



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Thursday 2020916

Coronavirus vaccine

Trump says coronavirus vaccine could be weeks away (The Tribune: 2020916)

<https://www.tribuneindia.com/news/health/trump-says-coronavirus-vaccine-could-be-weeks-away-141981>

Experts say a scientifically credible vaccine will not be available until early 2021.

Trump says coronavirus vaccine could be weeks away

U.S. President Donald Trump on Tuesday said a vaccine against the deadly coronavirus could be three or four weeks away.

U.S. President Donald Trump on Tuesday said a vaccine against the deadly coronavirus could be three or four weeks away, despite cautionary notes sounded by some U.S. public health officials about that accelerated timeline.

Trump, speaking at a town hall hosted by ABC News in Philadelphia, defended his handling of the coronavirus crisis, and said a vaccine could be ready for distribution before the U.S. presidential election on Nov. 3.

"We're very close to having a vaccine," he said. "If you want to know the truth, the previous administration would have taken perhaps years to have a vaccine because of the FDA and all the approvals. And we're within weeks of getting it... Could be three weeks, four weeks."

Earlier this month, top U.S. infectious disease expert Dr.

Anthony Fauci told CNN that most experts believe a vaccine will be ready by November or December. "It is conceivable that you can have it by October, though I don't think that that's likely." Other experts say a scientifically credible vaccine will not be available until early 2021.

Trump bristled at tough questions from uncommitted voters and ABC News host George Stephanopoulos during the town hall meeting, arguing that his decision to impose travel bans on China and Europe had saved thousands, if not millions, of lives.

He also defended Americans who have shunned face masks and social distancing guidelines and said even experts like Fauci had changed their views about those practices during the crisis.

Trump has faced criticism for holding large-scale campaign events in Nevada and other states - events that his adviser Fauci has described as "absolutely" risky.

His Democratic challenger, former vice president Joe Biden, last week accused Trump of "dereliction" of duty in dealing with the pandemic, which has cost millions of jobs.

The United States has reported nearly 6.6 million cases of COVID-19, the disease caused by the virus, the highest number worldwide, and nearly 195,000 deaths. That accounts for 20% of the cases worldwide, although the United States has just 4% of the world's population.

Trump said the United States had several cases because it did more testing than other countries.

He also repeated his claim from early in the pandemic that the virus would disappear on its own, and denied understating the threat of the disease when asked by an audience member why he would "downplay a pandemic that is known to disproportionately harm low-income families and minority communities."

"Yeah, well, I didn't downplay it. I actually, in many ways, I up-played it, in terms of action. My action was very strong," the Republican president, who is seeking reelection on Nov. 3, said.

Trump also provoked mockery on Twitter when he spoke about "herd mentality" instead of "herd immunity," a form of indirect protection from infectious disease that occurs when enough people have become immune through vaccination or previous infections.

"It would go away without the vaccine ... but it's going to go away a lot faster with it," he said. "You'll develop ... a herd mentality."-- Reuters

Medical oxygen

Absolutely 'no shortage' of medical oxygen at national level: Health secretary (The Tribune: 2020916)

<https://www.tribuneindia.com/news/health/absolutely-no-shortage-of-medical-oxygen-at-national-level-health-secretary-141618>

Absolutely 'no shortage' of medical oxygen at national level: Health secretary

A healthcare worker puts a pulse oximeter on a woman's finger to check her oxygen level during a door-to-door survey for the coronavirus disease in Moriya village on the outskirts of Ahmedabad. Reuters

There is absolutely "no shortage" of medical oxygen, vital in the treatment of coronavirus, at the national level, the Union Health Ministry said on Tuesday, while urging states to ensure a proper inventory management at hospital-level and advance planning for timely replenishment so that there is no stockout

Asked if there was an acute shortage of oxygen in different states and there had been deaths due to it, Health Ministry Secretary Rajesh Bhushan said the country's current daily capacity of oxygen production as on date is slightly more than 6,900 metric tonne.

Referring to morning figures, Bhushan at a press briefing said that 3.69 per cent of the COVID-19 patients were on oxygen support, 2.17 per cent were in ICU beds which are with oxygen and 0.36 per cent of the patients were on ventilator support which is again with oxygen. This, he said, amounts roughly to around 6 per cent people in total.

"So what was the oxygen which was being consumed by these people plus that is consumed by non-COVID health services, if that is again taken (as per morning figure) that is 2,800 metric tonnes on a daily basis.

"So if we look at the industries production and their requirement for oxygen it is 2,200 metric tonne which gives a total of 5,000 metric tonne consumption per day and a headroom of 1,900 metric tonne. So speaking at the national level there is absolutely no shortage of oxygen, in fact there is a surplus today morning of 1,900 metric tonnes," he said.

The problem, the official said, happens when there is no inventory management at facility-level.

Bhushan stressed that every state should ensure that there is oxygen inventory management at hospital-level and possible stockout alerts are generated so that it can be replenished on time.

"If a shortage is likely then immediate action should be taken to replenish it on time and help should be sought from the Centre," Bhushan said.

He further said that meetings have been held with states and they have also been asked to set up a control room for monitoring the situation of oxygen stock, and a virtual control room has also been set at the central level.

"States should monitor the oxygen availability and use it rationally," he said.

The Union Health Ministry on Monday held a virtual meeting with 29 states and UTs, including Assam, Bihar, Chandigarh, Chhattisgarh, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Kerala, Ladakh, Meghalaya, Nagaland, Delhi, Odisha, Punjab, Puducherry, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal, and urged them to ensure adequate oxygen availability in all healthcare facilities and unrestricted intra as well as inter-state movement of oxygen.

