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The Indian EXPRESS

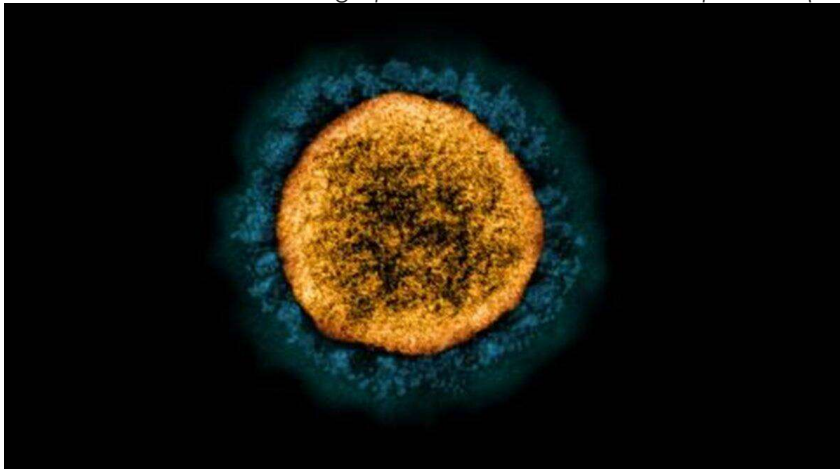
New research: Early antiviral response in nose may determine severity of COVID-19

The team also identified infected host cells and pathways associated with protection against infection.

By: [PTI](#) | Boston |

July 26, 2021 2:53:16 pm

Transmission electron micrograph of a SARS-CoV-2 virus particle (UK



B.1.1.7 variant), isolated from a patient sample and cultivated in cell culture. (NIAID)

The course of severe [COVID-19](#) may be determined by the body's antiviral response to initial infection, according to a study which opens up new avenues for early drug interventions that could prevent severe disease.

Researchers from Massachusetts Institute of Technology (MIT) and Harvard University in the US analysed whether the path

The Indian EXPRESS

New research: Test predicts who is likely to be infected with severe Covid-19

The new test is more likely to identify severe cases of Covid-19, but also has a higher rate of false positives.

By: [Express News Service](#) | New Delhi |

Updated: July 26, 2021 10:32:46 am

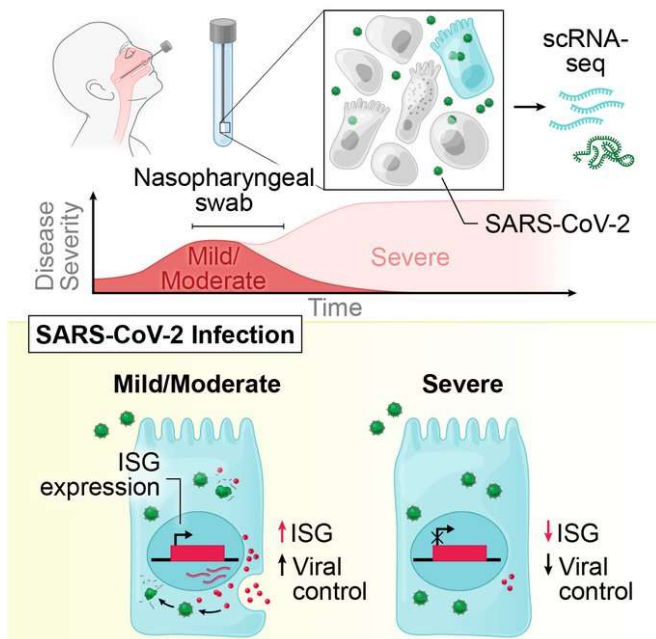


Health workers conduct Covid-19 tests at a housing society in Mumbai. (Express Photo: Amit Chakravarty, File)

Researchers have developed a blood test to predict which people infected with [Covid-19](#) are most likely to experience serious symptoms, which could help health care workers prioritise patients for hospitalisation and intensive care.....

Continued in page no.5

towards severe disease could start much earlier than expected — perhaps even within the initial response created when the virus enters the nose.



[See the latest COVID-19 information on Twitter](#)

They studied cells taken from nasal swabs of patients at the time of their initial COVID-19 diagnosis, comparing patients who went on to develop mild COVID-19 to those who progressed into more severe disease and eventually required respiratory support. The findings, published in the journal *Cell*, showed that patients who went on to develop severe COVID-19 exhibited a much more muted antiviral response in the cells collected from early swabs, compared to patients who had a mild course of disease.

“Our findings suggest that the course of severe COVID-19 may be determined by the body’s intrinsic antiviral response to initial infection, opening up new avenues for early interventions that could prevent severe disease,” said study co-senior author Jose Ordoñas-Montanes, from Harvard Medical School.

To understand the early response to infection, the team collected nasal swabs from 58 people. Thirty-five swabs came from COVID-19 patients, taken at the time of diagnosis, representing a

variety of disease states from mild to severe. Seventeen swabs came from healthy volunteers and six came from patients with respiratory failure due to other causes.

The team isolated individual cells from each sample and sequenced them, looking for RNA that would indicate what kind of proteins the cells were making — a proxy for understanding what a given cell is doing at the moment of collection. Cells use RNA as instructions to make proteins — tools, machinery, and building blocks used within and by the cell to perform different functions and respond to its environment.

By studying the collection of RNA in a cell — its transcriptome — researchers understand how a cell is responding, at that particular moment in time, to environmental changes such as a viral infection. Researchers can even use the transcriptome to see if individual cells are infected by an RNA virus like SARS-CoV-2.

First, the team found that the antiviral response, driven by a family of proteins called interferons, was much more muted in patients who went on to develop severe COVID-19. Second, patients with severe COVID-19 had higher amounts of highly inflammatory macrophages, immune cells that contribute to high amounts of inflammation, often found in severe or fatal COVID-19.

Since these samples were taken well before COVID-19 had reached its peak state of disease in the patients, both these findings indicate that the course of COVID-19 may be determined by the initial or very early response of the nasal epithelial and immune cells to the virus. The lack of strong initial antiviral response may allow the virus to spread more rapidly, increasing the chances that it can move from the upper to lower airways, while the recruitment of inflammatory immune cells could help drive the dangerous inflammation in severe disease.

The team also identified infected host cells and pathways associated with protection against infection — cells and responses unique to

patients that went on to develop a mild disease. These findings may allow researchers to discover new therapeutic strategies for COVID-19 and other respiratory viral infections.



The Delta variant is the symptom of a bigger threat in US: Vaccine refusal

The more contagious delta variant may be getting the blame, but fueling its rise is an older, more familiar foe: vaccine hesitancy and refusal, long pervasive in the United States.

By: [New York Times](#) |

Updated: July 26, 2021 11:44:23 am



Public health experts have fruitlessly warned for months that the virus — any version of it — would resurge if the country did not vaccinate enough of the population quickly enough. (AP)

After an all-too-brief respite, the United States is again at a crossroads in the [pandemic](#). The number of infections has ticked up — slowly at first, then swiftly — to 51,000 cases per day, on average, more than four times the rate a month ago. The country may again see overflowing hospitals, exhausted health care workers and thousands of needless deaths.

The more contagious [delta variant](#) may be getting the blame, but fueling its rise is an older, more familiar foe: vaccine hesitancy and refusal, long pervasive in the United States. Were a wider swath of the population vaccinated, there would be no resurgence — of the delta variant, alpha variant or any other version of the [coronavirus](#).

While mild breakthrough infections may be more common than once thought, the vaccines effectively prevent severe illness and death. Yet nearly half the population remains unvaccinated and unprotected. About 30% of adults have not received even a single dose, and the percentage is much higher in some parts of the country.

