



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Wednesday 20210908

India's vaccination coverage

A district-wise estimate of India's vaccination coverage (Hindustan Times: 20210908)

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

JhaIndia has administered at least one dose of a Covid-19 vaccine to 539.6 million people by September 7. In absolute terms, this makes India the largest country in terms of number of people who have received at least one dose of the Covid-19 vaccine (comparable data from China is not available). But absolute numbers do not matter; what matters is the share of population which has been vaccinated. For example, Israel has completely vaccinated 5.5 million people. But relative to its population, this is 62.7%, compared to just 17.7% for India (the proportion of fully vaccinated adults).

INTERNATIONAL COMPARISON OF INDIA'S VACCINATION COVERAGE

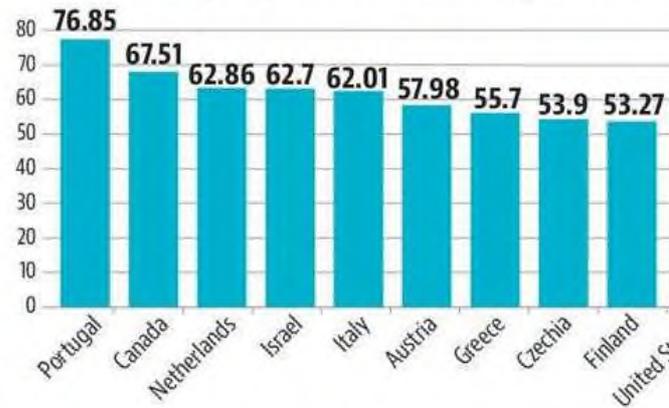
With most decisions involving non-pharmaceutical interventions to prevent the spread of the pandemic, such as lockdowns, being taken at the local level (not just in states but even districts), it will help to know the share of the adult population that has been vaccinated across districts.

HT has estimated the share of vaccinated population at the national and state level by using the population projections for March 2021 by the National Commission on Population. No such projections exist at the district level. So far, this has been an important handicap in assessing vaccination coverage at the district level.

To be sure, the government is likely to have population data at the granular level, but this is not available in the public domain.

In a two-part series, HT uses a reasonable proxy for population estimates for adults in India by district. The first part will describe how we arrived at these population estimates and summarise the status of inter-district inequality in vaccinations. The second part will track the trajectory of inter-district inequality in vaccinations over time.

Top 10 major countries* by share of fully vaccinated people & India on September



*Population greater than 5 million; Source: Our World In Data, Co-WIN dashboard, National Commission on Population

1 The next-best estimation for district-wise population

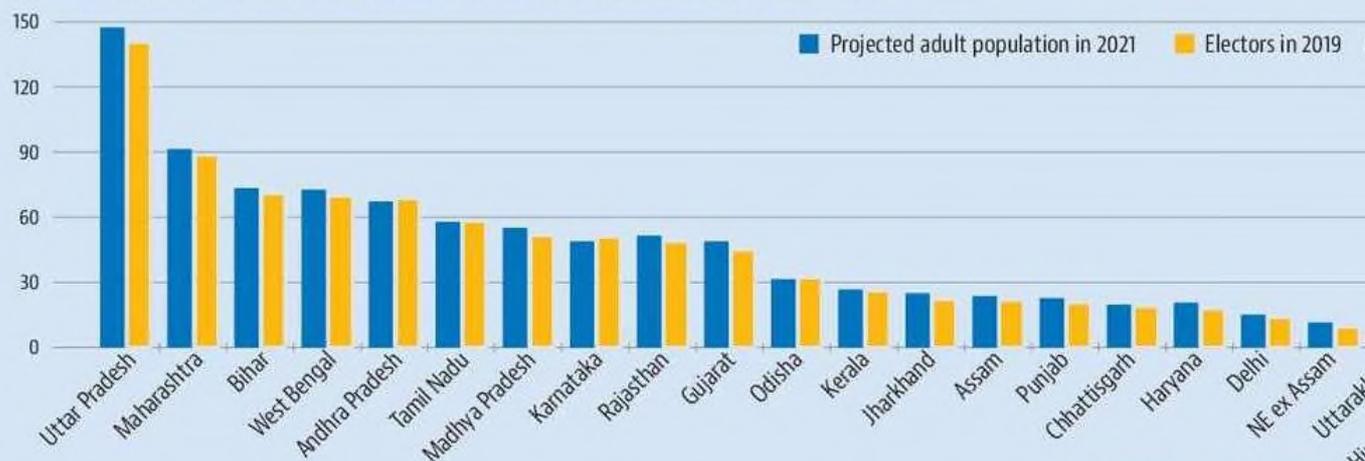
Covid-19 vaccines are only being administered to people who are 18 or above. This means the database of voters could be a good proxy (in India, the voting age is 18 years).

