Covid transmission

Covid can be transmitted by fully vaccinated people at home: Lancet study (The Tribune: 202101101)


The researchers note that most Covid transmission is known to occur in households yet there is limited data on the risk of transmission of the Delta variant from vaccinated people with asymptomatic or mild infections in the community.

Fully vaccinated people can contract and pass on Delta variant of SARS-CoV-2, the virus that causes Covid, in household settings, but at lower rates than unvaccinated people, according to a study published in The Lancet Infectious Diseases journal.

Researchers led by Imperial College London, UK, found that vaccinated people clear the infection more quickly, but the peak viral load among them is similar to that seen in unvaccinated individuals, which may explain why they can still readily pass on the virus at home.

The researchers noted that most Covid transmission is known to occur in households yet there is limited data on the risk of transmission of the Delta variant from vaccinated people with asymptomatic or mild infections in the community.

"Vaccines are critical to controlling the pandemic, as we know they are very effective at preventing serious illness and death from Covid," said Professor Ajit Lalvani of Imperial College London, who co-led the study.

"However, our findings show that vaccination alone is not enough to prevent people from being infected with the Delta variant and spreading it in household settings," Lalvani added.
The researchers noted that the transmission between vaccinated people makes it essential for unvaccinated people to get immunised to protect themselves from acquiring infection and severe Covid, especially as more people will be spending time inside in close proximity during the winter months.

The study enrolled 621 participants, identified by the UK contact tracing system, between September 2020 and September 2021.

All participants had mild Covid illness or were asymptomatic. They had daily PCR tests to detect infection, regardless of whether or not they had symptoms.

The researchers performed PCR tests on swab samples provided daily by each participant for 14–20 days. Changes over time in viral load -- the amount of virus in a person's nose and throat -- were estimated by modelling PCR data.

A total of 205 household contacts of Delta variant index cases were identified, of whom 53 tested positive for Covid.

Among vaccinated contacts infected with the Delta variant, the median length of time since vaccination was 101 days, compared with 64 days for uninfected contacts, the researchers said.

This suggests that the risk of infection increased within three months of receiving a second vaccine dose, likely due to waning protective immunity, they said. PTI

**New antibody treatment**

**Covid-19: New antibody treatment could offer up to 18 months’ protection against severe disease (The Tribune: 202101101)**


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

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

Photo for representational purpose only. iStock

A new treatment could soon help protect people from developing severe Covid. AstraZeneca has just released results from a phase-3 clinical trial – the final stage of testing before a drug is authorised – that suggest its new Covid treatment, AZD7442, is effective at reducing severe disease or death in non-hospitalised Covid patients.
The treatment contains antibodies, which are usually produced naturally in response to a Covid infection or vaccination. They work by recognising specific parts of SARS-CoV-2 – the virus that causes Covid – and either attack these directly or bind to them to stop the virus from working and flag it for destruction by other parts of the immune system.

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

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

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

How does AstraZeneca’s treatment work?

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

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

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

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

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

How well does it work?
AstraZeneca’s phase-3 trial investigated the effectiveness of the treatment when given to patients who were infected with SARS-CoV-2.

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

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

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

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

How useful will it be?

These results suggest that AZD7442 could be a valuable tool for patients in need of instant immunity against Covid, such as those who have not responded to vaccines because of a weakened immune system or those in other high-risk groups.

However, more detail of the characteristics of the patients who did and did not benefit from the medicine is required to fully understand who will benefit most from receiving this drug.

And when considering how useful AZD7442 could be, it’s important to consider when in the course of the disease the treatment will be given. For many, severe disease with Covid isn’t caused by the virus replicating, but by the immune system going awry.

This means that to prevent severe disease, drugs such as AZD7442 need to be given early in infection, before the overzealous immune response kicks in. Give them too late, and treatments like this that target the virus directly are unlikely to offer much benefit (unlike those that can control inflammation and immune overreaction, such as dexamethasone or tocilizumab).

But one thing that could help the treatment be deployed early during infection is the fact that it only needs to be injected into a muscle, rather than be given intravenously. This means it can be given at a clinic, without patients needing to come into hospital.

