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NEWS BULLETIN

♦The Indian **EXPRESS**

PM Modi launches Ayushman Bharat Digital Mission, health ID for every citizen

Under this, a unique digital health ID will be provided to the people, which will contain all the health records of the person.

By: Express Web Desk | New Delhi | Updated: September 27, 2021 12:21:17 pm

Prime Minister Narendra Modi Monday launched the Ayushman Bharat Digital Mission. Under this, a unique digital health ID will be provided to the people, which will contain all the health records of the person.

The pilot project of the **National Digital Health Mission** was announced by the prime minister from the ramparts of the Red Fort on August 15, 2020.

"Today is a very important day. The drive to strengthen the health facilities of the country, in the last 7 years, is entering a new phase today. This is not an ordinary phase. This is an extraordinary phase," Prime Minister Narendra Modi said, lauding the digital initiatives in the country.

During the address, PM Modi also praised the CoWIN platform - the government's centralised digital service provider and records-keeper for COVID-19 vaccination appointments and certificates, declaring "from registration to certification, no system is as massive". The Prime Minister underlined that India had administered over 86 crore vaccine doses since the inoculation drive began in January, and credited the CoWIN platform with a "big role".

♦The Indian **EXPRESS**

Tamil Nadu inoculates 24.85 lakh people in 3rd mega vaccination camp

In the third mega vaccination drive, 14,90,814 people were administered the first dose of the Covid-19 vaccine and 9.95.000 people were administered with the second dose.

By: Express Web Desk | Chennai | September 26, 2021 10:19:32 pm



People wait to be inoculated against Covid-19 at a vaccination centre in Chennai. (PTI Photo/File)

The third mega Covid-19 vaccination camp held on Sunday covered 24,85,814 people, pushing the total number of inoculations in September to 1,38,60,328 in the state.

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7Currently, the project is being implemented in the pilot phase in six Union Territories. The nationwide rollout of the project coincides with National Health Authority (NHA) celebrating the third anniversary of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), the statement said. The mission will enable access and exchange of longitudinal health records of citizens with their consent, a release from the PMO said.

The key components of the project include a health ID for every citizen that will also work as their health account, to which personal health records can be linked and viewed with the help of a mobile application, a Healthcare Professionals Registry (HPR) and Healthcare Facilities Registries (HFR) that will act as a repository of all healthcare providers across both modern and traditional systems of medicine

This will ensure ease of doing business for doctors and hospitals and healthcare service providers, the statement said.

This mission will create interoperability within the digital health ecosystem, similar to the role played by the Unified Payments Interface in revolutionising payments, the PMO said

Citizens will only be a click-away from accessing healthcare facilities, it said.

♦The Indian **EXPRESS**

Post-Covid TB: Karnataka health department strives to close gaps in screening, treatment

Written by Ralph Alex Arakal | Bengaluru | Updated: September 22, 2021 7:41:03 am

As many as 218 cases of tuberculosis have been reported among Covid-recovered individuals or their close contacts in the state so far.

With as many as 218 Covid-recovered individuals or their close contacts having been diagnosed with tuberculosis (TB) in the state, the Karnataka Health Department is leaving no stone unturned in ensuring timely treatment to such patients. It has also extended screening to avoid another related outbreak of infections.

As per data accessed by <u>The Indian Express</u> from the Department of Health and Family Welfare Services, 133 people who have recovered from <u>Covid-19</u> and 85 household contacts of such people have tested positive for TB across the state till September 20.

"Even though such cases are not life-threatening for most people, regular follow-up is imperative. With more data on the country's first such door-to-door survey coming in on a daily basis, our officials at the taluka and Primary Health Centre levels are ensuring that treatment is offered to TB patients at the earliest," said State Joint Director (TB) Dr Ramesh Chandra Reddy.

He added that the use of steroids for Covid treatment was found to have triggered the infection in nearly 60 to 70 per cent of the cases identified so far. "Both Covid and TB require early detection and treatment to improve patient outcomes and to reduce the pace of transmission among contacts and within communities," Dr Reddy explained.

Earlier in August, Health Minister K Sudhakar had launched a state-wide surveillance drive to evaluate post-Covid complications including TB. The drive was expected to cover over 80 lakh people, including individuals who recovered from Covid and their household contacts. "There are more than 28 lakh people in the state who have recovered from the infection. Since both Covid-19 and TB infect the lungs, we have launched this special drive to ensure early

detection of TB," he had said during the launch on August 16.

Over 7.66 lakh individuals who have recovered from Covid-19 and 25.14 lakh household contacts have been symptomatically screened for TB so far. Bengaluru tops the list of patients with post-Covid TB, counting 67 such persons, including 29 household contacts. It is followed by Ballari (26 including 16 contacts), Kalaburagi (19 including 12 contacts) and Mysore (14 including 3 contacts).

When asked about the slow progress of the drive, Dr Reddy clarified that the process was carried forward in a staggered manner. "Also, molecular diagnosis is done for samples collected from symptomatic individuals," he noted.

Meanwhile, in Hassan – where at least twelve Covid-recovered persons were diagnosed with TB – a senior official on-field said, "ASHA (Accredited Social Health Activist) workers visit each of these homes periodically to check if their medication is on track. They collect finished medicine strips to ensure that the treatment, which goes on for six months, is completed."

The official added that those with abnormalities suggestive of TB are also being closely watched. "Their samples are sent for NAAT testing as soon as they become symptomatic," the official added. The shortage in the supply of CB-NAAT test kits is also cited as a reason behind the "considerable delay" in diagnosis, the official admitted.

Samples from Chikkamagalur, Chitradurga and Yadgir districts are yet to be tested, with preliminary screening still underway at PHC levels at present.



Explained: Why vaccine efficacy is declining, and the implications of a third dose

The statement "The immune system is incredibly complex" is a woefully minimal description of the intricate set of interconnected reactions collectively called the immune system that protects us from disease-causing agents.

Written by **Tushar Gore**

Updated: September 27, 2021 7:04:45 am



The Israel study also showed individuals vaccinated in early 2021 are more susceptible to infection compared to those vaccinated later. (Representational)

Country	Main Vaccine	Fully vaccinated population as on Aug 31, 2021	VE versus Symptomatic Disease		VE versus Hospitalisation		Approximate study dates
			Initial	Latest	Initial	Latest	
Israel	mRNA	60.6%	95%1	40.5%	89%1	88.0%	20 Jun '21 - 17 Jul '21
USA	mRNA	53.0%	90%²	42%-80%	90%²	75%-90%	Initial: Mar '2' Latest: Jul' 21
UK Astı	raZeneca	64.4%	97%²	71-84%	92%2	94%	Two different

1: Initial VE is efficacy in clinical trial. Efficacy measure in clinical trials is against severe disease not hospitalization. 2: Initial VE as measured prior to delta variant. 3: Jan '21 - 16 May '21 for Initial data. Latest data from 17 May '21 for study versus symptomatic disease. 12 Apr '21 - 4 Jun '21 for study versus hospitalisation and data was spilt into Alpha and Delta population based on genetic sequencing.

Recent data suggest that the effectiveness of <u>Covid-19</u> vaccines has been declining. This article explores the possible reasons, and the implications of a third dose.

The table alongside shows some summary findings from Israel, the UK, and the US for vaccine effectiveness (VE) in preventing Covid infections. The data are shown for different disease severity.

The data indicate that while the protection against infection (as shown by effectiveness against symptomatic Covid) has declined (especially in Israel and USA), the protection against hospitalisation from Covid remains high. The Israel study also showed that individuals vaccinated in early 2021 are more susceptible to infection as compared to people vaccinated later.

Is this a cause for alarm?

No, because protection against hospitalisation is Ideally, a public vaccination still high. programme should protect the population from infection, transmission, and hospitalisation (and subsequent mortality). Initial vaccine efficacy data showed high efficacy versus infection and hospitalisation. (The correlation between infection and transmission is not automatic and has to be proven. Some post-clinical trial data showed this for the current vaccines.) Even if protection infection against decreases, vaccines highly protective against hospitalisation are still beneficial because hospitalisations place the maximum burden on healthcare capacity. As long as the disease can be managed at home (and there are no lingering effects such as long Covid) then is it any worse than flu-like discomfort?

The data do show that protection versus hospitalisation remains high. The recent disease trends in the UK provide additional support. Recently, cases there reached up to 85% of the prior peak in January 2021 whereas the number of deaths stayed at 10% of the prior peak.

Any concerns about the numbers being in the 70s and 80s versus the initial high 90s are countered by two observations. One is that the

initial efficacy numbers were based on few months' data from trials in a highly controlled setting. Real-world data tend to be lower. Furthermore, there are confidence intervals around these averages that make any concrete conclusion about a true decline in effectiveness difficult.

What could be the explanation for the differences in effectiveness?

The statement "The immune system is incredibly complex" is a woefully minimal description of the intricate set of interconnected reactions collectively called the immune system that protects us from disease-causing agents. The explanation below is a basic outline, and as with any simplification some inaccuracies creep in, but these do not distort the overall message.

The virus, as it 'infects' the body, is primarily found in two locations. One is the circulation system that it uses to travel around the body. The second is the cells of various tissues that the virus invades and uses to multiply. Logically, therefore, the immune system has two main 'arms' to confront the virus in these two locations. One is the antibody arm. Antibodies 'lock in' on certain surface proteins of the circulating virus, thereby preventing it from invading our cells. Further, they 'tag' the virus for destruction. Thus, antibodies can be thought as a first line of defence, but they become ineffective once the virus enters the cells. At this point, the second arm of the immune response becomes relevant.

This arm is aptly named the Killer T cell arm. These cells target our own bodies' cells that harbour the virus and within which the virus replicates. The T cells kill such cells, thereby eliminating the virus within them. Proceeding with a simplistic view that disease is caused once the virus takes hold in our bodies' cells, a strong T-cell immune function can protect from severe disease even if the antibody response is weak.

Vaccination establishes the two arms of the immune response; these two arms can mature differently with time and in response to variants. Circulating antibody levels decline with time. Even though there is "memory" in the system to produce antibodies on-demand, jumpstarting this memory at a subsequent encounter can take time. A weak and delayed antibody would result in an infection response (symptomatic Covid), but if the T-cell response is intact, the individual would be protected from severe disease.

Additionally, vaccine effectiveness can reduce because the immune system that has been primed by one variant has to counter a new variant. Even here, the differences in response of the two arms to a variant are crucial. The antibody arm reacts to the viral surface proteins (primarily the shape, or the 3D configuration), and thus changes in this surface protein can reduce the effectiveness of the antibody response. The T cells, however, react to smaller fragments of the surface and other viral proteins. Since the T cells respond to a broader set of targets — more proteins (surface and nonsurface) and more sites on the proteins (multiple fragments) as compared to antibodies that respond to a specific site (or sites) on the surface protein controlled by the local "shape" at the site, the T-cell response can be more resistant to variants.

So, the table can be explained by a decline in antibody effectiveness caused by time and variants that reduces VE versus symptomatic disease. Continuing effectiveness of the T-cell response explains the ongoing protection against hospitalisation. An important note is that at present, this explanation is conjecture based on the general principles of immune system function. Recent studies tracking a few individuals have reported that the T-cell response to Covid vaccines is durable and effective versus the variants. More data will be

required to confirm and perfect the above basic explanation.

The simplified picture also indicates that circulating antibodies are not the entirety of the available protective resources. Antibody tests are easier to implement at large scale as compared to T-cell measurements and are therefore widely available. Individuals, however, should not base lifestyle decisions on such tests. The best practice is to get vaccinated and follow the local guidance on appropriate behaviour.

Will a third dose help?

Given that a two-dose regimen is still highly protective against hospitalisation, the principal benefit of a third dose would be in improving effectiveness versus infection. Current limited data shows improvement in antibody levels and increase in effectiveness after a third dose. Consequently, some countries are considering a targeted roll-out of the third dose – in high-risk populations.

Nevertheless, there are other questions to consider. Since the vaccine is still based on the original 'Wuhan strain', the longer-term effectiveness is one concern. If immunity wanes after two doses, how long will the third dose remain effective? Will it protect against potential new variants? Another vital topic, especially in a resource-constrained situation, is the balance between reducing infection in an already vaccinated population via a third dose weighed against denying a first or second dose - one that protects from hospitalisation – to the partially or completely unvaccinated. An imperfect analogy is the choice between giving a lifejacket to an individual already wearing one versus to a person without one. The analogy also highlights the conflicting interests of the individual versus the collective.

In India, the majority of the population is not fully vaccinated and is therefore susceptible to hospitalisation. Furthermore, there is no data in

the Indian population assessing possible reduction in two-dose effectiveness and benefits of a third. With such lingering questions and continued vaccine supply constraints, the priority should remain full vaccination of the eligible population (including approval of a vaccine for children) to control hospitalisation. The basic precautions to control the spread such as masking, distancing, basic hygiene, and ensuring appropriate ventilation in crowded indoor spaces should continue.

Dr Tushar Gore's focus area is pharmaceuticals. He studied at IIT-Bombay and the University of Minnesota, and has worked at McKinsey and Novo Nordisk. He is the former MD/CEO of Resonance Laboratories, a niche pharmaceuticals manufacturer.



Third wave of Coronavirus: 'No evidence that children will be more infected'

During the conference, faculty members of institutions of national and international repute presented talks and papers on various aspects of child health, discussing extensively about Covid-19 and its impact on the mental, physical and emotional health of children.

