WHO

India among few nations witnessing Covid surge: WHO (The Indian Express: 20210902)


India among few nations witnessing Covid surge: WHO

WHO said a new variant, B.1.621, has been classified as a variant of interest and includes the descendent Pango lineage B.1.621.1.

The World Health Organisation on Wednesday reported a plateauing of the number of new Covid cases globally even as India, it said, was among few nations that saw a surge last week. The WHO also classified a fifth “variant of interest” detected in Colombia, which presented immune escape potential.

Based on the latest round of risk assessment, the WHO said a new variant, B.1.621, has been classified as a variant of interest and includes the descendent Pango lineage B.1.621.1. “The Mu variant has a constellation of mutations that indicate potential properties of immune escape,” the WHO said. It, however, said further studies were needed to confirm this.

Another covid ‘variant of interest’ detected

The WHO has classified Mu, detected in Colombia, as fifth variant of interest (VOI)

Others are Eta (originated in multiple countries), Lota (US), Kappa (India) and Lambda (Peru)

VOIs can affect transmissibility, disease severity, immune escape, diagnostic escape

Since its first identification in Colombia in January 2021, there had been a few sporadic reports of cases of the Mu variant and some larger outbreaks in other countries in South America and Europe, WHO experts said.
As of August 29, over 4,500 sequences (3,794 sequences of B.1.621 and 856 of B.1.621.1) have been uploaded to the global Covid sequencing network from 39 countries.

Although the global prevalence of the Mu variant among sequenced cases has declined and is currently below 0.1 per cent, the prevalence in Colombia (39 per cent) and Ecuador (13 per cent) has consistently increased. More studies are required to understand the characteristics of this variant, the world body said, taking no chances with the spread of mutations given the rapid global spread of Delta earlier this year. Meanwhile, with under 4.4 million new Covid cases reported week ending August 29, the WHO said the number of new cases globally appeared to be plateauing after having increased for two months. India was among the few nations to report a surge in new infections last week.

The highest numbers of new cases were reported from the US (9,38,014 new cases; 8 per cent decrease), India (2,70,796 new cases; 17 per cent increase), Iran (2,54,753 new cases; similar to previous week), the UK (2,37,556 new cases; 8 per cent increase) and Brazil (1,75,807 new cases; 16 per cent decrease). The number of deaths reported globally was also similar to last week, with just over 67,000 new deaths reported. Among the 4 variants of concern globally, Alpha variant has now been reported in 193 countries (one new country since last week), Beta in 141 countries (no new countries), Gamma in 91 countries (five new countries) and Delta in 170 countries (seven new countries).

**New Covid Cases**

**India logs 41,965 new Covid cases (The Indian Express: 20210902)**


India crossed two crore cases on May 4 and three crore cases on June 23.

With 41,965 people testing positive for Covid, India's total tally of cases rose to 3,28,10,845, while active cases have increased to 3,78,181, according to Union health ministry data updated on Wednesday.

The death toll has climbed to 4,39,020 with 460 more fatalities, according to the data updated at 8 am.

The number of active cases has increased to 3,78,181 and comprise 1.15 per cent of the total infections, while the national Covid recovery rate has been recorded at 97.51 per cent, ministry said.

It said that active cases increased by 7,541 in a span of 24 hours.
On Tuesday, 16,06,785 tests were conducted, taking the total cumulative tests done so far for detection of Covid in the country to 52,31,84,293. The daily positivity rate has been recorded 2.61 per cent, the ministry said.

The weekly positivity rate has been recorded at 2.58 per cent. It has been below three per cent for the last 68 days, it said.

The number of people who have recuperated from the disease has increased to 3,19,93,644, while the case fatality rate stands at 1.34 per cent, the data stated.

With 1.33 crore Covid vaccine doses being administered on Tuesday, the highest ever in a single day, the cumulative doses given in the country under the vaccination drive has reached 65.41 crore, according to the ministry.

India's Covid tally had crossed the 20-lakh mark on August 7 last year, 30 lakh on August 23, 40 lakh on September 5 and 50 lakh on September 16.

It went past 60 lakh on September 28, 70 lakh on October 11, crossed 80 lakh on October 29, 90 lakh on November 20 and surpassed the one-crore mark on December 19 last year.

India crossed two crore cases on May 4 and three crore cases on June 23.

The 460 new fatalities include 115 from Kerala and 104 from Maharashtra, the ministry said.

It said that 4,39,020 deaths have been reported so far in the country, including 1,37,313 from Maharashtra, 37,318 from Karnataka, 34,921 from Tamil Nadu, 25,082 from Delhi, 22,823 from Uttar Pradesh, 20,788 from Kerala and 18,447 from West Bengal.

The health ministry said that more than 70 per cent of the deaths occurred due to comorbidities.