HT has used the number of electors at the district level in the 2019 general elections available from the Election Commission of India. Data compiled by the Trivedi Centre for Political Data (TCPD) maps assembly constituencies to districts. This can be used to calculate the number of electors in these districts. There are a total of 662 districts in the TCPD database. HT has mapped the 754 districts given in the government's Co-WIN dashboard back to these 662 districts.

Because these are 2019 numbers, adult population for a district is likely to be an underestimate by 3.74% of the projected adult population at the national level. To be sure, there are differences across states.

For instance, the number of electors is more than the projected adult population in Andhra Pradesh, Telangana, Karnataka, Odisha, and Tamil Nadu. In other states, the number of electors is lower than projected adult population. However, the estimation error is largely the same across states. The standard deviation across the 23 states and UTs (Union Territories) for which data are available is -4.05%.

NUMBER OF ELECTORS AND PROJECTED ADULT POPULATION



Source: ECI, TCPD, National Commission on Population

2 Best and worst performing districts

On the basis of the data on electors, the share of adults who had received at least one dose of the vaccine by September 5 was 57.8%. The share of fully vaccinated adults was 17.6%. As expected, these figures are close to but slightly higher than the estimates – 55.7% with one dose and 17% with both doses – generated using the projected population.

Population projections using electoral roll data show that top five fully vaccinated districts are Kolkata (76.1%), Diu (72%), Leh in Ladakh (71.7%), Gurgaon (64.3%), and Papum Pare in Arunachal Pradesh (59.6%).

The five least fully vaccinated districts are all in Uttar Pradesh: Kanpur Rural

(2.97%), Budaun (4.35%), Kannauj (4.57%), Hardoi (4.67%), and Chit

The best five districts by share of adults given at least one dose are Kolkata (184%), Solan in Himachal (170%), Gurgaon (150%), and East (149%). To be sure, these numbers could be bigger than 100% not because the adult population might have increased, but also because people in neighbouring districts might be getting their shots here.

The bottom five districts on this metric are Mahbubnagar in Telangana, Kanpur Rural in Uttar Pradesh (20.02%), Narayanpur in Chhattisgarh (20.02%), Senapati in Manipur (23.51%) and Kiphire in Nagaland (24.36%).

DISTRICTS BY SHARE OF VACCINATED POPULATION WITH ONE AND BOTH DOSES



Covid-19: Karnataka issues

Covid-19: Karnataka issues advisory against travelling to Kerala(Hindustan Times: 20210908)

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

The Karnataka government on Tuesday issued an advisory, asking residents of the state to avoid travel to neighbouring Kerala which is currently grappling with a massive surge in Covid-19 infections and a new scare of the resurgence of Nipah virus.

“In view of the prevailing Covid-19 situation in Kerala, special measures are already in place for arrivals from Kerala. Further, it has been observed that students and employees arriving to Karnataka from Kerala though bringing negative RT-PCR reports are testing Covid-19 positive during repeat test and number of such case are considerably high in Dakshina Kannada and Udupi,” according to an order issued by Jawaid Akhtar, the additional chief secretary of the health and family welfare department of Karnataka.

The new orders come hours after Karnataka chief minister Basavaraj Bommai on Tuesday morning said that he has asked for stricter measures to be implemented in borders between the two states.

“At the time of sealing the Kerala border, we had asked for vaccination and testing and will make this stricter,” he said.

The new orders are also significant because they come in the wake of the Nipah scare in Kerala. “I have asked our experts to learn everything about Nipah virus, how it spreads and what precautions should be taken and their suggestions. We have already kept an eye on it and will definitely try and do it in a manner to control it,” Bommai said.

Karnataka believes that people travelling from Kerala and Maharashtra are the main source of the spread of infections in the state and has turned a blind eye on political events and other large gatherings of people within its own cities and districts.

“Public is advised to defer their plan to visit Kerala till the end of October, 2021, if there is no emergency/urgency with a view to avoid a third wave of Covid-19 in Karnataka in the larger interest of public health,” the order states.