America is one of the few countries with enough vaccines at its disposal to protect every resident — and yet it has the highest rates of vaccine hesitance or refusal of any nation except Russia.

Public health experts have fruitlessly warned for months that the virus — any version of it — would resurge if the country did not vaccinate enough of the population quickly enough. Bill Hanage, a public health researcher at the Harvard T.H. Chan School of Public Health, predicted in January that Florida might have a rough summer. Now 1 in 5 new infections nationwide is in Florida.

True, the speed and ferocity with which the delta variant is tearing through Asia, Europe, Africa and now North America has taken many experts by surprise. It now accounts for about 83% of the infections in the United States.

But delta is by no means the wickedest variant out there. Gamma and [lambda](#) are waiting in the wings, and who knows what frightful versions are already flourishing undetected in the far corners of the world, perhaps even here in America.

Every infected person, anywhere in the world, offers the coronavirus another opportunity to morph into a new variant. The more infections there are globally, the more likely new variants will arise.

The United States will be vulnerable to every one of them until it can immunize millions of people who now refuse to get the vaccine, are still persuadable but hesitant or have not yet gained access. The unvaccinated will set the country on fire over and over again.

And they will not be the only ones who are singled. Vaccinated people will be protected from severe illness and death, but there may be other consequences. Already in some communities, they are being asked to wear masks indoors. If the numbers continue to soar, the restrictions that divided the country before may return. Workplaces may need to close again, and schools, too.

And some number of vaccinated people will become infected. Breakthrough infections were expected to be vanishingly rare with the original virus, but recent data suggest they may be less so with the delta variant. It is roughly twice as contagious as the original coronavirus, and some early evidence hints that people infected with the variant carry the virus in much higher amounts.

“The larger the force of infection that comes from the pandemic in unvaccinated populations, the more breakthrough infections there will be,” Hanage said.

Most breakthrough infections produce few to no symptoms, but some may prompt illness in vaccinated people serious enough to lay them up in bed, miss work — and put their children or older relatives at risk. Some cases may lead to long COVID, scientists now fear — a poorly defined syndrome in which symptoms seem to persist for months.

This grim redux has a glaringly obvious solution: shots in arms. But short of a federal mandate — or a patchwork of mandates by municipalities, hospitals, colleges and businesses — it is hard to see how enough Americans will be immunized to form a buttress against the virus.

After a brisk vaccination campaign in the spring, the pace has slowed to about 537,000 doses per day, according to data gathered by The New York Times. Some responsibility for the lag lies with the frank refusal of conservative leaders — often Republicans — to champion the vaccines.

But misinformation, an epidemic all its own on social media, emanates from all parts of the cultural spectrum, and there is no single reason why so many Americans remain unvaccinated. It is a Hydra-headed problem.

Of the 39% of adults who are unvaccinated, about half say they are completely unwilling. But even within that group, some say they would comply if required to do so.

Some are hesitant and may come around with the right persuasion from people they trust, while still others plan to be inoculated but say they have just not had the chance.

Politics is a driver for only some of these people, noted Dr. Richard Besser, a former director of the Centers for Disease Control and Prevention. In New Jersey, where he lives, the rates vary drastically because of socioeconomic factors. In mostly white Princeton, 75% of adults are immunized, versus 45% in Trenton, just 14 miles away, which is heavily Black and Latino.

“Both are strong Democratic areas, so it’s really important to break things down and to address the issues that are impeding vaccination progress in each segment of the unvaccinated population,” Besser said.

Still, there is no doubt that the political divide is playing a role in rising infection rates. From the

start, vaccinations in counties that voted for Donald Trump lagged behind those in counties that voted for Joe Biden, and the gap has only widened — from 2 percentage points in April to nearly 12 points now, according to one recent poll by the Kaiser Family Foundation.

Nationwide, 86% of Democrats have had at least one shot, compared with 52% of Republicans, according to another poll. Even the national goal of having 70% of adults vaccinated by July 4 somehow became “Biden’s goal,” said Dr. Nahid Bhadelia, director of the Center for Emerging Infectious Diseases Policy and Research at Boston University. All of a sudden, even getting out of the pandemic “became a left-versus-right issue.”

Fewer than half of House Republicans are vaccinated as of May, compared with 100% of congressional Democrats. For months, some Republican lawmakers — including Sens. Ron Johnson of Wisconsin and Rand Paul of Kentucky — and conservative news commentators like Tucker Carlson have voiced their skepticism of vaccines, loudly and insistently.

Lately, as infections rise in conservative precincts, a few Republican leaders have begun championing vaccination. Sen. Mitch McConnell, R-Ky., the minority leader, who survived polio as a child, has worn masks and has urged that everyone be immunized. Sen. Mitt Romney, R-Utah, said in an interview Wednesday that “the politicization of vaccination is an outrage and frankly moronic.”

All of these leaders and many more will need to repeat vaccine affirmations often enough to persuade millions of people to overcome their hesitation. The delta variant is thriving amid American discord. The vaccines are the remedy not just for this variant but all those yet to come.

Continued from No.1

New research: Test predicts who is likely to be infected with severe Covid-19

.....The study has been published in the American Chemical Society’s journal Analytical Chemistry.

To measure changes in blood biochemistry that occur with severe Covid-19, the researchers chose a technique called attenuated total reflectance Fourier transform infrared spectroscopy (ATR-FTIR), which has been tested previously as a Covid-19 diagnostic tool.

Two regions of FTIR spectra from 128 patient plasma samples showed small but observable differences between those with severe and non-severe Covid-19.

Using these data together with clinical information about patients, the researchers developed a statistical model to predict Covid-19 severity. They found that the best predictor was whether the patient had diabetes, followed by the two regions in the FTIR spectra.

Adding the FTIR data to the model improved the sensitivity for detecting severe disease in a different set of 30 patients from 41.2% to 94.1%, it reduced the specificity from 84.6% to 69.2%, compared with the clinical factors alone.

This means that the new test was more likely to identify severe cases, but it also had a higher rate of false positives.

PPCB data: 'Punjab produced 1,672 tonnes Covid biomedical waste'

As per data compiled by the Punjab Pollution Control Board, the maximum amount of Covid waste in a month (234.5 tons) was generated in the state in September 2020, when the first wave was at its peak, followed by May this year when the second wave peaked (216.9 tonnes).

Written by [Navjeevan Gopal](#) | Chandigarh |
Updated: July 26, 2021 10:04:51 am

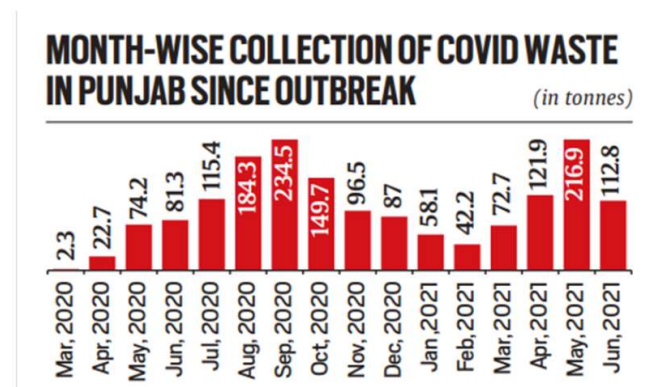


The data reveals that out of 1,672 tons, 1,023 tonnes of Covid waste was generated between May and December 2020 and 524 tonnes between March and June this year. (Representational)

From 2.3 tonnes in March 2020 to 112.8 tonnes in June this year, a total of 1,672 tonnes (16.72 lakh kg) of Covid waste was generated across various health facilities in Punjab dealing with Covid treatment and management.