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

25% health staff Covid +ve despite getting vax:

25% health staff Covid +ve despite getting vax: Study (The Indian Express: 20210902)


A little more than 25 per cent of healthcare workers were infected with coronavirus despite getting fully jabbed, a recent study has revealed, giving an insight on the breakthrough infections due to the Delta variant.
The study, jointly conducted by the Institute of Genomics and Integrative Biology and Max hospitals in Delhi-NCR, found that vaccination breakthroughs were far more common during the Delta-outbreak in Delhi than previously reported. However, the severity of the infection was low and vaccination is crucial to avoid severe illnesses, said Shantanu Sengupta, senior scientist with the IGIB and one of the lead researchers of the study. — PTI

**Covid: Delta sub-lineage**

**Covid: Delta sub-lineage found in Punjab(The Indian Express: 20210902)**

The latest report over the Covid mutation has revealed the prevalence of sub-lineages of Delta variants — especially AY.4 and AY.12 — in Punjab.

Of 66 samples of Covid-19 patients, 64 had sub-lineages of Delta variants, as per the report. Though AY.12 sub-lineage is reportedly responsible for the ravages in Israel, the Health Department said there was no cause for concern.

The department explained AY.12 had not been classified as Delta Plus variant. Notably, AY.12 is a sub-lineage of the Delta variant (B.1.617.2).

Dr GB Singh, Director, Health and Family Welfare Department, said the samples were sent for genome sequencing in July, but the results came out a few days ago.

“There is no cause for concern as of now, because these are sub-lineages of Delta variants that are already present. Besides, the state has not witnessed any rise in number of cases, therefore,
there is no need to worry. In Patiala, four samples were found positive for sub-lineage AY. 4. However, all have recovered,” he said.

Dr Rajesh Bhasker, nodal officer, said all districts where sub-lineages of Delta were detected had already been informed to keep tabs on cases.

He added the Health Department was prepared to battle a possible third wave. “Most of the preparations for the third wave have already been completed. Besides, paediatric wards for Covid have already been set up across the state.”

Covid relief

Thousands who lost one parent left out of Covid relief after tweak (Hindustan Times: 20210902)

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

Bhopal : Till April this year, the lives of the two sisters were the definition of comfortable. One sister, 10, studied in an international school in Indore. The other, 19, was a B Tech student at an engineering college in the city. They shared a dream, to emulate their father’s career as a software engineer. That was until April 29, when their father, the only earning member of the family died of Covid-19. Their mother, 50, slipped into depression, and they now live with their elderly grandfather in a home, for which rent has not been paid for three months. The savings the family has are being used for ration and supplies. But there was one thin glimmer of hope: a government scheme that promised children who lost even one parent to Covid-19 a monthly pension of ₹5,000 till they turned 21, free ration and importantly, free education.

Then, that door too shut.

On May 13, Madhya Pradesh chief minister Shivraj Singh Chouhan, announced the Mukhyamantri Covid -9 Jan Kalyan Scheme, which promised financial aid to children who lost a parent (or both) to the pandemic. The original draft of the scheme says children in families that lost earning members are eligible for the scheme.

But months later, both sisters from Indore have found themselves outside the ambit of the scheme because of a change in the definition of the beneficiaries in the final version of the scheme. “The draft of the scheme, which was approved by the cabinet, includes only orphans under the Covid-19 Bal Seva Scheme. Point number 4.4 of the form, which made single-parent kids eligible for benefits has been removed,” a senior official from the Woman and Child Department (WCD) said on condition of anonymity.
The reason for the change, officials said, was in the numbers. Orphans that lost both their parents that applied under the scheme totaled 1,001. The number of children that applied who lost one parent? Over ten thousand. “We simply don’t have the budget to cover this,” said the official.

The state has since suggested that these 10,000 children can apply under the decade-old Foster Care and Sponsorship Scheme, under which recipients get a monthly aid of ₹2,000. Yet here too, there is a catch. The scheme, originally introduced to help abandoned children, only allocates ₹10 lakh per year as an additional budget per district. Within that allowance, a district department can only take care of forty children per district, leaving out the vast majority.

The change in the scheme’s contours has left many aggrieved families even more desperate with the mother of a 12-year-old boy from Gwalior telling HT that she “blamed herself” for surviving Covid-19. “My son was studying in a reputed school but I lost my husband to Covid in May. My husband was a manager in a factory, and earned between sixty to seventy thousand rupees a month. I am a housewife and now, I don’t have money to pay the fees for my son. Now, I am cursing myself. Because I am alive, my son has to forego financial aid.”

