



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Friday 20210101

Oxford COVID-19 vaccine

Oxford COVID-19 vaccine may become the first to get Indian regulator's nod for emergency use (The Tribune: 20210101)

<https://www.tribuneindia.com/news/health/oxford-covid-19-vaccine-may-become-the-first-to-get-indian-regulators-nod-for-emergency-use-189714>

Indian regulator waiting for UK to give emergency authorisation of 'Covishield'

Oxford COVID-19 vaccine may become the first to get Indian regulator's nod for emergency use

With preparations underway for a possible vaccine-rollout by January, the Indian drug regulator is looking at the UK, which sources believe may give its nod to the Oxford COVID-19 vaccine next week, before deciding on giving emergency use authorisation to the Serum Institute that is manufacturing the shots here.

Once the UK drug regulator gives its approval to the Oxford vaccine, the expert committee on COVID-19 at the CDSCO will hold its meeting and thoroughly review the safety and immunogenicity data from the clinical evaluations conducted abroad and in India before granting any emergency authorisation for the vaccine here, official sources said.

The process of granting emergency use approval for Bharat Biotech's COVID-19 vaccine 'Covaxin' may take time as its phase 3 trials are still underway, while Pfizer is yet to make a presentation.

"Going by this, Oxford vaccine 'Covishield' is likely to be the first to be rolled out in India," a source said.

Serum Institute of India (SII) last week also had submitted some additional data required by the Drug Controller General of India (DCGI), the sources said.

Amid fears about the mutated variant of SARS-CoV-2 detected in the UK, government officials recently said that it will have no impact on the potential of emerging vaccines that are being developed in India and other countries.

Bharat Biotech, Serum Institute of India (SII) and Pfizer had applied to the Drugs Controller General of India (DCGI) seeking emergency use authorisation for their COVID-19 vaccines early this month.

The subject expert committee (SEC) on COVID-19 of the Central Drugs Standard Control Organisation (CDSCO) on December 9 had sought additional safety and efficacy data for COVID-19 vaccines of SII and Bharat Biotech after deliberating upon their applications.

The application by the Indian arm of US pharmaceutical firm Pfizer was not taken up for deliberation as the company had sought more time for making a presentation before the committee.

The Pfizer vaccine has already been approved by several countries including the UK, the US, and Bahrain.

While considering SII's application, the SEC had recommended that the firm should submit an updated safety data of phase 2 and 3 clinical trials in the country, immunogenicity data from the clinical trial in the UK and India, along with the outcome of the assessment of the UK Medicines and Healthcare products Regulatory Agency (MHRA) for grant of EUA.

As for Hyderabad-based Bharat Biotech, "after detailed deliberation, the committee recommended that the firm should present the safety and efficacy data from the ongoing phase 3 clinical trial in the country for further consideration", the SEC had said.

The Pune-based SII, the world's largest vaccine manufacturer, has made a collaboration with the University of Oxford and AstraZeneca to manufacture the vaccine.

The SII has already manufactured 40 million doses of the vaccine, under the at-risk manufacturing and stockpiling licence from the DCGI, officials recently had said. --- PTI

AstraZeneca's vaccine compare with Pfizer-BioNTech

Explainer - How does AstraZeneca's vaccine compare with Pfizer-BioNTech? (The Tribune: 20210101)

<https://www.tribuneindia.com/news/health/explainer-how-does-astrazenecas-vaccine-compare-with-pfizer-biontech-191939>

The AstraZeneca shot is a 'viral vector vaccine' while the Pfizer/BioNTech and Moderna vaccines use a new technology which packs messenger RNA (mRNA) inside tiny fat droplets to instruct cells to make the spike protein

Explainer - How does AstraZeneca's vaccine compare with Pfizer-BioNTech?
Photo for representation. Reuters file photos

Britain on Wednesday became the first country to approve AstraZeneca and Oxford University's home-grown UK COVID-19 vaccine, adding an easy-to-manage shot to the arsenal of a nation desperate for pandemic relief.

Even so, scientists — and regulators in Europe, following the Brexit divorce — are sceptical, given the confusion over trial results earlier that left experts questioning the robustness of the data.

HOW DOES THE ASTRAZENECA SHOT'S EFFICACY STACK UP TO OTHERS'?

The AstraZeneca/Oxford vaccine's efficacy in preventing symptomatic infections was 70.4 per cent, according to interim data, after 30 of 5,807 people who got the two-dose vaccine developed COVID-19, compared with 101 of 5,829 people who got a placebo.

That compares with the 95 per cent efficacy of the two-shot vaccine from Pfizer/BioNTech, the other vaccine approved in Britain.

While efficacy with any dose after one dose was pegged at 52.7 per cent, the UK's Medicines and Healthcare products Regulatory Agency (MHRA) regulator also said an "exploratory analysis" of trial participants, who got one full dose, showed the efficacy of 73 per cent from 22 days after the first shot.

Also read: ([Click here for the latest developments on Covid-19 epidemic](#))

The UK regulator recommends a booster shot four to 12 weeks after the first dose because up to 80 per cent efficacy was reached with a three-month interval between shots, an official involved in the MHRA approval said.

"The first dose efficacy gives an indication of protection for a short period between the two doses, the second dose strengthens the immune response and is expected to provide a more durable immune response," the University of Oxford, AstraZeneca's partner, said.

Confusion over efficacy emerged after interim late-stage trial results announced in late November when AstraZeneca acknowledged that people in its clinical trial accidentally got different doses.

Those who received a half dose of the vaccine, followed by a full dose, were shown to have 90 per cent protection, the company said initially, while two full doses offered only 62 per cent protection.

Now, however, the MHRA said the half-dose regimen's results were not borne out in analysis.

"It's all much more confusing because mistakes have been made, genuinely," one European Medicines Agency (EMA) official told Reuters, adding: "Mistakes that resulted in clinical data that was much more complex to interpret than Moderna's and Pfizer's. And on top of that, the efficacy is lower."

The AstraZeneca shot is a “viral vector vaccine”, where a specially engineered virus that normally causes chimpanzees to get the common cold delivers genetic instructions to human cells to make the spike protein jutting out from the new coronavirus’s surface.

The Pfizer/BioNTech and Moderna vaccines use a new technology which packs messenger RNA (mRNA) inside tiny fat droplets to instruct cells to make the spike protein.

