on dialysis tested positive while only 22 of the other 138 residents (16%) did.

"Based on our results, we believe that nursing home residents undergoing dialysis are more likely than others in a facility to have repeated and prolonged exposures to the SARS-CoV-2 virus, and therefore may be at greater risk of infection and subsequent COVID-19," says Benjamin Bigelow, a fourth-year medical student at the Johns Hopkins University School of Medicine and the study's lead author.

"Our study suggests that to prevent COVID-19 outbreaks, nursing homes and dialysis centres need to maintain clear and constant communication to improve infection prevention practices throughout the process of transporting residents to dialysis and during the dialysis itself," says Morgan Katz, M.D., M.H.S., assistant professor of medicine at the Johns Hopkins University School of Medicine and senior author of the study. "Residents who undergo dialysis should be carefully monitored, and testing prioritization must account for any contact with dialysis staff who may have been exposed to SARS-CoV-2."

"Identifying cases early, along with aggressive infection prevention and control, are the keys to protecting those in nursing homes with chronic kidney disease and who are most at risk during the pandemic," she adds.
निर्णय: दिल्ली में अगले हफ्ते से दोगुनी कोरोना जांच होंगी

सूचना संबंधीत

मुख्यमंत्री अरविंद केजरीवाल ने कोरोना संक्रमण की बढ़ती संख्या को देखते हुए कोरोना जांच दोगुनी करने का फैसला लिया है। दिल्ली में अभी रोजाना औसतन 20 हजार जांच होती है। जिसे अगले हफ्ते से 40 हजार किया जाएगा।

दिल्ली में संक्रमितों की संख्या मंगलवार को 1500, बुधवार को 1600 पर करने के बाद मुख्यमंत्री ने आपत्ति बेटक खुलाई थी। इसके बाद केजरीवाल ने कहा कि 17 अगस्त से कोरोना मरीजों की संख्या बढ़ी नजर है।

मगर स्थिति नियंत्रण में है। 90 पौसांदी के करीब लॉग टीका हो चुके हैं। मौत की दर भी अगस्त में महज 1.4 पौसांदी है।

14 दिन निगरानी रखी जाएगी

कोरोना से टीके होने और अस्पताल से छुट्टी लेकर जाने के बाद भी सरकार एयर और ऑपरेशन कमर्जी की कमजोर को बढ़ा देंगी।

14 दिन निगरानी रखी जाएगी। कोरोना से टीके होने और अस्पताल से छुट्टी लेकर जाने के बाद भी सरकार एयर और ऑपरेशन कमर्जी की कमजोर को बढ़ा देंगी।

Surgery (Hindustan: 2020827)

https://epaper.livehindustan.com/imageview_276740_53185074_4_1_27-08-2020_4_i_1_sf.html
संकाय : दिल्ली के सरकारी अस्पतालों में फिलहाल सिफर इंग्लैंडी सर्जरी लग रही है। • परेशान लोग कोट का सुख भी कर रहे।

अस्पतालों में पांच महीने से निम्निम सर्जरी बंद


corona in india latest update: 24 घंटे में 75 हजार से अधिक कोटियां और 1,023 लोगों की मौत

1. Corona in India Latest Update: 24 घंटे में 75 हजार से अधिक कोटियां और 1,023 लोगों की मौत

2. Covid-19 Latest News in India: देश में कोरोना की बढ़ती रफ्तार और टेस्ट दे रहे हैं। महाराष्ट्र, कर्नाटक, आंध्रप्रदेश जैसे राज्यों में कोविड-19 के लगभग 50 हजार से अधिक डीजे मृत पेश किए जा रहे हैं।
भारत में कोरोना की तेज रफ्तार

देश में कोरोना की रफ्तार (Corona in India) हर रोज रेकॉर्ड संख्या में बढ़ रही है। बिहार, महाराष्ट्र, उत्तर प्रदेश, कर्नाटक और आंध्रप्रदेश जैसे राज्य टेस्ट दे रहे हैं। कुल मामलों की संख्या अब 33,10,235 हो गई है और कुल 7,25,991 एक्टिव केस हैं। 25,23,772 लोग लोग कोरोना से ठीक हो चुके हैं। इस जानलेवा वायरस ने अबतक 60,472 लोगों की जान ले ली है। 24 घंटे में 75,760 नए केस दर्ज किए गए हैं जबकि 1,023 लोगों की मौत हुई है।

जानें किस राज्य में कोरोना के कितने मरीज

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सांख्य्य में हर रोज़ लगातार बढ़ रहा है, नियंत्रण की उपाय क्या हैं?