Written by <u>Parul</u> | Chandigarh | September 27, 2021 2:30:10 am

"There is no scientific evidence that children will be more infected during the third wave," said Dr Piyush Gupta, President of Central Indian Academy of Pediatrics (CIAP), during the ongoing North Zone Pedicon 2021 held by the Association of Pediatricians of <u>Chandigarh</u> here on Sunday.



Children, during the first and second wave were 90 per cent asymptomatic and were infected by adults, who were Covid-19 positive. (Photo: Getty/Thinkstock)

During the conference, faculty members of institutions of national and international repute presented talks and papers on various aspects of child health, discussing extensively about <u>Covid-19</u> and its impact on the mental, physical and emotional health of children.

Children, during the first and second wave were 90 per cent asymptomatic and were infected by adults, who were Covid-19 positive. The death rate was low because of less severity of infection and those who had severe infection were already immunocompromised, had immunity and heart issues and were vulnerable. Covid-19 infection in children in some cases has resulted in the Multisystem Inflammatory Syndrome in children, but the proportion is small, said Dr Gupta. Highlighting the issue of anxiety among children regarding Covid-19, he said, "A child asked a paediatrician recently if he was going to die because of Covid-19. The issue of concern right now is the rising anxiety among children regarding Covid-19, and the third wave, with many facing loneliness and confusion."

On the looming threat of the third wave, he said: "Nobody can predict the third wave. All of us have failed when it comes to predictions about Covid-19 and how the virus will behave, mutate and affect the larger population. As a doctor, I can tell that paediatric facilities have been upgraded across the country on account of the

fear of the third wave, which was the need of the hour, and we are prepared and equipped to handle tough situations." The doctor, who is also a senior professor, said that the working of the virus is gradually learnt, like the Spanish Flu ended with the third wave but "we cannot say how the <u>coronavirus</u> will mutate. We may have herd immunity against one variant, but not against another."

Regarding the issue of vaccination of children, Dr Gupta agreed that vaccination is important to break the chain of infection, especially since everything is opening up. "In a couple of months, we will have vaccination for the age group 12 to 18 years. Right now, there is a long process of framing of policies for this exercise," said Dr Gupta.

Continued from page no.1

.....The vaccination camp was held at 23,436 centers in the state. The government declared the camp a huge success as the 15 lakh target set by them was surpassed.

According to the health department, as many as 28.91 lakh people were vaccinated in the first mega vaccination camp conducted on September 12 and 16.43 lakh people benefitted in the second camp conducted on September 19.

In the third mega vaccination drive, 14,90,814 people were administered the first dose of the Covid-19 vaccine and 9,95,000 people were administered with the second dose.

The health department has further informed that Covid-19 vaccination camps won't be taking place on Monday.

CM Stalin visits Chennai camps

Chief Minister MK Stalin paid a visit to couple of camps set up in Chennai. A total of 1,600 camps were organised in 200 wards across the city where 2,13,763 people were vaccinated. During the earlier drive organised by the civic body in August, as many as 1.35 lakh people were inoculated in i400 camps.

In Chennai, during the first mega vaccination camp on September 12, as many as 1,91,350 people were vaccinated and on September 19 during the second mega vaccination drive, a total of 2,02,931 people were benefitted.

Addressing the reporters at the Stanley Hospital in Chennai earlier in the day, Tamil Nadu Health Secretary J Radhakrishnan requested the citizens above 60 years to take the vaccination without hesitancy. He said that it's the duty of the children to ensure their old-aged family members are vaccinated.

"Some people are of the thinking that older people need not be vaccinated as they are not going out often. This is wrong. Due to the relaxations, people are moving out of their houses more often and the elder people can be exposed to the virus through their family members. Deaths could occur. In Chennai, we have made facilities to provide vaccination to the elderly at their doorstep and in areas nearer to them," he said urging everyone to make use of this facility.

When asked about reports of <u>Covaxin</u> shortage in the city, Radhakrishnan said that there was vaccine shortage, however now the conditions have improved and there are about 5.48 lakh Covaxin doses in stock.

Radhakrishnan also said that the government aim to administer the first dose of vaccines to at least six crore eligible candidates in the state before November.

Meanwhile, on Sunday, Tamil Nadu reported 1,694 Covid-19 cases taking the overall tally to 26,57,266. With 14 fatalities, the death toll reached 35,490. Also, a total of 1,658 people got discharged from hospitals. 1,55,245 samples were tested in the past 24 hours. Coimbatore (196), Chennai (190), Chengalpet (118) and Erode (118) contributed to the maximum number of cases.

The number of active cases in the state stand at 17.285.

♦The Indian **EXPRESS**

These health care workers would rather get fired than get vaccinated

The dispute is dividing hospitals, where most workers are vaccinated and want their colleagues to be. The nurses' union supports the mandate but unions representing support workers, including nurses' aides, orderlies, cafeteria workers and others, have opposed it. If many of those workers leave or are fired, their duties could fall to already taxed nurses.

By: <u>New York Times</u> | September 27, 2021 12:19:23 pm.



Gov. Kathy Hochul wearing a necklace that reads "Vaxed" in New York, Sept. 26, 2021. Monday is the COVID-19 vaccination deadline for New York State

health care workers. Thousands of refusers have failed to meet it. (Dave Sanders/The New York Times)

By Anne Barnard, Grace Ashford and Neil Vigdor

Deborah Conrad, a physician assistant in western New York, and Simmone Leslie, a hospital switchboard operator in Queens, have both worked long, risky hours during the pandemic. But now, both are prepared to lose their jobs rather than meet Monday's state deadline for health care workers to get vaccinated.

In defying the order, they are resisting a step that public-health experts say is critical to save lives and end the pandemic. While they each cite differing reasons for their decisions — Leslie said her employer rejected her request for a medical exemption; Conrad referenced vaccine side effects she claimed to have seen but that veer from the scientific consensus — their recalcitrance embodies a conundrum facing New York.

Experts have called the mandate a clear-cut way for health care workers to prevent new waves of the virus from spreading, and to persuade doubters to get vaccinated. And health systems say the plan is crucial to keeping patients and staff safe.

Westchester Medical Center Health Network, where 94% of the system's 12,000 workers are vaccinated, called the mandate "a critical part of upholding our mission," in a statement on Sunday.

But a vocal minority working within the health care system are themselves skeptics — and some, like Conrad, have imperiled the plan, even fighting the mandate in court.

They see their work as a badge of credibility, and the order from their bosses and the state to make a choice — get vaccinated or get fired — as a betrayal.

"We were all traumatized, vaccinated and unvaccinated," said Conrad, who works at United Memorial, a hospital in Batavia, a small city midway between Rochester and Buffalo, and felt respected by colleagues there. "It's very hard that the same people who elevated me to this level now look at me as a dangerous person."

The dispute is dividing hospitals, where most workers are vaccinated and want their colleagues to be. The nurses' union supports the mandate — some 95% of members are already vaccinated — even as some members complain its rollout was too rushed. But unions representing support workers, including nurses' aides, orderlies, cafeteria workers and others, have opposed it. If many of those workers leave or are fired, their duties could fall to already taxed nurses.

The disagreement is also testing government's power to mandate compliance with public-health measures; New York's mandate and the state's refusal to allow religious exemptions are the subject of at least two lawsuits, including one by Conrad and five other plaintiffs.

Still, staff members choosing to exit their jobs because of the mandate could also create immediate practical challenges: Many nurses and other health workers are burned out or traumatized from the pandemic's strain; others have been lured by high salaries to become "travel nurses," crisscrossing the country to fill emergency staffing gaps.

On Sunday at the Christian Cultural Center in Brooklyn, Gov. Kathy Hochul pushed back hard against the idea of religious exemptions to vaccination, urging worshippers to be "apostles" for the vaccine in order to "keep more people alive."

"God did answer our prayers," she told the congregation. "He made the smartest men and women — the scientists, the doctors, the

researchers — he made them come up with a vaccine. That is from God to us and we must say, 'Thank you, God, thank you!'"

"There are a lot of people out there who aren't listening to God and what God wants," she said as a gold necklace spelling "Vaxed" glinted from her chest.

A federal judge last week gave a reprieve to 17 health care workers, including doctors, nurses, therapists and medical residents who sued the state, extending a temporary restraining order for enforcing the mandate against them until Oct. 12. Their lawyer, Stephen Crampton, said the delay should apply to all health workers, but the state does not garee.

"There's this coercive element that is hard to ignore in all of this urgency," Crampton, a senior counsel for the Thomas More Society, a conservative law firm that handles religious freedom cases, said. He would not identify the plaintiffs but said many are Catholic and some Protestant.

Pope Francis and the leaders of many major religions have endorsed vaccine mandates.

The plaintiffs, like other health care workers opposing the mandate, contend that the state is not taking into account that some of them have already had COVID-19 and believe they have a natural immunity.

But scientists say that prior infection does not fully protect people, and available data shows that while breakthrough infections in vaccinated people are rising, vaccines still greatly reduce the risk of infection, hospitalization and death.

State vaccination figures show that, as of Wednesday, 16% of the state's roughly 450,000 hospital workers, or about 70,000 people, were not fully vaccinated. The data show that 15% of staff at skilled nursing facilities and 14% of workers at adult care facilities are also not fully

vaccinated, representing another 25,000 or so workers.

There are no clear data on how many of those have absorbed unfounded anti-vaccination ideas through word-of-mouth, social media or politically inflected cable news; how many have not managed to take time off to get vaccinated; and how many have concerns about their personal health.

But what it adds up to is angst on all sides.

"Nobody should be put in these types of positions," Leslie said Sunday.

She has gotten other vaccines, she said, but she believes the COVID-19 shot would be risky for her, even though the Crohn's and Colitis Foundation, an advocacy group, broadly recommends vaccination for people with her condition. With her medical exemption rejected, she asked for a religious one.

Conrad, a physician assistant for 18 years, said she did not understand why the protective equipment she has always used to protect patients and herself — including before the vaccine was available — would not be enough now. But she also said that she wouldn't get weekly tests unless vaccinated workers also had to: She would sooner sell her house and move.

"It's not that I don't want to do my job anymore," she said. "I'm not allowed to do my job anymore."

Greg Serafin, a registered nurse at Erie County Medical Center in Buffalo who has sued the state Health Department in state court over the mandate, said Sunday that he expects to lose his job. He said he anticipates being placed on unpaid administrative leave for 30 days and then being fired for cause.

Regardless, he said, "I'm not taking the vaccine."

New York's experience with the mandate and its enforcement could inform how other states proceed. So far, neighboring states have instituted less stringent requirements.

New Jersey and Connecticut have stopped short of conditioning employment on vaccination in most health care settings. In New Jersey, workers at state and private health care facilities have the option of getting tested at least once or twice a week if they are not vaccinated under an order that went into effect on Sept. 7.

In Connecticut, nursing homes and other longterm care facilities face fines of up to \$40,000 a day if their workers do not get at least one dose of the <u>coronavirus</u> vaccine as of Sept. 7. There are no civil penalties for hospitals, but many already require vaccines for employees.

♦ The Indian **EXPRESS**

Half a million cases and counting: The story of Covid-19 in Pune

In the first four months after the pandemic spread to India, there was a complete national lockdown and creation of containment zones across the city, especially in the densely populated Peths of the city. Was this national lockdown necessary? Absolutely.

Written by <u>Joy Merwin Monteiro</u> | Pune | Updated: September 27, 2021 9:16:57 am

Pune city, the areas under Pune Municipal Corporation, has reached the unwanted milestone of recording half a million cases of <u>COVID-19</u> and more than 9,000 deaths since the first case was reported on March 9, 2020. It has taken us 18 months to get here, with most of the cases being reported in a span of eight

months: July-October 2020 and March-June 2021. In this article, I will reflect on these 18 months and see if there have been any lessons learnt to help us be more prepared for future waves of COVID-19 or any other infectious disease that will inevitably affect us in the future.



Even a rich city such as Pune, with a large number of high-quality hospitals, was unprepared to deal with an epidemic of this scale, and the lockdown gave the city administration and public health infrastructure time to devise a suitable response.

In the first four months after the pandemic spread to India, there was a complete national lockdown and creation of containment zones across the city, especially in the densely populated Peths of the city. Was this national lockdown necessary? Absolutely. Even a rich city such as Pune, with a large number of high-quality hospitals, was unprepared to deal with an epidemic of this scale, and the lockdown gave the city administration and public health infrastructure time to devise a suitable response.

Did the national lockdown keep cases in check? Not as much. Our study on the effectiveness of lockdowns in Pune indicates that while it bought us much-needed time to learn how to respond to COVID-19, the rate of infection kept increasing throughout the national lockdown period. This was due to a number of factors which range from WHO's misunderstanding regarding spread of COVID-19 to sub-par contact tracing and containment in Pune.

In contrast, the regional lockdown for a brief period at the end of July was much more effective in reducing the rate of infection for a number of weeks subsequently. This contrast tells us that we still have much to learn about how to use lockdowns effectively, both in terms of duration as well as timing.

The acid test of our ability to contain COVID-19 came when the first serosurvey was conducted in Pune in late July 2020. The survey suggested that in some of the worst-affected localities in the Peths, we had identified only 1 in 20 to 30 cases. However, the infection fatality rate for Pune was similar to that calculated for other parts of the world, indicating that the undercounting of COVID-19 related deaths was minimal in Pune (and probably most of Maharashtra), notwithstanding horror stories that were recently doing the rounds.