Union Health Secretary, Secretary DPIIT Secretary Pharmaceuticals and Secretary Textiles also participated in the meeting.

It was noted that 11 tankers in the state of Assam supply oxygen to most of the northeastern states.

The states were asked to assess the need and then to press more tankers into action, repurpose similar vehicles for carrying oxygen, and take steps to reduce their turnaround time so that patients do not face any lack of oxygen, the ministry had said in a statement on Monday.

The states were specifically advised to ensure facility wise/hospital-wise oxygen inventory management and advance planning for timely replenishment so that there is no stockout. PTI

Russia's COVID-19 vaccine data

Fifteen scientists launch critique of Russia's COVID-19 vaccine data (The Tribune: 2020916)

<https://www.tribuneindia.com/news/health/fifteen-scientists-launch-critique-of-russias-covid-19-vaccine-data-141548>

Fifteen scientists launch critique of Russia's COVID-19 vaccine data
Photo for representation only.

A group of scientists sent a formal letter to the Lancet on Monday outlining doubts about the accuracy of early data on Russia's COVID-19 vaccine, one of the authors said, adding further fuel to a dispute surrounding the "Sputnik-V" shot.

Fifteen scientists from five countries signed the letter presenting their concerns to the international medical journal, Enrico Bucci, biologist adjunct professor at Philadelphia's Temple University, told Reuters.

Reuters did not see the contents of the letter. The move nonetheless highlights growing concern among scientists about the safety and efficacy of the Sputnik-V vaccine, which the government approved for use before completing full human trials.

The official letter came days after a larger group of scientists - including the 15 - signed an open letter to the Lancet's editor, published on Bucci's personal blog, after the journal published the early-stage trial results from Moscow's Gamaleya Institute.

They said they found patterns in the Phase I/II data, which was peer-reviewed in the journal, that looked "highly unlikely", with multiple participants reporting identical antibody levels.

The Gamaleya Institute did not immediately respond to a request for comment about the formal letter sent on Monday.

Last week the institute rejected the critique contained in the open letter, which was initially signed by 26 scientists but now has 38 signatories.

"The published results are authentic and accurate and were examined by five reviewers at The Lancet," Denis Logunov, a deputy director at the institute, said in a statement.

He said his institute submitted the entire body of raw data on the trial results to The Lancet.

The Lancet said it had invited the authors of the Russian vaccine study to respond to the questions raised in the open letter by Bucci.

"We continue to follow the situation closely," it added.

Alexey Kuznetsov, Russian assistant health minister, told the Interfax news agency on Sept. 10 that the Gamaleya Institute had already sent detailed answers to the Lancet's editor.

'RESULTS ARE PLAUSIBLE'

Bucci said the blog published last week had drawn wide international support.

"We started with about a dozen of us and now we have reached three times the signatures, with colleagues from the United States, Switzerland, Australia, India, Russia, Great Britain, Japan, Germany, Canada," Bucci said.

He said the formal letter to the Lancet was signed only by 15 scientists with expertise in virology, immunology, pharmaceutical development, research integrity and statistical analysis. Most were Italian, but they also included scientists from Sweden, Britain, the United States and Japan, he added.

"The journal's editor wrote asking us to send him our points of objections and inviting the authors of Russian vaccine's study to respond to our points," said Bucci.

Naor Bar-Zeev, deputy director at John Hopkins Bloomberg School of Public Health, who peer-reviewed the Russian data, last week defended his analysis of the research following the publication of the blog.

"The results are plausible, and not very different to those seen with other AdV vectored products," he said.

The researchers had provided more detail than was needed for the review and responded to his questions "intelligently and in a matter-of-fact and confident but understated manner".

The results of the Russian Phase I/II trials, which involved 76 participants and was conducted in June-July, were published in the Lancet on Sept. 4. They showed that participants developed a positive immune response and no serious side effects, the study's authors said.

A Phase III trial, involving 40,000 participants, was launched on Aug. 26. Around 31,000 people have already subscribed to take part, Health Minister Mikhail Murashko said.

Oxford Covid vaccine trials in India

Serum Institute gets nod to resume Oxford Covid vaccine trials in India (The Tribune: 2020916)

<https://www.tribuneindia.com/news/health/serum-institute-gets-nod-to-resume-oxford-covid-vaccine-trials-in-india-141980>

On September 11, phase two and three clinical trial were suspended after “unexplained illness” in a participant

Serum Institute gets nod to resume Oxford Covid vaccine trials in India
Photo for representation only.

Drugs Controller General of India (DCGI) Dr V G Somani has gave permission to Serum Institute of India to resume clinical trial of the Oxford COVID-19 vaccine candidate in the country while revoking its earlier order of suspending any new recruitment for phase two and three trial.

The DCGI has, however, put certain conditions like taking extra care during screening, providing additional information in informed consent and close monitoring for adverse events during follow-up of the study which have to be "scrupulously" followed by Serum Institute of India (SII).

SII has also been asked to submit to the DCGI's office details of medication used in accordance with the protocol for management of adverse events.

The DCGI had on September 11 directed Serum Institute of India to suspend any new recruitment in the phase two and three clinical trial of the Oxford COVID-19 vaccine candidate till further orders in the backdrop of pharma giant AstraZeneca pausing the clinical trials in other countries because of "an unexplained illness" in a participant in the study.

On Saturday, British-Swedish biopharmaceutical giant AstraZeneca and the University of Oxford said clinical trials for their coronavirus vaccine have resumed in the UK after the Medicines Health Regulatory Authority's (MHRA) confirmed that the trials were safe.

