



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DA  
Wednesday

2020902

## Active Covid-19 cases in India

### Active Covid-19 cases in India reach 8 lakh; recovery rate is 77 per cent (The Tribune: 2020902)

<https://www.tribuneindia.com/news/nation/active-covid-19-cases-in-india-reach-8-lakh-recovery-rate-is-77-per-cent-135171>

78,357 new cases take tally past 37 lakh, death toll rises to 66,333

Active Covid-19 cases in India reach 8 lakh; recovery rate is 77 per cent  
India's COVID-19 tally had crossed the 20-lakh mark on August 7 and went past 30 lakh on August 23. PTI

India's COVID-19 tally of cases galloped past 37 lakh on Wednesday with 78,357 new instances of the disease reported in a day, while the number of recoveries crossed 29 lakh pushing the recovery rate to 76.98 per cent, the Union health ministry data showed.

The death toll climbed to 66,333 with 1,045 more fatalities reported in 24 hours. India has so far reported 37,69,523 cases of the viral disease, according to the data updated at 8 am.

The total number of COVID-19 recoveries in the country has surged to 29,01,908, while the fatality rate has further declined to 1.76 per cent. There are 8,01,282, active cases in the country which comprises 21.26 per cent of the total caseload, the data stated.

India's COVID-19 tally had crossed the 20-lakh mark on August 7 and went past 30 lakh on August 23.

According to the Indian Council of Medical Research (ICMR), a total of 4,43,37,201 samples have been tested up to September 1, of which 10,12,367 were tested on Tuesday. PTI

## **COVID-19 vaccine**

### **US says it won't join global effort to find COVID-19 vaccine (The Tribune: 2020902)**

<https://www.tribuneindia.com/news/health/us-says-it-wont-join-global-effort-to-find-covid-19-vaccine-135172>

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More than 150 countries are setting up the COVID-19 Vaccines Global Access Facility, or US says it won't join global effort to find COVID-19 vaccine  
More than 150 countries are setting up the COVID-19 Vaccines Global Access Facility, or COVAX.

The Trump administration said Tuesday that it will not work with an international cooperative effort to develop and distribute a COVID-19 vaccine because it does not want to be constrained by multilateral groups like the World Health Organization.

The decision to go it alone, first reported by The Washington Post, follows the White House's decision in early July to pull the United States out of the WHO. Trump claims the WHO is in need of reform and is heavily influenced by China.

Some nations have worked directly to secure supplies of vaccine, but others are pooling efforts to ensure success against a disease that has no geographical boundaries.

More than 150 countries are setting up the COVID-19 Vaccines Global Access Facility, or COVAX.

That cooperative effort, linked with the WHO, would allow nations to take advantage of a portfolio of potential vaccines to ensure their citizens are quickly covered by whichever ones are deemed effective.

The WHO says even governments making deals with individual vaccine makers would benefit from joining COVAX because it would provide backup vaccines in case the ones being made through bilateral deals with manufacturers aren't successful.

"The United States will continue to engage our international partners to ensure we defeat this virus, but we will not be constrained by multilateral organizations influenced by the corrupt World Health Organization and China," said White House spokesman Judd Deere.

"This president will spare no expense to ensure that any new vaccine maintains our own Food and Drug Administration's gold standard for safety and efficacy, is thoroughly tested and saves lives."

Rep. Ami Bera, D-Calif., said the administration's decision was shortsighted and will hamper the battle to end the pandemic.

“Joining COVAX is a simple measure to guarantee U.S. access to a vaccine — no matter who develops it first,” tweeted Bera, a medical doctor.

“This go-it-alone approach leaves America at risk of not getting a vaccine.” The administration's decision, paired with the U.S. withdrawal from the WHO, means the U.S. is abdicating America's global leadership in fighting pandemics, according to Tom Hart, North America director at The ONE Campaign, an advocacy organization co-founded by Bono of the rock band U2.

"Not only does this move put the lives of millions around the world at risk, it could completely isolate Americans from an effective vaccine against COVID-19," Hart said.