Government officials across districts have been taking steps to mitigate the situation. In Indore, where 330 such single parent children have been identified, the district collector Manish Singh and MP Shankar Lalwani have announced a waiver of school fees. Shruti Garg, 37, a mother of two girls (5 and 10) welcomed this relief, but called it “temporary”. “The school administration has clearly said that they won’t waive off fees for the next academic session. My husband had a transport business and earned around ₹50,000 a month.”

WCD officials and child welfare committee members are contributing what they can from their personal incomes “ but we can’t pay them for years,” said a CWC member from the Mahakaushal region. “The state should come up with a specific plan for this.”

WCD commissioner Swati Meena Naik said, “This is true that we have focused only on 1,001 orphaned children as they were highly vulnerable, and could have been trafficked and illegally adopted. During this second wave, we saw floods of messages where people were asking for help.”

Naik said that the department is developing a portal that would seek sponsorship from around the world for the other children.

Child rights activists believe the key is to focus on providing jobs. “The state removed the provision of helping single-parent kids because of high numbers of beneficiaries but they should also think of providing jobs to the single parent, mainly mothers, so that they can run the house effectively without anyone’s support,” said activist Prashant Dubey.
7 amazing benefits of Amla?

Did you know these 7 amazing benefits of Amla? (Hindustan Times: 20210902)

https://www.hindustantimes.com/lifestyle/health/did-you-know-these-7-amazing-benefits-of-amla-101630559667724.html

Amla known as Amalki in Ayurveda helps prevent accumulation of toxins in the body and fight many diseases.

Amla, a powerhouse of nutrients, is consumed in many forms in India from pickles, murabbas, candies, juice, chyawanprash to name a few. A cardiovascular tonic, an immunity booster, amla is also known for its anti-oxidant, anti-cancer and anti-inflammatory properties.

Amla is called Amalaki in Ayurveda and is said to be one of the most potent fruits produced in the nature. "Amla has been used in Asian medicine for centuries to ward off diseases and ensure optimal health. As per Ayurveda, Amla or Indian gooseberry qualities are light (laghu) and dry (ruksha) and its energy (virya) is cooling (shita), hence the citrus fruit works well to manage all the three doshas, vata, pitta, and kapha and prevent accumulation of toxins in the body," says Shreyansh Jain, Ayurvedic expert and CEO of Medy365.

Jain also elaborates on the seven amazing benefits of Amla.

1. Boosts immunity

Amla is a rich source of polyphenols and vitamin C, which help support digestion and strengthen immune functioning. The fruit builds defence against virus and bacteria in the body and also protects it from oxidative stress. Moreover, amla rejuvenates tissues in the body and supports healthy metabolism.

Covid variant

C.1.2: All you need to know about the new ‘highly transmissible’ Covid variant (The Indian Express: 20210902)


"The variant has 44 to 59 mutations which separate it from the Wuhan strain," a doctor says
A new Covid variant has been recently detected by scientists in South Africa and some other countries. According to experts, the variant called C.1.2 can potentially be more transmissible, compared to the previously found variants.

A PTI report mentions that C.1.2, deemed a potential ‘variant of interest’, was first detected by scientists from National Institute for communicable diseases (NICD) and the Kwazulu-Natal Research Innovation and Sequencing Platform (KRISP) in South Africa, in May 2021.

According to the Centers for Disease Control and Prevention (CDC), a variant of interest is one with “specific genetic markers that have been associated with “changes to receptor binding, reduced neutralisation by antibodies generated against previous infection or vaccination, reduced efficacy of treatments, potential diagnostic impact, or predicted increase in transmissibility or disease severity”.

The new Covid variant has more mutations than other variants of concern or interest that have been found worldwide till now. Dr Suranjit Chatterjee, senior consultant, internal medicine, Indraprastha Apollo Hospitals, tells indianexpress.com, “The variant has 44 to 59 mutations which separate it from the Wuhan strain. It can be highly transmissible and can cause severe diseases among those who are affected.”

Is it more harmful than the Delta variant? Dr Ravi Shekhar Jha, additional director and HOD, pulmonology, Fortis Escorts Hospital Faridabad, tells the outlet, “It is slightly premature to say if the variant is more contagious or more deadly than the already circulating Delta variant. The data available so far suggests that it is not as infective and deadly as the Delta variant.”

In India, however, the government has recorded no cases of the new variant so far, according to ANI. “Although the variant doesn’t seem to be increasing in circulation in the present scenario, proper hygiene and safe social distancing measures should be followed by the people,” Dr Chatterjee advises.

Meanwhile, Dr Maria Van Kerkhove, technical head, World Health Organisation (WHO) took to social media to address concerns about the variant. “@WHO has regularly been discussing with South African researchers about their work on sequencing throughout the #COVID19 pandemic. We are grateful for researchers in South Africa who first presented their findings on variant C.1.2 to the WHO Virus Evolution Working Group in July ’21,” She wrote.
**Skincare tips**

**Skincare tips: Say goodbye to pigmentation and blemishes with this pudina or mint toner** *(The Indian Express: 20210902)*


This fresh, organic and preservative-free toner can be made using just two basic ingredients, shared beauty blogger Sejal Goyal.