AstraZeneca pledged the vaccine would cost just a few dollars per dose and be sold without making a profit, whereas Pfizer’s vaccine costs \$18.40-\$19.50 per dose.

A separate mRNA vaccine from Moderna, approved in the United States, costs up to \$37.

COVID-19 vaccination drive

**Dry run for COVID-19 vaccination drive successfully conducted in 4 states: Health Ministry
Specific teams were formed for various tasks by the district administrations
(The Tribune: 20210101)**

<https://www.tribuneindia.com/news/health/dry-run-for-covid-19-vaccination-drive-successfully-conducted-in-4-states-health-ministry-191056>

Dry run for COVID-19 vaccination drive successfully conducted in 4 states: Health Ministry
A healthcare worker wearing personal protective equipment (PPE) collects a swab sample from a Border Security Force (BSF) soldier during a rapid antigen testing campaign for the coronavirus disease (COVID-19), in Gandhinagar. — Reuters

A two-day dry run to assess the readiness of the mechanism laid out for the COVID-19 immunisation drive, which is expected to begin soon, was successfully conducted in Andhra Pradesh, Gujarat, Punjab and Assam, the Union Health Ministry said on Tuesday.

The end-to-end exercise was undertaken in Krishna district of Andhra Pradesh, Rajkot and Gandhinagar of Gujarat, Ludhiana and Shaheed Bhagat Singh Nagar of Punjab, and Sonitpur and Nalbari districts of Assam on Monday and Tuesday.

Specific teams were formed for various tasks by the district administrations and activities like uploading of dummy beneficiary data, session site creation, vaccine allocation, communicating vaccination details to beneficiaries and vaccinators, and beneficiary mobilization were carried out, the health ministry said.

Field feedback on the first day of dry run was reviewed on December 29 through video conferencing with state and district programme officers by the joint secretary (Public Health).

"All the states expressed satisfaction in terms of operational approach and use of IT platform to ensure transparency and effective monitoring of vaccination processes expected to cover a large number of people across the country.

"Additional suggestions on IT platform were also noted for further enhancement of Co-WIN platform. Detailed insights and feedback obtained will help enrich the operational guidelines and IT platform, and will strengthen the COVID-19 vaccination roll out plan," the ministry said.

Backed with the experience of rolling out the Universal Immunization Programme (UIP) and conducting nationwide multiple wide-range injectable vaccination campaigns such as measles-rubella and adult Japanese Encephalitis campaign, required steps were being undertaken to vaccinate priority population groups such as healthcare and frontline workers, and people above 50 years for COVID-19, it stated.

The exercise tested the COVID-19 vaccination process, including planning and preparations according to operational guidelines; creation of facilities and users on Co-WIN application, session site creation and mapping of sites, uploading healthcare workers data, receipt of vaccines and their allocation by districts, session planning, deployment of vaccination team, logistics mobilisation at session sites, mock drill of conducting the drive, and reporting and review meetings at block, district and state levels.

The objective of the dry run was also to undertake and confirm field implementation of the Co-WIN and guide the way forward prior to its implementation. — PTI

Covid-safe revelry

Night curbs in metros to ensure Covid-safe revelry (Hindustan Times: 20210101)

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

Muted celebrations

Authorities in several cities imposed night-time restrictions to prevent large gatherings during New Year revelries amid the Covid-19 outbreak.

MUMBAI: Night-time curbs from December 22 to January 5. Four or more people not allowed after 11pm. Gatherings at restaurants, bars and pubs not allowed after the cut-off time

BENGALURU: More than four people not allowed in public places from Thursday noon to 6am on Friday. No DJ dance programmes and special events at clubs, pubs that attract large number of people

DELHI: Over 5 people not allowed at public places from 11pm on Thursday to 6am on Friday, and then again from 11pm on Friday to 6am on Saturday. This doesn't apply to "licensed premises", such as pubs and hotels, and gatherings at residences

KOLKATA: No New Year-specific curbs, but the government says it will take precautionary measures

CHENNAI: No celebrations on roads and beaches, including the Marina Beach, till Friday. Police to curtail movement on key roads after 10pm on Thursday. Hotels, restaurants, bars to close by this cut-off time

Authorities in Delhi have announced night-time restrictions to prevent gatherings in public places on December 31 and January 1, joining metro cities such as Mumbai and Bengaluru that introduced varying degrees of curbs to curtail New Year's celebrations in the backdrop of the coronavirus disease (Covid-19) pandemic.

According to an order issued late on Wednesday, over five people are not allowed to assemble at public places in the Capital from 11pm on Thursday to 6am on Friday, and then again from 11pm on Friday to 6am on Saturday.

This order — it cited the infectious mutant UK strain that has been detected in Delhi — does not apply to "licensed premises" such as hotels, clubs and pubs, which already follow social distancing measures and Covid-19 guidelines drafted by government authorities.

"On such premises, Covid-19 guidelines like limit of persons, mandatory wearing of masks and ensuring other Covid-19 appropriate behaviour will apply," Delhi chief secretary Vijay Dev said on Thursday.

There was no restriction on gatherings in residential premises. The order made it clear that there was no restriction on interstate and intrastate movement of people and goods.

The order issued by Dev, who is also the chairman of the executive committee of the Delhi Disaster Management Authority (DDMA), effectively bans large gatherings at places such as the India Gate, a popular destination in the city on New Year's eve and New Year's day.

DDMA is in charge of implementation and enforcement of Covid-19-related regulations and management strategies in the city. Lieutenant governor Anil Baijal is its chairperson.

The order said a "detailed assessment of the situation in Delhi has been made", and "considering the threat posed by the mutant UK strain of Covid-19 virus and after observing local incidents of Covid-19 pandemics in Delhi", authorities feared that "gatherings, congregations and public celebrations in New Year pose a considerable threat of spread of the virus".

All district magistrates and deputy commissioners of police in Delhi were told to ensure strict compliance of the restrictions. Violations can attract an imprisonment of up to six months, said a government official who did not want to be identified.

Several teams of revenue officials will be deployed for surveillance and enforcement of broader Covid-19 guidelines at popular public places such as Connaught Place till January 2, a second official said, requesting anonymity. He added that officials were authorised to prosecute people not wearing masks and not following social distancing norms, as specified by authorities in previous orders.

The official said the idea of night-time restrictions was discussed at a DDMA meet chaired by LG Baijal on Wednesday. “In the meeting, the L-G reviewed the Covid-19 situation and concerns were raised over patients of the UK strain being detected in Delhi,” he said.