The results of the serosurvey made two things clear: Firstly, COVID-19 was much harder to tackle thanks to the large number of asymptomatic carriers and secondly, the scale of testing and contact tracing in Pune was not even close to what was required to contain such an epidemic. The lack of an adequate public health response was not unique to Pune: very few countries apart from China and South Korea have been able to contain waves of COVID-19 over the past two years.

By August 2020, it was clear that the data infrastructure required to handle real-time epidemiological and clinical data during a large-scale epidemic was sorely lacking in Pune (actually, the entire country). A large group of volunteers from industry and academia has been assisting the Pune Municipal Corporation in curating and analysing COVID-19 data since mid-2020. However, such efforts can only be short-term and city and state governments across the country must make it a high priority to build local expertise and infrastructure to be able to respond to future epidemics.

The efforts of PMC in ramping up beds, ICUs and testing paid dividends: Pune's healthcare facilities were stretched, but not insufficient at any time during the first wave, and all of us were cautiously optimistic about Pune's ability to handle any future waves. By the end of 2020, things were slowly returning to normal, helped, no doubt, by inaccurate assertions about India reaching herd immunity and misplaced confidence in our innate immunity.

And then arrived the <u>Delta variant</u>. Delta completely changed the appearance of the pandemic in Pune: The highest cases were now from the wards at the periphery of PMC instead of the Peths, housing societies and apartment complexes were affected as badly as slum areas, and the cases began to rise at rates that made our heads spin. Analyses currently being done by scientists at IISER Pune, NCL, BJGMC and Genepath show how, within a month, the Delta and Kappa variants went from being negligible actors to major contributors to new infections in Pune.

The response of Pune's public health infrastructure, both public and private, was much better during the second wave as compared to cities like Delhi. Private RTPCR testing labs led the way by testing as many, if not more, people than the major government testing labs. The major government labs at NIV and BJGMC were also up to the task, allowing testing to ramp up from 4,000 tests per day to nearly 20,000 tests per day within a month (we were barely able to reach 7,000 tests per day during the first wave). The maximum test positivity during the second wave was actually lower than the first wave despite the huge difference in cases. This meant that more infected individuals were identified and guarantined, which had a direct impact on the spread of COVID-19. Private philanthropy also helped in dealing with the oxygen crisis. All in all, the second wave crisis demonstrated that different parts of society working together can mount an effective response.

COVID-19 has underscored the fragility of our public health infrastructure and showed in no uncertain terms that this fragility can result in the suffering of millions of people, even those who did not actually contract the disease. While we rightly celebrate the heroic efforts of individuals and voluntary organisations around the country, we must also remember that such heroism (and the toll it takes on ordinary citizens) would not be necessary if we as a country can put into place a robust public health system that is alert, responsive, data-driven and scalable. Another indisputable fact is that such a system has to be decentralised, since the same "ICMR guidelines" are unlikely to be useful in driving the public health response in both cities like Pune and villaaes. Development of local health infrastructure, staffed by locals who are personally invested in the health of the community, is the correct way forward in the socio-cultural mosaic that is India.

The author is associated with the Department of Earth and Climate Science, Indian Institute of Science Education and Research, Pune. The views expressed are personal.

♦ The Indian EXPRESS

Cybercrime on the rise during pandemic, but no trials completed since last year

Written by <u>Jayprakash \$ Naidu</u> | Mumbai | September 27, 2021 1:30:58 am

Cybercrimes steadily increased in the state from 4,822 cases in 2019 to 5,458 cases in 2020 but the detection rate remained at 18% in both years,

which is a significant drop compared to 2018 when the detection percentage was 32.8%.



In these 382 cases, the accused were convicted in 99 cases (26%) and acquitted in 283 cases (74%). (Representational)

CYBERCRIME IS the only crime, apart from motor-vehicle thefts, which saw a rise during the pandemic, but the detection and conviction rate continue to be a major issue and not even a single trial of such cases has been completed in Maharashtra since 2020 till August this year.

Cybercrimes steadily increased in the state from 4,822 cases in 2019 to 5,458 cases in 2020 but the detection rate remained at 18% in both years, which is a significant drop compared to 2018 when the detection percentage was 32.8%.

Another major issue is the conviction rate. In the past seven years, 2015 to 2020, a total of 21,970 cases were registered of which only 5,513 were detected (i.e. 25%). Out of these 5,513 cases detected till 2020, trials are complete in only 382 (i.e. 7% of the cases) while the remaining are pending before courts or are under investigation.

In these 382 cases, the accused were convicted in 99 cases (26%) and acquitted in 283 cases (74%). Cyber experts pointed to loopholes in the law, lack of knowledge, inaction and awareness as major issues for the increasing cybercrimes in the state.

"The reported cases are just the tip of the iceberg and many cases go unreported. The low conviction rate of cybercrimes is because of a lack of in-depth knowledge in police officers, prosecutors and magistrates. The prosecutors and magistrates need to be apprised of the intricacies of cybercrimes and the technology used to commit the crime. As per the IT Act, 2000, only an inspector can investigate cybercrimes. Computer science graduates need to be recruited in the force and regularly trained to investigate cyber-crimes. The detection rate is poor because cybercriminals keep innovating their modus operandi and techniques and the police due to the unavailability of technology, training and manpower have been unable to keep up. Last but not the least, there has to be a lot of awareness on a regular basis by the police department against cyber-crimes," said D Sivanadhan, former Police Commissioner of Mumbai and Director General of Police (DGP), Maharashtra.

Advocate Prashant Mali, a cybercrime lawyer in Bombay High Court, suggested the use of Lok Adalat for speedy disposal of cases and pointed out the urgent implementation of an initiative by the Ministry of Home Affairs where a cyber fraud victim can call and freeze the bank account where his/her money is transferred by a cybercriminal.

♦The Indian **EXPRESS**

Why are people leaving big cities for smaller towns

Relocation isn't without its paradoxes. In the pandemic, as people shift homes to hills and beaches, it brings with it a slower pace, a connect with nature, sometimes lesser pay cheques but ultimately a fuller life.

Written by <u>Shiny Varghese</u> | Updated: September 26, 2021 4:58:39 pm



Vasudha and Sanjay Sondhi at their estate (Courtesy: Parvada Bungalows@VS Fruitree Estate)

"Mama, chhi, chhi," squealed two-year-old Rudra. He was in a park with his mother Neha Dara, when he walked into a puddle on a rainy day. Dara, a travel writer who has spent most of her working life trekking in the Himalayas and exploring local markets in small towns, was horrified. Not because of the slush on his sandals, but his reaction. There had to be a better way he could connect to the natural world...



Covid vaccine certificates must in SMC office, hotels, city buses

According to the health department, around 95 per cent of targeted citizens in Surat had been vaccinated with the first dose and 45 per cent with the second dose.

By: Express News Service | Surat | September 25, 2021 8:24:34 pm



On Saturday, the Surat Municipal health officials held a meeting with the South Gujarat Hotel and Restaurant Association and sought their support for awareness in vaccination drives. (File)

The Surat Municipal Corporation on Saturday made <u>Covid-19</u> vaccination certificates compulsory for people going to the civic body offices, using BRTS or city bus services, or going to multiplexes, hotels and restaurants in the Surat city.

According to the health department, around 95 per cent of targeted citizens in Surat had been vaccinated with the first dose and 45 per cent with the second dose.

On Saturday, the Surat Municipal health officials held a meeting with the South Gujarat Hotel and Restaurant Association and sought their support for awareness in vaccination drives. Health officials instructed association members to check the Covid-19 vaccination certificates of the customers. The authorities also shared a mobile application having QR code facility developed by the SMC to association members, using which they can find out if the vaccination certificates are genuine or not.

Such practices will also be implemented in the SMC offices where works related to public services are done.

Those entering the SMC offices will have to show vaccination certificates at the main gates. Apart from this, passengers using BRTS or city bus services will also have to show the certificates.

Apart from this, multiplexes in Surat city have also been instructed by SMC authorities to check the vaccination certificates.

Surat Municipal Commissioner B N Pani said, "Only 5 per cent of our targeted population in Surat are left for the vaccination of the first dose and we are sure that we will get it done sooner. The purpose of involving multiplexes, hotels and restaurants in the drive is that those who are left behind will get vaccinated sooner. If somebody is not vaccinated, his details will be collected and our teams will get him vaccinated sooner."

South Gujarat Hotel and Restaurant Association president Arun Shetty said, "We have been told to check the vaccination certificate of customers and we will do it accordingly. Apart from this, the association members will also put banners and stickers on the hotel encouraging customers to get vaccinated."

A hotel owner on condition of anonymity said, "The hotel and restaurant industry has been badly affected due to the pandemic. We survived somehow, but there are many hotels and restaurants in Surat which have been shut down. If we start checking the vaccine, certificates, it may lead to conflict with customers and we may lose our business."

♦The Indian **EXPRESS**

CoWin certificates to mention date of birth of fully vaccinated travelling abroad

Currently, CoWin certificates mention the beneficiary's age based on the year of birth besides other details.

By: <u>PTI</u> | New Delhi | September 25, 2021 3:48:00 pm



The new feature is being introduced in compliance with the WHO norms and likely to be available from next week. (Express Photo by Partha Paul)

People who are fully inoculated and want to travel abroad will have a CoWin certificate with their full date of birth, official sources said on Saturday amid ongoing discussions between India and the UK over Covid vaccination certificates.

Currently, CoWin certificates mention the beneficiary's age based on the year of birth besides other details.

The new feature is being introduced in compliance with the WHO norms and likely to be available from next week.

"It has been decided that a new feature will be added to the CoWin under which those who are fully vaccinated and want to travel abroad will have full date of birth on their vaccination certificates." an official source said.

The UK on Wednesday had amended its new travel guidelines to include the Indian-made version of the AstraZeneca vaccine in its updated list of approved COVID-19 vaccines.

Following India's strong criticism over the UK's refusal to recognise Covishield, London has included the vaccine in its updated international travel advisory.

However, Indian travellers vaccinated with two doses of Covishield would still have to undergo 10 days of quarantine in the UK notwithstanding the amendment, UK officials had clarified on Wednesday saying the inclusion of the vaccine would not make much of a difference.

"We're clear Covishield is not a problem. The UK is open to travel and we're already seeing a lot of people going from India to the UK, be it tourists, business people or students," British High Commissioner Alex Ellis had said in a statement on Wednesday.

"We have been having detailed technical discussions regarding certification, with the builders of the CoWin app and the NHS app, about both apps. They're happening at a rapid pace, to ensure that both countries mutually recognise the vaccine certificates issued by each other," he had said.



Three-city project aims at understanding how long immunity lasts post-vaccination

VISION is a three-city consortium project and the sites include Pune, Bengaluru and Vellore, and is sponsored by Hindustan Unilever Limited CSR funds.

Written by <u>Anuradha Mascarenhas</u> | Pune | Updated: September 25, 2021 7:33:52 pm

Top public and private research institutes from Pune will partner with their counterparts in Bengaluru and Vellore for a study that aims at understanding how long immunity lasts post-Covid vaccination.



VISION (Vaccine Immunology Studies – Indian Outbreak-response Network) is a platform activity to generate immunogenicity data addressing the needs of the Covid-19 vaccination programme in the country. (Representational)

VISION (Vaccine Immunology Studies – Indian Outbreak-response Network) is a platform activity to generate immunogenicity data addressing the needs of the Covid-19 vaccination programme in the country. A 3-city consortium project, VISION is sponsored by Hindustan Unilever Limited's CSR (Corporate Social Responsibility) funds. The duration of the project is about 1.5-2 years with more than 800 study participants.

In Pune, institutions such as IISER, NCCS and CSIR-NCL with clinical partners KEM Hospital and Research Centre and Symbiosis University Hospital and Research Centre will participate in the study. Bengaluru-based NCBS, INStem with clinical partners St John's Research Institute and Baptist Hospital are the other partners along with CMC, Vellore.

The observational study has been planned with the primary objective of understanding the differences in magnitude and longevity of humoral and cellular immune responses generated following vaccination with two doses of either Covaxin or Covishield, in those with or without evidence of prior SARS-CoV-2 infection based on seropositivity, Dr Anu Raghunathan, senior principal scientist at CSIR-NCL, told The Indian Express.

"There are many queries this study aims to address. For example, diversity in response to vaccination due to nutritional status or other reasons, antibody response, how long does the immunity last and what are the variants against which we are protected by vaccines and host factors driving vaccine breakthroughs," Prof L S Shashidhara, co-founder of Pune Knowledge Cluster (PKC), which has been set up by the office of the Principal Scientific Adviser to the Government of India, said.

According to Dr Raghunathan, study experts will also analyse whether any memory B cells are left if there are no circulating antibodies. Would these memory B cells be broad range or vaccine-strain specific and are there varied T-cell responses generated by the different vaccine platforms are among some of the questions that the study aims at understanding.

In-depth immunogenicity data and the establishment of platforms to generate such data at speed will improve the ability to make public health decisions such as the number of vaccine doses required for those with or without prior SARS-CoV-2 infection, need and timing for booster shots, best combination (homologous versus heterologous) of vaccines for boosting, need for incorporating vaccine modifications for circulating strains and role of comorbidities among others, experts involved with the study said.

♦The Indian **EXPRESS**

Explained: Who can get COVID-19 booster shots in the US?

Out of the three vaccines that are being used against COVID-19 in the US, the ACIP booster

shot recommendation is only meant for Pfizer's vaccine.