Try this refreshing toner for your skincare troubles. (Source: Getty Images/Thinkstock)

Skincare demands effort and patience. But it is not about applying numerous products, it is instead about understanding one’s skin type and its problems and then using specific products. But one product which can be used by all is the toner, which helps hydrate the skin and also remove dead cells. However, instead of opting for store-bought toners, you can always make a fresh, organic and preservative-free toner at home. And all you need are two basic ingredients.

Beauty blogger Sejal Goyal shared an easy mint toner as part of her #DadiSays posts on Instagram.

**Good Ayurvedic, sattvic meal**

**Things to consider when planning a good Ayurvedic, sattvic meal** *(The Indian Express: 20210902)*


Sattvic foods are known to uplift purity, boost health, harmony and well-being in the body. This diet comprises pure unprocessed food that is light in potency and rich in pranic energy.

Whole grains such as rice, wheat, oats, millets, legumes, lentils and pulses, milk, seasonal vegetables and fruits, ghee, honey, jaggery are examples. (Photo: Getty/Thinkstock)

What you eat is what ultimately affects your health. This is why doctors, dietitians and health experts suggest you to be mindful of what you put on your plate, especially right now in the pandemic, when health and well-being have assumed so much of importance.
Not just in India, but around the world, sattvic food has gained immense popularity. Radhika Iyer Talati, the founder of Food by Anahata, an entrepreneur, yogini, mountaineer and philanthropist, explains that the sattvic diet in Ayurveda believes in the balance of three gunas — tamas, rajas and sattva — which are important in order to lead a healthy life.

“Foods, therefore, are also divided into these three groups namely sattvic, rajasik and tamasik foods that, when consumed consciously, can enhance the energies of the mind, body and spirit,” she says.

|Weight loss alert: Seven food combinations to burn fat, beat bloating and boost metabolism|

Talati explains that sattvic foods are known to uplift purity, boost health, harmony and well-being in the body. This diet comprises “pure unprocessed food that is light in potency and rich in pranic energy”.

“Sattvic diet is high-fibre, low-fat, vegetarian and completely balanced. Cooked food, consumed within three to four hours of preparation, is also considered sattvic. Whole grains such as rice, wheat, oats, millets, legumes, lentils and pulses, milk, seasonal vegetables and fruits, ghee, honey, jaggery are all examples.”

Plan a simple balanced sattvic meal by following these three principles:

1. Eat according to your prakriti

Consult a good Ayurvedic doctor to determine your prakriti. There are certain foods one must or must not consume depending on their inherent nature. Once you can identify yours, it makes it simple to know the correct type of food combination for you.

sattvic meal, what is sattvic meal, Ayurvedic meal, how to plan sattvic meal, planning a sattvic meal, benefits of sattvic meal, importance of sattvic meal, healthy eating, indian express news

‘Tamasik foods’ make the body feel dull and lazy. It includes processed foods. (Photo: Getty/Thinkstock)

2. Eat according to the season

Ayurveda teaches us that our bodies coexist with nature and our health and well-being depend on how connected we are to this biome. Ritucharya or eating according to the discipline of seasons, is an important aspect of living a healthy life. It consists of an Ayurvedic lifestyle diet routine that helps the body to cope with the seasonal impact caused on the body and mind.

3. Eating that which is locally grown and cooked traditionally

One of the most important steps to move into a sattvic lifestyle is to ensure that you get in touch with your base. Where do you come from? What is your genetic code? What is it that generations before you in your family were eating? While it is important to taste and experience everything that the modern gastronomical world is offering you, it is equally important to
balance every meal with a required amount of dietary fibre, vitamins, minerals, antioxidants, protein and healthy fats.

Covid care: Ayurvedic practitioner shares recipes to build strength, immunity

Talati says that ‘rajasik foods’ elevate stress and anger, induce activity and aggravate restlessness. Caffeinated drinks such as chai, coffee, colas, chocolates, spicy food, eggs, and pungent foods come in this category.

‘Tamasik foods’, she says, make the body feel dull and lazy. It includes processed foods, preservative filled foods, meat, fish, eggs, onions, garlic, mushrooms, alcohol and stale food. Ayurveda states that any food that has remained uneaten for more than three hours becomes tamasik.

**Covid Cases (The Asian Age: 20210902)**

Covid Guidelines (The Asian Age: 20210902)


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Coconut Fruit (The Asian Age: 20210902)

Cheers to coconut

World Coconut Day on September 2 is an ode to the quintessential ingredient: Coconut that has shifted gears outside the kitchen too.

