



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Friday

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## **Big new Covid wave unlikely**

### **Big new Covid wave unlikely but too early to say India in endemic stage: Scientists (The Tribune: 2021011012)**

<https://www.tribuneindia.com/news/coronavirus/big-new-covid-wave-unlikely-but-too-early-to-say-india-in-endemic-stage-scientists-328103>

The experts said India will continue to experience local increases in Covid cases

Big new Covid wave unlikely but too early to say India in endemic stage: Scientists

A medic prepares a dose of Covid-19 vaccine during a vaccination drive in Kolkata. PTI

India is unlikely to see a Covid wave like the devastating second one unless there is a new immune escaping variant but the lower number of cases does not necessarily mean the pandemic is now endemic, several experts said on Friday.

Giving hope and also injecting a note of caution as the festive season peaks with Diwali just days ahead, they said a dipping Covid graph is only part of the picture and pointed to factors such as the mortality rate, the need for a larger vaccination cover and examples of countries such as UK where numbers are again rising.

A day after India reached the milestone of 100 crore Covid vaccine doses, virologist Shahid Jameel said vaccination rates have improved significantly but more needs to be done.

“I am not sure we are in the endemic state yet... As we celebrate this (100 crore) landmark, there is still some distance to go. We are going towards endemicity, but are not there yet,” Jameel, a visiting professor at Ashoka University in Haryana, told PTI in an email interview.

He also noted that daily confirmed Covid cases in India have been decreasing slowly over the past three months from about 40,000 per day to about 15,000 per day now.

According to Union Health Ministry data on Friday, there were 15,786 new Covid-19 cases, marking 28 straight days of a daily rise of less than 30,000. The death toll climbed to 4,53,042 with 231 deaths.

Jameel, one of India's best known virologists, also pointed out that the mortality rate in the country remains steady at about 1.2 per cent.

"This tells me that the vaccine coverage in India still needs to increase," he added.

A disease is described as endemic when it continues to be present within a given geographical area but its impact is manageable.

"There have been some confused claims about this recently... Low cases for some time do not necessarily mean endemicity. It is possible that endemicity is close in some parts of the country, but the data needed to confirm this is not easily available," added Murad Banaji, senior lecturer in mathematics at UK's Middlesex University who has been closely tracking India's Covid graph and has done several model studies.

"For example, we do not know how many current infections are occurring amongst people who have been vaccinated or infected before," Banaji told PTI.

He added that nobody knows what an "endemic future" would look like or what levels of Covid to expect. What is likely is that measures to control transmission will still be needed for some years to come.

Epidemiologist Ramanan Laxminaryan concurred, saying there can be periodic flare-ups even with an endemic disease as is being observed in the UK.

"I believe we should wait for another two months before determining whether Covid-19 poses a significant future threat to the country," Laxminarayan, director of the Centre for Disease Dynamics, Economics & Policy in Washington, told PTI in an email interview.

In the UK, Jameel noted, the caseload has increased from about 30,000 cases per day in mid-September to almost 50,000 cases per day. However, the mortality rate has fallen from 2 per cent in mid-July to about 0.2 per cent now.

In the US, after reaching almost 200,000 cases per day in early September, the cases are now down to about 80,000 per day. However, mortality rate remains the same as earlier in the year.

The experts said India will continue to experience local increases in Covid cases even though it is unlikely to see another overwhelming surge in infections like it did during the second wave when the country's healthcare system was overwhelmed and thousands died.

Banaji said there have been a large number of recent infections, and vaccination has been proceeding at a reasonable pace.

“...These both reduce the likelihood of a major new wave in the next few months,” he explained.

“New variants could potentially still pose a challenge. Any new variant which spreads much more easily, especially amongst people who are vaccinated or have been previously infected, could lead to new surges.”