By: Explained Desk | New Delhi | September 25, 2021 12:10:15 pm



In this file photo, nurse administers the Pfizer COVID-19 vaccine to a patient in California (AP)

On Friday, the US Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunisation Practices (ACIP) recommended a booster shot of the Pfizer-BioNTech vaccine in certain populations and also recommended a booster dose for those in high risk settings.

Out of the three vaccines that are being used against <u>COVID-19</u> in the US, the ACIP booster shot recommendation is only meant for Pfizer's vaccine. Significantly, CDC's director Dr. Rochelle Walensky in what is being referred to as a rare move, overruled the advice of her expert committee and backed the decision to make booster shots available for more people in the US.

Which set of people could get booster shots already?

Earlier in August, the US Food and Drug Administration (FDA) authorised vaccine booster shots for transplant recipients and people with weakened immune systems to better protect them from variants of Covid-19. The authorisation came even as the WHO placed a moratorium on Covid-19 boosters in August due to the disparity in vaccination levels in low and high-income countries.

In September too, WHO Director-General Tedros Adhanom Ghebreyesus emphasised that countries should refrain from administering booster shot campaigns at least till the end of the year. As per the latest figures from Our World in Data, only 2.2 percent of the people in low-income countries have received at least one dose of a COVID-19 vaccine.

The FDA said those who had received either the Moderna or Pfizer-BioNTech vaccines could take a third dose; there is no information on beneficiaries of the Johnson and Johnson single-dose vaccine.

The FDA said that people with a weak immune system, including transplant patients and those with certain cancers or other disorders can get a third vaccine shot at least 28 days after getting their second dose. This recommendation is meant for the recipients of both the Pfizer and Moderna vaccines.

So, who can get a booster shot of the Pfizer-BioNTech vaccine in the US now?

The current recommendations are broader than what the FDA said in August and is only meant for the Pfizer-BioNTech vaccine. The CDC in a press release has recommended the following when it comes to getting a third shot of the COVID-19 vaccine:

People 65 years and older and residents in longterm care settings should receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series,

People aged 50–64 years with underlying medical conditions should receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series,

People aged 18–49 years with underlying medical conditions may receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6

months after their Pfizer-BioNTech primary series, based on their individual benefits and risks, and

People aged 18-64 years who are at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting may receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series, based on their individual benefits and risks

♦The Indian **EXPRESS**

Covid-19 is a public health problem caused by a virus. Let us address it with science, not politics

The Oxford/AstraZeneca vaccine is made under two trade names — Vaxzevria and Covishield. It is the same product made at different locations. Why then are people vaccinated in India with two doses of Covishield not considered at par with those who received the same vaccine elsewhere?

Written by <u>Shahid Jameel</u> | September 24, 2021 7:50:06 pm



A beneficiary getting vaccinated. (Express Photo by Amit Chakravarty)

I travelled to the United Kingdom recently to take up a position at Oxford. While in India, I received

two doses of Covishield, the Oxford/AstraZeneca Covid-19 vaccine made under licence by the Serum Institute of India. Still, the UK government rules for an 'amber' country required me to isolate at home for 10 days on arrival.

During this period, I had to take two RT-PCR tests on the second and eighth days after arrival. These tests had to be booked online before I left India, and cost me about GBP 200 (Rs 20,000). An additional test on the fifth day after arrival would have cost more, but would have allowed an early end to my isolation.

As a keen follower of the ongoing pandemic, I was aware of how well Public Health England has manged it in the UK. I have also learned much from their detailed and periodic science- and evidence-based reports. All travel information and requirements on the UK government sites were absolutely clear. But the scenes I witnessed at Heathrow airport were scandalous to say the least.

Though the mandatory signs for a 2-metre physical separation were there, about 800 people crowded the Immigration Hall. It took me five hours to clear immigration. Everyone travelling to the UK these days fills out a Passenger Locator Form up to 48 hours in advance of travel, so it's a no-brainer to align capacity to the load. Just five immigration windows were open leading to delays. Someone clearly overlooked this and put everyone in that room at risk.

The Oxford/AstraZeneca Covid-19 vaccine is made under two trade names — Vaxzevria and Covishield. It is the same product made at different locations. Covishield is manufactured by the Serum Institute of India and is the main vaccine in India's vaccination drive. Of about 837 million doses delivered in India at the time of writing this, Covishield has contributed to about 737 million (or 88 per cent) doses.

About 5 million doses of Covishield have also been used to vaccinate people in the UK and millions of more doses have been donated or sold to other countries and to COVAX, an international partnership that facilitates Covid-19 vaccine access to low- and middle-income countries.

Why then are people vaccinated in India with two doses of Covishield not considered at par with those who received the same vaccine elsewhere?

How is Vaxzevria superior to Covishield?

Vaccine effectiveness studies carried out by Public Health England and independent researchers in the UK and India show similar levels of protection from symptomatic infection, severe disease and mortality for the two products.

Clearly, there must be another reason.

Indian media reports quote the UK government as saying that "it doesn't think India's vaccine certification meets their minimum criteria needed for approval".

While it may be possible that a very small fraction of the 800-plus million doses given in India may be based on erroneous certificates, who would believe that a country that is a major global supplier of childhood vaccines, has a robust universal immunization programme and has used massive vaccination drives over years to eliminate polio, would be running such a racket?

Policy is not made for exceptional situations, and that is why this policy is wrong. To quote a friend who retired from the highest rank in the Indian Administrative Service, "to imply that something is wrong with the certificate per se without pointing out the defect is unbelievably stupid".

There were other ways to address this. Just as it requires a health check-up for students and workers seeking a visa, the UK government could

have partnered with designated vaccination sites in Indian cities. The certification matter appears to be an afterthought.

On one of the primetime TV debates I was on this week, a panelist suggested that in retaliation, India should ask travellers from the UK to isolate for 21 days. You cannot tackle ridiculous situations by being even more ridiculous. You sort them out based on evidence and through quiet diplomacy.

Enough energy has already been given to this matter. Unfortunately, most of it is heat with very little light.

Covid-19 is a public health problem caused by a virus. Let us address it with science not politics.

♦The Indian **EXPRESS**

Cadila Healthcare enters pact with Shilpa Medicare for production of ZyCoV-D vaccine

ZyCoV-D is the first DNA plasmid vaccine in the world for human use, developed indigenously by the company against the Covid-19 virus, Cadila Healthcare said.

By: PTI | New Delhi |

Drug firm Cadila Healthcare on Friday said it has entered into an agreement with Shilpa Medicare for the production of its <u>Covid-19</u> vaccine, ZyCoV-D.

The company has, "entered into a definitive agreement with Shilpa Medicare, via its wholly owned subsidiary, Shilpa Biologicals for

production-supply of the ZyCoV-D vaccine drug substance from its integrated biologics R&D cum manufacturing center at Dharwad, Karnataka," Cadila Healthcare said in a regulatory filing.



Updated: September 24, 2021 7:49:38 pm The targeted production of the ZyCoV-D vaccine from this facility will be mutually agreed upon by both parties, Cadila Healthcare said.

The targeted production of the ZyCoV-D vaccine from this facility will be mutually agreed upon by both parties, it added.

"The company will transfer the ZyCoV-D technology to Shilpa Biologicals Pvt Ltd (SBPL). Under the agreement, SBPL will be responsible for manufacture of the drug substance of the vaccine, while the company is responsible for filling / packaging / distribution / marketing of the vaccine in its marketing territories," Cadila Healthcare said.

ZyCoV-D is the first DNA plasmid vaccine in the world for human use, developed indigenously by the company against the Covid-19 virus, it added.

The vaccine was granted the Emergency Use Authorisation (EUA) by the Indian drug regulator on August 20.

Shares of Cadila Healthcare were trading at Rs 564.30 per scrip on BSE, down 0.46 per cent from its previous close.

♦The Indian **EXPRESS**

US: CDC advisers back Covid-19 booster shots for those 65 and older, not for high-risk workers

Still, the vote by the group, following the FDA's authorization clears the way for a booster rollout to begin as soon as this week for millions of people who had their second dose of the Pfizer shot at least six months ago.

By: <u>Reuters</u> | September 24, 2021 12:14:51 pm



Hollie Maloney, a pharmacy technician, loads a syringe with the Pfizer-BioNTech COVID-19 Vaccine, Tuesday, March 2, 2021, at the Portland Expo in Portland, Maine. (AP Photo/Robert F. Bukaty)

A U.S. Centers for Disease Control and Prevention (CDC) advisory panel on Thursday recommended a booster shot of the Pfizer (PFE.N) and BioNTech Covid-19 vaccine for Americans aged 65 and older and some adults with underlying medical conditions that put them at risk of severe disease.

But the panel declined to recommend boosters for younger adults, including healthcare workers, who live or work in institutions with high risk of contracting Covid-19, which could narrow the scope of the U.S. Food and Drug Administration's emergency use authorization issued on Wednesday.

The guidelines voted on by the CDC's Advisory Committee on Immunization Practices still need to be signed off on by agency Director Rochelle Walensky. The recommendations are not binding, and states and other jurisdictions could disregard them and use other approaches to administering the booster shots.

Still, the vote by the group, following the FDA's authorization clears the way for a booster rollout to begin as soon as this week for millions of people who had their second dose of the Pfizer shot at least six months ago.

Beyond older Americans, the committee also recommended the shots for all adults over 50 with underlying conditions, as well as some 18- to 49-year-olds with those conditions, based on their individual risk profile. Those conditions include <u>cancer</u>, diabetes, certain heart conditions and chronic kidney disease and lung disorders.

The recommendations only cover people who received their second Pfizer/BioNTech shot at least six months earlier. The CDC said that group is currently about 26 million people, including 13 million age 65 or older.

The panel gave the thumbs down for now to additional doses for groups including healthcare workers, teachers and residents of homeless shelters and prisons, in part because of the difficulty of implementing such a proposal.

Panel member Lynn Bahta, who works with the Minnesota Department of Health, voted against that measure, which would have broadly increased availability. She said the data does not support boosters in that group yet. "The science shows that we have a really effective vaccine," she said.

The committee said it could revisit the guidance later.

Last month, U.S. President Joe Biden and eight top health officials said they hoped to start a broad booster shot program this week, saying that emerging data showed immunity wanes over time.

Vaccine expert Dr. Paul Offit said he believed the CDC advisers were worried that recommending boosters based on employment would allow overly broad use, especially in younger people for whom the health benefits of a booster shot are still unclear.

"That was a hole that you could drive a truck through, that essentially what we were doing was basically what the (Biden) administration initially asked – to just have a vaccine for the general population, because obviously the pharmacists aren't going to figure out whether you're working in a grocery store or hospital," he said.

More than 180 million people in the United States are fully vaccinated, or about 64% of the eligible population.

Pfizer – and some top U.S. health officials like Dr. Anthony Fauci – have argued that the extra round of shots are needed to address waning immunity. Fauci and others have alsosaid they could help contain surging hospitalizations and deaths caused by the highly transmissible <u>Delta variant</u> of the <u>coronavirus</u> by cutting breakthrough infections of fully vaccinated people.

The recent wave of U.S. Covid-19 hospitalizations, primarily among the unvaccinated, may have peaked, although the nation was still recording some 1,500 Covid-19 deaths a day over the last week, according to CDC data.

Some countries, including Israel and the United Kingdom, have already begun Covid-19 booster campaigns. The United States authorized extra shots for people with compromised immune

systems last month and around 2.3 million people have already received a third shot, according to the CDC.

♦The Indian **EXPRESS**

US sets the stage for COVID booster shots for millions

All three of the COVID-19 vaccines used in the US still are highly protective against severe illness, hospitalisation and death, even amid the spread of the extra-contagious delta variant.

By: <u>AP</u> | Washington | September 24, 2021 11:09:33 am



About 26 million Americans got their last Pfizer dose at least six months ago, about half of whom are 65 or older. (File)

The US vaccination drive against <u>COVID-19</u> stood on the verge of a major new phase as government advisers recommended booster doses of Pfizer's vaccine for millions of older or otherwise vulnerable Americans despite doubts the extra shots will do much to slow the pandemic.

Advisers to the Centers for Disease Control and Prevention Thursday said boosters should be offered to people 65 and older, nursing home residents and those ages 50 to 64 who have risky underlying health problems.

The extra dose would be given once they are at least six months past their last Pfizer shot.

Deciding who else might get one was far tougher. While there is little evidence that younger people are in danger of waning immunity, the panel offered the option of a booster for those 18 to 49 who have chronic health problems and want one.

But the advisers refused to go further and open boosters to otherwise healthy front-line health care workers who aren't at risk of severe illness but want to avoid even a mild infection.

"We might as well just say give it to everyone 18 and older. We have a very effective vaccine and it's like saying, It's not working." It is working," said Dr. Pablo Sanchez of Ohio State University, who helped block the broadest booster option.

Still, getting the unvaccinated their first shots remains the top priority, and the panel wrestled with whether the booster debate was distracting from that goal.

All three of the COVID-19 vaccines used in the US still are highly protective against severe illness, hospitalisation and death, even amid the spread of the extra-contagious <u>delta variant</u>. But only about 182 million Americans are fully vaccinated, just 55 per cent of the population.

"We can give boosters to people, but that's not really the answer to this pandemic," said Dr. Helen Keipp Talbot of Vanderbilt University. "Hospitals are full because people are not vaccinated. We are declining care to people who deserve care because we are full of unvaccinated COVID-positive patients."

Thursday's decision represented a dramatic scaling back of the Biden administration plan, announced last month, to dispense boosters to nearly everyone to shore up their protection. Late Wednesday, the Food and Drug Administration, like the CDC, signed off on Pfizer

boosters for a much more targeted slice of the American population than the White House envisioned.