Coconut oil is beneficial for use in cosmetics, typically rich in lauric acid, fatty acids, antioxidants, and it's full of minerals and vitamins. Lauric acid is used in fighting fungi and bacteria, which cause many illnesses within the body. It is effective in reducing triglycerides and cholesterol levels, which reduces the chances of getting a stroke or cardiovascular disease.

— Narmada Reddy Sirupa, Co-founder, Sativa

Health Factor
Coconut helps in detoxifying your system, since it is rich in lauric acid, fatty acids, antioxidants, and it's full of minerals and vitamins. Lauric acid is useful in fighting fungi and bacteria. Coconut is also beneficial for use in cosmetics, typically as a moisturizer and in soaps. It is one of the most versatile ingredients in the world. The Coconuts also function as good medicines for growing flowering plants. The shell of the coconut is harvested from trees when ripe, says Shweta Mihalko, Clinical Nutritionist, Portis Hospital, Bengaluru.

Coconut helps in detoxifying your system, since it is rich in lauric acid, fatty acids, antioxidants and it's full of minerals and vitamins. Lauric acid is useful in fighting fungi and bacteria, which cause many illnesses within the body. It is effective in reducing triglycerides and cholesterol levels, which reduces the chances of getting a stroke or cardiovascular disease.
That natural immunity following a virus infection stays robust and lasts longer is already well
known. People infected with the 2002 Severe Acute Respiratory Syndrome (SARS) and the
Middle East Respiratory Syndrome (MERS) have been shown to have strong immunity for up
to three years, while the immunity lasts for life after a chickenpox infection. Now, a vaccine
effectiveness study undertaken in Israel has shown that natural infection confers stronger
immunity against the SARS-CoV-2 virus than even full vaccination. They found that people
previously infected with the SARS-CoV-2 virus had better immunity and had reduced risk of
reinfection, symptomatic disease and hospitalisation caused by the highly transmissible Delta
variant than uninfected people who were fully immunised with the Pfizer vaccine.

The results have been posted on medRxiv, a preprint server. Preprints are yet to be peer-
reviewed and published in scientific journals.

Since Israel was the first country to aggressively vaccinate a large percentage of the population
with the Pfizer vaccine, the researchers were able to compare over 16,000 people who were
previously infected but not vaccinated with an equal number of people who had not been
naturally infected but fully vaccinated.

During the follow-up, it became clear that even full vaccination with the Pfizer vaccine did not
confer immunity that was superior to the one acquired through natural infection. There were
238 instances of breakthrough infections in the fully vaccinated compared with just 19
reinfections among those previously infected but not vaccinated. The infection or vaccination
occurred during January and February this year. After adjusting for comorbidities, it was found
that the risk of breakthrough infections was 13-fold higher than reinfection among the naturally
infected group. Differences in protection were seen in symptomatic diseases too. At 191, the
number of people with symptomatic disease in the fully vaccinated group was higher than in
the previously infected group, which remained at eight. After adjusting for comorbidities, there
was a 27-fold risk for symptomatic breakthrough infection compared with symptomatic
reinfection.

But waning of natural immunity against the Delta variant was seen when infections that had
occurred anytime between March 2020 and February 2021 were compared with vaccination
during January-February 2021. The risk of breakthrough infections and symptomatic disease
in the fully vaccinated was nearly six-fold and over 7.1% higher respectively than in those
previously infected. Risk of hospitalisation was also higher among the vaccinated.

Explained | How does the immune system respond to a coronavirus attack?
This study does not tell if the level and duration of protection varies depending on the severity of the disease, and whether asymptomatic infection confers the same protection as those with the disease. Since the correlates of protection are not yet known, it is unknown if the broad immune response from natural infection might be proving to be superior to antibodies generated in response to spike proteins in the case of vaccines.

Though this is the largest real-world study evaluating the effectiveness of the Pfizer vaccine in preventing infections compared with natural immunity, it is only an observational study. Testing for the infection was not undertaken, thereby underestimating asymptomatic infections. Also, the number of events — infections or symptomatic disease — in all groups were fewer.

More such studies involving Pfizer and other vaccines, carried out over a longer time period, are needed to fully understand the level and duration of protection conferred by COVID-19 vaccines. One encouraging finding is the absence of death among the vaccinated, a clear signal that the vaccine offers formidable protection against serious disease. Hence, natural immunity, even if found to be superior and long-lasting than vaccine-induced protection, is not what one should opt for.

Since January 2020, there have been 4.5 million COVID-19 deaths recorded globally, a vast majority of which could have been prevented. A sizable number of deaths have been among the healthy and those younger than 60 years, which flies in the face of a section of scientists that came up with the Great Barrington Declaration before vaccines became available.