A handful of the dozens of experimental COVID-19 vaccines in human testing have reached the last and biggest hurdle — looking for the needed proof that they really work.

AstraZeneca announced Monday its vaccine candidate has entered the final testing stage in the U.S. The Cambridge, England-based company said the study will involve up to 30,000 adults from various racial, ethnic and geographic groups.

Two other vaccine candidates began final testing this summer in tens of thousands of people in the U.S. One was created by the National Institutes of Health and manufactured by Moderna Inc., and the other developed by Pfizer Inc. and Germany's BioNTech. --AP

## **Antibody**

### **Large antibody study offers hope for virus vaccine efforts (The Tribune: 2020902)**

<https://www.tribuneindia.com/news/health/large-antibody-study-offers-hope-for-virus-vaccine-efforts-135170>

New study done by Reykjavik-based deCODE Genetics with several hospitals, universities and health officials in Iceland

Large antibody study offers hope for virus vaccine efforts

Antibodies that people make to fight the new coronavirus last for at least four months after diagnosis and do not fade quickly, as some earlier reports suggested, scientists have found.

Tuesday's report, from tests on more than 30,000 people in Iceland, is the most extensive work yet on the immune system's response to the virus and is good news for efforts to develop vaccines.

If a vaccine can spur production of long-lasting antibodies like natural infection does, it gives hope that “immunity to this unpredictable and highly contagious virus may not be fleeting”, independent experts from Harvard University and the US National Institutes of Health wrote in a commentary published with the study in the New England Journal of Medicine.

One of the big mysteries of the pandemic is whether having had the coronavirus helps protect against future infection and for how long.

Some smaller studies previously suggested that antibodies disappear quickly and that some people with few or no symptoms may not make many at all.

The new study was done by Reykjavik-based deCODE Genetics, a subsidiary of the US biotech company Amgen, with several hospitals, universities and health officials in Iceland. AP

## **COVID-19 vaccination: WEF survey**

### **One in four adults globally do not want COVID-19 vaccination: WEF survey (The Tribune: 2020902)**

<https://www.tribuneindia.com/news/health/one-in-four-adults-globally-do-not-want-covid-19-vaccination-wef-survey-134750>

The most frequently mentioned reason for not taking a vaccine among those who would not get one is worry about side effects, followed by the perception of effectiveness

One in four adults globally do not want COVID-19 vaccination: WEF survey  
Photo for representation only. — PTI

One in four adults globally do not want to get vaccinated against COVID-19, largely due to their apprehensions about side effects and effectiveness of the vaccine, but the proportion of such people is much less at about 13 per cent in India, a new survey showed on Tuesday.

The World Economic Forum-Ipsos survey of nearly 20,000 adults from 27 countries also put Indians as the third most optimistic population—after China and Saudi Arabia—about a COVID-19 vaccine being available in 2020 itself.

Globally, 74 per cent respondents said they would get a vaccine for COVID-19 if it is available, but more than half (59 per cent) do not expect that one will be available before the end of this year.

Arnaud Bernaert, Head of Shaping the Future of Health and Healthcare at the WEF, said, "the 26 per cent shortfall in vaccine confidence is significant enough to compromise the effectiveness of rolling out a COVID-19 vaccine. It is therefore critical that governments and the private sector come together to build confidence and ensure that manufacturing capacity meets the global supply of a COVID-19 vaccination programme.

This will require cooperation between researchers and manufacturers and public funding arrangements that remove restrictions to vaccine access".

The countries where the COVID-19 vaccination intent was found to be the highest are China (97 per cent), Brazil (88 per cent), Australia (88 per cent), and India (87 per cent).

Those where it is lowest are Russia (54 per cent), Poland (56 per cent), Hungary (56 per cent), and France (59 per cent). However, in most countries, those who agree outnumber those who disagree by a significant margin, the WEF said while announcing the survey results.

Across all 27 countries, 59 per cent respondents disagreed that "a vaccine for COVID-19 will be available to me before the end of 2020".