“All administrators/principals of the educational/nursing/paramedical institutions are advised to instruct their wards who have not yet returned to Karnataka to defer/postpone their return till the end of October, 2021. Further, they should also advise their wards not to travel to Kerala till the end of October, 2021,” the order states.

Contract virus

Two contract virus in Chandigarh, one fatality (The Tribune: 20210908)

<https://www.tribuneindia.com/news/coronavirus/two-contract-virus-in-chandigarh-one-fatality-308268>

Two contract virus in Chandigarh, one fatality

Chandigarh: The city on Tuesday reported two fresh cases of Covid-19 and a death. A total of two patients were discharged. — TNS

Mohali: Ten fresh Covid cases were reported from the district during the past 24 hours, taking the tally to 68,647. No new death was reported, while nine patients recovered from the virus. There are now 44 active cases. The death toll stands at 1,060. — TNS

One case, no death in Panchkula dist

Panchkula: One case surfaced in the district during the past 24 hours, taking the tally to 30,693. No fresh death was reported. A 40-year-old man of Sector 19 was found infected. Of the 30,693 positive cases reported so far, 30,303 patients have been cured. There are now 13 active cases. The death toll stands at 377. — TNS

Sydney Covid-19 cases

Sydney Covid-19 cases may hit peak next week as Australia steps up vaccine rollout (The Tribune: 20210908)

<https://www.tribuneindia.com/news/coronavirus/sydney-covid-19-cases-may-hit-peak-next-week-as-australia-steps-up-vaccine-rollout-307459>

Australia is trying to contain a third wave of infections that has locked down its two largest cities, Sydney and Melbourne, and its capital Canberra, putting more than half its 25 million population under strict stay-at-home restrictions

Sydney Covid-19 cases may hit peak next week as Australia steps up vaccine rollout

Daily cases in Sydney's worst-affected suburbs are expected to rise to as high as 2,000 until the middle of this month, the modelling showed. Reuters file

Authorities in Australia's New South Wales, the epicentre of the country's biggest coronavirus outbreak, said on Monday daily infections were expected to peak next week, as they look to speed up immunisations ahead of easing restrictions.

Australia is trying to contain a third wave of infections that has locked down its two largest cities, Sydney and Melbourne, and its capital Canberra, putting more than half its 25 million population under strict stay-at-home restrictions.

New South Wales Premier Gladys Berejiklian said the government's modelling revealed the state would require its highest number of intensive care beds in early October, with "additional pressure on the system" in the next few weeks.

Daily cases in Sydney's worst-affected suburbs are expected to rise to as high as 2,000 until the middle of this month, the modelling showed.

"I do want to qualify that to say that modelling depends on a number of things, a number of variables ... if too many of us do the wrong thing, there are too many super-spreading events, we could see those numbers higher," Berejiklian said during a media briefing in Sydney, the state capital.

A total of 1,071 Covid-19 cases are currently in hospitals, with 177 people in intensive care (ICU), 67 of whom require ventilation. Officials have said they had quadrupled ICU beds to about 2,000 in the state early last year to handle the pandemic.

The state detected 1,281 new cases on Monday, most of them in Sydney, down from 1,485 a day earlier. Five new deaths were recorded.

Victoria state, which includes Melbourne, reported 246 new cases on Monday, its biggest daily rise of the year.

Despite the recent outbreaks, Australia's coronavirus numbers have remained relatively low at around 63,000 cases and 1,044 deaths.

VACCINE RUSH

Officials are trying to accelerate the vaccine rollout to help minimise deaths and hospitalisations with the government pledging more freedom of movement once 70-80% of the population aged over 16 is vaccinated.

Just over 38% of Australia's adult population has been fully vaccinated, with the country expected to reach 70% by early November based on current rates.

Last week, Australia entered into vaccine swap deals with Britain and Singapore for a total of around 4.5 million doses of the Pfizer-BioNTech vaccine, double this month's supply.

Nearly half a million doses, the first batch of shipments, arrived overnight.

"There will be another set of flights in a couple of days, but we'll pretty much be getting a million of the four million every week over the next four weeks," Lieutenant General John Frewen, head of the vaccination taskforce, told broadcaster ABC.

Under the vaccine swap deals, Australia will return equivalent numbers of Pfizer-BioNTech vaccines to Britain and Singapore later this year.