Vaccination will always remain a safe and sure way to remain protected against severe COVID-19 disease and death, even if it means the protection is not highly robust or long-lasting.

**Antibodies**

**Antibodies most potent weapon to combat COVID-19’, says ICMR-Jodhpur’s Dr. Arun Sharma (The Hindu: 20210902)**


Vaccines provide long-term immunity by generating antibodies, says Dr Arun Sharma of ICMR, Jodhpur

Antibodies are the most potent weapon to beat coronavirus and vaccines provide long-term immunity by generating adequate antibodies in the body. Natural infection, too, leads to antibodies formation, giving protection against the re-infection to an extent. Dr. Arun Sharma, a community medicine expert and Director, National Institute for Implementation Research on Non-Communicable Diseases-ICMR, Jodhpur, explains the relationship between the infection
and antibodies, when and whether to check the presence of antibodies and how they help fight the virus.

What is the relation between infection and antibodies?

When a new virus affects a population, the body’s immune system recognizes it as a foreign body and develops antibodies against it. Since antibodies take time to develop, the infection causes a severe disease, depending upon the pathogenicity of the virus, virus load, immunity of the person, and so on. But when the same pathogen strikes the next time, the antibodies, which are already present in the body, get activated fast and so the severity of the disease reduces.

For example, rotavirus affects the digestive system. It was observed that in the 1990s it used to cause severe diarrhoea in children but gradually children developed antibodies against it and the severity of the disease came down. But then it began to affect the foreign travellers to India as they were not exposed to the virus in their countries. So, this is how a new virus works unless it mutates to become more transmissible or pathogenic.

What is the ideal time interval post-vaccination to check the level of antibodies for COVID-19 in a person? Which test should one opt for?

Any well-equipped pathology laboratory can test the presence of antibodies in the blood. There are two types of antibodies generated in the body in response to infection — the initial response is through IgM, which remains for a short duration, and later the body produces IgG antibodies. So, soon after the COVID-19 infection, the level of IgM is high, but these antibodies fade after six weeks. IgG antibodies could be detected after two to three months. After vaccination, if one wants to know if the vaccine has led to antibodies production, they should go for IgG.

Immunity is of two types: humoral and cell mediated. In diseases such as Polio, Hepatitis or Covid-19, antibodies in the blood fight the infection, whereas in diseases such as tuberculosis, cell-mediated immunity has more role to play. Basically, majorly there are two types of immunity cells — B Cells, which form antibodies in the blood (humoral antibodies) and T-Cell, responsible for cell-mediated immunity. The T-cells kill and eat up the disease-causing pathogen, while the antibodies present in the blood neutralise the pathogen by binding to its disease-causing protein, not allowing it to enter the human cell. For example, in COVID-19, antibodies bind to the spike protein present in the virus, which helps the virus enter the cell, where it replicates. Antibodies ensure that the disease does not become severe.

Some experts say that vaccines lead to long-term cell-mediated immunity. Can you explain what it means for common readers?

There are two types of T-cells: T-helper cells, and T-suppressor cells. The helper cells recognise and memorise the antigen and help the B cells to reproduce the antibodies quickly in case of re-infection. COVID-19 vaccines help the T-helper cells to memorise the antigen. And when a person catches the infection, these helper cells help the B-cells in making antibodies against it. They remain active for a longer time.
Should one go for antibody testing post-vaccination? Why do some people not develop antibodies post-vaccination?

Whether or not to get antibody level tested post-vaccination or natural infection is an individual choice. As far as people in whom antibodies are not formed post-vaccination are concerned, I would recommend a thorough medical investigation. I feel it could be a person’s genetic composition or immune system-related issues that can lead to such a situation.

Why do some people still develop the disease, so-called breakthrough infections, even after the two doses of Vaccines?

The COVID-19 vaccines stimulate the body to develop antibodies against the virus. But these antibodies remain in the blood. The SAR-Cov-2 enters the body through the mouth and the nose. It replicates there and then through the trachea, enters the lungs. So, antibodies can neutralise the virus once it moves from the lung to the blood. So, as soon as the virus enters the blood, the antibodies attack it and prevent it from entering other organs such as the brain, the heart, or the kidney. The virus can cause the infection, but vaccines prevent it from causing severe disease, or hospitalisation. That’s why we emphasise on following COVID-appropriate behaviour even after taking the vaccine.

A nasal vaccine may help kill the virus in the nasal track itself. This happens in the case of the oral polio vaccine. A weakened virus vaccine, when given orally, forms a protective coating around the gut. This coating does not allow the virus to cause the infection.

How accurate are sero surveys?