SII, which has partnered with AstraZeneca for manufacturing the vaccine candidate for COVID-19, on Tuesday submitted the recommendations of the Data and Safety Monitoring Board (DSMB), UK and DSMB, India, and requested for permission to restart enrolment in the clinical trial.

According to Tuesday's order issued by DCGI, the DSMB, UK, recommended that the investigators recommence all immunisation in their clinical trials subject to certain conditions.

DSMB, India, also has recommended to continue the study and enrol the remaining participants in the clinical trial as per protocol subject to certain conditions.

According to the order, SII has submitted revised participant information sheet, revised informed consent form and additional safety monitoring plan for the evolved participants.

The Pune-based firm has also submitted a summary of safety follow up of seven days post first vaccination, stating that no serious adverse events were experienced by any of the subjects till the date of the reporting, and the reported adverse events were stated to be mild, resolved on their own and did not have any sequela.

"In view of the above, I Dr V G Somani, Drugs Controller General of India, Central Licensing Authority, after careful examination of your reply and the recommendations of the DSMB in India and in UK revoke herewith the order dated September 11 issued under Rule 30 of the New Drugs and Clinical Trials Rules, 2019.

"You may recommence the clinical trial as recommended by DSMB, India, as per already approved protocol and the provisions laid down under the New Drugs and Clinical Trial Rules, 2019, subject to the conditions mentioned," the order said. PTI

Immuno suppressing drugs

Immuno suppressing drugs do not increase Covid-19 risk: Study (The Tribune: 2020916)

<https://www.tribuneindia.com/news/health/immuno-suppressing-drugs-do-not-increase-covid-19-risk-study-141540>

Most of these patients are not at any greater risk for Covid-19 than the general population, despite their weakened immune system.

Immuno suppressing drugs do not increase Covid-19 risk: Study

Patients on immunosuppressive therapy for common skin and rheumatic diseases like psoriasis and rheumatoid arthritis are not at increased risk for contracting Covid-19

Patients on immunosuppressive therapy for common skin and rheumatic diseases like psoriasis and rheumatoid arthritis are not at increased risk for contracting Covid-19 and should continue taking their medicine as prescribed, say researchers.

According to the study, published in the Journal of the American Academy of Dermatology, most of these patients are not at any greater risk for Covid-19 than the general population, despite their weakened immune system.

"If you require an immune suppressant medication for your condition to be well controlled, you should not be afraid to continue that medication during the pandemic," said study author Jesse Veenstra from Henry Ford Health System in the US.

For the findings, the research team analysed the association between immunosuppressive medications for skin diseases and the risk of Covid-19 infection and outcomes.

Until recently, little was known about managing patients on these medications in the pandemic and whether they may be at increased risk for infection with Covid-19 or related complications because of their weakened immune system.

The team conducted a retrospective analysis of 213 patients who were taking immunosuppressive medication for immune-mediated inflammatory disease.

The patients were tested for Covid-19 between February 1 and April 18 and had been receiving immunosuppressive medication for at least one month prior to being tested for Covid-19.

The findings showed that, of the 213 patients, 36 per cent tested Covid-19 positive and had no greater odds of being hospitalised or placed on a ventilator than the general population.

There was no evidence that any single immunosuppressive medication increased a patient's odds for testing positive or developing serious disease.

Patients prescribed a TNF alpha inhibitor had significantly lower odds for hospitalisation. TNF alpha inhibitors are part of a class of immunosuppressive biologics used to stop inflammation.

"More research is needed to fully explain this finding, but it may suggest that multiple medications further suppress a patient's immune system, thus rendering them more susceptible to Covid-19," Veenstra noted.

China coronavirus vaccine

China coronavirus vaccine may be ready for public in November (The Tribune: 2020916)

<https://www.tribuneindia.com/news/health/china-coronavirus-vaccine-may-be-ready-for-public-in-november-141519>

China coronavirus vaccine may be ready for public in November
Photo for representation only.

Coronavirus vaccines being developed in China may be ready for use by the general public as early as November, an official with the China Centre for Disease Control and Prevention (CDC) said.

China has four COVID-19 vaccines in the final stage of clinical trials. At least three of those have already been offered to essential workers under an emergency use programme launched in July.

Phase 3 clinical trials were proceeding smoothly and the vaccines could be ready for the general public in November or December, CDC chief biosafety expert Guizhen Wu said in an interview with state TV late on Monday.

Wu, who said she has experienced no abnormal symptoms in recent months after taking an experimental vaccine herself in April, did not specify which vaccines she was referring to.

A unit of state pharmaceutical giant China National Pharmaceutical Group (Sinopharm) and U.S.-listed Sinovac Biotech are developing the three vaccines under the state's emergency use programme. A fourth COVID-19 vaccine being developed by CanSino Biologics was approved for use by the Chinese military in June.

Sinopharm said in July that its vaccine could be ready for public use by the end of this year after the conclusion of Phase 3 trials.