China stood out for its optimism with 87 per cent of those surveyed expecting a vaccine to be ready this year, followed by Saudi Arabia (75 per cent) and India (74 per cent).

By contrast, skepticism prevails in Germany, Belgium, Japan and Poland where fewer than one in four adults anticipate that a vaccine will be available at some point in the next four months, the WEF said.

The most frequently mentioned reason for not taking a vaccine among those who would not get one is worry about side effects, followed by the perception of effectiveness. There are also several countries that feel they are not sufficiently at risk and a proportion who are against vaccines in general, the survey results showed.

Geneva-based WEF, which describes itself as an international organisation for public-private cooperation, said the survey was conducted between July 24 and August 7 by Ipsos, the world's third-largest market research firm, on its global advisor online survey platform.

The surveyed countries also included the US, Canada, Malaysia, South Africa, Turkey, South Korea, Peru, Argentina, Mexico, Spain, Netherlands, Sweden, and Italy. PTI

## **Social distancing**

### **Mask use and social distancing may prevent 2 lakh COVID deaths in India: Study (The Tribune: 2020902)**

<https://www.tribuneindia.com/news/health/mask-use-and-social-distancing-may-prevent-2-lakh-covid-deaths-in-india-study-134717>

India can expect approximately 291,145 total COVID-19 deaths by December 1, up from 60,000 in late August

Mask use and social distancing may prevent 2 lakh COVID deaths in India: Study

Widespread mask use and data-driven social distancing measures in India may help prevent over 200,000 COVID-19-related deaths in India by December 1, according to a modelling study which shows the disease will continue to pose a major public health threat in the country.

The study by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington in the US suggests that there is an opportunity to further limit the toll of COVID-19 in India.

It highlights the critical need for people to comply with face mask use, social distancing, and other COVID-19 prevention guidelines as advised by the public health authorities.

"India's epidemic is far from over, as a large proportion of the population is still susceptible," IHME Director, Christopher Murray, said in a statement.

"In fact, our modelling shows there is a wide range of potential outcomes, depending on the actions that governments and individuals take today, tomorrow, and into the near future. Mask-wearing and social distancing are crucial to mitigate the spread of the virus," Murray explained.

Reacting to the findings of the modelling study, Gautam Menon, Professor, Departments of Physics and Biology, Ashoka University in Haryana said it is certainly true that mask wearing and distancing measures will significantly slow the progress of the disease while protecting vulnerable populations.

"My first view is that the IHME model predicts a peak in infections only by early to mid-December, peak numbers of close to 6 million new infections per day and total deaths of about 500,000 in the 'no intervention' scenario," Menon told PTI.

However, he noted that these numbers appear inflated compared to other estimates and models which suggest a peak that should happen well before mid-December.

"Given that, the estimate of lives saved (in the study) may be on the excessive side," Menon noted.

The researchers in the IHME study noted that India's response to COVID-19 has produced some significant successes that highlight the opportunity to limit the pandemic's toll in the country.

Giving the example of some urban areas, including Delhi, they explained that containment measures which include intensive contact tracing, widespread testing, mask-wearing, and social distancing mandates have helped reduce the spread of the virus.

Their modelling study found that, in the best-case scenario, India can expect approximately 291,145 total COVID-19 deaths by December 1, up from 60,000 in late August.

This scenario assumes that face mask usage increases to near-universal (95 per cent) levels and that six-week, state-level lockdowns are re-imposed if the daily death rate exceeds 8 per million in the states.

On the other hand, if lockdown restrictions continue to ease up and face mask usage remains at current levels, India can expect approximately 492,380 total deaths by December 1, according to the study.

In this scenario, the researchers said, 13 states would each have over 10,000 total COVID-19 deaths by that time, while currently only Maharashtra has crossed this threshold.

"India is at a tipping point. If hospitals in those states are unable to accommodate everyone needing COVID-19 care, the result will be more deaths and greater long-term harm to state and local economies," Murray said.

The researchers said until there is a widely available vaccine against COVID-19, much of India's population remains susceptible to the disease.