Authorities across the country, including those in Delhi, are on alert in view of the emergence of the mutant strain of the coronavirus that was first detected in London and Kent in mid-September.

India has suspended flights to and from the UK until January 7 from December 31. While the new strain is more infectious, there is no evidence to suggest that it increases the severity of the disease.

As of Thursday, India has reported 25 cases of the new strain; at least four of them are Delhi residents.

Delhi has reported 625,369 cases and 10,536 deaths since the beginning of the outbreak in March. On Thursday, the city recorded 574 cases and 13 fatalities.

Overall, India has reported 10,286,236 cases of Covid-19 and 149,034 deaths. The seven-day average has dropped to 19,828, down from the peak of 93,617 for the week ending September 16.

“At this juncture, people should not let their guards down, even though the number of new cases in India is on a decline. Across several other countries, there is a spike in cases and things for India can also change any moment. People should avoid gatherings,” Dr Lalit Kant, former head of the epidemiology and communicable diseases department in premier scientific body Indian Council of Medical Research (ICMR), said.

The city’s business community hinted at muted, and cautious, New Year’s celebrations.

“We have already been following Covid-19 guidelines ever since restaurants were reopened (on June 8 after a lockdown announced on March 25 to contain the spread of the disease)...

We will follow those guidelines during New Year’s celebration as well. Restaurants will operate at 50% capacity and there will be no entry of guests without masks. Thermal screening will be mandatory along with hand sanitisation,” said Sanjeev Mehra, president of the Khan Market Traders Association.

Not just Delhi, cities across India started at low-key New Year’s Day celebrations with stringent restrictions in place.

For instance, the Maharashtra government has imposed night-time restrictions from December 22 to January 5, prohibiting assembly of four or more people in Mumbai and other cities. Gatherings in restaurants, bars and pubs will not be allowed after 11pm.

There is no restriction on visiting friends, relatives and public places, but not in a group of over four people, the police added.

Unlike in the past, revellers in Bengaluru will not be able to gather in large numbers in popular spots such as MG Road, Brigade Road, Koramangala and Indira Nagar due to restrictions, Karnataka home minister Basavaraj Bommai told reporters on Thursday.

Prohibitory orders banning the gathering of over four people in public places was in place in the tech hub from Thursday noon to 6am on Friday. Hotels and restaurants were allowed to function, but only till midnight. The government has already prohibited DJ dance programmes and special events at clubs, pubs and restaurants that attract people in large numbers.

The Tamil Nadu government banned celebrations on roads and beaches, including the Marina Beach, till Friday. The Chennai Police will curtail movement on key roads after 10pm on Thursday. Hotels, restaurants and bars will have to close by this cut-off time.

In West Bengal, chief secretary Alapan Bandyopadhyay said the state government will not impose night-time restrictions, but will take precautionary measures to prevent gatherings.

“New Year celebrations are organised at a few places in West Bengal. If people abide by the Covid-19 safety protocols and cooperate with the police and administration, gatherings can be avoided,” he told news agency PTI.

(With inputs from agencies)

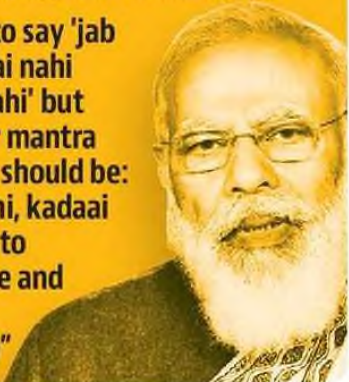
Vaccine drive

2021 brings hope, ready for largest vaccine drive: Modi (Hindustan Times: 20210101)

Leaving 2020 behind

- Prime Minister Modi said major efforts were underway to ensure vaccine doses reach the populations that need it the most
- He urged people to maintain strict precautions and unite to support the vaccination process

“I used to say ‘jab tak davai nahi dhilai nahi’ but now our mantra for 2021 should be: Davai bhi, kadaai bhi (yes to medicine and yes to caution)”



KEY DECISION LIKELY SOON

- Drugs regulator indicated that adequate data had been received in the case of one of the vaccines
- The regulators are scheduled to meet on Friday where officials said an approval could be possible
- This will pave the way for the first shots to begin shipping within days

DRY RUNS ON JAN 2

- The government decided vaccination dry runs will be carried out in each state on January 2 to help familiarise grassroots staff with the process
- The drills will also identify any challenges that may remain, and test the Co-WIN platform that will form the backbone for vaccine reporting

Massive preparations are underway in India for the launch of the world’s largest vaccination drive against the coronavirus disease (Covid-19), Prime Minister Narendra Modi said on

Thursday amid growing indications that the country's drug regulators would soon approve the first vaccine for a roll-out in the coming days.

Modi said the end of a pandemic-ravaged 2020 had brought with it a new hope, and urged citizens to unite in the vaccination effort in 2021 the same way as they did to reduce infections in the past year.

"For vaccines, every preparation needed is underway. Efforts to get vaccines being made in India to the population that need it the most are being done. India is carrying out major efforts to pull off the world's largest immunisation drive," the PM said, inaugurating a new All India Institute of Medical Sciences in Rajkot, Gujarat, over video link from New Delhi.

"In 2020, there was an atmosphere of disappointment and dismay due to the infection. There were doubts everywhere. But 2021 is coming up with a ray of hope in terms of its treatment," Modi said.

He described the battle against the coronavirus disease as a fight against "an unknown enemy" and urged the people to not believe in rumours, behave "as responsible citizens," and "refrain from forwarding messages on social media without checking".

The Prime Minister also said the last day of year was one to "remember India's millions of doctors, health warriors, sanitation workers, those working in drug stores, and other frontline corona warriors".

Three vaccines are being assessed for emergency approval by the Central Drugs Standard and Control Organisation (CDSCO). These are the vaccine candidates developed by Pfizer-BioNTech, which was the first approved anywhere in the world after clinical trials; Serum Institute of India's (SII) Oxford University-AstraZeneca candidate, which is believed to be the one with the most doses available at the earliest; and one developed by Bharat Biotech International Limited, a completely made-in-India antidote.

According to officials in the government who asked not to be named, the Oxford-AstraZeneca vaccine candidate has emerged as the front-runner for receiving regulatory approval, particularly because it had been green-lighted by the drug regulator in the UK on Wednesday.