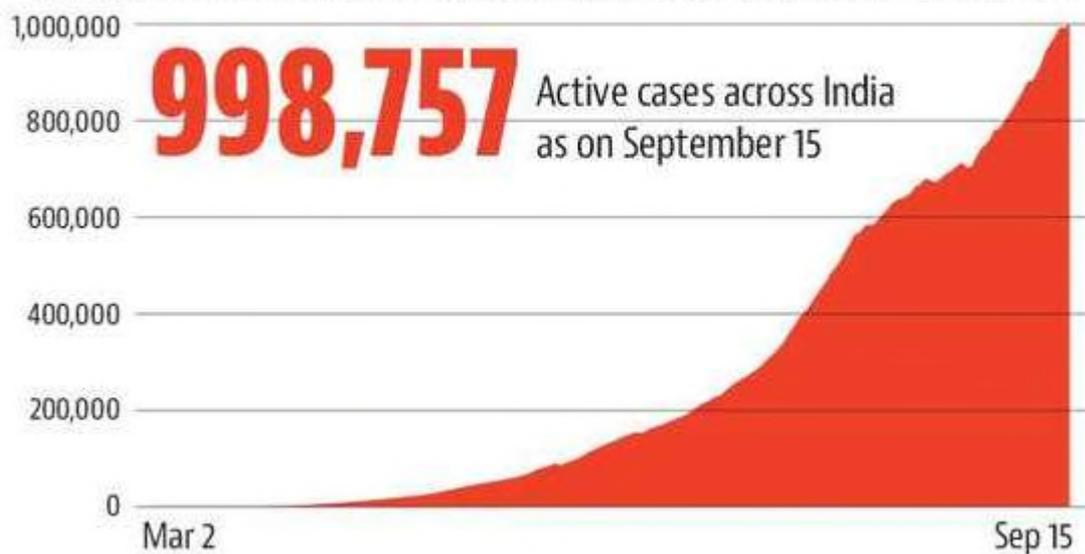
Global vaccine makers are racing to develop an effective vaccine against the virus which has killed more than 925,000 people. Leading Western vaccine makers pledged earlier this month to uphold scientific study standards and reject any political pressure to rush the process.

India hits 5 million, and cases yet to peak (Hindustan Times: 2020916)

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

Active cases near million

The number of active cases in India has been seeing a near-steady rise



The number of coronavirus infections in India crossed the 5 million mark with 91,136 new cases reported on Tuesday, as Covid-19 cases continued to rise at an alarming rate in the nation with the worst-ever recorded case rate.

India's tally of total cases stands at 5,017,914, behind only the United States, which at 6.76 million confirmed infections, is the worst-hit nation in the world. Also, 1,284 new deaths were reported on Tuesday, taking the nationwide death toll to 82,091. A total of 3,937,066 people who have been infected have so far recovered, according to HT's dashboard.

At 998,757, the number of active cases in the country was a little below the million mark till late Tuesday night.

India now accounts for nearly one-sixth of all Covid-19 cases recorded worldwide since the outbreak originated in China nine months ago.

The country also has the worst-ever daily infection rate recorded anywhere in the world. The seven-day average of daily cases in India stands at 93,334, much higher than the peak in the US — where the number touched 69,373 for the week ending June 25, according to worldometers.info.

Unlike the US, India's trajectory has shown no indication of a peak so far and has also been growing steady. The seven-day average has increased 50.7% in the last 30 days — it was 61,933 on August 17.

In terms of deaths, though, India has fared much better. The case fatality rate (CFR) — the proportion of infected people who have died from the disease — is 1.64%, which is not only better than the global average of 3.16%, but has also been improving steadily. The CFR in the US is 2.95%, and in Brazil it is 3.04%.

The rapid increase in daily cases has meant that active cases in India have been seeing a near steady increase. Active cases — which is calculated by subtracting the number of deaths and

recoveries from the total caseload — is a key metric because it reflects the toll on a region's health care facilities. In the past 30 days, active cases have increased from 672,269 to 998,757— a rise of nearly 50%.

One of the key characteristics of the outbreak in India so far has been that almost all of the country's hot spot regions are still seeing a rising curve. The seven-day average of daily cases in Maharashtra, which has the highest caseload, has nearly doubled — from 11,406 to 22,012 in the last 30 days. In Andhra Pradesh, on the second spot, this number has increased from 8,726 to 9,798, and in Karnataka it has grown from 7,276 to 9,011.

Tamil Nadu (on the third spot) is one of the regions that appear to be experiencing a prolonged plateau — daily cases have dropped marginally from 5,876 to 5,610 in 30 days.

In Delhi, average daily cases have nearly quadrupled in the same time period — from 1,033 to 4,094. At the start of August, Delhi was one of the only regions in India that had successfully contained its outbreak when average daily cases dropped to under 1,000. Cases, however, spiked again and are now at an all-time high. To be sure, Delhi's increase in cases has come with a record rise in daily tests.

Testing, in fact, has been one of the spheres where the country has reported massive improvements. Average daily tests across the country have increased from nearly 780,000 to 1,100,000 in the last 30 days.

The government said on Tuesday that India has “learnt from the experience of nations” that suffered high mortalities. India was able to “distribute the curve” of coronavirus infections due to the nationwide lockdown enforced at the end of March, government officials said during the Union health ministry's weekly press briefing. “The US and European nations experienced a peak, then the cases dropped down and now there's a second wave. We took our lesson from them and distributed the curve in a way that we did not have many deaths. It was because we had an effective lockdown, we did not have a huge peak at all,” said ICMR director general Dr Balram Bhargava.

Covid-19: What you need to know today (Hindustan Times: 2020916)

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

In Dispatch 156, I wrote about why it did not make sense to use rapid antigen tests all the time, or be overly dependent on them — like Delhi continues to be.

To recap, such tests give out too many false negative results (identifying an infected person as uninfected) to be reliable. And the protocol in place (which, to make things worse, isn't strictly followed by anybody) of ensuring symptomatic individuals who test negative in a rapid antigen test are administered a molecular test such as the RT-PCR one as a follow-up is pointless — at least 40% and as high as 80% of those infected with Sars-CoV-2, the virus which causes the coronavirus disease (Covid-19), are asymptomatic.