Hopefully, he added, India will not see a wave on the scale of April-June 2021 ever again, although there could be some increase in transmission during festival season. —PTI

## **Severe disease**

### **Covid-19: New antibody treatment could offer up to 18 months’ protection against severe disease (The Tribune: 2021011012)**

The new treatment, AZD7442, uses special antibodies called monoclonal antibodies

Covid-19: New antibody treatment could offer up to 18 months’ protection against severe disease

Photo for representational purpose only. iStock

A new treatment could soon help protect people from developing severe Covid. AstraZeneca has just released results from a phase-3 clinical trial – the final stage of testing before a drug is authorised – that suggest its new Covid treatment, AZD7442, is effective at reducing severe disease or death in non-hospitalised Covid patients.

The treatment contains antibodies, which are usually produced naturally in response to a Covid infection or vaccination. They work by recognising specific parts of SARS-CoV-2 – the virus that causes Covid – and either attack these directly or bind to them to stop the virus from working and flag it for destruction by other parts of the immune system.

After they’ve done their job of clearing the virus, the antibodies remain in the body for a period of time, making up part of our immunological memory. If what they target is encountered again, they can leap into action.

The new treatment, AZD7442, uses special antibodies called monoclonal antibodies. These are antibodies produced in a lab that imitate the body’s natural defences – in this case mimicking the immune system’s response to Covid.

Artificially developing antibodies to fight disease isn’t a new technique. This technology is already used to treat many diseases, including leukaemia, breast cancer and lupus. In fact, this isn’t even the first time the technique has been used for Covid. The first Covid monoclonal antibody treatment was approved in the UK in August 2021.

How does AstraZeneca's treatment work?

AZD7442 is a cocktail of two monoclonal antibodies – tixagevimab and cilgavimab – that are designed to reduce the severity of a SARS-CoV-2 infection and so prevent people from getting severely ill.

Both of these antibodies bind to different parts of virus's spike proteins, which cover its outer surface and are what the virus uses to infect cells. It's thought that attaching to these proteins is what gives the medicine its effect, as this stops the virus from being able to get inside cells and reproduce.

The two monoclonal antibodies in the cocktail are based on antibodies taken from patients who survived COVID. Scientists at AstraZeneca took blood samples from patients and isolated immune cells called B cells, which are the antibody factories of the human body. They then grew more of these B cells in the lab, and used them to make large quantities of the two antibodies, which they had identified as specifically targeting the coronavirus's spike protein.

But the key difference between this and other antibody-based treatments is that in AZD7442, the antibodies have been modified so they stay in the body for longer.

Studies using similarly modified antibodies against another respiratory virus – respiratory syncytial virus – have shown that this approach gives long-term protection, with the modified antibodies having triple the durability of conventional antibodies. It's hoped that a single dose of AZD7442 could offer 12 to 18 months protection from severe Covid, though we'll have to wait to see exactly how long protection lasts.

How well does it work?

AstraZeneca's phase-3 trial investigated the effectiveness of the treatment when given to patients who were infected with SARS-CoV-2.

The study looked at 822 participants who were over the age of 18. Only around 13% were 65 years and over, but 90% had health conditions that put them at high risk of severe Covid, such as cancer, diabetes, obesity, chronic lung disease or asthma, cardiovascular disease or a weakened immune system.

The trial results show that of the 407 people who received AZD7442, 18 developed severe Covid or died, compared with 37 of the 415 people who received a placebo. This suggests that those in the AZD7442 group were 50% less likely to develop severe Covid than those taking a placebo.

The trial also looked specifically at patients who received treatment quickly – that is, within five days of their symptoms starting. In this group, AZD7442 reduced the risk of severe disease or death by 67%, suggesting that early treatment with AZD7442 provides greater protection.

It's important to note, however, that these results have been released by AstraZeneca but don't yet appear to have been formally reviewed by other scientists. So any findings need to be treated with caution.

## Strees Management

### What is the difference between stress and anxiety? (The Indian Express: 2021011012)

<https://indianexpress.com/article/lifestyle/health/stress-anxiety-difference-mental-health-causes-relief-7590946/>

Too many responsibilities or a high-stakes work project can usually trigger a stress response. "Anxiety is largely more internal" and depends on how you react to stressors," said clinical psychologist, Narendra Kinger, founder, 'Talk To Me'

stress vs anxiety, mental health Symptoms of stress include moodiness, irritability or anger, feeling overwhelmed, dizzy, lonely, nauseous and a general feeling of unhappiness. (Source: Getty Images/Thinkstock)

Often, stress and anxiety are used interchangeably. However, it must be known that there is a difference between the two. Stress and anxiety both impact us physically and psychologically, but different people them differently. So how does one differentiate?