"Monitoring trends state-by-state, encouraging mask use, continuing social distancing and hygiene precautions, and using state-level or district-level lockdowns if needed can help save lives and minimise the impact of the pandemic on India's health and economy," the researchers said. PTI

## **Covid-19: What you need to know today (Hindustan Times: 2020902)**

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

The Indian economy declined by almost a fourth in the first quarter of 2020-21 compared to a year ago, and there are fears that when data from smaller companies and the informal sector is factored in, the fall could be much higher.

The coronavirus disease and the lockdown imposed to fight it — there was a near-total lockdown for 68 days, including the entire months of April and May, although some restrictions were relaxed starting mid-April — have clearly roiled the economy. By how much? The loss of 23.9% of GDP, or ₹8.6 lakh crore (in 2011-12 prices; at current prices, the amount is ₹11.1 lakh crore), in these three months. Every Indian has seen a loss of ₹6,466 in this period, although, to be sure, the pandemic hasn't affected everyone equally.

The general consensus among economists and statisticians is that the contraction will be larger — because proxies have been used to make good the gaps in data collection (the ongoing pandemic made this difficult), and because data on small companies and the informal sector isn't readily available, although it is anecdotally known that small companies and the informal sector have been hit hard by the pandemic and the lockdown.

The numbers released on Monday show that private consumption is down 27%, which isn't surprising — some people have lost jobs, others have taken salary cuts, and everyone has become cautious with spending. There is also the beginning of what some financial advisors term precautionary saving — with the prospect of the proverbial rainy day now being all too real. Still worse, investment, one of the pillars on which the economy is built, fell by 47% in the quarter. Among large economies, India's rate of contraction was the sharpest — by quite a

bit. The US, for instance, saw its economy shrink by 9.04% in the same quarter year-on-year (its second, because it follows the calendar year for accounting unlike India).

The consensus among experts, before these numbers were released, was that the Indian economy would shrink by at least 5% in 2020-21. It is now becoming clear that 5% may have been an underestimation. India is two months into its second quarter (July-September), and business activity is yet to return to pre-pandemic levels, although it has improved since May. And while there are positive signs in some high-frequency indicators (those released more frequently than a quarter, such as car sales data), there's nothing to suggest that India is in the midst of a V-shaped recovery as emphasised by the chief economic adviser.

Indeed, given the current economic context, even the prospect of a U-shaped recovery looks challenging. Unless there is a miraculous turnaround in fortunes, the Indian economy will likely contract in the second and third quarters. And for the year as a whole, it is possible that the Indian economy will contract by much more than 5% in 2020-21. Some experts believe the number could be close to 10%, though there are others that see this as an extreme estimate.

What should the government's response be?

The simple answer to this would be: spend. The government should spend money to boost aggregate demand, which includes both consumption and investment. The problem is that it has limited headroom. Data released on Monday showed that its fiscal deficit is already at 103% of the 2020-21 estimate. One radical alternative (that people are already beginning to talk of) is debt monetisation. In other words, India could consider monetising at least part of its deficit. At one time, any country even thinking of this would have been censured by the world at large. It is a sign of the times, and the pressing economic challenges facing countries, that Indonesia's decision to monetise \$40 billion of its debt didn't provoke any strong criticism (it did cause a flutter, though). One of the classical economic arguments against this is that it will boost inflation. Given that the primary economic challenge right now is on the demand-side (supply isn't a constraint, at least, not yet), the government need not worry about inflation (again, not just yet).

This could also help the federal governments meet its payout commitments to the states, which are at the forefront of the fight against the pandemic and, therefore, need more money.

After all, it will take something special, even unconventional, to deal with an Act of God.

## SHARP CONTRACTION

Data shows that private consumption is down 27%. There is also the beginning of what some financial advisors term precautionary saving. Still worse, investment fell by 47% in the quarter. Among large economies too, India's rate of contraction was the sharpest.

## TOUGH TIMES AHEAD

It is now becoming clear that a 5% contraction in FY21 may have been an underestimation. Unless there is a miraculous turnaround in fortunes, the Indian economy will likely contract in the second and third quarters.