It falls to the CDC to set final US policy on who qualifies for the extra shot. The CDC usually follows its advisers' recommendations. A final decision from the agency was expected later Thursday.

The booster plan marks an important shift in the nation's vaccination drive. Britain and Israel are already giving a third round of shots over strong objections from the World Health Organization that poor countries don't have enough for their initial doses.

CDC Director Dr. Rochelle Walensky opened Thursday's meeting by stressing that vaccinating the unvaccinated remains the top goal "here in America and around the world."

Walensky acknowledged that the data on who really needs a booster right away are not perfect. "Yet collectively they form a picture for us," she said, "and they are what we have in this moment to make a decision about the next stage in this pandemic."

The CDC panel stressed its recommendations will be changed if new evidence shows more people need a booster.

The CDC advisers expressed concern over the millions more Americans who received Moderna or Johnson & Johnson shots early in the vaccine rollout. The government still hasn't considered boosters for those brands and has no data on whether it's safe or effective to mix-and-match and give those people a Pfizer shot.

"I just don't understand how later this afternoon we can say to people 65 and older you're at risk for severe illness and death but only half of you can protect yourselves right now," said Dr. Sarah Long of Drexel University.

About 26 million Americans got their last Pfizer dose at least six months ago, about half of whom are 65 or older. It's not clear how many more would meet the CDC panel's initial booster qualifications.

CDC data shows the vaccines still offer strong protection for all ages, but there is a slight drop among the oldest adults. And immunity against milder infection appears to be waning months after people's initial immunization.

For most people, if you're not in a group recommended for a booster, "it's really because we think you're well-protected," said Dr. Matthew Daley of Kaiser Permanente Colorado. "This isn't about who deserves a booster, but who needs a booster."

Among people who stand to benefit from a booster, there are few risks, the CDC concluded. Serious side effects from the first two Pfizer doses are exceedingly rare, including heart inflammation that sometimes occurs in younger men. Data from Israel, which has given nearly 3 million people "mostly 60 and older" a third Pfizer dose, has uncovered no red flags.

The panelists also wrestled with how to even tell when a booster is needed. While an extra dose revs up numbers of virus-fighting antibodies, those naturally wane over time and no one knows how long the antibody boost from a third Pfizer dose will last — or how much protection it really adds, since the immune system also forms additional defences after vaccination.

♦The Indian **EXPRESS**

US FDA authorizes third dose of Pfizer Covid-19 vaccine for older Americans The booster dose is to be administered at least six months after completion of the second dose, and the authorization would include people most susceptible to severe disease and those in jobs that left them at risk, the FDA said.

By: <u>Reuters</u> | September 23, 2021 11:04:32 am



The advisory panel said there was not enough evidence to support booster shots for all those aged 16 and older who had received a second dose at least six months earlier. (Representational)

The US Food and Drug Administration on Wednesday authorized a booster dose of the Pfizer Inc and BioNTech Covid-19 vaccine for those aged 65 and older and some high-risk Americans, paving the way for a quick rollout of the shots.

The booster dose is to be administered at least six months after completion of the second dose, and the authorization would include people most susceptible to severe disease and those in jobs that left them at risk, the FDA said.

A US Centers for Disease Control and Prevention (CDC) advisory panel could vote on Thursday on the use of a third shot of the vaccine, an agency official said at a public meeting of the panel on Wednesday.

President Joe Biden announced in August the government's intention to roll out booster shots for people aged 16 and older this week, pending approval by the FDA and CDC.

Advisers to the FDA voted on Friday to recommend Covid-19 vaccine booster shots for Americans 65 and older and those at high risk of severe illness, after overwhelmingly rejecting a call for broader approval.

The advisory panel said there was not enough evidence to support booster shots for all those aged 16 and older who had received a second dose at least six months earlier and also sought more safety data.

The agency could revisit the issue of additional shots for a broader authorization in the future.

Top FDA members have been split on the need for boosters for the general population, with interim head Janet Woodcock backing them and some of the agency's senior scientists arguing current evidence does not support them.

Johnson & Johnson said on Tuesday a second shot of its Covid-19 vaccine increased its effectiveness in the United States against moderate to severe forms of the disease.

Data from Moderna Inc's Covid-19 vaccine on booster doses is just weeks away, President Joe Biden's chief medical adviser, Dr. Anthony Fauci, said on Sunday.

Some countries, including Israel and Britain, have already rolled out Covid-19 booster campaigns.

The United States authorized extra shots for people with compromised immune systems last month and over 2 million people had already received a third shot, CDC data showed.

♦The Indian **EXPRESS**

Explained: Does my mask protect me if nobody else is wearing one?

If I am the only person wearing a mask in a store or other indoor location, am I really protected from infection?

By: New York Times | September 23, 2021 9:41:32 am



Students wear face masks during a lecture in Lausanne, Switzerland, Tuesday, September 21, 2021. (Laurent Gillieron/Keystone via AP, File)

Written by Tara Parker-Pope

If I am the only person wearing a mask in a store or other indoor location, am I really protected from infection?

It is true that masks work best when everyone in the room is wearing one. That is because when an infected person wears a mask, a large percentage of their exhaled infectious particles are trapped, stopping viral spread at the source. And when fewer viral particles are floating around the room, the masks others are wearing would likely block those that have escaped.

But there is also plenty of evidence showing that masks protect the wearer even when others around them are mask-free. The amount of protection depends on the quality of the mask and how well it fits. During a hotel outbreak in Switzerland, for instance, several employees and a guest who tested positive for the <u>coronavirus</u> were wearing only face shields (with no masks); those who wore masks were not infected. And a Tennessee study found that communities with mask mandates had lower hospitalization rates than areas where masks were not required.

"Health care workers, scientists who work with nasty pathogens and workers who may be exposed to hazardous airborne particles on the job rely on specialized masks like N95s for protection, so we know that properly fitted, highefficiency masks work," said Linsey Marr, a Virginia Tech engineering professor and one of the world's leading experts on viral transmission.

A number of laboratory studies have also documented that a mask protects the person who is wearing it, though the level of that protection can vary depending on the type of mask, the material it is made from, the experimental setup and how particle exposure was measured.

But the bottom line of all the studies is that a mask reduces the potential exposure of the person wearing it. Here are some of the findings.

- One study from the Centers for Disease Control and Prevention found that a standard surgical mask only protected the wearer from about 7.5% of the particles generated by a simulated cough. But knotting the loops and tucking in the sides of the medical mask reduced exposure by nearly 65%. Covering the surgical mask with a cloth mask, a technique known as double masking, reduced exposure to the simulated cough particles by 83%.
- A Virginia Tech study looked at how well homemade masks, surgical masks and face shields protected the wearer, based on particle size. The research showed that most masks could block very large particles, like those from a sneeze. But when the researchers looked at

smaller aerosol particles that are hardest to block, protection ranged from near zero with a face shield to about 30% protection with a surgical mask. (The percentages in the study cannot be directly compared to the CDC knot-and-tuck study because the testing methods were different.) Based on the findings, Marr and her colleagues concluded that a two-layer cloth mask made of flexible, tightly woven fabric, combined with a filter material (like a coffee filter or surgical mask), could offer good protection, reducing 70% of the most penetrating particles and trapping 90% or more of the larger particles. They also found that head straps or ties created a better fit than ear loops.

- A study from Tokyo tested how well different types of masks protected the wearer from actual coronavirus particles. The study showed that even a simple cotton mask offered some protection (17% to 27%) to the wearer. Medical masks performed better, including a surgical mask (47% to 50% protection), a loose fitting N95 (57% to 86% protection) and a tightly sealed N95 (79% to 90% protection).
- While many lab studies test masks using mannequin heads, a 2008 study used real people to measure how well masks could protect the wearer against a respiratory virus. The study subjects wore different kinds of masks fitted with special receptors that could measure particle concentration on both sides of the masks. In this study, cloth masks reduced exposure by 60%, surgical masks by 76% and N95 masks by 99%

While the lab studies all show a mask can protect the wearer, how well the masks perform in the real world depends on a number of variables, including how consistently people use them, whether a person is in high-risk situations and the rate of infection in the community. A Danish study of 6,000 participants, half of whom were told to wear masks, did not show a benefit to mask wearing, but the study has been widely criticized for its poor design.

The laboratory studies showed that a high-quality medical mask, such as an N95, KN95 or KF94, works best. While vaccination is the best protection against COVID-19, even vaccinated people are advised to avoid crowds or large groups indoors when the vaccination status of others is not known. Given that the delta variant is far more contagious than other variants, Marr also recommended wearing the highest-quality mask possible when you cannot keep your distance or be outdoors — or when nobody around you is masking up.

"If I'm in a situation where I have to rely solely on my mask for protection — unvaccinated people may be present, it's crowded, I don't know anything about the ventilation — I would wear the best mask in my wardrobe, which is an N95," Marr said. "Because delta has proved to be so much more easily transmitted and because vaccinated people can transmit, we need to wear the best masks possible in high-risk situations."

This article originally appeared in The New York Times.

♦The Indian **EXPRESS**

Is Covid-19 associated with acute weight loss and malnutrition? Here's what you need to know

As per the National Center for Biotechnology Information study, weight loss and risk of malnutrition were "highly prevalent in Covid-19 patients evaluated after clinical remission with nearly 30 per cent of patients losing more than five per cent of baseline body weight, and more than half were at risk of malnutrition"

By: <u>Lifestyle Desk</u> | New Delhi | September 22, 2021 4:40:04 pm



Is weight loss post-Covid infections a phenomenon? (Source: Getty Images/Thinkstock)

It is now a well-established fact that <u>Covid-19</u> affects various organs and their functioning. Medical experts also said that the infection is, in many cases, leading to weight loss in patients in the recovery phase, especially those severely affected.

While there has not been any clear analysis, an October 2020 posthoc analysis of a prospective cohort study stated that "coronavirus disease 2019 may associate with clinical manifestations, ranging from alterations in smell and taste to severe respiratory distress requiring intensive care, that might associate with weight loss and malnutrition". To understand more about this unintentional weight loss, we reached out to experts.

As per the National Center for Biotechnology Information (NCBI) study, <u>weight loss</u> and risk of malnutrition were "highly prevalent in Covid-19 patients evaluated after clinical remission with nearly 30 per cent of patients losing more than five per cent of baseline body weight, and more than half were at risk of malnutrition".

Dr Abhishek Subhash, consultant, internal medicine at Bhatia Hospital mentioned that weight loss is being seen in many Covid patients due to loss of smell and taste. "But it can be more drastic with patients who have had mucormycosis infections. This is because loss of smell and taste due to Covid leads to a natural reduction in appetite. With secondary infection of mucormycosis, these patients have had to undergo surgery and were put on high range of anti-fungal medicines which causes nausea, again affecting their appetite, and in many cases leading to weight loss," he mentioned.



Alterations of smell and taste, as well as fatigue and lack of appetite, are reported as prevalent symptoms in Covid-19 patients that could affect food intake, a 2020 NCBI study says. (Source: Express Photo by Tashi Tobgyal)

Alterations of smell and taste, as well as fatigue and lack of appetite, are reported as prevalent symptoms in Covid-19 patients. "Confinement at home and Covid-19 symptoms may limit the amount of physical activity, leading to loss of lean mass. These factors, on top of systemic inflammatory response, might result in malnutrition even in non-hospitalised patients. However, no data is available on the impact of Covid-19 on nutritional status," the study noted.

Treating doctors told <u>indianexpress.com</u> that a rise in conditions like type 2 diabetes, hyperthyroid conditions, postural orthostatic tachycardia syndrome (POTS), secondary <u>pneumonia</u> post-Covid, and Lond Hauler Covid symptom are also "leading to weight loss".

When comparing patients with or without weight loss, the Milan study noted that those who lost weight had greater systemic inflammation (baseline CRP and, in hospitalised patients, peak CRP values), worse renal function (proportion of patients with an eGFR $< 60 \, \text{mL/min}/1.73 \, \text{m2}$), and longer disease duration. "Acute systemic inflammation deeply affects several metabolic and hypothalamic pathways contributing to anorexia and decreased food intake as well as elevation of resting energy expenditure and increased muscle catabolism. inflammatory events can trigger persistent neuroinflammatory responses in vulnerable individuals, which may perpetuate inflammation and wasting even after the acute phase," it reads.

Agreed Dr Navneet Sood, pulmonary consultant, Dharamshila Narayana Superspeciality Hospital but, however, said that weight loss may not be directly due to the infection but a "prolonged state of inflammation". "This is not exactly due to infections only, but in many cases prolonged state of inflammation, of which infection is one part causing catabolic state in the body which may result in weight loss. Patients need to be more aware about their health even after being infection-free. Post-covid complications is a much bigger concern. Regular health check-up is the key," said Dr Sood.

♦The Indian **EXPRESS**

Coronavirus vaccine: Johnson & Johnson says second shot boosts protection

A booster dose of the Johnson & Johnson COVID jab has a 94% efficacy rate, the drugmaker said.

By: <u>AP</u> | London | Updated: September 22, 2021 11:37:19 am



A vial of the Johnson & Johnson Covid-19 vaccine. (AP)

In the United States, <u>pharmaceutical company</u> <u>Johnson & Johnson</u> said a second shot of its <u>COVID-19</u> vaccine given two months after the first dose increased efficacy to 94%. This was found to be the case against moderate to severe courses.