Rolling out whichever vaccine is approved will be a challenging task – the government has targeted reaching 300 million people by July, which means over 1.5 million will need to be inoculated on an average every day beginning January.

"...This year showed that when India unites, it can effectively cope with the most difficult crisis. India is in a much better position as a result of the effective steps and India's record of saving victims of Corona has been much better than other countries," Modi said.

Later in the day, Union health secretary Rajesh Bhushan presided over a high-level meeting, directing states to gear up for the Covid-19 vaccine roll-out. The government also decided to carry out a drill for vaccinations across the country on January 2, replicating the dry runs held in seven districts in the last week.

"The activity is proposed to be conducted in all state capitals in at least three session sites; some states will also include districts that are situated in difficult terrain or areas that have poor logistical support...", said the ministry of health and family welfare in a statement.

According to the health ministry, the main objective of the dry run is to assess the operational feasibility of the Co-WIN application, the digital platform that will form the backbone of vaccination management. The linkages between planning and implementation will also be

tested at a large scale, and issues that may lead to challenges during the actual roll-out will be identified.

“The plan is all finalised, which is why dry runs are being conducted to see how it works on the ground. The pilot run helped us identify certain weak spots that are being sorted out, and now the same exercise will be conducted across the country,” said a senior health ministry official, requesting anonymity.

Overall, the vaccination process will include profiling and schedule management of several groups of people. These include 100 million health care workers (who are divided into nine categories), frontline workers such as police and military personnel, disaster management volunteers and municipal workers, and members of the general public most at risk from the virus.

The last group includes the largest numbers, about 270 million. Of these, 260 million are people above the age of 50 who have been categorised as a priority group. The remaining 10 million are expected to be people who are younger but with comorbid conditions associated with a greater risk of disease or mortality.

According to the Centre’s Covid vaccine operational guidelines, the age of a recipient for vaccination will be considered as of January 1, 2021. Anyone born on or before January 1, 1971 will fall under this category, and high- risk population group will be further sub-categorised into various age groups with priority to senior citizens above 60 years of age.

The latest electoral rolls for Lok Sabha and state legislative assembly election will be used to identify the population aged 50 years or above.

The PM also praised the efforts of the Gujarat government in containing the outbreak, and spoke on his government’s initiatives in the medical education sector. “We are working on mission mode to improve medical education in India. After the formation of National Medical Commission, the quality and quantity of health education will improve,” he added.

Covid-19: What you need to know today (Hindustan Times: 20210101)

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

If 2020 was the year of the virus, then 2021 will be, aptly enough, the year of the vaccine. If we hadn’t ended the year with a vaccine — fortunately, we have, and not just one but a handful; and one may well be approved in India on January 1 — 2021 would have been the year of the mutant strain, which makes it sound like what 2020 really was, a pulp horror novel.

But 2020 wasn’t merely the year of the virus.

It was the year of the health care worker. Through the year, around the world, doctors, nurses, paramedics and other health care givers worked around the clock, putting themselves at risk, displaying physical, mental, and emotional stamina of the kind that the world hasn’t seen in decades.

It was the year of the scientist and the researcher, the data scientist and the epidemiologist. Never in history have so many scientists and researchers around the world worked towards the same two objectives as they did in 2020: understanding the virus that caused Covid-19 better; and finding a cure or a vaccine for it. What do we have to show for it? Tens of thousands of research studies, a very clear understanding of the virus and how it attacks the human body, several successful vaccines, and a few drugs that work.

It was the year of the home. It became the office and the school, the gymnasium and the restaurant, and it became, at once, both a sanctuary and a prison.

It was the year of the screen, the year of the Zoom background; the year of baking and family meals.

It was, for people like my parents who are pretty much stuck in Chennai and can't even meet friends and relatives because they are in the most vulnerable age group, the year of loneliness and fear (neither of which can be assuaged by any amount of video-calling).

It was, for those among us who lost family and friends to the viral disease, a year of pain and sorrow, and a grieving process that seemed all too inadequate.

For me, it was also a year of writing — thanks to this column, I wrote more than I have in years (although probably just as much as I usually rewrite in a couple of months).

But for many others, definitely less privileged than anyone reading this column, 2020 was something else.

For some, it was the year that pushed them back into a life they thought they had left behind; many may have neither the will nor the means to do it all over again.

For some poor students who saw education as a way out of their situation, it was the year that ended their dreams. Many will drop out; some already have, forced to do so either because of their financial circumstances or the inability to follow classes online.

And for some who left home to pursue their dreams elsewhere, it was a year that reminded them just how little they mattered — to the people and establishments they worked for; to the cities and neighbourhoods they lived in; even to governments that are expected to look out for everyone.

And so, even as economists speak of 2021 being the year of the great rebound, and CEOs wax eloquent in investor briefings about how their companies have become more efficient and are on the path to profitability, and the rest of us simply treat 2020 like what it really is for the privileged — a Formula 1 pitstop — it is important to make sure that in this new year, all of us, individuals, companies, governments, do all we can for those whose lives have been ravaged by the year gone by.

They need opportunities; they need understanding; they need the playing field to be levelled; and, they need someone who can help them hold on to their dreams.

■ 25 cases of UK variant found

All states/UTs to do vaccine test tomorrow

VINEETA PANDEY
NEW DELHI, DEC. 31

A total 25 cases of the new, mutant Covid-19 virus have been detected among United Kingdom returnees to India till now. One new case was sequenced in IGIB, Delhi, while four were found by NIV, Pune. All 25 patients have been kept in isolation at health facilities by various state governments and are under strict monitoring.

While all containment and contact tracing efforts are on, the Centre has directed all states and Union territories to gear up for the rollout of the Covid-19 vaccine, for which a dry run will be done all across India on Saturday, January 2.

Union health secretary Rajesh Bhushan on Thursday chaired a meeting with the principal secretaries of all states/UTs. The activity is proposed to be held in state capitals in at least three session sites, but some states will also include districts situated in difficult terrain or which have poor logistical support. Maharashtra and Kerala are likely to

Dawai bhi, kadaai bhi: Modi's advice

Ahmedabad: Prime Minister Narendra Modi on Thursday said new coronavirus cases are on the decline in the country but people should not let their guard down and continue adhering to norms even after vaccination.