However, monoclonal antibody treatments are notoriously expensive, and the cost of AZD7442 has not yet been released. This could be the biggest barrier to the drug having a big impact.
worldwide – assuming, of course, that its phase 3 results pass the scrutiny of regulators and the drug is approved. — The Conversation

**Pfizer vaccine**

**Pfizer vaccine very effective against Delta variant in adolescents in Israel: Study (The Tribune: 202101101)**


The research was conducted between June and September when Delta variant was the main strain in Israel

Pfizer vaccine very effective against Delta variant in adolescents in Israel: Study

Photo for representational purpose only. Reuters file

The Pfizer/BioNTech COVID-19 vaccine is highly effective at preventing infection and symptomatic disease from the Delta variant among 12- to 18-year-olds, research conducted in Israel shows.

The findings, published in the New England Journal of Medicine, will likely provide further reassurance the shot is effective against the variant among younger people as the US drug watchdog considers authorising use of the vaccine on children as young as five.

The study found the estimated vaccine effectiveness against documented COVID-19 infection in adolescents was 90%, and 93% against symptomatic COVID-19, on days seven to 21 after the second dose.

Israel's Clalit health maintenance organisation and Harvard University researchers reviewed data from 94,354 vaccine recipients aged 12 to 18 who were matched with an identical number of unvaccinated adolescents from the same age group.

The research was conducted between June and September, when the Delta variant was the main strain in Israel.

In a statement late on Wednesday, Clalit said the study was one of the largest peer-reviewed evaluations conducted among the age group of the effectiveness of the vaccine against the Delta variant.
Earlier this week, an analysis released by the US Centers for Disease Control and Prevention (CDC) showed the Pfizer Inc /BioNTech vaccine was 93% effective in preventing hospitalisations among those aged 12 to 18.

The Pfizer/BioNTech vaccine is authorised for children as young as 12, and the companies are seeking further approval from the US Food and Drug Administration for use in those as young as five.

A panel of advisers to the FDA is expected to weigh in on data on young children later this month.

In England, the spread of COVID-19 among children is fuelling a rise in cases and causing concern among some scientists that vaccines are being rolled out in schools too slowly. Reuters

**Dengue burden**

**Health infrastructure again found wanting (The Tribune: 202101101)**


Dengue burden

IN the face of what is unfolding as one of the most virulent dengue outbreaks in recent history, the health infrastructure countrywide has been found to be both ill-prepared and ill-equipped to handle the rising numbers of patients needing medical attention. - File photo

IN the face of what is unfolding as one of the most virulent dengue outbreaks in recent history, the health infrastructure countrywide has been found to be both ill-prepared and ill-equipped to handle the rising numbers of patients needing medical attention. The surge of dengue, also called breakbone fever, in the past month has overwhelmed most hospitals and doctors in the region. Government hospitals in Punjab, Haryana and Chandigarh have been found wanting as severely affected patients with depleted platelet counts, across all ages, struggle to find proper beds and kits essential for tests and treatment. Stories of two patients having had to share a bed and hospital corridors crammed with patients with glucose drips depict the pathetic picture.

Such circumstances once more red-flag the inadequacies that assail the health system. Prominently painful are the lack of specialists and machines lying defunct or damaged in the public sector, especially in the rural and small-town facilities. While the Covid pandemic roused the authorities to the ills in the system and both the Central and state governments pledged to enhance health budgets to ensure top-class amenities for all, filling the gaping holes is still a work in progress. It is the common man and the poor who generally bear the brunt of this lackadaisical attitude. Betraying it is the absence of specialist doctors or technicians in many hospitals, even though dengue has of late become a regular phenomenon during the
monsoon. That the necessary medical machines are gathering dust in some places is a criminal waste of scarce resources.

Adding to the woes of the victims of the mosquito (Aedes aegypti) bite-induced disease is the fleecing indulged in by many a private facility and lab. Despite the cap on the prices for tests and blood units with SDPs (single donor platelets) imposed by the Punjab Government in the wake of the outbreak, reports of charging double or more call for strict and deterrent action. At the same time, people must take the preventive step of keeping their surroundings clean and dry to prevent mosquito-breeding.

**Dengue (The Asian Age: 202101101)**

Dengue, malaria & chikungunya made notifiable diseases

New Delhi, Oct. 30:
Vector-borne diseases like dengue, chikungunya and malaria have been made as notifiable diseases under the Epidemic Diseases Act, according to an official notification. The notification makes it compulsory for all hospitals to provide information to the government about any such case that they receive.