Sure, there is a context in which it makes sense to use rapid antigen tests. After all, they provide results within the hour, as compared to the minimum of 24 hours it takes for an RT-PCR test (and in practice, with logistical delays and backlogs, this goes up to three to four days sometimes). So, in containment zones, in airports and railway stations, and ahead of public events (such as the JEE and NEET entrance examinations; no test was administered the candidates, frittering away a great opportunity to test a large number of people) — wherever time is a constraint — it makes sense to use rapid antigen tests. And sure, it makes sense to ensure that a follow-up RT-PCR test is administered to symptomatic individuals testing negative in an antigen test.

I have previously suggested a hack that could make antigen tests more accurate — two tests administered in parallel to two samples from the same patient (if there is a discrepancy between the two results, a molecular test is administered). This reduces the chances of a false negative by half.

Finally, I have also written about new rapid antigen tests (one was launched by Abbott Laboratories, but only in the US recently), which are fast, inexpensive, and as accurate as molecular tests. We must get those. At the time of writing the column referred to in the first instance — it also mentioned Uttar Pradesh and Bihar, two other states overly dependent on rapid antigen tests — I did not expect that an opportunity to use a real-life example to explain why such tests shouldn't be used indiscriminately would present itself in a few days. The math presented in that column was simple, but because it concerned a hypothetical situation, administrators in Delhi, Lucknow and Patna may have missed its import.

And so, with that elaborate prelude, let's look at Exhibit A: The Delhi assembly.

This is what we know: 50 lawmakers attended the Delhi assembly's special one-day session on Monday. All of them had previously taken RT-PCR tests, but not all the results had come in by Monday morning. A rapid antigen test was administered to these lawmakers. It isn't immediately clear how many were administered the test. It was also administered to assembly officials and journalists covering the session. One MLA tested positive and was immediately sent into quarantine. The others tested negative, and the session began. The positive RT-PCR results of two MLAs came even as the session was in progress — they left the assembly immediately, but, by then, their colleagues had been exposed to them. While all 47 of them have tested negative, they have shared a closed room (a large one) with the two lawmakers, should ideally go into quarantine, and have themselves tested after five days (if they are infected, it will show up by then).

Delhi's administrators, who continue to rely overly on antigen tests (last week, these accounted for 83% of the total 397,722 tests conducted), couldn't have asked for a better demonstration of their (the tests') inaccuracy, and how the erroneous results could, in turn, have cascading implications. Delhi chief minister Arvind Kejriwal was in the House at the time, although it isn't clear whether he came in contact with the infected lawmakers. A mere greeting, or passing an infected person in the corridor, is unlikely to be dangerous — the infection comes from prolonged exposure. But, building on several research studies, a bunch of talking heads in a room are more at risk than a bunch of silent ones.

I hope those plexiglass partitions in Parliament are tall enough.

© 2020 All Rights Reserved. Powered by Summit

Disclaimer: The contents of this website is the copyright of HT Digital Streams Limited and any downloadable version thereof, including but not limited to electronic or digital version of newspaper (e-paper) in any format, is intended for personal consumption only. Dissemination, distribution, circulation and/ or publication of any content or e-paper (pdf or otherwise) through any mode and/or on any social media platform without prior authorization/ permission/ license, is strictly prohibited.

New Cases (The Asian Age: 2020916)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=15106780>



People wait outside district hospital OPD for medical consultation amid the ongoing coronavirus pandemic in Noida on Tuesday. — PTI

Delhi records 4,263 new corona cases, total tally over 2.25 lakh

36 fatalities push death toll to 4,806 ■ Containment zones jump to 1,560

AGE CORRESPONDENT
NEW DELHI, SEPT. 15

Delhi's Covid tally mounted to over 2.25 lakh after 4,263 fresh cases were reported on Tuesday, with authorities conducting a record 62,669 tests in the national capital.

Thirty-six fatalities pushed the death toll in the national capital to 4,806, according to the latest bulletin issued by the Delhi health department.

Three of these 36 deaths are from the previous day. The death toll from Covid in Delhi stood at 4,770 on Monday.

The active cases tally on Tuesday rose to 29,787 from 28,641 on the previous day, as per the bulletin.

The Tuesday bulletin said that the death toll from the coronavirus infection has risen to 4,806 and the total number of cases have climbed to 2,25,796. The number of containment zones in Delhi jumped to 1,560 on Tuesday from 1,517 on the previous day.

The Delhi government has also significantly ramped up testing in the past few days.

The number of tests con-

Noida: 152 Covid-19 cases, tally climbs to over 10,000

Noida , Sept. 15: Uttar Pradesh's Gautam Buddha Nagar on Tuesday recorded 152 new Covid cases, taking the district's infection tally to 10,482, official data showed.

The number of active cases came down to 1,928 from 1,979 on Monday and 2,008 on Sunday, according to the data released by the UP health department for a 24-hour period.

On the brighter side, 201 more patients got discharged during the period and the total number of recoveries in the district reached 8,506.

The district, adjoining Delhi, has so far recorded 48 deaths linked to the pandemic, with one of the

lowest mortality rates — 0.45 per cent — in the state, it showed.

The recovery rate improved to 81.14 per cent from 80.38 per cent on Monday and 79.82 per cent on Sunday, as per the statistics. Gautam Buddha Nagar now ranks seventh among the 75 districts in the state in terms of active cases as well as in recoveries and 28th in the death toll, according to the official figures.

There were 67,335 active cases across UP on Tuesday. So far, 2,52,097 patients have recovered across the state, while the death toll linked to Covid climbed to 4,604, the data showed. — PTI

Monday stood at 52.271 while the RT-PCR, CBNAAT and True NAAT tests figures were 10,398 in all adding to 62,669, according to the Tuesday bulletin.