Frewen said one million doses of Moderna will also reach Australia in "a week or so", becoming the third vaccine to join the rollout along with Pfizer and AstraZeneca shots. Reuters

Vaccination certificate

No vaccination certificate, RT-PCR checks at Punjab entry points, commuters have free run (The Tribune: 20210908)

<https://www.tribuneindia.com/news/coronavirus/no-vaccination-certificate-rt-pcr-checks-at-punjab-entry-points-commuters-have-free-run-307605>

No vaccination certificate, RT-PCR checks at Punjab entry points, commuters have free run

Photo for representational purpose only. File photo

Though it is mandatory for those entering the state to show an RT-PCR negative report or a vaccination certificate, there is reportedly no check on the ground.

The Tribune visited three interstate border entry points, including the biggest at the Shambhu barrier of Haryana, and found no officials checked the required documents to control the movement.

However, the health department claimed that they had screened state-owned buses coming from other states and were conducting rapid antigen tests of travellers who did not have a negative test report or vaccination certificate. Officials said majority of the staff was busy in the vaccination drive and they were not getting enough support from other departments.

In the wake of a dip in Covid-19 cases, health experts said the departments had been complacent and not taking the government's order seriously.

Harpalpur Senior Medical Officer Dr Rishi said: "Our teams visit Shambhu barrier once a day to conduct tests of travellers because the teams are busy with vaccination and testing of government schoolchildren. Besides, we need more support from the administration to screen travellers."

Patiala Civil Surgeon Dr Prince Sodhi said: "I have already directed my officers to hold regular screening at all three checking points. I will re-check with my officers in this regard."

Japan's 'vaccine minister'

Japan's 'vaccine minister' Taro Kono favoured for PM(The Tribune: 20210908)

<https://www.tribuneindia.com/news/coronavirus/japans-vaccine-minister-taro-kono-favoured-for-pm-307257>

Japan's minister in charge of Covid-19 vaccinations is seen as the most suitable candidate to become the next prime minister, while a female former Internal Affairs Minister has secured backing for her bid for the top job, media reported on Sunday.

The Kyodo news agency said nearly a third of respondents to a telephone poll it conducted this weekend said the minister in charge of vaccinations, Taro Kono, was most suitable to succeed Suga as premier. Kono has not confirmed his intention to seek the leadership of ruling Liberal Democratic Party (LDP), telling reporters only that he wanted to consult party colleagues before deciding. Kono was named by 31.9 per cent of respondents in the Kyodo poll as the most suitable person to succeed Suga. — Reuters

Covid-19 vaccines fare with Delta variant

Explained: How Covid-19 vaccines fare with Delta variant (The Indian Express: 20210908)

<https://indianexpress.com/article/explained/how-vaccines-fare-with-delta-variant-coronavirus-7495317/>

Compared to the original strain, Delta is 8 times more likely to infect those vaccinated and 6 times more likely to re-infect those recovered, finds study based on data from India. Yet, vaccines are important, experts stress.

Vaccination at Shahaji Raje Sport Complex, Mumbai. Experts have stressed that the study must not lead people to believe vaccines are not useful. (PTI Photo)

In a possible explanation for the rapid spread of the Delta variant of SARS-CoV2 virus, a study published in the journal Nature has found this particular variant to have a much higher ability to infect, and to evade the immune response gained through previous infections or vaccines.

The Delta variant, or the B.1.617.2 lineage, first discovered in Maharashtra, is dominant not just in India but also in several other countries. According to the World Health Organization, the Delta variant is now present in at least 170 countries.

The Nature study, carried out by an international team of researchers including from several Indian institutions, is based on data collected from India till the end of May. Its results were first reported in June when the pre-print version was made available, before peer review.

What are the key findings?

The study found that the Delta variant was 6 times less sensitive to serum neutralising antibodies from recovered individuals, and 8 times less sensitive to vaccine-induced antibodies compared to the original Wuhan strain of the virus.

In other words, compared to the original virus, the Delta variant was 8 times more likely to cause breakthrough infections among vaccinated people, and 6 times more likely to re-infect people who have recovered from previous infections. The vaccines considered for the study were those developed by AstraZeneca and Oxford University, and Pfizer and BioNTech.

New research |New research: Comparing antibody levels in Moderna and Pfizer Covid-19 recipients

Additionally, the study reported a higher “replication and spike mediated entry” in the Delta variant, meaning it had a greater ability to infect and multiply within the human body, compared to the B.1.617.1 lineage.