## GOVT RESPONSE

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## **Swine flu vaccination**

### **Swine flu vaccination may be safe for pregnant women: Study (New Kerala: 2020902)**

<https://www.newkerala.com/news/2020/154873.htm>

: Researchers have found that H1N1 "swine flu" vaccination given to pregnant women might be associated with an autism spectrum disorder in the offspring.

Autism spectrum disorder is a severe neurodevelopmental childhood disorder characterised by impaired communication, lack of social skills and repetitive behaviour. The disease has its onset in childhood.

"Our null findings are important since some people have suspected that vaccinations could cause autism, and the anti-vaccine movement seems to be growing in the Western world," said study lead author Jonas F Ludvigsson from the Karolinska Institutet in Sweden.

While some studies indicate that influenza vaccination during pregnancy protects against morbidity in both the woman and her offspring, the long-term risks of H1N1 vaccination during fetal life have not been examined in detail.

However, two recent studies were unable to rule out that offspring to women undergoing influenza or H1N1 influenza vaccination during pregnancy, and especially during the first trimester, were at increased risk of autism spectrum disorder.

Now, a large study by researchers, published in the journal *Annals of Internal Medicine*, refutes any such association. Researchers, linked vaccination data in pregnant women from seven Swedish healthcare regions in 2009-2010 to the Swedish Medical Birth Register and the Swedish National Patient Register to identify autism spectrum disorder in the offspring.

Of the 39,726 vaccine-exposed children, 394 had a diagnosis of autism spectrum disorder during the six-year follow-up compared with 330 among 29,293 unexposed children. The researchers adjusted their analyses for such confounders as maternal smoking, height-weight, maternal age and comorbidity in order to minimize the influence of other factors that might explain any association between vaccination and autism.

Adjusting for potential confounders, H1N1 vaccine exposure during fetal life was not associated with a later childhood diagnosis of autism spectrum disorder. Results were similar for vaccinations in the first pregnancy trimester.

"H1N1 vaccination has previously been linked to an increased risk of narcolepsy in young people, but vaccinating pregnant women does not seem to influence the risk of autism spectrum disorder in the offspring," Ludvigsson said.

"Vaccination research has never been more important. Anticipating a vaccine against COVID-19, millions of pregnant women are likely to be offered such a vaccination," he added.

## **Nutrition Week:**

### **Nutrition Week: Health experts shed light on nutrient deficiencies in women, kids (New Kerala: 2020902)**

<https://www.newkerala.com/news/2020/154860.htm>

Health experts shed light on nutrient deficiencies in women, kids

New Delhi, Sep 1 : On the first day of the National Nutrition Week, observed every year from September 1 to 7 in India, various public health experts said the focus should be on the issue of under-nutrition, over nutrition or micro-nutrient deficiencies in children and women.

The National Nutrition Week was launched by the Ministry of Women and Child Development in 1982 with the objective to raise awareness about the importance of nutrition for the human body.

According to the Ministry of Health and Family Welfare, one in four adults and one in five school-going children are overweight in India, and nearly one-third of the diseases can be controlled with a proper diet.

According to a UN report in 2017, India has 190.7 million undernourished people and 38.4 percent of children under five in India are stunted.

"Despite beginning nutrition-oriented development programmes especially focused on children, like integrated child development services 45 years ago, India still has children suffering from undernutrition and malnutrition, stunting, wasting and other problems. On the other hand, children in well-to-do families are suffering due to heavy intake of refined foods and carbonated beverages," said Kamal Narayan Omer, CEO, Integrated Health and Wellbeing (IHW) Council in New Delhi.

Omer said the right eating habits and eating the right kind of food can play a significant role in reducing India's burden of non-communicable diseases in adults.

"The imbalance needs to be addressed urgently and we must work to find the right alternatives to foods that are causing this nutritional imbalance in the most vulnerable section of our society."