On the basis of the data provided by the hospitals, areas where the vector-borne diseases are spreading will be identified and declared as ‘infected’ or ‘threatened’.

The notification also said that legal action will be taken against individuals or institutions found not following adequate measures or not informing about the cases to the authorities.

The national capital has seen a surge in dengue cases. Delhi has reported over 1,000 cases of dengue this year, with more than 280 cases logged in the last week, according to a civic report released on Monday.

Of the total number of dengue cases this season, 665 were recorded in the first 23 days of this month alone.

— PTI
Delhi records 45 Covid-19 cases, positivity at 0.08%

AGE CORRESPONDENT
NEW DELHI, OCT. 31

The national capital on Sunday reported 45 new Covid-19 cases, while the positivity rate stood at 0.08 per cent, according to data shared by the health department here. No fresh deaths were recorded.

Delhi has recorded only four deaths due to Covid-19 in October. Last month, five people had succumbed to the viral disease.

With the new infections, Delhi’s coronavirus case-load climbed to 14,38,870. So far, over 14.14 lakh patients have recovered, the bulletin said.

The death toll stands at 25,091, it said.

According to the bulletin, authorities conducted 56,731 Covid-19 tests, including 46,468 RT-PCR ones, the previous day. There are 348 active cases in Delhi. Of these, 142 patients are in home isolation. The number of containment zones stands at 85, the bulletin said.

Delhi reported 37 cases of Covid-19 on Thursday and Wednesday.

In April and May, Delhi battled a brutal second wave of the pandemic that claimed a large number of lives and led to a shortage of oxygen and essential drugs in hospitals.

On April 20, the city reported 28,355 cases, the highest since the pandemic began last year. On April 22, the case positivity rate stood at 36.2 per cent, the highest so far.

The highest number of 448 deaths was reported on May 3.

According to the sixth sero survey, 97 per cent of Delhi’s population has developed antibodies against coronavirus as a result of a large number of people getting exposed to the virus during the second wave and a robust vaccination drive.

Ninety-five per cent of the vaccinated people who have a history of Covid-19 have developed antibodies as compared to 82 per cent of unvaccinated ones.
Healthy eating habits

This Diwali season, incorporate these healthy eating habits (The Indian Express: 202101101)

https://indianexpress.com/article/lifestyle/health/diwali-season-healthy-eating-habits-desserts-7597004/

For starters, choose a milk-based dessert like shrikhand, sandesh, mishit doi, kheer, etc.

Diwali, Diwali season, Diwali celebrations, Diwali desserts, how to eat healthy on Diwali, healthy Diwali desserts, indian express news

There may be desserts which are high in fats like jalebi, malpua, gulab jamun, gulpapdi, sheera etc. If it’s your favourite, reduce the portion size.

(PHOTO: GETTY/THINKSTOCK)

In India, festival time is when people tend to stray from healthy eating habits and allow themselves to binge-eat, and eat unhealthy food that is typically not a part of their everyday diet. While occasional cheat-meals are okay, one must also learn to consciously stay away from foods that can harm their health and lead to lifelong issues.

As we await Diwali, Minal Shah, senior nutrition therapist, Fortis Hospital, Mulund shares some pointers on how one can enjoy the festival of lights, keep their taste buds happy and also not compromise on health.

ALSO READ | This festive season, balance your cravings with these simple tips

Here are a few pointers for enjoying guilt-free desserts:

1. Choose a milk-based dessert like shrikhand, sandesh, mishit doi, kheer, etc. Milk is a good source of first-class protein, and these desserts can easily be made at home with any modifications that we desire.

2. Sugar can be replaced with natural flavoring agents like cinnamon, nutmeg, dry fruits like dates, raisins, and fresh fruits. To an extent, jaggery and honey can also be opted over refined sugar, but with quantity restriction.

3. Make a healthier choice among existing desserts.
   – Choose badam katli (omega-3 fatty acids) over kaju katli.
   – Choose besan ladoo (protein) or peanut ladoo (MUFA) over rava ladoo, Mysore pak (protein) over coconut ladoo.
– Choose carrot halwa or dudhi halwa (antioxidants/vitamins) or moong dal sheera (protein) over rava sheera.

– Choose payasam over a regular rice kheer.