Experts state that while stress is mostly external, anxiety is "largely internal".

"Although one can generate stress for oneself through negative self-talk, pessimistic attitude, or need for perfectionism, it is usually triggered by external factors. Too many responsibilities or a high-stakes work project can usually trigger a stress response. Anxiety, on the other hand, is largely internal and depends on how you react to stressors," said clinical psychologist, Narendra Kinger, founder, 'Talk To Me'.

ALSO READ | 'Time to practise what we preach': Therapists on taking care of their mental health amid pandemic

Often, even after the cessation or removal of stressors, some individuals may still feel overwhelmed and/or distressed. "This distress is called anxiety. It is an exaggerated reaction or response to a given situation. If the worry and distress you feel in a given situation is unusual, excessive, or lasts much longer than most others, it may be anxiety rather than stress," Kinger told indianexpress.com.

anxiety While mild anxiety might be vague and unsettling, severe anxiety may seriously affect day-to-day living (Source: Getty/Thinkstock)

Anxiety is a psychological reaction to any change that occurs. "This reaction generally springs out from fear as a conditioned response. Overwhelming reaction to stress brings about anxiety at the emotional level. Stress is essential to keeping the spark of life while anxiety consumes life," mentioned Dr Karthiyayini Mahadevan, Head, Wellness and Wellbeing at Columbia Pacific.

## Causes

Where stress is concerned, there is always an external stressor or a trigger – like a strict teacher, approaching deadline or a fight with a friend. With anxiety, there doesn't need to be a stressor, it can be a worry about something we think may happen in the future. “Very often, what we worry about may not even happen, but the thought of it happening causes us to become anxious and panic,” said Dr Shireen Stephen (Ph.D.), counselling psychologist, Mind Talk, Cadabams Hospitals, Bengaluru.

Dr Stephen differentiates between the two with an example. “Stress is the pressure that you may be under to make a presentation at a team meeting or to complete a project on time or to finish studying for an exam. Anxiety is the worry that the presentation might not go well or that the project may not be good enough or that you might fail the exam,” Dr Stephen mentioned

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As per Dr Stephen, another distinction is the duration – stress lasts until the event is resolved but anxiety can be persistent and last for a very long time.

## Symptoms

Symptoms of stress include moodiness, irritability or anger, feeling overwhelmed, dizzy, lonely, nauseous and a general feeling of unhappiness. Symptoms of anxiety include feeling restless, tense, nervous and a general feeling of dread.

ALSO READ |Had a hectic day? Count on this simple breathing exercise to relieve stress, anxiety

“Both stress and anxiety have common symptoms such as increased heart rate, breathing faster and having an upset stomach or being constipated, but as you can see, they differ in all other aspects,” elaborated Dr Stephen.

How do they manifest?

Excessive anxiety or panic immobilises us and we are unable to function, said Kinger. “Most stressful situations are difficult to get through but are ultimately manageable, whereas anxiety disorders prevent you from managing normal, everyday tasks,” Kinger said.

While mild anxiety might be vague and unsettling, severe anxiety may seriously affect day-to-day living. Panic attacks are characteristic of panic disorder, a type of anxiety disorder. Also, high levels of stress and anxiety in social situations may indicate a social anxiety disorder, said Kinger.

ALSO READ |What is the connection between functional anxiety and PCOS?

One of the most common anxiety disorders is generalised anxiety disorder, said Dr J Mayurnath Reddy, consultant psychiatrist, Yashoda Hospitals Hyderabad. “To identify if someone has

generalised anxiety disorder, symptoms such as excessive, hard-to-control worry occurring most days over six months need to be noted. The worry may jump from topic to topic,” Dr Reddy noted.