A single dose has been found to give 70% protection.

"A booster dose of the Johnson & Johnson COVID-19 vaccine further increases antibody responses among study participants who had previously received our vaccine," said Dr. Mathai Mammen, head of research and development at J&J. The company previously published data showing its one-shot dose provided protection for up to eight months after immunisation.

J&J said in statement that it ran two early studies in people previously given its vaccine and found that a second dose produced an increased antibody response in adults from age 18 to 55. The study's results haven't yet been peerreviewed.

J&J's vaccine is approved for use in the US, across Europe and there are plans for at least 200 million doses to be shared with the UN-backed COVAX effort aimed at distributing vaccines to poor countries. But the company has been plagued by production problems and millions of

doses made at a troubled factory in Baltimore had to be thrown out.

The J&J vaccine has been considered critical by numerous health officials to ending the pandemic because it requires only one shot, but fears about the easier-to-spread delta coronavirus variant have prompted numerous governments to consider the use of booster shots for many approved vaccines.

US President Joe Biden has been pushing for widespread booster shots, but his vaccination campaign received a blow last week, when a panel of experts advising the US Food and Drug Administration, recommended against booster shots for younger population groups.

The World Health Organisation has urged rich countries to stop administering booster doses until at least the end of the year, saying vaccines should immediately be redirected to Africa, where fewer than 4per cent of the population is fully immunised.

In a paper published last week in the journal Lancet, top scientists from the WHO and FDA argued that the average person doesn't need a booster shot and that the authorised vaccines to date provide strong protection against severe COVID-19, hospitalisation and death.

♦ The Indian EXPRESS

Coronavirus India Live Updates: 66% of adult population administered at least one dose of Covid vaccine, says govt

Covid-19 Live Updates today September 23: Also, as many as 282 deaths in the last 24 hours took the total number of fatalities in the country to 4.46 lakh.

By: Express Web Desk | New Delhi | Updated: September 23, 2021 10:25:25 pm



Pune's weekly Covid-19 positivity rate has dropped below 5 per cent from September 15 to 21, as per state Health Department. (PTI)

Coronavirus pandemic live news update: The Centre Thursday said 66 per cent of the country's adult population has been given at least one dose of Covid-19 vaccine, while 23 per cent has received both the jabs. Addressing the media, Union Health Secretary Rajesh Bhushan said 63.7 per cent doses have been administered in rural areas while 35.4 per cent vaccine doses has been administered in urban areas. A total of 68.2 lakh doses (approximately 0.95 per cent) has been administered at vaccination centres not marked as rural or urban, he said.

The government on Thursday announced that differently-abled people and those with restricted mobility will be administered Covid vaccine doses at their homes. Addressing a press conference in New Delhi, Union Health Ministry officials also said the country is still in the middle of the coronavirus second wave even though the number of daily new cases are declining.

They however added that 62.73% of total infections recorded last week were from Kerala alone, which is also the only state with more than 1 lakh active cases.

India on Wednesday logged 31,923 new Covid-19 infections out of which Kerala reported 19,675. There are about 3.01 lakh active cases in the country and Kerala has over 1.61 lakh active infections. Also, as many as 282 deaths in the last 24 hours took the total number of fatalities in the country to 4.46 lakh.

♦The Indian **EXPRESS**

Covid-19: R-value drops below 1 in mid-September

However, the R-values of some major cities, Mumbai, Kolkata, Chennai, Bengaluru, are over 1. The R-value of Delhi and Pune are below 1.

By: <u>PTI</u> | New Delhi | September 21, 2021 8:18:57 pm



At a Covid-19 testing centre in Pune | Express file photo

The R-value, or reproductive number, for <u>Covid-19</u> in India dropped from 1.17 in August end to 0.92 in mid September, indicating that the spread of the infection across the country has slowed down, according to researchers.

However, the R-values of some major cities, Mumbai, Kolkata, Chennai, Bengaluru, are over 1. The R-value of Delhi and Pune are below 1.

The R-values of Maharashtra and Kerala are below 1, giving a much needed relief to these

two states with the highest number of active cases.

The R-value was 1.17 at the end of August. It declined to 1.11 between September 4-7 and since then it has remained under 1.

"The good news is that India's R has continued to be less than 1, as is that of Kerala and Maharashtra, the two states having the highest number of active cases," said Sitabhra Sinha of the Institute of Mathematical Sciences, Chennai.

Sinha is leading a team of researchers who calculate the R-value.

According to the data, the R-value of Mumbai stands at 1.09, Chennai 1.11, Kolkata 1.04, Bengaluru 1.06.

The Reproduction number or R refers to how many people an infected person infects on average. In other words, it tells how 'efficiently' a virus is spreading.

After the devastating second wave that saw hospitals and health infrastructure being overwhelmed by the patients infected with SARS-CoV2 coronavirus, the R-value started to decline.

During the March-May period, thousands of people died due to the infection, while lakhs were infected.

When the second wave of the coronavirus was at its peak, overall, the R-value in the country was estimated to be 1.37 between March 9 to April 21. It declined to 1.18 between April 24 to May 1, and it further dropped to 1.10 between April 29 to May 7.

Between May 9 to 11, the R-value was estimated to be around 0.98 and then 0.82 between May 14 to May 30. The R-value from May 15 to June 26 was 0.78. However, it increased to 0.88 from June 20 to July 7.

The R-value value between September 4-7 was 0.94, 0.86 between September 11-15 and 0.92 between September 14-19.

According to the Health Ministry, the recovery rate currently stands at 97.75 per cent. The weekly positivity rate (2.08 per cent) has been less than 3 per cent for last 88 days

♦The Indian **EXPRESS**

Pfizer says its vaccine is safe for kids ages 5-11. Will parents buy in?

If authorized by the Food and Drug Administration, the vaccine could be a game changer for millions of American families with young children and could help bolster the country's response as the highly contagious delta variant of the coronavirus spreads.

By: New York Times

Updated: September 21, 2021 10:40:27 am



A nurse tends to a 2-month-old on a ventilator for respiratory failure because of COVID-19 at Children?s Hospital New Orleans on Aug. 18, 2021. (Erin Schaff/The New York Times)

Written by Sarah Mervosh and Dana Goldstein

With Pfizer-BioNTech's announcement Monday that its COVID-19 vaccine had been shown to

be safe and effective in low doses in children ages 5 to 11, a major question looms: How many parents will have it given to their children?

authorized by the Food and Drug Administration, the vaccine could be a game changer for millions of American families with young children and could help bolster the country's response the highly as contagious delta variant of the coronavirus spreads. There are about 28 million children ages 5 to 11 in the United States, far more than the 17 million adolescents ages 12 to 15, who became eligible when the Pfizer vaccine rolled out to that age group in May.

But it remains to be seen how widely the vaccine will be accepted for the younger group. Uptake among older children has lagged, and polling indicates reservations among a significant chunk of parents.

Lorena Tule-Romain was up early Monday, getting ready to ferry her 7-year-old son to school in Dallas, when she turned on the television and heard the news.

"I was like, 'Oh, my gosh, this is exciting,' " said Tule-Romain, 32, who felt an initial surge of hopefulness and relief. She has spent months living in limbo, declining birthday party invitations, holding off registering her son for orchestra in school and even canceling a recent trip to see her son's grandparents in Atlanta.

Tule-Romain will be among those eagerly waiting to learn whether federal officials authorize the vaccine for the younger age group, a step that is expected to come first on an emergency-use basis, perhaps as soon as around Halloween.

However the FDA rules, Michelle Goebel, 36, of Carlsbad, California, said she is nowhere near ready to vaccinate her children, who are 8, 6 and 3, against COVID-19.

Although Goebel said she had been vaccinated herself, she expressed worry about the risks for her children, in part because of the relatively small size of children's trials and the lack of long-term safety data. She said the potential risk from a new vaccine seemed to her to outweigh the benefit, because young children have been far less likely to become seriously sick from the virus than adults.

Only about 40% of children ages 12 to 15 have been fully vaccinated, compared with 66% of adults, according to federal data. Polling indicates that parental openness to the vaccine for their children decreases with the child's age.

About 20% of parents of 12- to 17-year-olds said they definitely did not plan to get their child vaccinated, according to polling by the Kaiser Family Foundation published last month. The "definitely not" group grew to about 25% among parents of children ages 5 to 11 and to 30% among parents of children under 5.

René LaBerge, 53, of Katy, Texas, said she plans to vaccinate her 11-year-old son when he becomes eligible. "But I'm not impatient. I want them to do the work."

She said she had heard about some rare, but serious, side effects in children, and she was eager for federal officials to thoroughly review the data before she makes her decision.

"I don't want my son to take something that is unsafe," she said, but she added, "I believe COVID is dangerous. There aren't any good, easy answers here."

Among the side effects scientists have been studying is myocarditis, an inflammation of the heart. In rare cases, the vaccine has led to myocarditis in young people. But a large Israeli study, based on electronic health records of 2 million people aged 16 and older, also found that COVID is far more likely to cause these heart problems.

The Pfizer trial results were greeted enthusiastically by many school administrators and teachers organizations, but are unlikely to lead to immediate policy changes.

"This is one huge step toward beating COVID and returning to normalcy. I don't think it changes the conversation around vaccine requirements for kids," said Randi Weingarten, president of the American Federation of Teachers, a national union.

Weingarten predicted there would not be widespread student vaccine mandates until the 2022-23 school year. She noted that parents and educators were still awaiting full FDA approval of vaccines for children ages 12 to 15 and that mandates for adults did not come until months after the shots first became available.

A significant barrier to child vaccination, she said, were widespread conspiracy theories about the shots impacting fertility.

"When people have these conversations prematurely about requirements, it adds to the distrust," she said.

Only a single large school district — Los Angeles Unified — has mandated vaccination for those students already eligible for a shot, those 12 and older. On Monday, the district said it was not ready to respond to news about the Pfizer trial results for children under 12.

New York Mayor Bill de Blasio said Monday that the promising results from Pfizer did not change his conviction that student vaccine mandates are the wrong approach. Chicago Mayor Lori Lightfoot said last month that student mandates would be "premature."

Historically, it is states, not individual school systems, that determine which vaccines are necessary for school attendance. All 50 states currently mandate vaccination against diseases such as polio, measles and chickenpox.

Given the entrenched politicization of the coronavirus vaccine — with Republican parents much less likely to support vaccination — and the existence of widespread misinformation about the shots, many school leaders are hesitant to step out in front of the issue and are likely to await guidance from their states on how to handle it.

No state has mandated that children or adolescents be vaccinated against the coronavirus, and five states are currently banning such mandates, according to the Center on Reinventing Public Education.

♦The Indian **EXPRESS**

From vaccination to case numbers, all Covid developments you need to know today

The active Covid-19 cases have declined to 3,18,181, comprising 0.95 per cent of the total infections, the lowest since March 2020.

By: Express Web Desk | September 20, 2021 9:57:54 pm

With 30,256 people testing positive for <u>coronavirus</u> infection, India's total tally of <u>COVID-19</u> cases rose to 3,34,78,419, while the active cases declined to 3,18,181, the lowest in 183 days, according to the Union health ministry data updated on Monday.

The death toll climbed to 4,45,133 with 295 more fatalities, according to the data updated at 8 am.

The active cases have declined to 3,18,181, comprising 0.95 per cent of the total infections, the lowest since March 2020, while the national

COVID-19 recovery rate was recorded at 97.72 per cent, the health ministry said.

India's COVID-19 vaccination coverage crossed the 81-crore landmark milestone (81,73,95,763) on Monday. Out of 81,73,95,763, 64.8% (60,88,10,164) eligible population received first dose of COVID-19 vaccination and 22.2% (20,85,85,599) eligible population received second dose of COVID-19 vaccination.

<u>Pfizer Covid-19 shot safely bolsters antibodies in kids aged 5 to 11</u>

Pfizer Inc. and partner BioNTech SE said their Covid-19 vaccine was safe and produced strong antibody responses in children ages 5 to 11 in a large-scale trial, findings that could pave the way to begin vaccinating grade-school kids within months.

The long-awaited results offer one of the first looks at how well a Covid vaccine could work for younger children. Pressure to immunize kids has been on the climb in the US, where a new school year has started just as the <u>delta variant</u> is fueling a surge in cases.

In a trial with 2,268 participants, two shots of a 10 microgram dose – one-third of the adult shot – produced antibody levels comparable to those seen in a trial of 16-to-25-year-olds who got the adult dose, the companies said, with similar side effects.

'Vaccination is on...let govt take a call': SC rejects plea seeking reopening of schools

The Supreme Court on Monday turned down a petition seeking reopening of schools, which were shut down across the country due to the Covid-19 crisis, saying it is a complex issue that should be better left to be handled by the government.

"These issues are fraught with grave complexity. We don't think we should enter here by judicial mandates," said a bench of Justices D Y Chandrachud and B V Nagarathna, allowing the petitioner, a class 12 student from Delhi, to withdraw the plea.

The bench asked the counsel to advise his client to rather spend time on studies.

<u>UP: Certificate shows local BJP leader given 5</u> <u>doses of Covid vaccine, 6th scheduled; probe</u> ordered

The vaccination certificate of a <u>BJP</u> booth level leader here wrongly shows he has been given five doses of the coronavirus vaccine and is scheduled for the sixth, with officials saying it appears to be a case of "mischief" and conspiracy.

The case was reported from Sardhana area of the district after Rampal Singh (73), who says he is the BJP president of booth no 79 and is also a member of the Hindu Yuva Vahini, got his vaccination certificate downloaded.