The study also looked at 130 cases of breakthrough infections among fully vaccinated healthcare workers at three Delhi hospitals, and found reduced vaccine effectiveness against the Delta variant.

“The results of the study show that Delta variant does spread faster and reduces protection gained from previous infections or vaccines,” said Anurag Agrawal, director of the Delhi-based CSIR-Institute of Genomics and Integrative Biology, and a joint author of the study.

“However, the good news is that vaccination does lead to reduced severity of the disease, and so does previous infection,” he said.

What other evidence is available on the effectiveness of vaccines against Delta?

Recently, the World Health Organization cited four studies — two in the United States, one in the UK, and the other one in Qatar — that have presented similar evidence for reduced effectiveness of vaccines against the Delta variant.

The UK study, for example, showed reduced effectiveness of the AstraZeneca vaccine in a period when the Delta variant was the most dominant in the country, compared to when the Alpha variant was dominant there.

Also in Explained |Does the effectiveness of Pfizer, AstraZeneca vaccines against Delta variant reduce over time?

How important are vaccines, then?

Vineeta Bal, an immunologist with the Indian Institute of Science Education and Research (IISER) in Pune, pointed out that the study must not lead people to believe that vaccines were not useful. She pointed out that the Nature study was carried out on in vitro samples, in a laboratory environment.

“All data emerging from in vitro studies are surrogate evaluations in lieu of what actually happens inside the body. The limitation is that neutralising antibodies (which were tested in the study) do not provide the entire answer. Immune protection is offered by neutralising antibodies as well as the T-cell responses. In vaccinated or previously infected individuals, both antibodies and T-cells contribute to protection. This study does not show data on T-cells, thus leaving a major component of immune response out of consideration,” she said.

Bal said the results of the study were not surprising, however.

“Currently, the majority of infections are being caused by Delta variant, and it is no surprise that it is the commonest virus found in re-infection cases or in cases post vaccination,” she said.

“No vaccination provides 100% protection. Breakthrough infections are not unusual or unheard of. However, the incidence of severe disease, and hospitalisation would be significantly lower than in the vaccinated groups compared to the unvaccinated, or uninfected, groups,” she said.

Anu Raghunathan, a scientist at the National Chemical Laboratory in Pune, said the study simply means that larger amounts of antibodies would be required to block the Delta variant.

“Vaccines are still effective. The Delta variant is just less sensitive to neutralising antibodies. It means that it would require five to eight times more antibodies to elicit the same kind immune response as against the original virus during the first wave to block the Delta variant,” she said.

Don't miss |Why Moderna's mRNA candidate brings new hope for an HIV vaccine

What is the way forward in dealing with newer variants?

The original Wuhan virus mutated into the successively more dangerous Alpha, Beta, Kappa and Delta variants. The virus will likely continue to mutate into newer forms. But all mutations need not necessarily mean they are more harmful.

Experts say the only effective way to slow down the emergence of new variants is to reduce the spread of infections through measures like vaccination, or observance of Covid-appropriate behaviour.

“Like this study, there is a critical need for continuous surveillance of the effectiveness of antibody response against new variants, and to keep assessing whether booster vaccine doses are required, or whether vaccines themselves need to be updated. Simultaneously, a genomic surveillance of new variants has to be continued,” Raghunathan said.

“This will help us in improving our vaccines and producing newer, more effective ones. In the current context, it is possible that we might require additional booster shots of vaccines. Additionally, we must ensure that when newer and more effective vaccines arrive the market, they are made accessible to everyone at a quick pace,” she said.

Infectious diseases'

Covid pandemic forced us to rethink how air quality is linked with spread of infectious diseases' (The Indian Express: 20210908)

<https://indianexpress.com/article/opinion/columns/covid-pandemic-forced-us-to-rethink-how-air-quality-is-linked-with-spread-of-infectious-diseases-7493234/>

The Sixth Assessment Report (AR6) of the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) highlighted that we could surpass 1.5 oC by mid-century due to human influence.

The recent World Health Organisation and Global Burden of Disease report, including the 'Lancet Commission on Pollution and Health' also links air pollution to over 7 million premature deaths globally. (File)

AIR pollution poses a major threat to human health. The recent World Health Organisation and Global Burden of Disease report, including the 'Lancet Commission on Pollution and Health' also links air pollution to over 7 million premature deaths globally.