Besides this, India is home to non-nutritious, non-balanced food either in the form of under nutrition, over nutrition or micro-nutrient deficiencies. Various other experts feel that the need of the hour is to encourage and provide balanced and nutritious food for everybody especially for women and the new-born.

"We need to ensure that the nutrition specific and nutrition sensitive schemes or interventions that benefit the bottom of the pyramid are formed so that the vulnerable population can have access to affirmative actions, services and entitlements. The community structures and service providers should be accountable enough for early identification and management of malnutrition within communities is vital for addressing malnutrition," said Shuchin Bajaj, Founder and Director, Ujala Cygnus Healthcare in New Delhi.

Another doctor, Manisha Ranjan, who is a consultant in obstetrics and gynaecology at Motherhood Hospital, quoted Oxfam which estimated that after the pandemic an additional 100 million Indians are vulnerable to food distress and those particularly hard hit are women and women-headed households.

"In the patriarchal family structure that India has, children (and the girl child in particular) and women will bear the brunt of this calamity. A woman needs nutrients right from their adolescent age because they undergo a lot of hormonal imbalance as the body prepares for menstruation," Ranjan added.

Malnutrition perpetuates the vicious cycle of intergenerational undernutrition that results in a high incidence of babies born with low birth weight, more susceptible to infections, more likely to experience growth failure, reflected in high levels of child undernutrition and anaemia, said Sunil Rajpal, Associate Professor, Health Economist, IIMR University, Jaipur.

"A recent study by researchers from the Institute of Economic Growth, Delhi has estimated that spending USD1 on nutritional interventions in India could generate public economic returns of USD19.35 to USD22.21, which is multiple times more than the global average. This indicates the huge potential we have as well as the gravity of the task since the lockdown and economic downfall due to Covid-19 is likely to push millions more to nutritional deficiency," added Rajpal.

## **Menopause**

### **Study reveals genetic mutations may be linked to infertility, early menopause (New Kerala: 2020902)**

<https://www.newkerala.com/news/2020/154835.htm>

A new study identifies a specific gene's previously unknown role in fertility. Analysing genetic data in people, the researchers found an association between mutations in this gene and early menopause.

The study appears in the journal of Science Advances.

The human gene -- called nuclear envelope membrane protein 1 (NEMP1) -- is not widely studied. In animals, mutations in the equivalent gene had been linked to impaired eye development in frogs. When the gene is missing in fruit flies, roundworms, zebrafish and mice, the animals are infertile or lose their fertility unusually early but appear otherwise healthy.

The researchers who made the new discovery were not trying to study fertility at all. Rather, they were using genetic techniques to find genes involved with eye development in the early embryos of fruit flies.

"We blocked some gene expression in fruit flies but found that their eyes were fine," said senior author Helen McNeill, PhD, the Larry J. Shapiro and Carol-Ann Uetake-Shapiro Professor and a BJC Investigator at the School of Medicine. "So, we started trying to figure out what other problems these animals might have. They appeared healthy, but to our surprise, it turned out they were completely sterile. We found they had substantially defective reproductive organs."

Though it varied a bit by species, males and females both had fertility problems when missing this gene. And in females, the researchers found that the envelope that contains the egg's nucleus -- the vital compartment that holds half of an organism's chromosomes -- looked like a floppy balloon.

"This gene is expressed throughout the body, but we didn't see this floppy balloon structure in the nuclei of any other cells," said McNeill, also a professor of developmental biology. "That was a hint we'd stumbled across a gene that has a specific role in fertility. We saw the impact first in flies, but we knew the proteins are shared across species. With a group of wonderful collaborators, we also knocked this gene out in worms, zebrafish and mice. It's so exciting to see that this protein that is present in many cells throughout the body has such a specific role in fertility. It's not a huge leap to suspect it has a role in people as well."

To study this floppy balloon-like nuclear envelope, the researchers used a technique called atomic force microscopy to poke a needle into the cells, first penetrating the outer membrane and then the nucleus's membrane. The amount of force required to penetrate the membranes gives scientists a measure of their stiffness. While the outer membrane was of normal stiffness, the nucleus's membrane was much softer.