He said the certificate shows he has been given five doses of the coronavirus vaccine and the sixth is also scheduled. He accused the health department of negligence and filed a complaint following which, the officials said, a probe has been launched.

'Offensive', 'smacks of racism': Tharoor, Ramesh on UK's new Covid travel policy for India

Senior Congress leaders <u>Shashi Tharoor</u> and Jairam Ramesh Monday spoke out against the UK government's decision to consider people vaccinated in India, Africa, South America and several other countries as unvaccinated, and make them go through a 10-day quarantine.

Tharoor, Thiruvananthapuram Lok Sabha MP, has pulled put of a debate at Cambridge Union and withdrawn from the events for the launch of the UK edition of his book "The Battle of Belonging".

Rajya Sabha Congress MP Jairam Ramesh too termed the country's new travel policy "absolutely bizarre".

<u>Will resume exporting Covid-19 vaccines from</u> October: Mansukh Mandaviya

Union Minister of Health and Family Welfare Mansukh Mandaviya on Monday announced that India, which is the leading global manufacturer of vaccines, will resume exporting Covid-19 vaccine doses from October this year.

Mandaviya Monday added that Vaccine Maitri, which is India's initiative to provide Covid vaccines to countries around the world, will resume in the fourth quarter starting October this year. He added that decision to resume vaccine exports has been taken "in order to fulfil the commitment of India towards COVAX, in line with our motto Vasudhaiva Kutumbakam".

Mandaviya further added that the surplus supply of vaccines will be used to fulfil India's commitment towards the world for putting up a collective fight against Covid-19.

When Covid-19 stole their smell, these experts lost much more

For millions worldwide, anosmia – the partial or complete loss of the sense of smell – has become a telltale sign of Covid-19. For sommeliers, perfumers, oenologists and others, smell is a skill honed over many years of identifying things like subtle notes of citrus in a perfume, or parsing the bouquet of a mature Bordeaux.

When Covid-19 snatches that away, the fear of career-ending consequences can be particularly gripping, making anosmia a difficult, even taboo topic.

Fears that Covid-19 could derail careers are particularly acute in the highly competitive world of perfumery, where perfumers — sometimes known as "noses" in France — work hand-in-

hand with evaluators to select and dose the chemical components of a fragrance for months or even years.

<u>Cambodia bat researchers on mission to track</u> origin of COVID-19

Researchers are collecting samples from bats in northern Cambodia in a bid to understand the coronavirus pandemic, returning to a region where a very similar virus was found in the animals a decade ago.

Two samples from horseshoe bats were collected in 2010 in Stung Treng province near Laos and kept in freezers at the Institut Pasteur du Cambodge (IPC) in Phnom Penh.

Tests done on them last year revealed a close relative to the coronavirus that has killed more than 4.6 million people worldwide. An eightmember IPC research team has been collecting samples from bats and logging their species, sex, age and other details for a week. Similar research is going on in the Philippines

♦The Indian **EXPRESS**

Covid-19 pandemic cut life expectancy by most since World War Two: Study

In the United States, the rise in mortality was mainly among those of working age and those under 60, while in Europe, deaths among people aged over 60 contributed more significantly to the increase in mortality.

By: Reuters | London | September 27, 2021 9:48:58 am

In this Sept. 17, 2021, file photo, Zoe Nassimoff, of Argentina, looks at white flags that are part of artist

Suzanne Brennan Firstenberg's temporary art installation, "In America: Remember," in remembrance of Americans who have died of COVID-19, on the National Mall in Washington. (AP Photo/Brynn Anderson, File)

The <u>COVID-19</u> pandemic reduced life expectancy in 2020 by the largest amount since World War Two, according to a study published on Monday by Oxford University, with the life expectancy of American men dropping by more than two years.

Life expectancy fell by more than six months compared with 2019 in 22 of the 29 countries analysed in the study, which spanned Europe, the United States and Chile. There were reductions in life expectancy in 27 of the 29 countries overall.

The university said most life expectancy reductions across different countries could be linked to official COVID-19 deaths. There have been nearly 5 million reported deaths caused by the new <u>coronavirus</u> so far, a Reuters tally shows.

"The fact that our results highlight such a large impact that is directly attributable to COVID-19 shows how devastating a shock it has been for many countries," said Dr Ridhi Kashyap, co-lead author of the paper, published in the International Journal of Epidemiology.

There have been nearly 5 million reported deaths caused by the new coronavirus so far, a Reuters tally shows.

There were greater drops in life expectancy for men than women in most countries, with the largest decline in American men, who saw life expectancy drop by 2.2 years relative to 2019. Overall, men had more than a year shaved off in 15 countries, compared to women in 11 countries. That wiped out the progress on mortality that had been made in the previous 5.6 years.

In the United States, the rise in mortality was mainly among those of working age and those under 60, while in Europe, deaths among people aged over 60 contributed more significantly to the increase in mortality. Kashyap appealed to more countries, including low- and middle-income nations, to make mortality data available for further studies.

"We urgently call for the publication and availability of more disaggregated data to better understand the impacts of the pandemic globally," she said

THE TIMES OF INDIA

Covid coughs up new problem: A greater vulnerability to tuberculosis?

TNN | Sep 22, 2021, 07.25 AM IST

NEW DELHI: Is low immunity and lung damage caused by Covid-19 predisposing some people to get tuberculosis? Many doctors are raising this concern as there has been a significant surge in diagnosis of the bacterial infection over the past few months.

Dr Jugal Kishore, head of community medicine department at Safdarjung Hospital, said detection of TB has nearly doubled. "It's possible that many patients who had TB are coming to hospitals now and getting tested, hence the increase in detection. But we cannot rule out the role of steroid use for Covid-19 management. It reduces immunity and predisposes those with latent infection to get active TB," he added.

According to World Health Organisation (WHO), 2-3 billion people in the world are latently infected with mycobacterium tuberculosis. It means the person has infection, but not the disease because

his/her immune system is able to fight the bacteria to stop it from growing. WHO says 5%-15% of people suffering from latent TB are at risk of reactivation of TB.

However, a recent study showed that for patients being treated with steroids, the risk of TB reactivation increased from 2.8 to 7.7-fold. "It's recommended that all Covid patients who have recovered should be followed up for early detection and treatment of TB through DOTS centres. Otherwise, we may fail in the national tuberculosis elimination programme," said Dr Kishore, who is also vice-president of Indian Association of Epidemiologists.

AllMS doctors said there was a significant increase in extrapulmonary TB cases, meaning the bacterial infection was affecting organs other than the lungs. Similar trends were observed in big private hospitals too. "Post Covid-19 second wave, we have 30%-40% detection of TB, many of them extrapulmonary," said Dr Vikas Maurya, director and head of pulmonology department at Fortis Shalimar Bagh. He added that they had seen multiple members of the same family testing positive for TB.

The increase in TB cases in the country was highlighted by public health experts in July too. The Union health ministry had then clarified that TB screening for all Covid-positive patients and Covid-19 screening for all diagnosed TB patients had been recommended. "States/UTs were asked for convergence for better surveillance and case finding of TB and Covid-19 as early as August 2020," the health ministry stated.

A statement issued by the ministry added, "Due to the impact of Covid-related restrictions, case notifications for TB decreased by about 25% in 2020. But special efforts are being made to mitigate this impact through intensified case finding in OPD settings as well as through campaigns by all states. Moreover, there is not enough evidence currently to suggest that there has been an increase in TB cases due to Covid-19.

THE TIMES OF INDIA

Covid Coughs Up New Problem: A Greater Vulnerability To TB?

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New Delhi: Is low immunity and lung damage caused by Covid-19 predisposing some people to get tuberculosis? Many doctors are raising this concern as there has been a significant surge in diagnosis of the bacterial infection over the past few months. Dr Jugal Kishore, head of community medicine department at Safdarjung Hospital, said detection of TB has nearly doubled. "It's possible that many patients who had TB are coming to hospitals now and getting tested, hence the increase in detection. But we cannot rule out the role of steroid use for Covid-19 management. It reduces immunity and predisposes those with latent infection to get active TB," he added. According to World Health Organisation (WHO), 2-3 billion people in the world are latently infected with mycobacterium tuberculosis. It means the person has infection, but not the disease because his/her immune system is able to fight the bacteria to stop it from growing. WHO says 5%-15% of people suffering from latent TB are at risk of reactivation of TB.

However, a recent study showed that for patients being treated with steroids, the risk of TB reactivation increased from 2.8 to 7.7-fold. "It's recommended that all Covid patients who have recovered should be followed up for early detection and treatment of TB through DOTS centres. Otherwise, we may fail in the national tuberculosis elimination programme," said Dr Kishore, who is also vice-president of Indian

Association of Epidemiologists. AllMS doctors said there was a significant increase in extrapulmonary TB cases, meaning the bacterial infection was affecting organs other than the lungs. Similar trends were observed in big private hospitals too. "Post Covid-19 second wave, we have 30%-40% detection of TB, many of them extrapulmonary," said Dr Vikas Maurya, director and head of pulmonology department at Fortis Shalimar Bagh. He added that they had seen multiple members of the same family testing positive for TB.

The increase in TB cases in the country was highlighted by public health experts in July too. The Union health ministry had then clarified that TB screening for all Covid-positive patients and Covid-19 screening for all diagnosed TB patients had been recommended. "States/UTs were asked for convergence for better surveillance and case finding of TB and Covid-19 as early as August 2020," the health ministry stated.

A statement issued by the ministry added, "Due to the impact of Covid-related restrictions, case notifications for TB decreased by about 25% in 2020. But special efforts are being made to mitigate this impact through intensified case finding in OPD settings as well as through campaigns by all states. Moreover, there is not enough evidence currently to suggest that there has been an increase in TB cases due to Covid-19."



பி.சி.ஜி. தடுப்பூசிக்கு 100 வயது!

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இன்சுலினைக் கண்டுபிடித்து 100 ஆண்டுகள் நிறைவடைந்ததை யொட்டி உலகெங்கிலும் மருத்துவர் களும் பொதுமக்களும் அண்மையில் அதைக் கொண்டாடி மகிழ்ந்தனர். அதைத் தொடர்ந்து இப்போது பி.சி.ஜி. (BCG) தடுப்பூசி கண்டுபிடிக்கப்பட்டு 100 ஆண்டுகள் நிறைவடைந்துள்ளன. பி.சி.ஜி. காசநோயைத் தடுப்பதற்குப் போடப்படும் முதன்மைத் தடுப்பூசி. இது குழந்தைகள் பிறந்தவுடன் தோள்பட்டை அருகே போடப்படுகிறது. இது கண்டுபிடிக்கப்பட்ட ஆரம்பக் காலத்தில் குழந்தைகளுக்கு வாய்வழி மருந்தாகவே வழங்கப்பட்டது.

இது குழந்தைகளுக்கு ஏற்படும் காசநோயை மட்டுமல்லாமல் பலதரப்பட்ட வைரஸ் நோய்கள், சுவாசக் கோளாறுகள், வயிற்றுக் கோளாறுகள் போன்றவற்றையும் தடுக்கும்.நெஞ்சகக் காசநோயைத் தடுப்பதைவிட மூளைக் காசநோய் போன்ற மோசமான காசநோய் வகைகளைப் பெரிதும் தடுக்கும்.உடலின் தடுப்பாற்றல் மண்டலத்தைத் தூண்டி பொது ஆரோக்கியத்தை வலுப்படுத்தும்.மேலும், இது தொழுநோயைக் கட்டுப்படுத்தவும் உதவுகிறது. சிறுநீரகப்பைப் புற்றுநோய்க்கும் மெலனோமா புற்றுநோய்க்கும் இது தடுப்பு மருந்தாகப் பயன்படுகிறது. உலகில் குழந்தைகளின் இறப்பு விகிதம் குறைந்துவருவதற்கு பி.சி.ஜி. தடுப்பூசியும் முக்கியக் காரணம்.

பி.சி.ஜி. அறிமுகம்

20ஆம் நூற்றாண்டின் தொடக்கத்தில் ஆல்பர்ட் கால்மெட் (Albert Calmette), கமில் கியூரான் (Camille Guerin) எனும் இரண்டு பிரெஞ்சு அறிவியலாளர்கள் பி.சி.ஜி. தடுப்பூசி யைக் கண்டுபிடித்தனர். அதனால்தான் இந்தப் பெயர் (Bacillus Calmette Guerin – BCG). பசுக்களுக்குக் காசநோயை உருவாக்கும் மைக்கோபாக்டீரியம் போவிஸ் (Mycobacterium bovis) எனும் பாக்டீரியத்தின் வீரியத்தைக் குறைத்து இந்தத் தடுப்பூசியை உருவாக்கினர். காசநோய்க் கிருமிகள் மிகவும் மெதுவாகவே வளரும் என்பதால், இந்தத் தடுப்பூசியைக் கண்டுபிடிப்பதற்கு 13 ஆண்டுகள் பிடித்தன. 1921இல் இது மனிதப் பயன்பாட்டுக்கு வந்தது. இன்றளவில் உலகில் காசநோயைத் தடுப்பதற்குச் செலுத்தப்படும் ஒரே தடுப்பூசி பி.சி.ஜி. மட்டுமே. தடுப்பூசிகளிலேயே பக்கவிளைவுகள் இல்லாததும் மிகுந்த பாதுகாப்பு கொண்டதும் இதுவே. உலகெங் கிலும் ஆண்டுதோறும் சுமார் ஒரு கோடியே 20 லட்சம் தவணைகள் பி.சி.ஜி. தடுப்பூசி செலுத்தப்படுவது வழக்கத்தில் உள்ளது. இந்தியாவில் 1948இல் இது குறிப்பிட்ட வட்டாரத்துக் குழந்தை களுக்கு மட்டும் செலுத்தப்பட்டது. பிறகு 1962இல் தேசியக் காசநோய் கட்டுப்பாட்டுத் திட்டத்தில் இது இணைக்கப்பட்டு இந்தியக் குழந்தைகள்

தடுப்பாற்றலில் வேறுபாடு!