As per data compiled by the Punjab Pollution Control Board (PPCB), the maximum amount of Covid waste in a month (234.5 tons) was generated in the state in September 2020, when the first wave was at its peak, followed by May

this year when the second wave peaked (216.9 tonnes). The data reveals that out of 1,672 tons, 1,023 tonnes of Covid waste was generated between May and December 2020 and 524 tonnes between March and June this year.



Data on Covid biomedical waste produced in Punjab.

Biomedical waste is treated by the biomedical waste management and disposal agencies the state has signed an memorandum of understanding with. As of now, there are five such agencies, each located at Ludhiana, Amritsar, Pathankot, Muktsar and Mohali. "These cater to various districts in clusters, collecting biomedical and Covid waste, segregated at the origin of collection. Covid waste is categorised separately," said a PPCB functionary, adding that vehicles which collect biomedical and Covid waste have GPS tracking system installed, and need to collect waste daily.

"Covid waste has to be collected every 48 hours mandatorily," the official said, adding that the quantum of waste is recorded after weighing the vehicle carrying the waste and is uploaded on a software. "PPCB monitors the exercise," the functionary said.

As per Punjab's nodal officer for Covid Dr Rajesh Bhaskar, there are around 160 community health centres, 400 primary health centres, 41 sub-divisional hospitals and 23 district hospitals from where Covid waste is collected, managed and disposed of.

Colour-coded collection

As per July 17, 2020 guidelines by the Central Pollution Control Board (CPCB) for handling, treating and disposing of waste generated during treatment/diagnosis/quarantine of Covid patients, personal protective equipment (PPE) such as goggles, face shield, splash-proof apron, plastic coverall, hazmet suit, nitrile gloves have to be disposed of in a red bag.

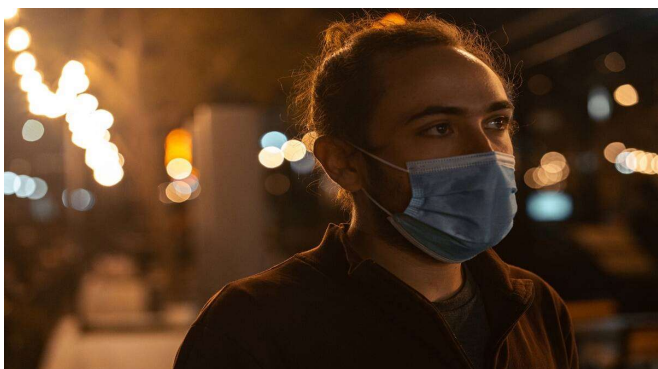
Used masks, tissues and toiletries of [Covid-19](#) patients have to be disposed in a yellow bag.



Post-Covid diet for people with chronic conditions: What foods to eat and when

"A balanced diet can help them heal quickly and stay protected from other infections," said nutritionist Sujata Sharma

By: [Lifestyle Desk](#) | New Delhi |
July 25, 2021 9:30:42 pm



Post COVID-19 recovery of the patient. (source:Pixabay)

Recovery from [COVID-19](#) can be a long process and an uphill task for many. Managing the body's immunity levels post-Covid through a

nutritionist-recommended diet is necessary to keep other health complications away. This is especially important with the expectation of the [third wave](#) hitting us soon. Further, the use of steroids to recover from Covid can cause spikes in blood sugar levels for a few months and this needs to be managed with a diet and expert medical advice.

"The recovery rate of Sars-Cov 2 patients has increased significantly. The data shared by the Ministry of Health and Family Welfare indicates that more than 95 per cent of [COVID-19](#) patients are recovering from the ailment. However, they are not free from the threat of other life-threatening diseases. While there is no substitute for medicines, managing diabetes is possible with diet regulation. It is important for people with diabetes to realign their diet plan after recovering from COVID-19. A balanced diet can help them heal quickly and stay protected from other infections," said Sujata Sharma, nutritionist & diabetes educator, BeatO.

Breakfast is an essential part of our diet, which should be taken within two hours of waking up, between 8:00-9:00 am. It reinvigorates our body with a fresh stream of energy by restoring glucose levels and reducing stress; hence, we must choose the components meticulously. A diabetes patient recovering from COVID-19 should choose from the following breakfast options: one bowl of oats with skimmed milk (adding berries and nuts is optional) or vegetable besan cheela or vegetable moong dal cheela or two pieces of multigrain dosa and one bowl of quinowa or boiled chana and moong chaat with vegetables or two egg white omelettes. Pairing any of these with buttermilk can complete the breakfast.

Mid-morning snack

The gap between breakfast and lunch must be covered with some nutritious snack (11:30 am). About 100 gm fruits ([apple](#)/ guava/ pear/

strawberries/ berries/ papaya/ watermelon) or nuts and seeds are most suitable for a mid-morning snack.

Lunch

As the day progresses, the body needs the energy to continue its functioning. A wholesome lunch fulfils these requirements while providing a break (between 1:30-2:30 pm). An ideal lunch should consist of one plate of salad, one bowl of green vegetable/dal or homemade chicken, low-fat curd or cucumber raita and multigrain chapatti (1-2) or one bowl of brown rice.

Evening snacks

As the day progresses towards dusk (4:30-5:30 pm), it is necessary to restore energy levels. This light snack can consist of tea without sugar/buttermilk or a handful of roasted makhana or chana or roasted/grilled/toasted paneer cubes or fruits 100 gm or chicken soup or multigrain biscuit or yoghurt with berries.

Dinner

Dinner is an important meal, one of the last food items that an individual eats. Ideally, dinner should be consumed between 7:30 to 8:30 pm and should consist of a plate of salad plus one bowl of green vegetable/paneer gravy/homemade chicken/fish gravy plus 50-100 gm of curd plus one bowl of moong dal khichdi/vegetable oats khichdi or one to two slices of multigrain chapatti/jowar chapatti/bajra chapatti.

Post-dinner snack

The ideal post-dinner snack is a glass of skimmed/toned milk that can be taken if the individual feels hungry.

Following this diet plan, along with medication and [physical exercises](#), can minimise the various

health risks for diabetes patients recovering from COVID-19.



COVID-19 antibodies last at least nine months after infection, study finds

The team also found cases of antibody levels increasing in some people, suggesting potential re-infections with the virus, providing a boost to the immune system.

By: [PTI](#) | London |
July 19, 2021 5:17:06 pm



A healthcare professional collects swab samples to test Covid-19. (File/Express Photo: Amit Mehra)

Antibody levels remain high nine months after infection with SARS-CoV-2, the virus that causes [COVID-19](#), whether symptomatic or asymptomatic, according to a study published on Monday that analysed data from an entire Italian town.

Researchers from the University of Padua in Italy and Imperial College London in the UK tested over 85 per cent of the 3,000 residents of Vo',

Italy, in February and March last year for infection with SARS-CoV-2, the virus that causes COVID-19. They then tested them again in May and November 2020 for antibodies against the virus. The study, published in the journal *Nature Communications*, found that 98.8 per cent of people infected in February and March showed detectable levels of antibodies in November.

The results also show that there was no difference between people who had suffered symptoms of COVID-19 and those that had been symptom-free. “We found no evidence that antibody levels between symptomatic and asymptomatic infections differ significantly, suggesting that the strength of the immune response does not depend on the symptoms and the severity of the infection,” said study lead author Ilaria Dorigatti, from Imperial College. “However, our study does show that antibody levels vary, sometimes markedly, depending on the test used,” Dorigatti said.

Antibody levels were tracked using three ‘assays’ — tests that detect different types of antibodies which respond to different parts of the virus. The results showed that while all antibody types showed some decline between May and November, the rate of decay was different depending on the assay.