"It's interesting to ask whether stiffness of the nuclear envelope of the egg is also important for fertility in people," McNeill said. "We know there are variants in this gene associated with early menopause. And when we studied this defect in mice, we see that their ovaries have lost the pool of egg cells that they're born with, which determines fertility over the lifespan. So, this finding provides a potential explanation for why women with mutations in this gene might have early menopause. When you lose your stock of eggs, you go into menopause."

McNeill and her colleagues suspect that the nuclear envelope has to find a balance between being pliant enough to allow the chromosomes to align as they should for reproductive purposes but stiff enough to protect them from the ovary's stressful environment. With age,

ovaries develop strands of collagen with the potential to create mechanical stress not present in embryonic ovaries.

"If you have a softer nucleus, maybe it can't handle that environment," McNeill said. "This could be the cue that triggers the death of eggs. We don't know yet, but we're planning studies to address this question."

Over the course of these studies, McNeill said they found only one other problem with the mice missing this specific gene. They were anaemic, meaning they lacked red blood cells.

"Normal adult red blood cells lack a nucleus," McNeill said. "There's a stage when the nuclear envelope has to condense and get expelled from the young red blood cell as it develops in the bone marrow. The red blood cells in these mice aren't doing this properly and die at this stage. With a floppy nuclear envelope, we think young red blood cells are not surviving in another mechanically stressful situation."

The researchers would like to investigate whether women with fertility problems have mutations in NEMP1. To help establish whether such a link is causal, they have developed human embryonic stem cells that, using CRISPR gene-editing technology, were given specific mutations in NEMP1 listed in genetic databases as associated with infertility.

"We can direct these stem cells to become eggs and see what effect these mutations have on the nuclear envelope," McNeill said. "It's possible there are perfectly healthy women walking around who lack the NEMP protein. If this proves to cause infertility, at the very least this knowledge could offer an explanation. If it turns out that women who lack NEMP are infertile, more research must be done before we could start asking if there are ways to fix these mutations -- restore NEMP, for example, or find some other way to support nuclear envelope stiffness."

## **Covid-19 severity**

### **Study shows clear link between obesity, Covid-19 severity (New Kerala: 2020902)**

<https://www.newkerala.com/news/2020/154775.htm>

New research adds to the growing body of evidence that patients with obesity are facing more serious Covid-19 disease and higher mortality risk than patients without obesity.

At the beginning of April, both general and intensive care admissions for Covid-19 began to rise sharply in Lille University Hospital (LUH), and across France and other European countries.

"Our data show that the chances of increasing to more severe disease increase with BMI, to the point where almost all intensive care COVID-19 patients with severe obesity will end up on a ventilator," said study author Francois Pattou from the LUH in France.

An analysis conducted by the LUH included 124 intensive care unit (ICU) admissions with Covid-19, and compared them with 306 patients who had been in ICU for other reasons, without Covid-19.

The data showed that among ICU patients with Covid-19, around half had obesity (BMI above 30), with a quarter having severe obesity (BMI of 35 or above).

Most of the remaining patients (around 40 per cent) were overweight, with only around 10 per cent of patients in the healthy weight range (BMI 25 or under).

Among the non-Covid-19 ICU patients, the story was very different a quarter had obesity or severe obesity; a further quarter was overweight, and around half fell into the healthy weight range.

A similar trend emerged regarding which ICU patients with Covid-19 had to be put on ventilators. Of the 89 requiring mechanical ventilation, more than half had obesity or severe obesity, while most of the other patients were overweight.

According to the study, patients with a BMI in the healthy range of 25 and under made up less than 10 per cent of patients needing a ventilator.

Looking specifically at the individual BMI groups, almost all patients Covid-19 ICU patients with severe obesity (87 per cent) needed a ventilator, dropping to 75 per cent for 'regular' obesity (BMI 30-35), 60 per cent for patients in the overweight category, and 47 per cent for those in the healthy BMI range.