According to Dr Reddy, another type is panic disorder, which is marked by sudden attacks of anxiety that may leave a person sweating, dizzy, and gasping for air. Anxiety may also manifest in the form of specific phobias (such as fear of flying) or as social anxiety, which is marked by a pervasive fear of social situations.

How to cope?

Physical activity, a nutritious and varied diet, and good sleep hygiene are a good starting point to control these symptoms, said Dr Reddy.

“If your stress or anxiety does not respond to these management techniques, or if they are affecting your day-to-day functioning or mood, consider talking to a mental health professional who can help you understand what you are experiencing and provide you additional coping tools,” said Dr Reddy. According to Kinger, there are several actions to help a person cope with milder, more focused, or shorter-term anxiety disorders, including:

**Stress management:** Learning to manage stress can help limit potential triggers. Organise upcoming pressures and deadlines, compile lists to make daunting tasks more manageable, and commit to taking time off from study or work

**Relaxation techniques:** Meditation, deep breathing exercises, long baths, resting in the dark, and yoga interventions to replace negative thoughts with positive ones: Make a list of the negative thoughts that might be cycling as a result of anxiety, write down another list next to it containing positive, believable thoughts to replace them. Creating a mental image of successfully facing and conquering a specific fear can also provide benefits if anxiety symptoms relate to a specific cause, such as in a phobia.

**Support network:** Talk with people who are supportive, including family members or friends. Support group services may be available locally and online.

**Exercise:** Physical exertion can improve self-image and release chemicals in the brain that trigger positive feelings

**Counselling:** A standard way of treating anxiety is psychological counselling. This can include cognitive-behavioural therapy (CBT), psychotherapy, or a combination of therapies.

**ALSO READ |** Simple yoga asanas and lifestyle practices to relieve stress and anxiety

Another potential treatment is exposure therapy, which involves confronting anxiety triggers in a safe, controlled way in order to break the cycle of fear around the trigger, mentioned Dr Reddy.

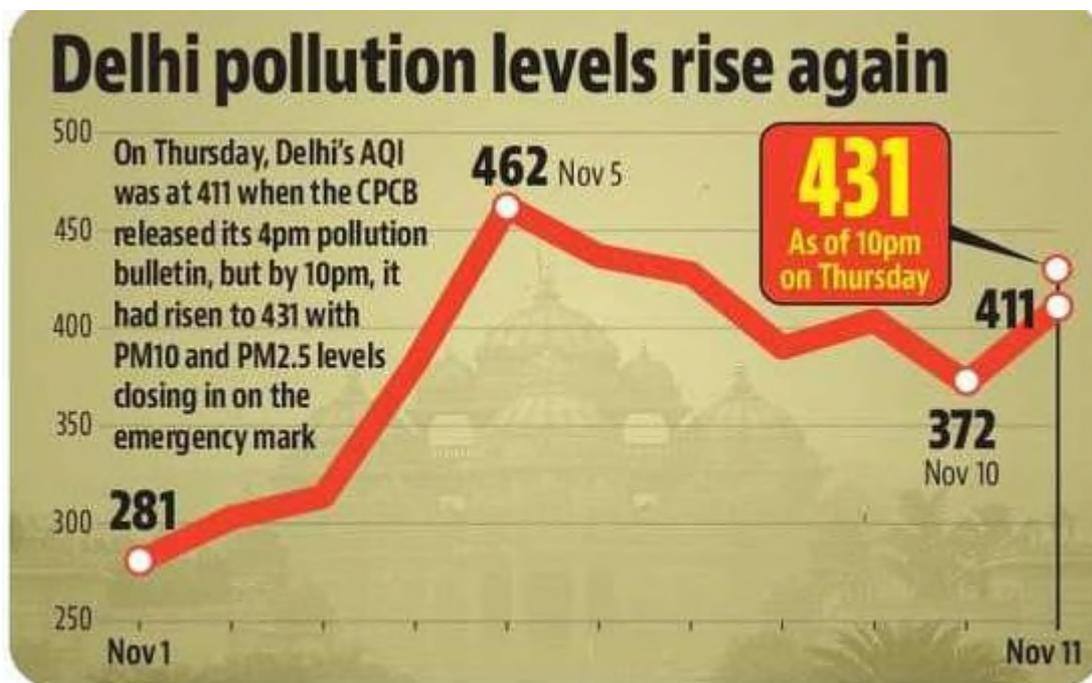
“Eventually, with a set of suitable mind-relaxing exercises, one can identify and differentiate the stress and triggers causing anxiety. Furthermore, it is important to remember that stress and

anxiety are a natural and integral part of our daily life, and experiencing those does not always indicate the presence of a mental health disorder,” Kinger said.