The number of tests done per million, as on Tuesday was over 1.18 lakh while the total number of tests stood at over 22.46 lakh.

The positivity rate on Tuesday stood at 6.8 per cent while the recovery rate was over 84 per cent, the bulletin said, adding that the case fatality rate stood at 2.13 per cent.

Health Minister Satyendar Jain in a meeting with medical directors and medical superintendents of all Delhi government hospitals reviewed the status of testing.

Meanwhile, Delhi chief secretary Vijay Dev reviewed Covid-19 management along with district magistrates in a meeting, according to the bulletin.

Since August 18, cases again have been coming in four-figure count in the city. According to the bulletin, out of the total number of beds in Covid hospitals, 7,824 are vacant.

ducted and corresponding fresh cases reported from September 1-14 in that order are: 14,389 (1,358); 20,437 (2,024); 24,198 (2,312); 28,835 (2,509); 32,834 (2,737); 36,219 (2,914) 38,895 (2,973); 36,046 (3,256); 22,954 (2,077); 45,797 (3,609); 54,517 (4,039);

58,340 (4,308); 60,580 (4,266); 60,076 (4,321); 56,656 (4,235) and 44,884 (3,229).

On Tuesday again, over 4,000 cases were recorded for the 62,669 tests conducted the previous day.

The number of rapid-antigen tests conducted on

Total Covid Tally (The Asian Age: 2020916)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=15106831>

■ Total Covid tally nears 50L mark ■ Recovery rate at 78.28%

84K new cases in India in 24 hrs

VINEETA PANDEY
with agency inputs
NEW DELHI, SEPT. 15

With close to 84,000 fresh cases, India on Tuesday moved closer to the mark of 50 lakh overall cases of novel coronavirus. Till Tuesday morning, the tally, as per the Union health ministry, was over 49.30 lakh while the total number of deaths went past 80,000 with 1,054 new fatalities due to the virus.

Covid cases in India have crossed 50 lakh as per Covid19India.org

However, the recoveries too have been equally high with more than 38.59 lakh



patients cured, taking the recovery rate to 78.28 per cent. According to Johns Hopkins University data, India has the highest recoveries in the world, followed by Brazil, the United States, Russia,

Colombia and South Africa. Union health secretary Rajesh Bhushan the number of active cases (9,90,061) are only one-fifth or 20 per cent of the total cases (38,59,399) and there are 14 states and Union territories where the number of active cases are less than 5,000 and only four states have more than 50,000 active cases. He underlined that India's Covid-19 deaths per million population at 58 is also amongst the lowest in the world and the global average is 118.

Amid reported cases of re-infection of coronavirus in fully cured per-

sons, director general of the ICMR, Dr Balram Bhargava said the cases of reinfection was very rare. "We have reinfection in many other illness too. So can have re-infection of Covid as well, but it is not a matter of major concern because wherever it has happened, it has been mild," Dr Bhargava said.

Talking about India's Covid-19 fight, he said, "If you look at the countries of Europe and the US, they had a peak and then they came down and during that peak whether it was Spain, the UK or Sweden or Italy, there were a huge number of mortalities."

Asymptomatic COVID-19 reinfection

Scientists document cases of asymptomatic COVID-19 reinfection (The Hindu: 2020916)

<https://www.thehindu.com/sci-tech/health/scientists-document-cases-of-asymptomatic-covid-19-reinfection/article32613251.ece>

Research report appears on a pre-print server and hasn't been peer-reviewed.
You have reached your limit for free articles this month.

The lost art of breathing right

Experts remind us of basic breathing techniques we've forgotten (The Hindu: 2020916)

<https://www.thehindu.com/sci-tech/health/how-to-breathe-right/article32599407.ece>

Unless we have asthma or a lung infection, breathing is something we take for granted. But according to Dr Sundeep Salvi, a pulmonologist in Pune, “breathing nourishes our body with oxygen that generates 90% of the body’s energy; only 10% comes from the food we eat and the water we drink.” The main problem, he says, is that we forget our natural way of breathing as we age, and breathe shallowly.

Health Care Services

35 doctors from top Mumbai hospitals to help BMC run jumbo C (The Times of India: 2020916)

Read more at:

https://mumbaimirror.indiatimes.com/coronavirus/news/top-doctors-to-help-bmc-run-mumbais-jumbo-covid-centres/articleshow/78137435.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Pandemic

Vaccines won't end pandemic quickly unless delivered equitably: Gates (New Kerala: 2020916)

<https://www.newkerala.com/news/2020/164158.htm>

Even as the world is rushing for solutions to fight Covid-19, developing and manufacturing vaccines will not end the pandemic quickly unless they are delivered equitably, warn Bill and Melinda Gates.

According to a projection by Northeastern University, if rich countries buy up the first two billion doses of vaccine instead of making sure they are distributed equitably, then almost twice as many people could die from Covid-19.

"Researchers are very close to developing safe, effective coronavirus vaccines, but breakthrough science must be met by breakthrough generosity," Melinda Gates said in a statement.

"We need leaders in government and the pharmaceutical industry to ensure that everyone, regardless of where they live, can access these vaccines. And we're hopeful that will happen."

However, according to the fourth annual Goalkeepers Report released by the Bill and Melinda Gates Foundation on Monday the world has regressed by nearly every indicator because of Covid-19.

Because of the pandemic, extreme poverty has increased by seven per cent, said the report.

Vaccine coverage, a good proxy measure for how health systems are functioning, is dropping to levels last seen in the 1990s, setting the world back about 25 years in 25 weeks.