Sero-survey is a research methodology that helps policymakers come up with strategies to fight the pandemic. It is done through random sampling to know the prevalence of antibodies in the population. These antibodies tell us the extent of infection. But it has its limitation as the sample size is small and cannot represent the entire population of a large country like India. So, we cannot and should not lower our guard.

COVID-19 infections

Breakthrough COVID-19 infections on expected lines: report(The Hindu: 20210902)


Vaccines continue to protect against severe disease, says the Indian SARS-CoV-2 Genomics Consortium.
Amidst reports of rising numbers of “breakthrough infections”, or infections following two doses of vaccine, in India, a government body has said that these numbers are on expected lines, but has not officially quantified the extent of such infections.

“The number of reported vaccination breakthroughs in India are well within the numbers expected from the total number of infections, the fraction of population that is vaccinated and the known reduction in effectiveness of Covishield/Covaxin against infections by Delta. Vaccines continue to protect against severe disease and remain a cornerstone of public health strategy,” the India SARS-CoV-2 Genome Consortium (INSACOG) said in a weekly report. The INSACOG is a consortium of laboratories coordinated by the Department of Biotechnology (DBT).

Breakthrough COVID-19 infections on expected lines: report

The published efficacy of Covaxin and Covishield from Phase 3 clinical trials has shown that they range from 70%-90% but their efficacy, at preventing transmission, is significantly reduced against newer variants such as Delta. Like other vaccines, they have been designed on the older version of the virus isolated from Wuhan, China.

Last week, a study by scientists at the Council of Scientific and Industrial Research (CSIR)-Institute of Genomics and Integrative Biology and the Max Hospitals Group in Delhi, revealed that nearly a quarter of 600 fully vaccinated healthcare workers were reinfected.

Earlier, studies from the Christian Medical College, Vellore and Post Graduate Institute of Medical Education Research, Chandigarh, too, had reported between 1%-10% of fully vaccinated healthcare workers as having been reinfected. However, less than 5% of them have required hospitalisation and no deaths have been confirmed, indicating that vaccines continued to be effective — even against Delta variants — at preventing severe sickness and death.

The latest INSACOG report also noted that Delta continued to be the dominant lineage in India, though some of the Delta variants were in the process of being reclassified into sub-lineages comprising the ‘Delta plus’ category because of slight variations in the mutations that they manifested.

One of these Delta plus categories is called AY.12, which raised concern after being associated with several cases of breakthrough infections in Israel. However, this wasn’t yet of concern in India. “It is specifically noted that the expanding phylogenetic cluster of AY.12 that was first noted in Israel, is not yet seen in India. Similar sequences that are also being classified as AY.12 at low stringency, do not have the same epidemiological significance. A detailed update will follow,” the INSACOG noted.

There were other lineages such as AY.4 that were being tracked but they were not “clinically significant” and did not pose any additional risk compared with the Delta variants. So far, the total number of samples processed was 70,420, of which 51,651 sequences were analysed for their genomic composition, the INSACOG statement said.
India had achieved the one-crore doses milestone for the first time on August 27.

More than 65 crore doses administered so far, says government.

India on August 31 administered more than 1.09 crore COVID-vaccine doses, which the Union Health Minister Mansukh Mandaviya tweeted “is a new vaccination milestone.”

In total over 65 crore doses have been administered so far in the country.

The Union Health Ministry on Tuesday noted that more than 64.36 crore (64,36,13,160) vaccine doses have been provided to States and Union Territories so far through Central Government’s free of cost channel and through direct state procurement category.

It added that nearly 15 lakh doses (14,94,040) are in the pipeline and more than 5.42 crore (5,42,30,546) balance and unutilised COVID vaccine doses are still available with the States and UTs to be administered.

Meanwhile in a statement released by the World Health Organisation (WHO) on Tuesday, the former co-chairs of the Independent Panel on Pandemic Preparedness and Response (IPPPR), Ellen Johnson Sirleaf, former president of Liberia, and Helen Clark, former prime minister of New Zealand, have expressed their deep concern at the slow pace of redistribution of COVID-19 vaccines from high income to low-income countries.

“The Independent Panel report recommended that high-income countries ensure that at least one billion doses of vaccines available to them were redistributed to 92 low- and middle-income countries by 1 September, and a further one billion doses by mid-2022,” the statement said.
“High-income countries have ordered over twice as many doses as are needed for their populations. Now is the time to show solidarity with those who have not yet been able to vaccinate their frontline health workers and most vulnerable populations. Reaching the goal of redistributing one billion doses by 1 September would be a vital step in protecting the five billion people aged 15 and over who live in low- and middle-income countries. The 600 million doses which have already been pledged now need to be delivered with urgency,” the co-chairs said.