"I used to say '*jab tak dawai nahi dhilai nahi*' but now our mantra for 2021 should be: *Dawai bhi, kadaai bhi* (yes to medicine and yes to caution)," the Prime Minister said. — PTI

do the dry run in some major cities other than the state capital.

"The objective of the dry run for the Covid-19 vaccine introduction is to assess operational feasibility in the use of CoWIN application in a field environment, to test the linkages between planning and implementation and to identify the challenges and guide the way forward prior to actual implementation. This is also expected to give

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New coronavirus strain in India

A constant vigil: On the new coronavirus strain in India (The Hindu: 20210101)

<https://www.thehindu.com/opinion/editorial/a-constant-vigil-the-hindu-editorial-on-the-new-coronavirus-strain-in-india/article33466146.ece>

Constant monitoring is the only way India can build up its defences against new virus strains. In less than a month, it will be a year since India confirmed its first SARS-CoV-2 case in Kerala. From then and now, India looks infinitely more prepared in terms of testing capacity, vaccine candidates in development, public awareness and the kaleidoscopic experiences of those who have been exposed to the virus. However, the report of the new variant from the U.K. and confirmed in at least 25 travellers from there puts India back at the base of a new learning curve. First reported to WHO on December 14, the SARS-CoV-2 VUI 202012/01, or the 'U.K. strain', was detected only following an unexpected case spike in South East England. The U.K.'s consortium of labs periodically sequences 5%-10% of the entire genome of SARS-CoV-2 isolates from the population. From October 5 to December 13, over 50% of isolates were identified as the variant strain in South East England. This variant has at least 14 significant mutations, which could affect healthy cells or worsen compromised immune systems. Studies show that the virus variant, while not linked yet to increasing mortality, is more transmissible than other variants, thus indirectly contributing to a higher death toll. Even though the world has only now woken up to this variant, it may have been circulating in the U.K. as early as October, and with people flying on the U.K.-India route, it is quite likely that this may have already caused its circulation in India. This puts the country right back to January and February when attention was trained towards possible carriers from China and SE Asia, when it was travellers from West Asia and Europe who led to the case explosion after March. Then, India was just about figuring out how to mass produce and, more importantly, distribute RT-PCR kits and paraphernalia required for detection. Now, Indian scientists have to grapple with a new beast called mass genomic surveillance. For some years now, India has had genome sequencing machines and the personnel to track and identify new variants. However, like in the early days of RT-PCR, there are not enough of them to sequence the 4%-5% of isolates in the population like what the U.K. does. India has genome sequenced around 5,000 isolates compared to the U.K.'s 137,000.

That India has formed a consortium of leading genomics labs to make genome surveillance a routine continuous exercise is to be welcomed. With 2021 likely to be the year of the vaccine, with a rollout at an unprecedented scale, scientists have already warned that it is possible that some virus strains, or escape mutants, may change enough to evade the vaccine's immune response — as observed in the case of hepatitis B. Therefore, continuous monitoring and developing suitable detection kits are the only way India can shore up its defences against this pandemic and those of the future.

The coronavirus is universal

The coronavirus is universal, but questions of identity remain urgent

In the aftermath of the pandemic, moreover, we should realise the interconnected-ness of all life on the planet, that the questions and challenges we face are both global and local. (The Indian Express: 20210101)

<https://indianexpress.com/article/opinion/columns/coronavirus-virus-cao-protest-nrc-7128099/>

Written by Kamal Kumar Tanti | Updated: January 1, 2021 8:52:33 am

The clash of cultural identities is fundamentally a conflict among dominant cultural practices, promoted by a social order governed by the agents of capitalism for their own benefits. (File Photo)

As I wake up every morning, I ask myself a question: Am I alive? Do I exist among human beings? Will my child grow up and live to old age? The pessimism comes from two major crises looming over mankind today: A minuscule virus and the colossal climate crisis. As much as we try to close our eyes to the larger perspectives, as we speak to ourselves or to our children, the basic questions of human lives have always remained the same.

If the 2020 experience has shown us anything, it is that the human struggle for survival would continue, as it has since time immemorial, amongst hope and despair, love and conflict, living and dying, empathy and hate, birth and death. The mythical Old Fellow, my imaginary and constant companion, whispered to me that 2020 was the year for appreciating everything that we have with us, not the year to possess all that we yearn for.

If the virus does not discriminate, one may ask how relevant are questions of identity, ethnicity, class, and caste, while the world unites in suffering. In the state I call home, Assam, identity remains a fraught issue, even in the backdrop of a pandemic. Assam has witnessed a lot of turbulence, due to several mass uprisings and social movements, the latest being the anti-CAB/anti-CAA movements in the last couple of years. In the year gone by, too, we have seen how a divisive socio-political agenda created vertical divisions and distinctions among castes, religions, class and multi-fragmented Assamese identities. It set the stage for several incidents of mass hysteria, like the fears and misinformation about Tablighi Jamaat.

As an Assamese poet-writer, I also represent the descendants of tribals, socially downtrodden backward castes and classes, brought by the British colonial government and tea planters in the 19th century, as indentured and forcibly displaced labourers from central and central-east India. It is to be noted that these large populations, except for a few cases, never went back to their original birthplace. We, the descendants, have an independent history and a rare cultural sense that resists being absorbed into the cultures of the upper caste people. That's why the Adivasi tea garden labourer communities coexist with the mainstream Assamese society rather than assimilating themselves completely. We are an integral part of the greater primitive and Adivasi nationality of India, but we actively and passionately take part in the formation of the heterogeneous greater Assamese nationality. Naturally, I believe that "Assamese" is a multi-ethnic, multi-cultural, heterogeneous and democratically placed identity.

Pandemic exposed

Opinion |Pandemic exposed the existing societal framework as unsustainable (The Indian Express: 20210101)

<https://indianexpress.com/article/opinion/columns/if-the-pandemic-has-curtailed-movements-it-has-opened-up-new-spaces-too-7128098/>

The clash of cultural identities is fundamentally a conflict among dominant cultural practices, promoted by a social order governed by the agents of capitalism for their own benefits. But at the same time, culture has the potential to become subversive and can challenge the ruling order as well. What is happening in Assam is an outcome of one dominant culture attempting to hegemonise another. At stake is the question: Who really belongs to this land?

In this, what is forgotten is that Assam is a land of various democratic cultural practices; since we only talk about the dominant among them. “Assamese culture” is not one-dimensional but rather consists of heterogeneous, multi-cultural, multi-ethnic, multi-placed and multi-displaced cultural identities. But to think of culture in terms of a binary shrinks the space for the lives of others.