The report showed how economic damage has reinforced inequities and derailed achievement of the UN Sustainable Development Goals.

The ripple effects of COVID-19 have stopped 20 years of progress toward these global goals, said the report.

Coronavirus re-infection

Coronavirus re-infection is very rare: ICMR DG (New Kerala: 2020916)

<https://www.newkerala.com/news/2020/164135.htm>

The Indian Council of Medical Research (ICMR) DG Dr Balram Bhargava said on Tuesday said that re-infection with coronavirus is very rare.

"Re-infection is very rare with COVID-19. We have seen re-infection occurs in case of measles and (if) someone gets measles, he needs to be protected all his life from measles even though he generates certain anti-bodies," Dr Bhargava said at a press conference.

"Similarly, we can have re-infection in COVID-19 as it is being described by the case in Hong Kong. It is not a matter of concern. One point be noted that whenever re-infection occurs, earlier symptoms would have been mild, Dr Bhargava said.

A Hong Kong man, who recovered from COVID-19 was infected again four-and-a-half months later after the first infection in the first documented instance of human re-infection last month, researchers at the University of Hong Kong reported.

The expert group at Centre for Disease Control (CDC), US Department of Health, in its guidance note recently said that "re-infection with SARS-CoV-2 has not yet been definitively confirmed in any recovered persons to date. If, and if so when, persons can be re-infected with the SARS-CoV-2 remains unknown and is a subject of investigation."

However, this does not mean that people once infected with the virus can be said to have developed immunity against re-infection, it said

In India over 38.5 lakh persons have recovered from COVID-19, one of the highest in the world, Health Ministry said on Tuesday.

The ministry has said that the country has consistently maintained a low and declining Case Fatality Rate (1.64 per cent) and it is far below the global average of 3.2 per cent and that of many other countries. The aim is to achieve a national CFR of less than one per cent.

"US and countries of Europe had a peak, then they came down and there is a second wave occurring there. We learnt from that. We distributed the curve in a way that we did not have many deaths. It was because we had an effective lockdown, we did not have a huge peak at all," Dr Bhargava said.

Turmeric supplement

Turmeric supplement effective in osteoarthritis knee pain: Study (New Kerala: 2020916)

<https://www.newkerala.com/news/2020/164100.htm>

An extract of *Curcuma longa* (CL) or turmeric has been found to be more effective than placebo for reducing knee pain in patients with knee osteoarthritis, say researchers.

Osteoarthritis is the most common form of arthritis, affecting millions of people worldwide. It occurs when the protective cartilage that cushions the ends of bones wears down over time.

Although osteoarthritis can damage any joint, the disorder most commonly affects joints in the hands, knees, hips and spine.

According to the study, published in the journal *Annals of Internal Medicine*, turmeric, however, does not affect the structural aspects of knee osteoarthritis, such as swelling or cartilage composition assessed using MRI.

"Despite its large disease burden, no approved disease-modifying drugs currently are available to treat osteoarthritis," said study authors from the University of Tasmania in Australia.

Common treatments, such as acetaminophen and nonsteroidal anti-inflammatory drugs have only mild to moderate effects and are associated with adverse events.

As such, an urgent need exists for safer and more effective drugs to treat osteoarthritis.

For the current findings, the research team randomly assigned 70 participants with symptomatic knee osteoarthritis and ultrasound evidence of effusion (swelling inside the knee joint) to receive either two capsules per day of CL or matched placebo for 12 weeks to determine the efficacy of CL for reducing knee symptoms and joint swelling.

Changes in pain and knee effusion-synovitis volume were assessed by a standardized questionnaire and MRI, respectively, over 12 weeks.

The researchers also looked for changes in cartilage composition, pain medication usage, quality of life, physical performance measures, and adverse events.

After 12 weeks, they found that patients taking the turmeric supplements reported less pain than those in the placebo group with no adverse events.

Besides, participants in the turmeric group consumed fewer pain medications compared to the participants in the placebo group.

There was no difference in the structural aspects of knee osteoarthritis between the groups.

Due to the modest effect of the turmeric extracts on knee pain, a small sample size of the study, short-duration of follow-up and the single research centre, the researchers suggest that multicenter trials with larger sample sizes and longer duration of follow-up are needed to assess the clinical significance of their findings.

Artificial intelligence system

Researchers develop artificial intelligence system to help better select embryos for implantation (New Kerala: 2020916)

<https://www.newkerala.com/news/2020/164047.htm>

Investigators from Brigham and Women's Hospital and Massachusetts General Hospital are developing an artificial intelligence system with the goal of improving IVF success by helping embryologists objectively select embryos most likely to result in a healthy birth.

Using thousands of embryo image examples and deep-learning artificial intelligence (AI), the team developed a system that was able to differentiate and identify embryos with the highest potential for success significantly better than 15 experienced embryologists from five different fertility centres across the United States. The results of their study are published in eLife.

For many people who are struggling to conceive, in-vitro fertilization (IVF) can offer a life-changing solution. But the average success rate for IVF is only about 30 per cent.

"We believe that these systems will benefit clinical embryologists and patients," said corresponding author Hadi Shafiee, PhD, of the Division of Engineering in Medicine at the Brigham. "A major challenge in the field is deciding on the embryos that need to be transferred during IVF. Our system has tremendous potential to improve clinical decision making and access to care."

Currently, the tools available to embryologists are limited and expensive, and most embryologists must rely on their observational skills and expertise. Shafiee and colleagues are developing an assistive tool that can evaluate images captured using microscopes traditionally available at fertility centres.