The team also found cases of antibody levels increasing in some people, suggesting potential re-infections with the virus, providing a boost to the immune system. The findings suggest that caution is needed when comparing estimates of infection levels in a population obtained in different parts of the world with different tests and at different times.

“The May testing demonstrated that 3.5 per cent of the Vo’ population had been exposed to the virus, even though not all of these subjects were aware of their exposure given the large fraction of asymptomatic infections,” said Professor Enrico Lavezzo, from the University of Padua.

“However, at the follow-up, which was performed roughly nine months after the outbreak, we found that antibodies were less abundant, so we need to continue to monitor antibody persistence for longer time spans,” Lavezzo said.

The researchers also analysed the infection status of household members, to estimate how likely an infected member is to pass on the infection within the household. They found that there was a probability of about one in four that a person infected with SARS-CoV-2 passes the infection to a family member and that most transmission (79 per cent) is caused by 20 per cent of infections. This finding confirms that the majority of infections generate no further infections and a minority of the infections cause a large number of infections, the researchers said. The large differences in how one infected person may infect others in the population suggests that behavioural factors are key for epidemic control, they said.

Physical distancing, as well as limiting the number of contacts and mask wearing, continue to be important to reduce the risk of transmitting the disease, even in highly vaccinated populations, according to the study. The dataset, which includes the results of the two mass PCR testing campaigns conducted in February and March, and the antibody survey, also allowed them to tease apart the impact of various control measures. The study showed that, in the absence of case isolation and short lockdowns, manual contact tracing alone would not have been enough to suppress the epidemic.

Covid 19: Patients diagnosed with black fungus opt for leech therapy; all you need to know

Is leech therapy a cure for black fungus? Here's what experts say

By: [Lifestyle Desk](#) | New Delhi |
July 20, 2021 11:30:22 am



A black fungus patient getting treated using leech therapy at a government Ayurvedic hospital in Asarwa, Ahmedabad. (Express photo by Nirmal Harindran)

The number of [black fungus or mucormycosis](#) cases in both active and recovered Covid patients has been alarming. In fact, in May this year, the centre asked states to notify [black fungus](#) as an epidemic.

Meanwhile, some recovered patients diagnosed with black fungus have opted for leech therapy, an Ayurvedic treatment, after trying conventional methods for cure.

Does it really work?

Leech therapy for [mucormycosis](#)

An Ayurvedic practice, leech therapy is a blood purification process that is helpful in letting toxic

blood out of the body. Medicinal leeches suck impure blood and release enzymes supportive in increasing immunity.

Dr Aswathy Pathiyath, Ayurveda consultant, Fazlani Natures Nest, tells [indianexpress.com](#), "Mucormycosis or black fungus is mainly affecting [coronavirus](#) patients with comorbid conditions like diabetes. It is classified into five types depending on the part affected. Among them, Disseminated Mucormycosis in the later phase and Cutaneous mucormycosis can be correlated to Dustavrana (non-healing ulcer) and Kusta (skin disease), Visarpa (erysipelas) respectively."

"In this, leech therapy is one among the best methods of treatment. This again depends on the 'prakruthi' of the person and the extent of the symptoms," the expert adds.

He further says, "Along with other Ayurveda treatment principles of mucormycosis, depending upon the area affected, leech therapy may be administered. However, the main line of treatment will be Kledohara chikista and Premehahara (treatment of diabetes and diabetic wounds and skin issues), Agnivardhaka (modalities to improve metabolism and digestion), Krimihara, Ojovardhaka (treatment of infections) and Rasayana chikitsa (rejuvenation and immunoboosting therapies)."

Dr Yash Javeri, critical care, Anesthesia and Emergency Medicine, Regency Superspecialty Hospital, Lucknow, however, says, "Though the therapy might be useful for few medical conditions, there is no medical literature or evidence to support the use of leech therapy in mucormycosis. We need to select therapies very carefully."

Dr Amitabh Malik, ENT surgeon, Paras Healthcare, agrees that Ayurveda treatment for mucormycosis lacks scientific proof. "There is only one therapy that has been proven worldwide which is working on such patients is to

surgically remove all the disease tissue and then give them amphotericin B liposomal and other anti-fungal drugs. People can have faith in anything but so far there has been no scientific evidence for this leech therapy," he says.



WHO assessing Covaxin data for EUL; Decision date “to be confirmed”

Suchitra Ella, joint managing director of Bharat Biotech, had recently said the EUL process is a step closer to the final decision on Covaxin's 'global acceptance' as the rolling data was slated to begin in July.

By: [PTI](#) | Hyderabad |
July 20, 2021 11:33:29 am



Bharat Biotech recently said it concluded the final analysis of Covaxin efficacy from Phase 3 trials.

The World Health Organisation, which is currently reviewing Bharat Biotech's application for an Emergency Use Listing (EUL) of its [COVID-19](#) vaccine [Covaxin](#), has said it is assessing the data of the jab.

In an update on its website, the WHO, which began rolling data on July 6, said the date for a decision on the jab is yet “to be confirmed”.

Rolling data allows the WHO to start its review right away, as information continues to come in, to accelerate the overall review process.

Suchitra Ella, joint managing director of Bharat Biotech, had recently said the EUL process is a step closer to the final decision on Covaxin's 'global acceptance' as the rolling data was slated to begin in July.

She also, in a tweet, said the company was working closely with the WHO for inclusion of Covaxin in its EUL and approval is not expected to be a long drawn process as cell line and majority of Bharat Biotech's facilities have already been audited and approved by the global health watchdog for BBIL's other vaccines in the past.

The Hyderabad-based vaccine maker recently said it concluded the final analysis of Covaxin efficacy from Phase 3 trials.

The jab demonstrated 77.8 per cent effectiveness against symptomatic COVID-19 and 65.2 per cent protection against the B.1.617.2 [Delta variant](#), it said.



30% to 40% people hesitant about vaccination due to misinformation: Experts

The government should include specialist health communication agencies for running

coordinated behaviour change campaigns and a professionally drafted centralised communication strategy, which should be followed by all stakeholders, said Dr Laharia

By: [Express News Service](#) | Pune |
July 20, 2021 11:29:15 pm



Dr Laharia said during Covid-19 times, the reason behind hesitancy was misinformation (Representational image)

ALTHOUGH A large number of people accept vaccines, 30 to 40 per cent people were still hesitant as everyone was inundated with information from the internet, said Dr Chandrakant Laharia, vaccine public policy and health systems expert. Vaccine hesitancy has prevailed since the beginning of polio vaccination, he said during an e-summit organised by HEAL Foundation, Indian Public Health Association, DPU, and Makhanlal Chaturvedi National University of Journalism and Communication (MCNUJC).

Dr Laharia said during [Covid-19](#) times, the reason behind hesitancy was misinformation. The government should include specialist health communication agencies for running coordinated behaviour change campaigns and a professionally drafted centralised communication strategy, which should be followed by all stakeholders, he added.

Prof K G Suresh, vice-chancellor, MCNUJC, said, misinformation spread primarily due to lack of information, but without wrong intent.

Dr Swadeep Srivastava, founder and CEO, HEAL Foundation, said with the support of Indian Public Health Association (IPHA), they would soon start India Health Infodemic Fact-Checking Network (IHIFCN), a forum for healthcare information going out in the public domain, predominantly through social media.



One dose of J&J vaccine is ineffective against Delta, study suggests

The delta variant is the most contagious version yet of the coronavirus. It accounts for 83% of infections in the United States, Dr. Rochelle Walensky, director of the Centers for Disease Control and Prevention, said.