It makes us wonder if we have already lost the battle. Will Assam be forced to forego its own distinctively heterogeneous cultural identity in the face of an invading and expanding hegemonic force from north India and the mainland?

To oppose such a cultural onslaught, we do not need to erase diverse identities. Instead, the dominant Assamese cultural identities should accommodate and be accompanied by other forms of living. Considering the current scenario, I urge that we have to provide the necessary democratic, horizontal spaces to various voices from all communities, both dominant and non-dominant, across disciplines, thereby creating a coherent voice to be heard by the academicians, intellectuals, social workers, politicians and the common people. This will create a realistic sense of belonging to the land and its people. It will pave the way for cultural exchanges and sharing of cultural knowledge in a real sense, which will ultimately create a complete democratic space and domain for all equally important cultural identities.

Must Read Opinions

We need a new language to speak of the people, avoid the old impasse

Structures of exclusion left a stamp on the year, shaping conflict and solidarity

Pandemic exposed the existing societal framework as unsustainable

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In the aftermath of the pandemic, moreover, we should realise the interconnected-ness of all life on the planet, that the questions and challenges we face are both global and local. And as flag-bearers of our respective societies, we should look at the common crippling questions of contemporary times, because, despite all the tall claims of progress and development on all fronts, all the vitally important questions of humankind — the questions of daily sustenance, poverty, land, human rights — still remain the same. If these questions are not addressed, then

the earth would not be livable anymore for common folks with dignity, whatever be their identity.

This article first appeared in the print edition on January 1, 2021 under the title ‘We are in this together’. The writer is an award-winning bilingual poet, academic, critic and translator, based in Assam.

Pandemic

If the pandemic has curtailed movements, it has opened up new spaces too. For long, homo sapiens has been known as a questing, consuming, destructive species. What is new in this calculus is the idea of global finitude.

The days of the lockdown, even though they came upon us as recently as this past summer, have already acquired a nostalgic shimmer. Now that an effective vaccine has at long last reached the shore, this sense of nostalgia will only grow stronger. Not that the virus is killing fewer people. If anything, the devastation of life has multiplied over the past months. News channels continue with their verbal hypertrophy that viewers believe in not believing. What has changed is the way we react to the ongoing crisis.

As is the wont of human existence, even a global threat like the present one, which is perilous like never before in our lifetime, has been put through the grooves of habituation. More than a new information regime, COVID-19 has placed us in a whole new geography of affects. The more we get used to it, the more the early period of the lockdown, those days of sheer bewilderment and panic, acquire a pristine, tender ring to it, as if it was the second coming of childhood, seasoned now that we are living under the glare of unpredictability and death for months in a row.

The virus is only half a life and needs a body to breed. In the present case, it jumped from captured animals to humans. In response, we quarantined ourselves, observing our movements every passing moment. We all have become trace-detectors chasing our touch. As surfaces — of tables, chairs, doorknobs, taps — took on a new meaning in our lives, out of the blue, the topologist in us started working overtime. In supreme uncertainty and existential threat, someone in the family held out a green liquid made of aloe vera juice that promised to kill 99.9 per cent germs and mused whether it would be of real help. Confused, he saw a mighty gap between 99.9 per cent and 100 per cent. Those were the days of the “micro” or, better, as the demography teacher back in my university days used to announce in class as he stroked the chalk on the blackboard, “from micro to further micro”, leaving us wondering where “macro” stood in his scheme of things.

When home becomes an invaded space, touching becomes exploring. Touch can happen only at the surface of an object but quite often it carries the speculative possibility of what lies inside. Depending on our state of mind, every touch may open a new theatre. Each object becomes an allegory of itself in the state of solitude. It could be as trivial as a particular crack in the wall or the odd shape of moss collected in the balcony. Each of these is an image, an abode, of our ponderings. They reproduce nothing; rather we reproduce our inner selves in them.

Editorial | This was a year of the shrinking public sphere. Here’s to stepping out, without stepping over

I have been living in this room of mine since 2007. Yet for the first time, as I made it a point to clean it frequently during COVID-19, I noticed that my existence is actually crowded by a plethora of squares — from the shape of the room to the windows, doors, racks, air conditioner, bed, table and the numerous books that surround me. Similarly, I noticed that there are circles all around me — from the clock that hangs on the wall, to the pedestal fan that stands at one corner, to the bottles, and the lampshade next to my table. And also, there are straight lines. I realised that I am surrounded by a ballet of geometric shapes and proportions. On a similar journey, architect Sarovar Zaidi asks: “How do we... begin to inhabit squares, dwell in them, create enclosures and forms of order for our lives?”

Solitude is often mistaken as a kind of loneliness. Loneliness is yearning for someone who is not there. Solitude is communion with the world, making visible the deepest fabrics of our relations. Loneliness kills. One doesn't die of solitude. Solitude is also typically mistaken as the privilege of the well-off. For one thing, solitude demands an ascetic lifestyle. In India, those who enjoy the rewards of cheap labour usually have no time or aptitude for a contemplative existence. They fill in their lonely hours with television serials, just as they did during the cooped-up days of the lockdown. On the other hand, ill-paid jobs like pottery or weaving require a great deal of immersion.

In solitude, one discovers in oneself an “other than me”. This is what attributes solitude its grace. This is also why solitude is immensely political, especially in the age of neoliberalism, which is all out to kill any internal dialogue of the subject consumer, who must not be reflexive. A consumer is not a solitary being. In a cruel irony, the advent of the deadly microbe has created the possibility to take a fresh look at how we have been framing our lives in the age of hyper-technology. Instead, what effectively happened during the long-stretched immobility of the lockdown was that the vast majority of the population allowed the cyber world to do their thinking. The result was a perpetuated sense of crisis, helplessness, and oftentimes, crass selfishness.

Spinal cord injury

Scientists explore deficits in processing speed in individuals with spinal cord injury (New Kerala: 20210101)

<https://www.newkerala.com/news/2020/225822.htm>

A team of rehabilitation researchers has studied processing speed deficits in individuals with spinal cord injury (SCI). They found that the SCI group and older controls had similar activation patterns, but the SCI group differed significantly from their age-matched controls.

The scientists have compared SCI patients and their brain activation patterns with those of healthy age-matched controls, and older healthy individuals.