## Pollution

**Air worsens as winds die down, farm fires continue (Hindustan Times: 2021011012)**

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



Pollution levels rose sharply on Thursday as winds died down, pushing the air quality index (AQI) back into the “severe” category after a day of slight respite when it was still very poor.

The AQI was at 411 when the Central Pollution Control Board released its 4pm pollution bulletin, and by 10pm, it had risen to 431 with average PM10 and PM2.5 pollutant levels nearing the emergency threshold.

Weather experts attributed the deterioration to a drop in wind speed, which was caused by unusual circulation patterns over the country: a depression over the Bay of Bengal stretching into southern India and over parts of the eastern coast has blocked winds that sweep in from the northwest, flow over the Indo-Gangetic plains.

According to the System of Air Quality and Weather Forecasting And Research (SAFAR), on Thursday 3,914 fires were reported from Punjab and Haryana, which contributed to 26% in Delhi's PM 2.5 levels. P6

## TB

### **TB patients got unhindered support despite pandemic constraints: MoS Health (The Hindu: 2021011012)**

<https://www.thehindu.com/sci-tech/health/tb-patients-got-unhindered-support-despite-pandemic-constraints-mos-health/article37418244.ece>

MoS for Health and Family Welfare Dr. Bharati Pravin Pawar. File | Photo Credit: KAMAL NARANG

Efforts made by NTEP led to significant improvements in time-to-diagnosis, treatment adherence and outcomes, Bharati Pravin Pawar said.

Despite the COVID-19 pandemic, India has managed to scale up access to free rapid molecular diagnostics and treatment for tuberculosis while financial and nutritional support to affected patients continued without any hindrance, Union Minister of State for Health Bharati Pravin Pawar said on Tuesday.

Efforts made by the National Tuberculosis Elimination Programme (NTEP) led to significant improvements in time-to-diagnosis, treatment adherence and outcomes, Ms. Pawar said as she chaired the brainstorming session on “Strategies for Ending TB by 2025”, a Health Ministry statement said.

Reiterating Prime Minister Narendra Modi’s commitment to eliminate TB in India by 2025, five years ahead of the Sustainable Development Goals (SDGs) target of 2030, Ms. Pawar said, “We have a mere 37 months before the deadline to end TB in the country. We need to shift gears and come up with innovative solutions to make up for the setbacks due to COVID-19 and move beyond.” As proper diagnosis and prompt treatment are key to TB elimination, the NTEP is working towards accelerating universal TB care coverage and preventive services in the country.

TB preventive treatment has been prioritised under the pillar of “Prevent” in the National Strategic Plan to End TB, Ms. Pawar said.

Scaling up TB preventive treatment and at the same time decentralising it to bring services closer to patients, are of utmost importance to break the chain of transmission and breakdown of those with TB infection into full-blown TB disease, she said.

Highlighting the Union government’s efforts for TB eradication, she added, “TB has now been made an essential part of Comprehensive Primary Health Care and is integrated with Ayushman Bharat scheme. Our aim is to detect cases early and prevent the emergence of new cases of TB by expanding TB care through engagement of various stakeholders, including the community. The nationwide ‘TB Mukta Bharat Abhiyan’ has been launched in this regard.”

Mentioning the introduction of newer anti-TB drugs, newer regimens and programmes, Ms. Pawar appreciated the research and development efforts to combat TB.

The session focussed on five pillars – improving case detection, improving treatment adherence, evolving ways to converge with other social welfare programmes, utilising and refining private sector engagement and finally integration of NTEP within our health system for accelerating TB eradication in the country, the statement said.