By: [New York Times](#) |
Updated: July 21, 2021 1:02:54 pm



Doses of the vaccines against Covid-19 are pictured at a vaccination site in Newark N.J., June 19, 2021. (Bryan Anselm/The New York Times)

Written by Apoorva Mandavilli

The [coronavirus](#) vaccine made by Johnson & Johnson is much less effective against

the [delta](#) and [lambda](#) variants than against the original virus, according to a new study posted online Tuesday.

The findings add to evidence that the 13 million people inoculated with the J&J vaccine may need to receive a second dose — ideally of one of the mRNA vaccines made by Pfizer-BioNTech or Moderna, the authors said.

But the conclusions are at odds with those from smaller studies published by Johnson & Johnson earlier this month suggesting that a single dose of the vaccine [is effective against the variant](#) even eight months after inoculation.

The new study has not yet been peer reviewed nor published in a scientific journal, and relied on laboratory experiments. But it is consistent with observations that a single dose of the AstraZeneca vaccine — which has a similar architecture to the J&J vaccine — shows only about 33% efficacy against symptomatic disease caused by the [delta variant](#).

“The message that we wanted to give was not that people shouldn’t get the J&J vaccine, but we hope that in the future, it will be boosted with either another dose of J&J or a boost with Pfizer or Moderna,” said Nathaniel Landau, a virologist at NYU’s Grossman School of Medicine, who led the study.

Other experts said the results are what they would have expected, because all of the vaccines seem to work better when given in two doses. “I have always thought, and often said, that the J&J vaccine is a two-dose vaccine,” said John Moore, a virus expert at Weill Cornell Medicine in New York.

Moore pointed to several studies in monkeys and people that have shown greater efficacy with two doses of the J&J vaccine, compared with one dose. He said the new study was particularly credible because it was published by a team with no ties to any of the vaccine manufacturers.

But the data from the new study “do not speak to the full nature of immune protection,” said Seema Kumar, a spokesperson for J&J. Studies sponsored by the company indicate that the vaccine “generated strong, persistent activity against the rapidly spreading delta variant,” she said.

The delta variant is the most contagious version yet of the coronavirus. It accounts for 83% of infections in the United States, Dr. Rochelle Walensky, director of the Centers for Disease Control and Prevention, said at a Senate hearing Tuesday.

The variant may also be mainly responsible for a recent rise in infections: Although they are still low relative to last winter, cases are rising in all 50 states, and hospitalizations are increasing in nearly all of them. In the two weeks ending Tuesday, the nation averaged 268 deaths per day.

Delta may cause more breakthrough infections than earlier forms of the virus, but more than 99% of the hospitalizations and deaths are occurring among unvaccinated people. Rates of immunization in the country have stalled, with just under 60% of adults fully protected against the virus.

Several studies have suggested that the mRNA vaccines made by Pfizer-BioNTech and Moderna will maintain their efficacy against the coronavirus, including all variants identified so far. One recent study showed, for example, that the vaccines trigger a persistent immune reaction in the body that may protect against the coronavirus for years.

But evidence on the J&J vaccine has been limited, because it was rolled out later than the mRNA vaccines. Most studies of effectiveness of the coronavirus vaccines were conducted at medical centers and hospitals that relied on samples from staff members who received the mRNA vaccines.

The J&J vaccine has also been dogged by reports of blood clots and a rare neurological syndrome, as well as problems with contamination at a manufacturing plant in Baltimore.

Small studies published by researchers affiliated with J&J suggested that the vaccine was only slightly less effective against the delta variant than against the original virus, and that antibodies stimulated by the vaccine grew in strength over eight months.

Landau's team would probably have seen a similar increase in the vaccine's potency if they had looked at the data over time, said Dan Barouch, a virologist at Beth Israel Deaconess Medical Center in Boston. The data on the J&J vaccine's strength against the delta variant at Day 29 is not much different from those reported in his own study, Barouch said.

"Fundamentally I don't see that there's any discordance," he said. "The question is that of kinetics, it's not just magnitude, because immune responses are not static over time." The new study also did not consider other components of immune defense, he added.

Landau and his colleagues looked at blood samples taken from 17 people who had been immunized with two doses of an mRNA vaccine and 10 people with one dose of the J&J vaccine.

The J&J vaccine started out with a lower efficacy than the mRNA vaccines and showed a bigger drop in efficacy against the delta and lambda variants. "The lower baseline means that what's left to counter delta is very weak," Moore said. "That is a substantial concern."

Very few vaccines are given as a single dose, because the second dose is needed to amp up antibody levels, noted Akiko Iwasaki, an immunologist at Yale University. People who were inoculated with the J&J vaccine "are relying on that primary response to maintain high

levels of antibodies, which is difficult, especially against the variants," she said.

Boosting immunity with a second dose should raise the antibody levels high enough to counter the variants, she said.

Turning to an mRNA vaccine for the second shot, rather than another J&J shot, may be better: Several studies have shown that combining one dose of the AstraZeneca vaccine with a dose of the Pfizer-BioNTech or Moderna vaccines kicks up the immune response more effectively than two doses of AstraZeneca.

The Food and Drug Administration has said "Americans who have been fully vaccinated do not need a booster shot at this time," and the agency is unlikely to change its recommendations based on laboratory studies. But the new data should prompt the FDA to revisit its recommendations, Landau said: "I hope that they read our paper and think about it."

This article originally appeared in The New York Times.



Another milestone for state: Over 4 crore vaccine doses administered

Written by [Anuradha Mascarenhas](#) | Pune |
Updated: July 22, 2021 10:27:31 am

Over 21 lakh frontline workers have got the first vaccine dose and more than 10 lakh have got both jabs. There are over 12 lakh healthcare workers who have received the first vaccine shot

and over eight lakh who have been administered both jabs.



Tope had earlier said that the state can administer 10 lakh vaccine doses daily but the supply of doses was not steady. (File photo)

OVER 4 crore [Covid-19](#) vaccines have been administered in Maharashtra so far, Dr Pradeep Vyas, Additional Chief Secretary (Health) said on Wednesday.

“We are expecting 5.23 lakh Covishield vaccine doses and 1.62 lakh [Covaxin](#) doses soon,” he added.

Time and again, the state has been seeking a steady supply of vaccine doses from the Centre, with Health Minister Rajesh Tope even stating that he would personally make a request for doses. Tope had earlier said that the state can administer 10 lakh vaccine doses daily but the supply of doses was not steady. On July 20, only 1.81 lakh doses could be administered across the state.

Till July 20, a total of 4.01 crore vaccine doses have been administered. Of these, 1.7 crore beneficiaries in the 45-60 age group have got the first dose while more than 69 lakh have got both jabs. The state is also inching towards another milestone — administering the first vaccine dose to one crore beneficiaries in the 18-44 age group. Till July 20, a total of 98.79 lakh beneficiaries have received the first dose while over 4 lakh in this age group have got both jabs.

Over 21 lakh frontline workers have got the first vaccine dose and more than 10 lakh have got both jabs. There are over 12 lakh healthcare workers who have received the first vaccine shot and over eight lakh who have been administered both jabs.

Five districts – Ahmednagar, Aurangabad, Kolhapur, Nashik, Sangli and Satara — have administered more than 10 lakh doses each. Mumbai has the highest numbers of vaccinations in the state, with over 67 lakh doses administered.

Pune has administered more than 56 lakh vaccine doses, followed by Thane at more than 31 lakh doses and Nagpur at over 21 lakh vaccine doses. In Pune district, a total of 56.86 lakh Covid-19 vaccine doses have been administered. Of this, over 20 lakh beneficiaries in the 45 + age group have got the first dose while more than 10 lakh have got both vaccine doses.