"There is so much at stake for our patients with each IVF cycle. Embryologists make dozens of critical decisions that impact the success of a patient cycle. With assistance from our AI system, embryologists will be able to select the embryo that will result in a successful pregnancy better than ever before," said co-lead author Charles Bormann, PhD, MGH IVF Laboratory director.

The team trained the AI system using images of embryos captured at 113 hours post-insemination. Among 742 embryos, the AI system was 90 per cent accurate in choosing the most high-quality embryos. The investigators further assessed the AI system's ability to distinguish among high-quality embryos with the normal number of human chromosomes and compared the system's performance to that of trained embryologists. The system performed with an accuracy of approximately 75 per cent while the embryologists performed with an average accuracy of 67 per cent.

The authors note that in its current stage, this system is intended to act only as an assistive tool for embryologists to make judgments during embryo selection.

"Our approach has shown the potential of AI systems to be used in aiding embryologists to select the embryo with the highest implantation potential, especially amongst high-quality embryos," said Manoj Kumar Kanakasabapathy, one of the co-lead authors.

Researchers develop artificial intelligence system to help better select embryos for implantation
Liked This Article? Be The First To Share it!

Fertility

Leading gynaecologists and infertility experts across NCR-Delhi have opined that amid the coronavirus pandemic, a host of factors are at play that are advantageous to the couples eager to start a family. (New Kerala: 2020916)

<https://www.newkerala.com/news/2020/163954.htm>

They said remote working is the "best time to conceive" as the couples are now getting enough of a comfortable environment to plan their future, besides facing less stress without the earlier long commuting hours and striking a balance in professional and personal lives.

Dr Akta Bajaj, Senior Consultant-Obstetrics and Gynaecology at New Delhi's Ujala Cygnus Healthcare Services, said that she has been witnessing a surge in pregnant patients in the last couple of months in her hospital OPDs. The doctor said that these patients were mostly those who faced problems earlier in conceiving because of immense stress.

"Owing to the coronavirus pandemic, mostly couples are confined to the comfort of their homes, experiencing low stress and spending more time together. They are utilising this time for family planning. In our hospital too, we have been seeing a lot of couples who earlier had trouble conceiving, but have conceived in the last three-four months," Dr Bajaj added.

Dr Manpreet Sodhi, Consultant-Obstetrics and Gynaecology at Paras Hospitals in Gurugram, explained why couples experienced infertility in the pre-COVID times. "If we see the pre-coronavirus times, the couples had no work-life balance... quality time needed to plan pregnancy was not there. So, it was seen that most couples could not plan a baby at the right time because of the tremendous work pressure."

She added "Nowadays, they are getting time to strike a balance between work and life as they are mostly at home; so it is a good time for those who were planning a baby for a long time. They can try and conceive at this point of time," said Dr Sodhi.

Apart from remote working, without the stress of daily commuting, the couples are more relaxed than normal times. Remote working also gives a chance to exercise together -- it has been seen that having a 'buddy' motivates people better to take up an exercise as a routine.

This model is also very helpful for stress-relieving activities like yoga and meditation. This, in turn, is good for the health of both the partners. It is important to limit work hours from spilling over and affect non-working hours.

New couples can use that time to know each other better - getting at ease with each other is very important for the parents-to-be, said Dr Amita Shah, Senior Consultant and Head of Obstetrics and Gynaecology at Columbia Asia Hospital in Palam Vihar.

Dr Sandeep Chadha, Obstetrician and Gynaecologist, Motherhood Hospital, Noida, felt that this is the ideal time for those wishing to conceive because air quality is at its best. Since there is hardly any pollutant in the air, it is safe for both the mother and her child, he pointed out.

"Women are in a more comfortable environment as they are working from home. When a woman is expecting and gets such a comfortable environment, it is good for her health. Sometimes facing the computer screen for a long time makes them nauseated. They are more relaxed at home and can eat small meals in between. Even other family members are there to take care of her. There is nothing to be frightened about if you are expecting during the pandemic times because coronavirus does not get transmitted to the baby easily. Pregnant women just need to adhere to all COVID-19 guidelines because their immunity levels are low," said Dr Chadha.

Dr Parul Katiyar, Fertility Consultant, Nova IVF, New Delhi, pointed out that since people are eating nutritious diets and maintaining a healthy lifestyle to keep the COVID-19 infection at bay, they are conceiving naturally.

"Staying at home has reduced the intake of junk food and increased intake of quality and home-cooked food and diet, which plays a vital role in fertility. Since most couples are staying and working together, they manage to have a better bonding, which is good not just for interpersonal relationships but also makes it easier for the man to take good care of his wife if she conceives."

She added "Mostly, women are concerned about rest and undergoing regular check-ups in case they conceive. They often tend to think that they will not be able to take adequate rest because of the usual hectic lifestyle. Since they are working from home, these factors are eliminated because of the flexible duty hours while working from home," said Dr Katiyar.

Dr Gauri Agarwal, IVF and Infertility Specialist, and founder of Seeds of Innocence and Genestrings Lab, said she is recommending to married couples to conceive at this point in time because everybody is at home, and the harmony between the couples is much better than before. Even the IVF centres have subsidised their rates because of the prevalent economic slowdown.

"Because of the low economy, the IVF centres are quoting lesser rates for tests to help interested couples. And it's a great time to enjoy pregnancy also, as the couples can spend most of their time together and stay calm. Speaking of the stress among the couples from the working class, due to various reasons like salary reductions, increased workload, and sitting at home, it is still better than before. We think the equation between the couples is better, as told by most of those who came for tests," Dr Agarwal added.