The article, 'The neural mechanisms underlying processing speed deficits in individuals who have sustained a spinal cord injury A pilot study' was published by Brain Topography. The authors are scientists with expertise in research in cognitive rehabilitation and SCI rehabilitation Glenn Wylie, DPhil, Nancy D. Chiaravalloti, PhD, Erica Weber, PhD, Helen Genova, PhD, and Trevor Dyson-Hudson, MD, from Kessler Foundation, and Jill M. Wecht, EdD, from the James J. Peters VA Medical Center.

Individuals with chronic SCI have an increased risk for cognitive deficits that resemble the deficits associated with the aging process, giving rise to the theory of "accelerated cognitive aging." As reported previously by this team, the deficits affect processing speed, new learning and memory, and verbal fluency, which are the domains affected during aging. This study is the first to examine the neural mechanisms of higher order cognitive tasks of individuals with SCI. The focus was on processing speed, which is known to be affected by SCI and aging, and is integral to cognitive function and everyday life activities.

The 30 participants were participants of a larger study who underwent optional neuroimaging studies at the Rocco Ortenzio Neuroimaging Center at Kessler Foundation -- 10 individuals with cervical SCI, 10 age-matched controls, and 10 healthy older individuals. In addition to traditional neuropsychological testing methods, processing speed was tested in the scanner, using timed letter comparison tasks during functional magnetic resonance imaging (fMRI). This study was the first to use the modified letter comparison test.

Significant differences in brain activation were found between the SCI group and the age-matched control group, but the SCI and older groups had similar patterns, including activation of the hippocampal, frontal and parietal areas. "This suggests that individuals with SCI are compensating for deficits in processing speed by relying on the areas of the brain involved in executive control and memory," noted Dr. Chiaravalloti, "which supports the theory of accelerated brain aging after SCI."

Despite the limitations of sample size and level of injury, the study is an important contribution to our understanding of the impact of SCI on cognition, according to Dr. Wylie, director of the Ortenzio Center. "Our ability to observe brain activation while the individual performs specific cognitive tasks provides new information on the mechanisms that underlie the cognitive deficits that we now know affect a substantial proportion of the SCI population," Dr. Wylie said. "Developing treatments targeted to these deficits depends on our pursuit of this line of research, which may benefit other populations affected by delayed processing speed."

Red cell transfusion

Study suggests higher red cell transfusion threshold offers no advantage for treating preterm infants (New Kerala: 20210101)

<https://www.newkerala.com/news/2020/225796.htm>

: Very low birth weight infants often need blood transfusions to survive. A National Institutes of Health-funded study suggests that providing a higher threshold of red cells within accepted limits offers no advantage in survival or reduction in neurological impairment over a lower threshold.

The research was conducted by Haresh Kirpalani, B.M., of the University of Pennsylvania, Philadelphia, and colleagues and was funded by the NIH's Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), National Heart, Lung, and Blood Institute, and National Center for Advancing Translational Sciences. The study appears in The New England Journal of Medicine.

Very preterm infants (born before 29 weeks of pregnancy) and those weighing less than 1,000 grams (slightly more than 2 pounds) are at high risk for anaemia because of their early stage of development, reduced ability to produce red blood cells and need for increased blood sampling as part of their intensive medical care. Previous studies suggest that anaemic infants would have a lower risk of death, cognitive delay, cerebral palsy and hearing and vision loss if they received transfusions leading to higher haemoglobin thresholds within the currently accepted range. Measuring haemoglobin, a protein produced in red blood cells, indicates the proportion of red blood cells. Haemoglobin transfusion thresholds for preterm infants vary according to weight, stage of maturity and other factors.

Of 845 infants assigned to a higher haemoglobin threshold, 50.1% died or survived with neurodevelopmental impairment, compared to 49.8% of 847 infants assigned to a lower threshold. When the two-component outcomes were evaluated separately, the two groups also had similar rates of death (16.2% vs. 15%) and of neurodevelopmental impairment (39.6% vs 40.3%). The authors conclude that a higher haemoglobin threshold increased the number of transfusions, but did not improve the chance of survival without neurodevelopmental impairment.

Blood oxygenation

What causes blood oxygenation to drop in many Covid patients? (New Kerala: 20210101)

<https://www.newkerala.com/news/2020/225494.htm>

The decreased arterial blood oxygen levels in many Covid-19 cases could be caused by infection in carotid bodies by SARS-CoV-2, the virus responsible for the pandemic, says a new study.

Carotid bodies, located on either side of the neck next to the carotid artery, detect the drop in blood oxygen and send signals to the brain to stimulate the respiratory centre.

The new research, detailed in the journal Function, relies on experiments that have revealed a high presence of the enzyme ECA2, the protein the coronavirus uses to infect human cells, in the carotid body.

One of the physiopathological characteristics of Covid-19 that has most baffled the scientific and medical community is what is known as "silent hypoxemia" or "happy hypoxia".

Patients suffering this phenomenon, the causes of which are still unknown, have severe pneumonia with reduced arterial blood oxygen levels -- known as hypoxemia.

Patients with "silent hypoxemia" often suffer a sudden imbalance, reaching a critical state that can be fatal.

In patients with Covid-19, the coronavirus circulates in the blood.

Therefore, in this study researchers from the University of Seville in Spain suggest that infection of the human carotid body by SARS-CoV-2 in the early stages of the disease could alter its ability to detect blood oxygen levels, resulting in an inability to "notice" the drop in oxygen in the arteries.

If this hypothesis, which is currently being tested in new experimental models, is confirmed, this would justify the use of activators of the carotid body independent of the oxygen sensing mechanism as respiratory stimulants in patients with Covid-19.