A recent report also highlights that many of the highly polluted cities over the globe are in India, which raises concern for public health. September 7 is celebrated as 'International Day of Clean Air for Blue skies' to make communities and various stakeholders aware of sustainable action. The theme of 2021 is 'Healthy Air, Healthy Planet', to emphasise air pollution's health effects, particularly during the Covid-19 pandemic.

The pandemic is one of the biggest public health emergencies that also brought focus on environmental protection and the lockdowns provided an opportunity for scientists to examine air pollution, its sources and mechanism of reduction to build evidence-based future policies and suggestions to strengthen the action under the National Clean Air Program. The key observation from the scientific studies include:

There is clear evidence that lockdowns significantly improved air quality

The reduction in air pollution was directly proportional to the urban size and population density

Natural emissions such as forest fire also contributed to the local and regional pollution

Covid also brought the focus on indoor air quality and the need for proper ventilation to restrict the spread of emerging infectious disease threats

Lockdown is not a solution to air pollution or environmental pollution. But, the current pandemic forced us to rethink how air quality, climate are linked with the spread of infectious diseases such as Covid-19.

The Sixth Assessment Report (AR6) of the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) highlighted that we could surpass 1.5 oC by mid-century due to human influence.

Both climatic and air pollution impacts will burden the healthcare delivery system, affecting mainly vulnerable and marginalised populations like in the pandemic. There is no apparent epidemiological evidence, but it is established that the route of air pollution exposure and Covid transmission/infection is through the lungs.

If someone has compromised lung function due to air pollution, he/she may be at a higher risk of complications associated with the Covid-19 disease.

We need to exploit existing knowledge for evidence-based policies to develop risk reduction strategies. Furthermore, there is a need to focus on the physical environment, including the population's social and behavioural aspects, to ensure public participation for environmental protection and sustainability.

This will help in ecosystem restoration and reduce the burden of environment-related morbidity and mortality.

Nutrition alert

Nutrition alert: A guide to take care of your preterm baby(The Indian Express: 20210908)

<https://indianexpress.com/article/lifestyle/health/national-nutrition-week-2021-nutritional-guide-for-preemies-premature-babies-breastfeeding-mother-milk-7494577/>

In 75 per cent of cases, infections such as diarrhea and pneumonia pose a threat to the lives of newborns, said Dr Vikram Reddy, chief scientific officer, Neolacta Lifesciences

national nutrition week, national nutrition week 2021, premature babies nutrition, indianexpress.com, indianexpress, breastfeeding tips, should premature baby be given water,Here's your ready reckoner for caring for premature baby's nutrition. (Source: Getty Images/Thinkstock)

The theme of the recently-concluded National Nutrition Week 2021 — 'Feeding smart, right from start' — highlighted the importance of nutrition from the very beginning. Hence, to promote health, support growth, and enhance development, it is imperative that infants are breastfed exclusively for the first six months, followed by complementary feeding while continuing to breastfeed till 2 years of age, experts recommend.

This becomes even more essential for premature babies or those born before the completion of 37 weeks of pregnancy and hence, are at high risk of developing complications. In 75 per cent

of cases, infections such as diarrhea and pneumonia pose a threat to the lives of newborns, said Dr Vikram Reddy, chief scientific officer, Neolacta Lifesciences. Hence, ensuring access to human milk-based nutrition is of prime importance as helps in the optimal growth and development of the baby, he added.

What must be done?

Dr Geetika Gangwani, lactation consultant, emphasised that ensuring availability of 100 per cent breast milk diet is of paramount importance for the survival of the newborn as well as for the optimal development of the brain and other organs.

As per Dr Reddy, human milk provides antibodies and is easily digestible. “It contains all the nutrients that are essential for the overall growth of the baby and support the development of vital organs. It also provides natural immunity to fight infectious diseases and prevent other prematurity-related complications,” he explained.

Human milk is vital for ensuring optimal nutrition for all babies

If your baby is not able to feed on your breast, you can express your milk and feed it with a sterilised small spoon. If you are a working woman and you have to stay away from your baby for a long time, then you should store your milk at the proper temperature as prescribed by the doctor so that the baby can continue receiving breastmilk, even in your absence,” said Dr Reddy.

breastfeeding mothers, yoga, indianexpress, Newborns should receive breast milk. (Source: Getty Images/Thinkstock)

Pasteurised human milk

If you find it difficult to breastfeed or express sufficient milk for your baby, organisations such as WHO, UNICEF and the Indian Academy of Paediatrics recommend providing the baby, pasteurised human breast milk. Pasteurised human breast milk refers to excess breast milk donated by a healthy mother which undergoes pasteurisation to make it safe for consumption by an infant. Pasteurisation is a process that uses heat to kill any pathogenic microorganism that may be present in the milk without affecting its nutritive value, immune properties, or good bacteria. After pasteurisation, the milk undergoes stringent quality checks to ensure it is safe for a baby, mentioned Dr Reddy.