**Diabetic**

कोरोना के दौर में बड़ा लोगों में डायबिटीज़ का खतरा, एक्सपर्ट की सलाह 35 की उम्र में करवा लें शुगर की जांच (Dainik Gagaran: 20210902)


यूनाइटेड स्टेट्स जिविटिव सर्विसेज टास्क फोर्स ने कहा कि कम उम्र में टेस्टिंग से मोटे लोगों को सीरियस हेल्थ प्रोब्लेम्स से बचाया जा सकता है। जिसके चलते अमेरिका में अब टाइप 2 डायबिटीज़ और ब्लड में हाई शुगर लेवल की टेस्टिंग 35 साल की उम्र से ही शुरू हो जाएगी।

डायबिटीज़ और उससे होने वाले दूसरे खतरों से भी हम सब वास्तविक हैं ही लेकिन पहले जहां यह बीमारी एक खास उम्र के बाद ही अटैक करती थी वहीं अब यह क्वा बूढ़े क्वा बच्चे, किसी को भी अपना शिकार बना ले रही है। कोरोना महामारी के दौर में तो डायबिटीज़ के मामले तेजी से बढ़े हैं। जिसके चलते अमेरिका में अब ओवरवेट लोगों में टाइप 2 डायबिटीज़ और ब्लड में हाई शुगर लेवल की टेस्टिंग 35 साल की उम्र से ही शुरू कर दी जाएगी। जो पहले 40 साल की उम्र में किया जाता था। यूनाइटेड स्टेट्स जिविटिव सर्विसेज टास्क फोर्स ने कहा कि कम उम्र में टेस्टिंग हो जाने से मोटोपे से परेशान लोगों को सीरियस हेल्थ प्रोब्लेम्स से बचाया जा सकता है। टास्क फोर्स का कहना है कि 35 साल की उम्र में डायबिटीज़ की पहली स्क्रीनिंग और 70 साल की उम्र तक हर तीन साल पर स्क्रीनिंग करवानी चाहिए।

इन लोगों में रिस्क ज्यादा
टाक फोस ने कहा कि हेथ केयर वाइडर को 35 साल से पहले भी उन लोगों की टेस्टिंग करनी चाहिए जिनमें डायबिटीज होने की संभावना ज्यादा है।

Pollution

रिसर्च का दावा, लगातार बढ़ता वायु प्रदूषण घटा सकता है 9 साल तक आपकी उम्र (Dainik Gagaran: 20210902)

चिंतनियों से निकलता हुआ खतनाक घुटना का गुबार

https://www.jagran.com/lifestyle/health-research-claims-ever-increasing-air-pollution-can-reduce-your-age-by-9-years-21983746.html

शिकान्य युनिवर्सिटी की ईंटीआईसी की रिपोर्ट के मुताबिक सेंट्रल इस्ट और नॉर्थ इंडिया में रहने वाले 48 करोड़ से ज्यादा लोग बढ़ो हुए प्रदूषण में जीने को मजबूर हैं और इसकी वजह से उनकी उम्र घट रही है।

एक अमेरिकी रिसर्च इंटीट्यूट के आधार पर, दावा किया जा रहा है कि भारत में वायु प्रदूषण (एयर पॉयूशन) की वजह से 40 परसेंट लोगों की उम्र 9 साल तक कम हो सकती है। रिपोर्ट के तहत वायु प्रदूषण से निपटने के लिए तत्काल जरूरी कदम उठाने को कहा गया है।

करोड़ों लोग प्रभावित

रिपोर्ट ने महाराष्ट्र, मंगोलिया देशों के उदाहरण देते हए कहा कि यह बेहतर गंभीर विषय है कि वायु प्रदूषण का इतना ऊंचा स्तर समय के साथ और भी बढ़ती जगहों पर फैलता जा रहा है। रिपोर्ट ने महाराष्ट्र और मध्य प्रदेश का उदाहरण देते हुए कहा कि यहां भी एयर क्वालिटी गंभीर रूप से ज्यादा गई है।

ऐसे लगातार अनुमान

खुजली से निजात पाने के लिए आप नारियल तेल का इस्तेमाल करें।

Skin Allergies cure: बरसात में चक्कर एलजी से परेशान हैं, तो इन 5 उपायों से करें उपचार

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यह भी पढ़ें
तीसरी सबसे पॉल्यूटेड राजधानी है दिल्ली

आईस्क्यूएयर नाम की स्विट्जरलैंड की एक संस्था के मुताबिक 2020 में नई दिल्ली ने दुनिया की सबसे ज्यादा प्रदूषित राष्ट्रीय राजधानी होने का दर्जा लगातार तीसरी बार हासिल किया। आईस्क्यूएयर नाम के जिम्मेदारी के आधार पर वायु गुणवत्ता नापता है। यह कण फेफड़ों को नुकसान पहुँचाते हैं।