4. Try something new and unconventional with a functional food added to it. Like dates sesame ladoo, oats dates nut ladoo, walnut ladoo, methi kheer, dudhi kheer, apple sheera, fruit kheer, papaya halwa, beetroot halwa, carrot kalakand, oats pancakes with cranberry syrup or blueberry syrup or chocolate syrup, homemade protein bars, apple pie, pumpkin pie, fruit yogurt, seeds chikki (pumpkin/sunflower/flaxseed).

ALSO READ | Festive skincare: Here’s what to eat and avoid for a healthy glow

5. Consider the portion size. There may be desserts which are high in fats like jalebi, malpua, gulab jamun, gulpapdi, sheera etc. If it’s your favourite, reduce the portion size. Cut smaller pieces to reduce the calorie intake.

6. Also, remember the basics — add a good bowl of salad with different coloured vegetables and fruits to ensure healthy fibre in every meal.

7. Ad fillers for yourself and your guests, which are low in calories and tasty as well like ginger lemonade, virgin pina colada, kiwi margarita, masala milk, thandai, milkshake with fennel seeds, falooda, cucumber mint cooler, tomato mocktail, etc.

Lucknow News

Cong Rally In Gorakhpur: Yogi govt acts against people, turns its back wherever there is injustice, says Priyanka

Akhilesh talks Patel and Jinnah, BJP asks why ‘praise’ Pakistan

Adityanath hurls appeasement charge at Rajbhar, says he opposed Raja Suheldev memorial for Muslim votes

**COVID-19 vaccine**

**Zydus Cadila likely to reduce price of COVID-19 vaccine (The Hindu: 202101101)**


Negotiations with government still on.
Zydus Cadila has agreed to bring down the price of its COVID-19 vaccine to ₹265 a dose following persistent negotiations by the government but a final deal is yet to be reached, sources said on Sunday.

WHO

Supreme Court prefers to wait and watch for Covaxin’s WHO approval (The Hindu: 202101101)


Plea wants people vaccinated with Covaxin to be administered two doses of Covishield

The Supreme Court on Friday decided to wait and see if the World Health Organisation (WHO) gives emergency use authorisation to Bharat Biotech’s Covaxin before considering a plea to allow people vaccinated with Covaxin to be administered two doses of Covishield.

“Let us see if authorisation from the WHO comes or not,” a Bench of Justices D.Y. Chandrachud and B.V. Nagarathna told petitioner-in-person Kartik Shah.

COVID-19 guidelines

Ministry of Home Affairs extends COVID-19 guidelines till November 30 (The Hindu: 202101101)


The earlier guidelines are applicable till October 31

The Ministry of Home Affairs (MHA) has extended the COVID-19 guidelines issued under the Disaster Management Act till November 30.

The Ministry said in an order that the previous order issued on September 28, to ensure compliance with the “prompt and effective containment measures for
AY4.2 variant ‘infrequent’

Coronavirus | AY4.2 variant ‘infrequent’ in India: INSACOG (The Hindu: 202101101)


AY4.2 responsible for a ‘slowly increasing’ proportion of cases in the U.K., according to Public Health England

The latest mutation of the coronavirus variant, AY4.2, which has been linked to a rise in cases in the United Kingdom, is “very infrequent” in India, according to a weekly report by the India SARS-CoV-2 Genome Consortium (INSACOG), the body that tracks the emergence of new variants, on Wednesday.

AY4.2 was responsible for a “slowly increasing” proportion of cases in the U.K., according to Public Health England (PHE) on October 22. It is also present in

Skin health

Study reveals strains of acnes that promote skin health: (New Kerala: 202101101)

Recent advances in gene sequencing have shown that differences in the genetic background between strains of bacteria might lead to differing roles in the skin.