Avoid cow milk and bovine milk-based formula

Do not give cow/buffalo milk (bovine milk), advised Dr Reddy. Most infant formulas are also derived from cow’s milk and may cause overload on the baby’s fragile organs such as stomach, intestines, kidneys etc. and bovine milk-derived products may lead to conditions like allergies, infections etc. Also, since bovine milk is difficult for the baby to digest, it may affect your baby’s overall gut health further increasing the risk of complications.

Do not give water or other liquid, even in summer

Babies do not need water or any other fluids. Mother's milk fulfils all their needs which are necessary for survival and good growth and development. Avoid introducing any other foods to babies during the first six months.

Keep an eye

Since premature babies are not fully developed in the womb, the risk of developing complications is very high. Therefore, as soon as you notice any red flags, you must visit the doctor immediately.

“Since breastmilk is the ideal nutrition for babies, it is imperative that each one of us takes the onus to support mothers to continue breastfeeding. The need of the hour is to have a uniform breastfeeding policy and action plan. A joint effort of the government, employers, friends and family, as well as healthcare fraternity, will ensure that the mother gets the right information to make the right decisions for her baby's nutritional needs,” expressed Dr Reddy.

Kidney problems with long Covid;

Study associates kidney problems with long Covid; experts share symptoms to look out for

<https://indianexpress.com/article/lifestyle/health/long-covid-kidney-problems-experts-symptoms-signs-treatment-7494257/>

"People should get screened and look for percentage of kidney function – eGFR and the amount of protein leakage in urine," said Dr Sanjeev Gulati

kidneyHere's what to consider about kidney health when you are suffering from long Covid symptoms. (Source: Getty Images/Thinkstock)

A new study published in the Journal of the American Society of Nephrology has found that hospitalised Covid patients, and even those with mild symptoms, are likely to experience lingering kidney damage, and end-stage kidney disease (ESKD). Primarily a respiratory infection, experts have often stressed on how it also invades other vital organs and their functioning.

Study researchers at the Veterans Affairs St. Louis Health Care System and Washington University analysed federal health data to gauge the risk of kidney dysfunction and disease, one of the top causes of death in the United States. Since kidney disease tends to present no symptoms, the National Kidney Foundation estimates that 90 per cent of the 37 million Americans who have it are unaware of their condition.

Agreed Dr Sanjeev Gulati, director, Nephrology and Kidney transplant, Fortis Hospital, Vasant Kunj and pointed out how kidney disease is a silent disease – “where you can lose up to 70 to 80 percent of all kidney function without even realising because there are no symptoms”.

Notably, people already suffering from kidney-related issues have almost 30 per cent higher chances of progressing to chronic kidney diseases, said Dr Sudeep Sachdev, senior consultant and clinical Lead, Nephrology and Renal Transplant, Narayana Superspeciality Hospital Gurugram.

Why does it happen?

According to the study, Covid-19 is associated with increased risk of post-acute sequelae involving pulmonary and extrapulmonary organ systems — referred to as long Covid. However, a detailed assessment of kidney outcomes in long Covid is not yet available, mentioned the September 2021 study which was conducted from March 1 2020 to March 15, 2021 in a cohort of 1,726,683 US Veterans including 89,216 30-day Covid-19 survivors and 1,637,467 non-infected controls.

Long Covid is the condition where people experience persistent new symptoms a month or more after the infection.

“People who were hospitalised for Covid-19 or needed ICU care are at the highest risk,” senior author Ziyad Al-Aly, MD said in a Washington University press release. “But the risk is not zero for those who had milder cases. In fact, it’s significant. And we need to remember that we don’t yet know the health implications for long haulers in the coming years.”