மற்ற தடுப்பூசிகளைப் போலில்லாமல், பி.சி.ஜி. தடுப்பூசி எல்லா நாடுகளிலும் ஒன்றுபோல் தடுப்பாற்றலைத் தருவதில்லை என்பது இதிலுள்ள ஒரு குறை. சில நாடுகளில் மிக நன்றாகவும் பல நாடுகளில் குறைவாகவும் இது செயல்படுவதை ஆராய்ச்சியாளர்கள் சுட்டிக்காட்டுகின்றனர். முக்கியமாக, நிலநடுக் கோட்டுக்கு அப்பால் இருக்கும் நாடுகளில் அதிகச் செயல்பாடும், அதன் அருகிலுள்ள நாடுகளில் குறைந்த செயல்பாடும் உள்ளதை அவர்கள் அறிந்துள்ளனர். உதாரணத்துக்கு, நிலநடுக் கோட்டுக்கு அப்பால் இருக்கும் இங்கிலாந்து, நார்வே, ஸ்வீடன், டென்மார்க் ஆகிய நாடுகளில் இது காசநோய்க்கு எதிராக நல்ல தடுப்பாற்றலைத் தந்திருக்கிறது. ஆனால், காசநோய் அதிகம் பரவியுள்ள, நிலநடுக் கோட்டுக்கு அருகிலுள்ள இந்தியா, கென்யா, மலாவி போன்ற நாடுகளில் இந்தத் தடுப்பூசி அவ்வளவாகப் பலன் அளிக்கவில்லை.

முக்கியமாக, வயது வந்தவர்களுக்குக் காசநோய் ஏற்படுவதைத் தடுப்பதில்லை என்பது இதில் உள்ள பெருங்குறை. 1968க்கும் 1983க்கும் இடைப்பட்ட காலத்தில் தமிழ்நாட்டில் செங்கல்பட்டு மாவட்டத்தில் இந்திய மருத்துவ ஆராய்ச்சிக் கழகத்தின் தேசிய காசநோய் ஆராய்ச்சி நிறுவனத்தைச் சார்ந்த ஆய்வாளர்கள் மேற்கொண்ட ஆராய்ச்சியில் வயதாக ஆக பி.சி.ஜி.யின் தடுப்பாற்றல் குறைந்து வருகிறது என்பதால், குழந்தைகளுக்கு 27 சதவீதத் தடுப்பாற்றல்தான் தருவதாகவும் பெரிய வர்களுக்குச் சிறிதளவுகூடத் தடுப்பாற்றல் தருவதில்லை என்பதையும் உறுதிசெய்தனர். இந்தியச் சுற்றுச்சூழலில் மனிதர்களுக்குக் காசநோயை ஏற்படுத்தும் மைகோபாக்டீரியம் டியூபர்குளோசிஸ் பாக்டீரியாக் களின் ஆதிக்கம் அதிகம் என்றும், அவை பி.சி.ஜி.யின் வீரியத்துக்குச் சவால் விடுகின்றன என்றும் அவர்கள் காரணம் தெரிவித்துள்ளனர்.

காசநோய் ஒழிப்பு சாத்தியமா?

காசநோய் என்பது இன்று நேற்று ஏற்பட்டதல்ல; பொ.ஆ.மு. (கி.மு.) 3000 ஆண்டுகளுக்கு முன்பு உருவான எகிப்திய பிரமிடுகளில் இந்த நோய் குறித்த குறிப்புகள் இருப்பதை வரலாற்று ஆய்வாளர்கள் குறிப்பிடுகின்றனர். வருத்தப்பட வேண்டிய விஷயம் என்னவென்றால், காசநோய்க்குப் பிறகு உலகில் பரவத் தொடங்கிய பெரியம்மை, தொழுநோய், காலரா, பிளேக், போலியோ போன்றவற்றைக்கூடத் தடுப்பூசிகள் மூலம் ஒழித்துவிட்டோம்; அறிவியல் துறையில் புகுந்துள்ள நவீனத் தொழில்நுட்பங்களின் துணையுடன் நன்றாகக் கட்டுப்படுத்தி விட்டோம். ஆனால், இன்னமும் காசநோய் மட்டும் உலக அளவில் பிரச்சினைக்குரிய தொற்றுநோயாக நீடிக்கிறது. உலகச் சுகாதார நிறுவனத்தின் புள்ளிவிவரப்படி 2019இல் மட்டும் ஒரு கோடிப் பேருக்குப் புதிதாகக் காசநோய் பரவியிருக்கிறது. 14 லட்சம் பேர்

காசநோயால் இறந்திருக்கின்றனர். இந்த இறப்பில் 27 சதவீதத்தினர் இந்தியர்கள்.

2025க்குள் இந்தியாவில் காசநோயை ஒழித்துவிட வேண்டும் எனும் குறிக்கோளுடன் செயல்படும் இந்த நேரத்தில், காசநோயைக் குணமாக்கும் நவீன மருந்துகளும் பி.சி.ஜி.யை விட அதிக ஆற்றல் கொண்ட தடுப்பூசிகள் புதிதாகக் கண்டுபிடிக்கப்பட வேண்டிய கட்டாய மும் ஏற்பட்டுள்ளதைக் கவனத்தில் கொள்ள வேண்டும். கடந்த பத்தாண்டுகளில் உலக அளவில் 14 புதிய தடுப்பூசிகள் காசநோய்க்குக் கண்டுபிடிக்கப்பட்டு, தன்னார்வலர்களிடம் ஆய்வுக்கு உட்படுத்தப்பட்டுள்ளன. இவற்றில் இந்தியத் தடுப்பூசிகளும் உண்டு. இந்திய மருத்துவ ஆராய்ச்சிக் கழகத்தின் கண்டுபிடிப்புகளான வி.பி.எம்., 1002 (VPM 1002), 'எம்.ஐ.பி' (Mycobacterium indicus pranii - MIP) ஆகியவை மூன்றாம் கட்ட ஆய்வில் இருக்கின்றன. இவை மிக விரைவிலேயே மனிதப் பயன்பாட்டுக்கு வரலாம் என்று எதிர்பார்க்கப்படுகிறது.

கரோனாவும் பி.சி.ஜி.யும்

கரோனா பரவத் தொடங்கி உலக மக்கள் அனைவரும் அச்சத்தில் உறைந்திருந்தபோது கரோனாவை பி.சி.ஜி. தடுப்பூசி தடுக்கிறது என்கிற கருத்து வலுப்பெற்று, மன ஆறுதல் கொடுத்ததையும் இங்கே குறிப்பிட வேண்டும். கோவிட 19 நோயால் இறந்தவர்களின் புள்ளிவிவரங்களைக் கவனித்தபோது பி.சி.ஜி. தடுப்பூசி போட்டுக்கொள்ளும் வழக்கமுள்ள நாடுகளில் இறப்பு விகிதம் ஆறு மடங்கு குறைவாக இருப்பதுதான் காரணம். பி.சி.ஜி. தடுப்பூசி வழக்கத்தில் இல்லாத இத்தாலியில் கரோனாவால் இறந்தவர்கள் 100க்கு 12 பேர்; ஸ்பெயினில் 29 பேர்; அமெரிக்காவில் இதுவரை 5 பேர். அதேநேரம் இந்தத் தடுப்பூசி போடும் வழக்கமுள்ள சீனாவில் இறப்பு விகிதம் 0.14%; ஜெர்மனியில் 1.8%. இந்தியாவில் இந்தத் தடுப்பூசி போடப்படும் வழக்கம் இருப்பதால் அமெரிக்கா,

இத்தாலி போன்று இங்கே இறப்பு விகிதம் இதுவரை கூடவில்லை என்பதும் இந்தக் கருத்துக்கு வலுச்சேர்க்கிறது.

உலக அளவில் கரோனா பரவத் தொடங்கிய கடந்த 18 மாதங்களில் கரோனாவுக்கு எதிராக 17 தடுப்பூசிகள் அவசரக் காலப் பயன்பாட்டுக்கு அனுமதி அளிக்கப்பட்டதும் 97 தடுப்பூசிகள் பல கட்ட ஆராய்ச்சிகளில் இருப்பதையும் ஒப்பிடும்போது காசநோய்க்கு பி.சி.ஜி. தடுப்பூசி கண்டுபிடிக்கப்பட்டு ஒரு நூற்றாண்டு காலம் நிறைவுற்றாலும், பி.சி.ஜி. தடுப்பூசி தவிர வேறு புதிய தடுப்பூசிகள் இதுவரை கண்டு பிடிக்கப்படவில்லை என்பது இன்றுள்ள அறிவிய லாளர்களுக்கான சவாலாகவே கருதப்படுகிறது. காரணம், கரோனா தடுப்பூசி ஆய்வுகளுக்காக ஒதுக்கப்பட்ட நிதியோடு ஒப்பிடும்போது, காசநோய்க்கான தடுப்பூசி ஆய்வுகளுக்கு ஒதுக்கப்பட்ட நிதி மிகவும் சொற்பம். ஆகவே, காசநோய் ஒழிப்பில் தீவிரம் காட்டும் இந்தியா உள்ளிட்ட உலக நாடுகள் இனிமேலாவது புதிய ஆராய்ச்சிகளுக்குப் போதிய நிதி ஒதுக்கி, கரோனாவுக்குத் தடுப்பூசி கண்டுபிடித்ததுபோல் காசநோய்க்கும் ஆற்றலுள்ள தடுப்பூசியைக் கண்டுபிடித்தாக வேண்டும்.

கட்டுரையாளர், பொதுநல மருத்துவர் தொடர்புக்கு: gganesan95@gmail.com



இந்தியாவில் கரோனாவுக்கு சிகிச்சை பெறுவோர் 3 லட்சத்துக்கும் கீழ் குறைந்தனர்: 191 நாட்களில் இல்லாத வகையில் குறைவு

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இந்தியாவில் கரோனாவுக்கு சிகிச்சை பெறுவோர் எண்ணிக்கை கடந்த 191 நாட்களில் இல்லாத அளவுக்குக் குறைந்து 3 லட்சத்துக்கும் கீழ் சரிந்துள்ளனர். கடந்த 24 மணி நேரத்தில் புதிதாக 26 ஆயிரம் பேர் பாதிக்கப்பட்டுள்ளனர் என்று மத்திய சுகதாாரத்துறை அமைச்சகம் தெரிவித்துள்ளது.



இதுகுறித்து <u>மத்திய சுகாதாரத்துறை</u> <u>அமைச்சகம்</u> வெளியிட்ட அறிவிப்பில் கூறப்பட்டிருப்பதாவது:

"கடந்த 24 மணி நேரத்தில் கரோனாவால் புதிதாக 26 ஆயிரத்து 41 பேர் பாதிக்கப்பட்டுள்ளனர். ஒட்டுமொத்த பாதிப்பு 3 கோடியே 36 லட்சத்து 78 ஆயிரத்து 786 ஆக அதிகரித்துள்ளது.

ஒட்டுமொத்தமாக சிகிச்சை பெறுவோர் எண்ணிக்கை 2 லட்சத்து 99 ஆயிரத்து 620 ஆக அதிகரித்துள்ளது. ஒட்டுமொத்த பாதிப்பில் சிகிச்சையில் இருப்போர் வீதம் 0.89 சதவீதமாகக் குறைந்துள்ளது.

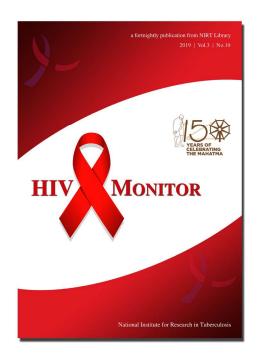
கரோனாவிலிருந்து இதுவரை 3 கோடியே 29 லட்சத்து 31 ஆயிரத்து 972 பேர் குணமடைந்தனர். குணமடைந்தோர் சதவீதம் 97.78 ஆக அதிகரித்துள்ளது. கடந்த 24 மணி நேரத்தில் 3,586 பேர் சிகிச்சையிலிருந்து குணமடைந்து சென்றுள்ளனர். கடந்த 92 நாட்களாக தினசரி தொற்றில் 50 ஆயிரத்துக்கும் குறைவாக பாதிப்பு இருந்து வருகிறது.

கடந்த 24 மணி நேரத்தில் கரோனாவால் 276 பேர் உயிரிழந்துள்ளனர். ஒட்டுமொத்த உயிரிழப்பு 4 லட்சத்து 47 ஆயிரத்து 194 ஆக அதிகரித்துள்ளது.

நாட்டில் இதுவரை ஏறக்குறைய 56.44 கோடி பேருக்கு கரோனா பரிசோதனை செய்யப்பட்டுள்ளன. 86.01 கோடி பேருக்குத் தடுப்பூசி செலுத்தப்பட்டுள்ளது".

இவ்வாறு <u>மத்திய சுகாதாரத்துறை</u> அமைச்சகம் தெரிவித்துள்ளது.

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