Long COVID'

Long COVID' can negatively impact physical, cognitive function, employment, quality of life: (New Kerala: 202101101)

Study Washington, October 30: A new study has shown that patients experiencing post-acute COVID syndrome (PACS, also known as long COVID) may have symptoms f

Antibiotics

Research discovers antibiotics for treating appendicitis (New Kerala: 202101101)

Washington, October 31: According to the findings of the Comparing Outcomes of antibiotic Drugs and Appendectomy (CODA) trial and an updated treatment guideline for appendicitis from the Americ-> View it-->

Breastfeeding

Breastfeeding mothers should avoid these foods New Delhi, Oct 31: After a sombre year, (New Kerala: 202101101)

people all over the world are finally ushering in the festive season with more joy and hope. For many, it will also be the first time they see their extended fami-> View it-->

Infertility

Scientist link rare genetic hearing loss condition with infertility, (New Kerala: 202101101)

A team of researchers has identified a common link between Perrault syndrome, a rare genetic condition resulting in hearing loss in men and women, and early menopaus-> View it-->

Cataract

Clinically significant cataract associated with increased risk of death from vascular causes: (New Kerala: 202101101)

Study London, October 30: Clinically significant cataract is associated with an increased risk of death from vascular causes, such as stroke and heart attac-> View it-->
Fully vaccinated

Fully vaccinated? You can still spread virus at home(New Kerala: 202101101)

London, Oct 29: Even if you are fully vaccinated, chances are that you can still catch Covid and pass on the deadly disease to people at home, according to a study published in the journal The Lan-> View it--> https://www.newkerala.com/news/2021/154893.htm

Health Care Services

एम्स में 24 घंटे के अंदर हो सकेगा अल्ट्रासाउंड(Hindustan: 202101101)

https://epaper.livehindustan.com/
था कि सोनोग्राफी (अल्ट्रासाउंड) भी एक ही दिन में हो सकती है। अस्पताल में ब्लड जांच का समय भी बढ़ा दिया गया है। इससे पहले एकसे जांच के लिए इंतजार खत्म हो चुका है। ओपीडी से लेकर भर्ती रोग की एकसे जांच के लिए कोई इंतजार नहीं है। मरीज को तत्काल जांच के बाद जांच रिपोर्ट उपलब्ध कराई जा रही है।

**ब्लड सैम्पल का समय बढ़ेगा**

अस्पताल ने स्वास्थ्य मंत्री के निर्देश के बाद मरीजों को किसी भी तरह की ब्लड टेस्ट के लिए सैम्पल देने का समय साड़े पंच घंटे तक बढ़ा दिया है। एम्स में एब मरीज सोमवार से शुक्रवार तक सुबह 8 बजे से शाम को साढ़े 3 बजे तक जांच के लिए अपने ब्लड का सैम्पल दे सकते हैं। इससे पहले सिर्फ सुबह 8 बजे से 10 बजे तक ही ओपीडी के मरीजों की जांच के लिए सैम्पल लिए जाते थे।

**नई दिल्ली | वरिष्ठ संवाददाता**

दिल्ली के अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स) में इलाज के लिए आने वाले मरीजों के लिए अच्छी खबर है। अब उन्हें अल्ट्रासाउंड की जांच के लिए लंबा इंतजार नहीं करना होगा।

अस्पताल प्रशासन अल्ट्रासाउंड (सोनोग्राफी) की बेटिंग (खत्म करने की तैयारी) कर रहा है। इसके लिए अस्पताल में मौजूदा स्थान के अलावा नए स्थान पर अल्ट्रासाउंड की व्यवस्था की जा रही है।

अस्पताल के एक वरिष्ठ डॉक्टर का कहना है कि इसके बाद एम्स में डॉक्टर द्वारा लिखे जाने के 24 घंटे के अंदर अल्ट्रासाउंड हो सकेगा।

**फिल्म भी तत्काल मिलेगी :** मरीज को तत्काल जांच के बाद फिल्म और जांच रिपोर्ट उपलब्ध कराई जा सकेगी।

जांच रिपोर्ट मरीज के मूएचआईडी नंबर पर 24 घंटे के अंदर अपलोड की जाएगी, जिससे डॉक्टर अपने कंप्यूटर पर उसे देख सकें। इससे पहले अबतक मरीज को अल्ट्रासाउंड करने के लिए पहले तारीख मिलती थी। उसके बाद अस्पताल सिर्फ जांच करने के लिए जाना पड़ता था। बाद में रिपोर्ट लेने के बाद फिर डॉक्टर से परामर्श ले पाता था। नई सुविधा के बाद जिस दिन डॉक्टर अल्ट्रासाउंड लिखे उसी दिन जांच हो जाएगी और रिपोर्ट जांच लिखने वाले डॉक्टर तक पहुँच जाएगी।