Also, incidence of Acute Kidney Injury or AKI, where kidneys suddenly stop working properly, in Covid-19 patients varies widely, but estimates range from 2.1 to 29 per cent, said Dr Sachdev. “The exact mechanism of kidney involvement is although unclear, sepsis may lead to cytokine storm syndrome or direct cellular injury may occur due to the virus invasion leading to acute tubular necrosis or tubulointerstitial nephritis,” he mentioned.

kidney covid Chronic kidney disease can lead to kidney failure. (Source: Getty Images)

Here’s what experts suggest for those recovering from long Covid

Patients who were treated at home with mild Covid illness may also develop some kidney problem but may not show significant symptoms. This is why, always look out for signs like not peeing enough, swelling in ankles, legs, and around eyes, tiredness, shortness of breath, feeling confused, nausea, seizures or coma, chest pressure or pain, said Dr Abhishek Subhash, consultant, internal medicine at Bhatia Hospital.

Signs

According to Dr Subhash, high levels of protein in the urine, and abnormal blood work are signs to look out for. “The virus itself infects the cells of the kidney. Kidney cells have receptors that enable the new coronavirus to attach to them, invade, and make copies of itself, potentially

damaging those tissues. Similar receptors are found on cells of the lungs and heart, where the new coronavirus has been shown to cause injury,” he said.

What precautions need to be taken?

Experts point out the need for “early intervention“. All patients should regularly follow-up with their physician and perform routine creatinine test to determine proper function of the kidneys, Dr Subhash told indianexpress.com. However, since kidneys of patients with chronic conditions like diabetes and high blood pressure are already functioning at a lower capacity, specific treatments, as per the physician concerned, may need to be advised, he noted.

Dr Gulati said that people should get screened and look for percentage of kidney function – eGFR and the amount of protein leakage in the urine.

“Early intervention and treatment can cure the disease and mitigate its effects on the body. There are multiple problems occurring during post-Covid. Thus, it is quintessential to have regular health checkups and follow up with a specialist up to six months post-Covid,” said Dr Sachdev.

Nipah amidst a pandemic

Quick development of vaccines for tropical infections is a success of the coronavirus era (The Hindu:20210908)

<https://www.thehindu.com/opinion/editorial/nipah-amidst-a-pandemic/article36348891.ece>

India is far from being anywhere near the finish line with regard to the

Age wellness retreat

Socials for the soul: a peek into a new-age wellness retreat (The Hindu: 20210908)

<https://www.thehindu.com/life-and-style/kochi-wellness-retreat-aurah-socials-health-fitness-2021/article36335733.ece>

Four friends in Kochi are encouraging locals to replace that Sunday boozy brunch with an outdoor workout at Aurah Social

We’ve seen ‘socially distanced’ running and cycling groups, and had our fill of Instagram live sessions and Clubhouse rooms on lockdown fitness and home

Nipah, a highly pathogenic paramyxovirus

Explained | Nipah, a highly pathogenic paramyxovirus (The Hindu: 20210908)

<https://www.thehindu.com/sci-tech/health/explained-nipah-a-highly-pathogenic-paramyxovirus-and-handling-it-requires-the-highest-grade-facilities/article36318910.ece>

The natural reservoir for the virus are large fruit bats of Pteropus genus. From here, it may pass on to pigs who may be infected after eating fruits that are bitten on by infected bats.

STORY SO FAR: Kerala has reported a fatality from a case of infection by the Nipah virus in the northern district of Kozhikode bringing back memories of the chaos in May-June 2018 when the same district reported 18 confirmed cases

Health professionals with disabilities

Revise nursing council clause, say health professionals with disabilities (The Hindu: 20210908)

<https://www.thehindu.com/news/national/revise-nursing-council-clause-say-health-professionals-with-disabilities/article36303403.ece>

‘Restricting 5% reservation in B.Sc. Nursing to only those with up to 40-50% lower limb disability is discriminatory, unfair’

The Indian Nursing Council’s (INC) recent notification restricting the 5% reservation for persons with disabilities (PwD) in B.Sc. Nursing courses only to

Covishield-like vaccine

Covishield-like vaccine reports success in monkey trials against Nipah virus(The Hindu: 20210908)

<https://www.thehindu.com/sci-tech/health/covishield-like-vaccine-reports-success-in-monkey-trials-against-nipah/article36322790.ece>

No approved vaccine yet exists for the lethal virus that has killed a 12-year old boy in Kozhikode

Can a Covishield-like vaccine give protection against the Nipah virus? Preliminary animal trial results seem to suggest so. In July, researchers at the