A total of 19.17 lakh beneficiaries in the 18-44 age group have got the first vaccine dose so far. Dr Sachin Edke, immunisation officer for Pune district, said they have got 62,000 Covishield vaccine doses on Wednesday evening, of which 27,000 have been distributed to centres at Pune Rural, 21,000 to Pune Municipal Corporation centres and 14,000 to Pimpri-Chinchwad.

“We have received a total of 12,620 Covaxin doses, of which 5,620 have been sent to Pune rural vaccination centres, 4,000 to PMC and 3,000 to PCMC. Meanwhile, private hospitals have urged citizens who can afford to pay for the doses to get their jabs at such facilities,” said Dr Edke.

'Vaccine for pregnant women will provide some protection to foetus and newborn against Covid-19'

Dr Praveen Kumar, head of paediatrics at Lady Hardinge Medical College, urged pregnant women and lactating mothers to get vaccinated.

By: [Express News Service](#) | New Delhi | July 22, 2021 11:24:14 am



"Besides, all the adults should take vaccines, which will also protect the children to a great extent. And now vaccines are available for pregnant women and lactating mothers," Dr Praveen Kumar said.

The vaccine for pregnant women and lactating mothers will give some protection to the growing foetus and newborn baby against the [coronavirus](#), said the head of paediatrics at Lady Hardinge Medical College here.

In a detailed statement, Dr Praveen Kumar, director department of paediatrics at the institute, said that it is mere speculation that children will be affected more in the future waves of [Covid-19](#) and that children have equally been affected by the second wave.

"As we all know, the coronavirus is a new virus that has the potential to mutate. Whether the future waves will affect children more or with increased severity are speculations. People speculate that future waves may affect children more as most of the adults will be vaccinated in the next few months while we do not have any approved vaccine for children at this point. Though we don't know how the virus is going to behave and affect children in the future, we need to protect our children from the contagion. Adults in the house should follow Covid-appropriate behaviour and limit their social engagements to reduce the chances of infection. Besides, all the adults should take vaccines, which will also protect the children to a great extent. And now vaccines are available for pregnant women and lactating mothers. This will give a certain degree of protection to the growing foetus and newborn against the deadly infection," he said.

Pointing out that recent surveys have shown comparable seroprevalence (presence of Covid antibodies) in children and adults, he stated, "however, due to a larger number of people getting affected by Covid during the second wave, the number of infected children were also more compared to the first wave. So far, the mortality rate in children is lower compared to adults and limited mainly to children with comorbidities."

Each child behaves differently, some may become silent while others may express anger and hyperactivity.

By: [PTI](#) | New Delhi |
July 22, 2021 4:11:57 pm



All the adults should take vaccines, which will also protect the children to a great extent, says a doctor. (Source: pixabay)

Whether future waves of [COVID-19](#) will affect children more or with increased severity are all speculations, a senior paediatrician said on Wednesday.

Praveen Kumar, Director, Department of Paediatrics, Lady Hardinge Medical College, New Delhi said people speculate that future waves may affect children more as most of the adults will be vaccinated in the next few months while there is still no approved [vaccine](#) for children at this point in time.

On how the [pandemic](#) has affected children's mental and physical health, Kumar said [pandemic](#) can have a severe effect on children's mental and physical health. They are confined at home for more than a year.

Moreover, illnesses in the family, wage losses for parents have increased stress. Children may express psychological distress (sadness) by acting out in a different way. Each child behaves differently, some may become silent while others may express anger and hyperactivity.

"Caregivers need to be patient with children and understand their emotions. Look for signs of stress in young children, which could be excessive worry or sadness, unhealthy eating or sleeping habits, and difficulty with attention and concentration. Families also need to support children to cope with stress and also allay their anxiety," he was quoted as saying in a Health Ministry statement.

On whether future waves can affect [children](#) more severely, Kumar said COVID-19 is a new virus that has potential to mutate.

"Whether the future waves will affect children more or with increased severity are speculations. People speculate that future waves may affect children more as most of the adults will be vaccinated in the next few months while we do not have any approved vaccine for children at this point in time," he said.

"Though we don't know how the virus is going to behave and affect children in the future, we need to protect our children from the contagion," he stressed.

Adults in the house should follow Covid-appropriate behaviour, and limit their social engagements to reduce the chances of infection as they may carry and transmit the infection to others. Besides, all the adults should take vaccines, which will also protect the children to a great extent.

And now vaccine is available for pregnant women and lactating [mothers](#). This will give a certain degree of protection to the growing foetus and new-born against the deadly infection, Kumar said, according to the statement.

He said that second wave has affected children equally.

“COVID-19 is a new virus and it affects all age groups because we do not have natural immunity against this virus. As per the NCDC/IDSP dashboard, approximately 12% of infected Covid was contributed by patients less than 20 years of age,” he said.

“So far, the mortality rate in children is lower as compared to adults and is usually seen in children with comorbidities,” he stated.

On the challenges that he faced in treating paediatric patients, especially those who required hospitalisation, Kumar said, “Largely we were able to manage children well by increasing number of dedicated beds for Covid-infected children. However, during peak of second wave we faced some challenges as many of senior doctors, resident doctors, staff nurses became positive. We also faced challenges in accommodating all referrals during peak of second wave.”

He further said that the multisystem inflammatory syndrome (MIS) is a new syndrome seen in children and adolescents (0-19 years of age). Most patients report it two to six weeks after the peak of COVID-19 infections in the affected population.

For establishing the diagnosis of MIS-C, advanced investigations are required. All suspected cases should be referred and managed in a tertiary care hospital with HDU/ICU facility. If identified early, all these cases can be treated.



Australia's drug regulator approves Pfizer COVID-19 vaccine for 12 to 15-year-olds

Up until now, the Pfizer vaccine had only been approved for use in Australia for people aged 16 years and over.

By: [Reuters](#) | Sydney |
July 23, 2021 11:39:20 am



With just over 32,400 COVID-19 cases and 915 deaths, Australia has handled the pandemic much better than many other developed economies. (Representational)

Australia's drug regulator has approved Pfizer's [COVID-19](#) vaccine for use with 12 to 15-year-olds, Federal Health Minister Greg Hunt said on Friday, as the country fights an outbreak of the [Delta variant](#) in three states.

The Therapeutic Goods Administration has thoroughly assessed the domestic and international evidence before extending its approval for the Pfizer vaccine to be administered to this age group, Hunt said in a statement.

Similar clearances for the use of the vaccine in children were approved several weeks ago by regulators in the United States, European Union and Britain.

Up until now, the Pfizer vaccine had only been approved for use in Australia for people aged 16 years and over. Australia's vaccination panel will advise on which groups of children should be prioritised for the rollout of the vaccine and when it should be administered, Hunt said.

With just over 32,400 COVID-19 cases and 915 deaths, Australia has handled

the [pandemic](#) much better than many other developed economies, but stop-and-start lockdowns and a sluggish vaccine rollout have led to frustration.

Prime Minister Scott Morrison on Thursday apologised for the slow vaccination programme as his government looks to speed up inoculations and meet a target to vaccinate the adult population by the end-2021. So far, just under 15% of the adult population has been fully vaccinated.



Countrywide vaccination drives help reduce anxiety in Indians, survey finds

The survey indicates a 6 per cent decline in the overall anxiety levels to 39 per cent, as the number of new Covid-19 cases across the country continues to decrease

By: [Lifestyle Desk](#) | New Delhi | July 24, 2021 4:16:41 pm



More vaccination coverage is helping Indians feel less anxious in the pandemic, encouraging some who have got the jab to even step out and embrace a normal routine. (Photo: Getty/Thinkstock)

While for some people the [pandemic](#) triggered an anxiety that they had never experienced before, for others, it exacerbated a pre-existing condition, making it difficult to function in the absence of 'normalcy'.