The study was scheduled to be presented at The European and International Congress on Obesity (ECOICO 2020) online conference from September 1-4.

Recently, a study published in the journal Diabetes Care found that Covid-19 patients hospitalised with high blood pressure, obesity and diabetes were over three times more likely to die from the viral disease.

Earlier, another research published in the European Journal of Endocrinology, also found that the risk of greater Covid-19 severity and death is higher in people with any obese body mass index (BMI).

## **Coronavirus (Hindustan: 2020902)**

[https://epaper.livehindustan.com/imageview\\_287848\\_55320910\\_4\\_1\\_02-09-2020\\_3\\_i\\_1\\_sf.html](https://epaper.livehindustan.com/imageview_287848_55320910_4_1_02-09-2020_3_i_1_sf.html)

# चिंताजनक : दिल्ली में 57 दिन बाद 2300 केस

नई दिल्ली | वरिष्ठ संवाददाता

दिल्ली में 57 दिन बाद मंगलवार को कोरोना संक्रमण के 23 सौ से अधिक मामले सामने आए। इससे पहले चार जुलाई को कोरोना वायरस के 2505 केस मिले थे।

कुल 2312 नए मामले मंगलवार को सामने आए। इसके साथ ही संक्रमितों को आंकड़ा 1,77,060 पहुंच गया है। मंगलवार को 1050 को छुट्टी दी गई जबकि 18 मरीजों ने दम तोड़ दिया। वहीं, 24198 जांच में 9.55 फीसदी सैम्पल पॉजिटिव मिले। दिल्ली में 1,56,728 मरीज अब तक ठीक हो चुके हैं।

**सक्रिय मरीज 15 हजार पार:**

**10 दिनों में 15594 मरीज**

दिल्ली में पिछले 10 दिनों में 15594 मरीज मिले हैं। यानी हर दिन औसतन 1559 मरीजों में कोरोना संक्रमण की पुष्टि हुई है। 23 अगस्त को कोरोना के कुल मरीजों की संख्या 161466 थी जो 1 सितंबर को बढ़कर 177060 हो गई।

दिल्ली में कोरोना के सक्रिय मरीजों की संख्या 15870 हो गई है। इनमें से दिल्ली के विभिन्न अस्पतालों में 4186 मरीज, कोविड केयर सेंटर में 902 मरीज और कोविड मेडिकल सेंटर में 351 मरीज भर्ती हैं। 8119 मरीज होम आइसोलेशन में हैं।

➤ तीसरा सिरा सर्वे पेज 03

# कई निजी अस्पतालों में आईसीयू के बेड भरे

नई दिल्ली | वरिष्ठ संवाददाता

दिल्ली में कोरोना संक्रमण के मामले बढ़ने से अस्पतालों में भर्ती मरीजों की संख्या भी बढ़ी है। मैक्स जैसे कई निजी अस्पतालों में कोरोना मरीजों के लिए तय आईसीयू बेड फुल हो गए हैं।

**मैक्स में नहीं मिला बेड:** आगरा के रहने वाले 61 वर्षीय सत्यपाल (बदला हुआ नाम) कोरोना से पीड़ित हैं। उन्हें मंगलवार को साकेत में बने कोरोना अस्पताल मैक्स स्मार्ट में भर्ती कराने के लिए संपर्क किया गया। स्टाफ ने आईसीयू बेड खाली नहीं होने की

## कुल 4886 मरीज भर्ती

दिल्ली के सरकारी अस्पतालों में बेड खाली हैं। राजधानी में कुल 14148 बेड कोरोना मरीजों के लिए आरक्षित हैं, लेकिन इनमें से सिर्फ 4886 बेड पर मरीज भर्ती हैं।

जानकारी दी। दिल्ली सरकार के 'दिल्ली कोरोना' एप के मुताबिक अस्पताल में मौजूद 200 बेड में से सिर्फ तीन खाली दिखाए गए। फिर उन्होंने सरिता विहार स्थित निजी अस्पताल में संपर्क किया तो वहां भी आईसीयू बेड खाली नहीं मिला।