Having to stay away from friends and family, with long periods of lockdown and isolation, did not help, and neither did the fact that the second wave brought devastation and deaths around the country.

While experts have suggested [ways to take care of your mental health](#) amid this ongoing health crisis, a new survey has found that things may be looking up a bit. According to Deloitte's Global Consumer Tracker survey, Indian consumers may be displaying signs of reduced anxiety as nationwide vaccination coverage increases.

The survey indicates a 6 per cent decline in the overall anxiety levels to 39 per cent, as the number of new [Covid-19](#) cases across the country continues to decrease. In addition, Indian consumers have been found to show an intent to increase discretionary spends in anticipation of the upcoming festivities like Eid, Raksha Bandhan, Janmashtami, and Ganesh Chaturthi. In fact, across age groups, there continues to be a preference to spend more on convenience.

Per the survey, the following facts indicate decrease in anxiety:

- Approximately 87 per cent of consumers are willing to spend more as they prioritise convenience over price.
- Some 61 per cent consumers have indicated they now feel safe visiting the stores to shop.
- And 51 per cent have shown willingness to attend in-person events.

Concerns about physical well-being, however, prevail, with 79 per cent of Indian consumers being concerned about their own physical well-

being, and 85 per cent about the health of their family.

Other trends

It has been seen that there is a decline in use of public transport, along with cautious spending on the next vehicle. While 79 per cent of Indian consumers intend to keep their current vehicles for a longer time, 76 per cent respondents — compared with 79 per cent in the previous wave — are concerned about using public transport.

Additionally, 55+ age group shows confidence in stepping out. They feel safer compared with young adults in the age group of 18-35.

Among them, 78 per cent of people feel safe going to a store, 70 per cent feel safe going to a restaurant, 69 per cent feel safe staying in a hotel, 71 per cent feel safe taking a flight, and only 9 per cent are concerned about returning to their workplace.



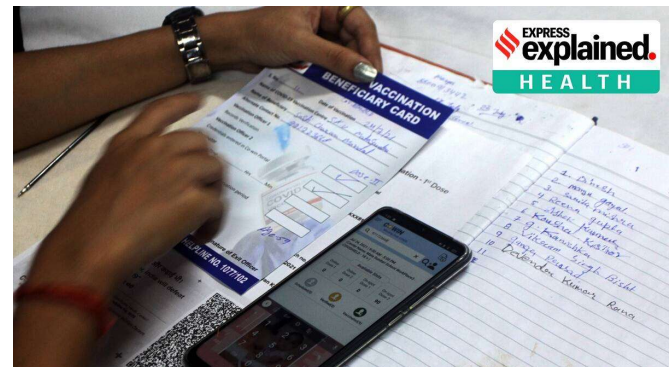
Explained: What are the common Covid-19 symptoms for those who are vaccinated?

How do I know if I have Covid-19? This question has been on our minds since the start of the pandemic. We still can't really answer it, and even a cold should not be taken lightly.

By: [Deutsche Welle](#) |
Updated: July 27, 2021 9:09:10 am

In 2020, a dry cough and fever would have been clear [Covid-19](#) symptoms, and if headaches and aching limbs had been added to the mix, it

would have been a clear case of flu. With a sniffly nose and sore throat, it was likely you'd been fortunate and only caught a cold.



At a vaccination Center in New Delhi (Express Photo/Amit Mehra)

This is how — in very simplified form — we could describe how Covid-19 symptoms were differentiated from those of other illnesses at the beginning of the [pandemic](#).

And then came the loss of smell and taste: the major indication of a SARS-CoV-2 infection. This is still reliable — someone who notices a change in their sense of taste or smell today should still have Covid alarm bells going off.

It is different with the other symptoms. These are somewhat more fluid. We try to track them using biomarkers and a pattern based on blood types. On top of that, they can differ depending on whether a Covid-19 sufferer has already been vaccinated, whether the infection is caused by a variant, or whether the patient is old or young, fit or unfit, or has other health concerns.

The new top 5

A study underway in the United Kingdom has published data on the most recent Covid-19 symptoms. In the Zoe Covid Symptom Study, infected people reported their symptoms via an app. According to the findings, Covid-19 symptoms have apparently changed. This could be due to the [delta variant](#), which now accounts for 99% of infections in the UK (as of July 12, 2021).

What are the most common symptoms in people who are fully vaccinated?

In general, similar symptoms of Covid-19 were reported in the app by both vaccinated and unvaccinated individuals, the website states. "However, those who had already been vaccinated reported fewer symptoms over a shorter period of time, suggesting that they were less likely to become severely ill and recover more quickly," it says.

Even vaccinated people can become infected with the [coronavirus](#). But the data confirms that these people usually have mild symptoms and that vaccination prevents severe or even life-threatening Covid-19.

The current ranking of Covid symptoms after two vaccinations is:

- * Headache
- * Runny nose
- * Sneezing
- * Sore throat
- * Loss of sense of smell

Many of these are symptoms we usually associate with a cold. The possibility of confusing the two illnesses is dangerous and may have played a role in the spread of the delta variant in the UK.

What are the common symptoms in people who have not been vaccinated?

In unvaccinated people, the symptoms are slightly different. While some remain the same, there are changes compared to when the virus first appeared about 1.5 years ago.

The current ranking of Covid symptoms in people who have not been vaccinated is:

- * Headache
- * Sore throat
- * Runny nose

- * Fever
- * Persistent cough
- * Loss of smell fell to ninth on the list, and shortness of breath comes even further down in 30th place. These fluctuations may indicate that previously known symptoms change as variants of the virus evolve.

Don't be so hasty

In the podcast 'Coronavirus Update' (podcast/transcript in German), German virologist Christian Drosten discussed the results of the study and the YouTube statement by Tim Spector, an epidemiologist and leader of the ZOE study. He believes that an important point is being missed in the discussion of symptoms in the media.

The symptom picture in general has changed, he said, "in that older people are increasingly vaccinated, and now in their study, they're seeing an increase in younger people who are infected."

In younger people, the symptoms are more along the lines of a general flu-like infection, with a headache, sore throat and a bit of a fever. The persistent cough that was so typical in older patients is seen less now, Drosten says.

He would not attribute that so much to the delta variant as to trends in the susceptible population — which basically consists of younger people, as the older ones are more likely to be vaccinated.

"I think you just have to wait until something really scientific is published on this," Drosten says.

When in doubt, get tested

If you feel unwell and you're unsure if it is Covid-19, the right decision is always to get tested and keep your distance from others until you have a negative result. On this point, Spector and Drosten agree.

"I think that was also the purpose of this public statement to remind the population, especially the younger population that is now infected, that you have to be careful even if you don't feel seriously ill," says Drosten. "And [that you] shouldn't just think to yourself: 'Oh, it's just a cold.'"

The recent Gutenberg Covid-19 study by the University of Mainz showed that more than 40% of all those infected with SARS-CoV-2 were unaware of their acute or previous infection.

In an interview with DW, study author Philipp Wild acknowledged that testing should not be waived because of vaccination status or low incidence rates. "It's an important metric to keep an eye on the dynamics of the pandemic," he said.

Staying alert and exercising caution is not optional, but a must — whether one is vaccinated, recovered or tested. And measures such as thorough hand-washing, wearing a mask and keeping a 1.5 meter (5-foot) distance from others help to prevent the spread of disease.

THE TIMES OF INDIA

BPaL regimen can cut time for treatment of drug-resistant TB

TNN | Jul 22, 2021, 04.00 AM IST

NEW DELHI: Even as Covid-19 has disrupted screening and treatment of tuberculosis derailing efforts to eliminate it, TB Alliance's BPaL regimen to reduce TB treatment time from 18 months to 6 months and reported success rate of 90% can be crucial in the fight against TB.

BPaL is a six-month, all-oral, three-drug regimen that is used to treat people with highly drug-resistant forms of TB. It consists of the TB Alliance's developed antibiotic pretomanid, along with two other antibiotics: bedaquiline and linezolid.

While the BPaL regimen was approved by the drug regulator in India last year, TB Alliance's latest trial results show that the high efficacy of the BPaL regimen can be maintained with lower dosing of linezolid, which is associated with challenging side effects including peripheral neuropathy. This is expected to boost the use of the drug

"TB Alliance is encouraged by these results, which support the use of reduced linezolid dosing in the six-month, three-drug, alloral BPaL regimen," the Alliance President and Chief Executive Mel Spigelman says.

While many patients stop treatment due to the length of the present treatment, old treatment regimens require more than 18 months of five or more drugs with low treatment success rates.

India accounts for more than 1 in 4 of all cases of active TB diseases, including nearly 1.20 lakh cases of drug-resistant forms of TB.

"Innovative approaches are urgently needed to turn the tide on TB and are essential to meeting national and global targets for TB elimination. Short, simple, safe and effective therapies must be a cornerstone of any TB control effort. By significantly reducing the cost and treatment time required for highly drug-resistant forms of TB, TB programs can be freed up to devote scarce resources to easier to treat forms of the disease and other serious challenges like COVID-19 control," says Spigelman.

A national TB control programme in India registered a 25 percent fall in the detection of new patients during the first half of 2021 when compared with the corresponding period in 2019. WHO estimates that these Covid-19 related disruptions in access to TB care could cause an

additional half a million deaths, losing progress of a decade.

THE TIMES OF INDIA

Redness of eye mistaken as mucor in post Covid phase

TNN | Jul 21, 2021, 04.38 AM IST

NAGPUR: Apprehensions of having contracted the dreadful mucormycosis — early symptoms of which are seen in eye, nose or teeth — among recovered Covid patients has led to an increased detection of ocular surface inflammation (OSI) and retinal vasculitis (RV), say doctors. Some city eye specialists said home isolated patients are reporting OSI (redness in eyes) while those who were admitted for Covid treatment are generally suffering from RV (clotting in eye).

Both the disorders were seen during the first wave too, but as large number of people were infected and many mucor, also known as black fungus, cases emerged, these two ophthalmic post Covid complications have doubled this time.



Well-known eye specialist Dr Gopal Arora, however, observed that the two disorders are commonly seen in ophthalmology and presently co-related with other factors and not just Covid.

“Dry eye syndrome has come to be known as digital eye strain or computer vision syndrome. It is due to increased screen time. Clotting in eye can result due to multiple factors, with Covid being one of them,” he said.

Other doctors said patients are self-diagnosing the redness in eye as mucormycosis, which following diagnosis doesn't turn out to be the case.

Retina surgeon Dr Sandeep Anjankar said he has been getting patients with complaints of redness in eye. “Mostly, patients are suffering from OSI or conjunctivitis. But these symptoms are misdiagnosed to be mucormycosis by the patients themselves. Retinal vasculitis or vascular occlusion (blockage of a blood vessel, usually with a clot) occurs either due to increased inflammatory or coagulating factors,” he said.

Dr Anjankar added, “In 90% cases, vision loss is reversible if the disorder is detected early.”

Consultant ophthalmologist Dr Ashish Kamble said, “When a new virus or bacteria infects a body, sometimes cross-antigenicity can occur. This means certain viral antigens mimic those of the body which mount an immune response in the body, including in the eyes which is most commonly presented as redness of eye.”

He added inflammation means body's immune system is activated. When the inflammation occurs in ocular surface, the eye turns red. “I have commonly seen this in post-Covid patients,” said Dr Kamble.

Not just Covid, it can happen after any viral infection. “It can be seen in any post viral inflammation, even in bacterial infections like tuberculosis too,” he said.

Regarding retinal occlusion, Dr Kamble said it is known that clotting in heart or brain is a post-Covid problem. “Same types of clots are formed in blood vessels of eye. This is called vascular occlusion. Sometimes, there are clots in artery

which supplies blood to the eye. This is a bad situation as it can result in permanent loss of vision. Veins, which pump out blood from eye, may also get clots. In this case too, vision is affected, but to some extent can be restored," he said.

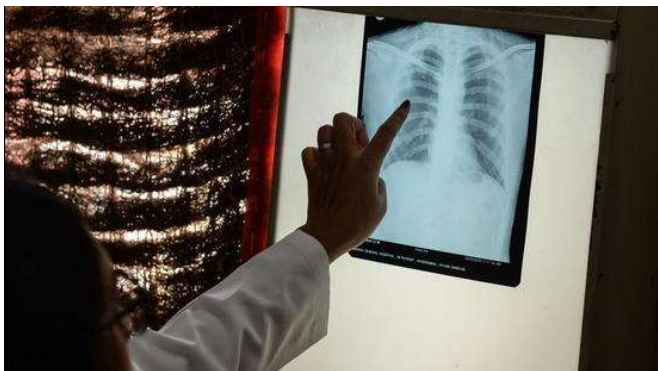
In mucor, artery occlusion was found along with other complications like drooping of eyelids, diplopia (double vision) and proptosis (prominence and forward displacement of eyeballs). It is very rare for mucormycosis to cause vascular occlusion alone, said Dr Kamble.



TB patients not getting nutritional support for seven months

Officials say that the monthly nutritional support of ₹500 has not been credited to accounts of registered TB patients due to budgetary constraints

By Vishal Joshi
UPDATED ON JUL 20, 2021 12:12 AM IST



Ludhiana has a maximum of 3,473 patients under TB treatment followed by Amritsar (2,226) and Patiala (1,699). (HT FILE PHOTO)

BATHINDA Scores of tuberculosis (TB) patients in the state have failed to get monthly nutritional support of ₹500 from the state government since December 2020.

Punjab has 19,693 patients enrolled under the Tuberculosis Control Programme and officials say incentive under the "Nikshay Poshan Yojana" (National Nutritional Support Scheme) has not been disbursed over the last few months due to budgetary constraints. Ludhiana has a maximum of 3,473 patients under TB treatment followed by Amritsar (2,226) and Patiala (1,699).

A 59-year-old patient from Bathinda said her six-month treatment began in December, but she has not received even a single instalment yet. Another patient being treated at a private institute said, "I have submitted my updated bank details, but the money for nutritional support has not been credited for four months."

Bathinda district tuberculosis centre (DTC) in-charge Dr Rosy Aggarwal said, "The district has 998 registered patients and most had been paid the money till March," adding that the disbursement depended on the availability of funds.

The head of TB clinic at Ferozepur Dr Satinder Oberoi said the delay was due to manpower being deployed on Covid-19 duty. "There has also been delay in getting money from the state headquarters," she added.

In-charge of Kishori Ram Hospital Dr Vitull K Gupta said hospitals and paramedical volunteers engaged in TB eradication programme were entitled to ₹1,000 per patient but they have not received the amount since December.

Dr Jastej Kullar, state TB Control Programme officer, admitted that beneficiaries had not been paid, due to budgetary issues. "Exact data of the patients awaiting incentive is not readily available," he added.

"Normally, we make payment once in two months, but sometimes delays occur due to mismatch in bank account details or other issues. The money will be credited soon," he added.

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