Covid (Hindustan: 20210101)

https://epaper.livehindustan.com/imageview_546030_55435922_4_1_01-01-2021_6_i_1_sf.html

अनुमान		इनकार न करने वाले ऑफिस	गठबंधनों का दौर
<h3>कोविड के असर से 2021 में दिखेंगे सात बदलाव</h3> <p>वर्ष 2020 ने इंसान का चरम इंसान बना दिया। वैश्वीक आंदोलन साथ कई अनोखे तंत्र, आई है, बमरस ये दुनिया बदल चुकी है। मजदूरियों ने हार बतलाय अब हमारे सामान्य जीवन का विस्था बन गए है। कोविड के दुकामी प्रभावों के चलते जीवन के हर स्तर पर अभी कई बदलाव देखने को मिलेंगे। (गोलावती है आपको वर्ष 2021 के 7 न्यू वर्ल्ड से)</p>	<p>नौकरों में 3-2-2 कोविड की प्रभाव से कई फ्री होय अहदी केमियों को डिमांडरी से निकल कर न्यू नॉर्मल की भीनी में आ गए, मगर मोस्ट्रुट केरि कोम होम 0 दिन बरहा है। अब केमिंस का कर्मचारी को घरपर ऑफिस चलाने की विचार कर रही है, मगर अब पहले की तरह राब दिन ऑफिस बुराना या आने का परिपुत्र्य बदर नहीं आ रहा। इस साल 3-2-2 का विचार और परकोगा करनी तीन दिन अफिस, दो दिन लक प्रोगि होम और दो दिन ह्यूटो। कई इकोनॉमिक फायर में प्रमनूत एक सर्वे के मुताबिक, 98 फॉर्मिडी तांग पर से काम करने के विकल्प को चुनने को तयार है।</p>	<p>कोविड के इलाके से उबरने के लिए कर्मियों को एक से एक बेवर्निंग और न्यू फिक्स के अफिर देनी। ट्रेनन सस्टेबिलिटीन इरखन ताजा उदाहरण है। ट्रेनन सस्टेबिलिटीन टोक पैरे है जैसे आयु नेफिलिडम का सस्टेबिलिटीन लेते हैं। अफेरिका को कास्टको कर्मियों ने कोल्लेपर कर्मियों के साथ मिलकर इस तरह को बेवर्निंग शुरू की है जिससे कलक को प्रमोवट वेड की सुविधा मिलेगी। कुछ इसी तरह की सोचन दिव एजानर वापसी ला रही है। बने रहने की जल्दबाडी के बीच प्रविचरनीय अफिर इस साल के न्यू नॉर्मल होगे।</p>	<p>जब साल पारंपरिक चरतीर, अहदीती और मजबूत का गढ़ बनने है। कोविड ने बुनिया, देगी, कर्मियों को एक दूसरे के साथ काम करने के तौर तरीके विस्थाए। अब ये तौर तरीके ही कार्य बनी समस्याओं से बहान निकालने। लोकडाउन के चलते कई संस्टी को कई बेवर्निंग पर ऑफिस वेड चुकी है। बजट के चलकरनी का बहाना है कि फिचनेस के बने रहने पर मजबूत मजबूतनी से निकलेंगे। इसका अब विचार नहीं, बल्कि एक दूसरे के समायोनी का इस्तेमाल करना है।</p>
<p>स्वरोजगार पकड़ने का यत्ना लोकडाउन के चलते पूरी दुनिया में बड़े पैमाने पर नौकरियों में रोक और नॉर्मल सिंग इंडियन इकॉनॉमी के अडुस, देग में नरमप 1.89 करोड़ लोगों को जीवन से हार जीना पड़ा। नौकरों जैसे और नौकरों जैसे के थप ने लोगों को स्वरोजगार को चुनना हिंदा। जो लोग को बि बिना डिपेंडेंसी इंडिया बहाना के चल करेगी। साथ तीन मजदूर फिच एर है। बीते विलीय का की अरेश यह 6 फॉर्मिडी है। यह ट्रेस सात और अगे बढ़े।</p>	<p>हर प्रोडक्ट पर सुरक्षित का टैग वर्ष 2020 की शुरुआत तक सबसे ज्यादा विकसित राष्ट्र भी डेल सार कोविड से इतने बलत दिया। इस साल सबसे ज्यादा विकसित मुद्रन होगी सुरक्षित। हर वो तकनीक तरीके का ध्यान रखेंगे जो उन्हें बीमारियों या वायरस से सुरक्षा का वादा देनी। हर वो प्रोडक्ट लेनी का ध्यान रखेंगे जो सबसे अधिक से निकलने से सुरक्षित होने का वादा करेगा। उजानम, लॉन्गमैक, टैगल, परीक्षण, इंसिस्टेंसिटी सलम अभी शक हाकी होगी। उदाहरण के लिए एपल की कई पड़ी रॉबोट में अडिसेजन का लेवल, दिल की धड़कन और डेंसीती तक दिखाती है।</p>	<p>आपे की आदत बीते साल ने हमें अपने-पिने पर जीने को मजबूर किया। ये वर्ष हमें इसकी आदत डाल देगा। घुमने में अगे नहीं खुली। विस्थाओं के मुताबिक, चीनी की वैश्वीक अरेश के बावजूद कर्मियों पूरी तरह से नहीं हटेंगे। इन्फ्लुएंजा की और से जारी एडवाइजरी के मुताबिक, कोविड जैसी कई और जुराेटिक बीमारियां (जानमरी से इंसानों को हाने वाली) इंगनी अहदीती में अपना रास्ता बना रही है। ऐसे में हमसे बचे रहने के लिए हम कम शक की अनुमान ही होना।</p>	

Infection (Hindustan: 20210101)

https://epaper.livehindustan.com/imageview_546030_55423068_4_1_01-01-2021_6_i_1_sf.htm

Coronavirus Infection (Hindustan: 20210101)

कोरोना से मृत्यु दर भी घटकर 1.45% पर पहुंची, 40 फीसदी सक्रिय मामले सिर्फ केरल-महाराष्ट्र से

सुखद: देश में 6% से नीचे आई संक्रमण दर

नई दिल्ली | हिन्दुस्तान ब्यूरो

साल 2020 के आखिरी दिन देश के लिए एक और अच्छी खबर आई। कोरोना पॉजिटिव होने वालों की दर अब छह फीसदी से नीचे आ गई है। केंद्रीय स्वास्थ्य मंत्रालय की ओर से जारी आंकड़ों के अनुसार, पिछले 14 दिनों में यह दर 6.28 फीसदी से घटकर 5.99 फीसदी हो गई है। वहीं, देश में गुरुवार को कोविड-19 के 21,822 नए मामले सामने आए जबकि 299 लोगों की मौत हो गई।

भारतीय चिकित्सा अनुसंधान परिषद (आईसीएमआर) के अनुसार, 30 दिसंबर तक कुल 17 करोड़ से अधिक नमूनों की कोविड-19 संबंधी जांच की गई, जिनमें से 11,27,244 नमूनों की जांच बुधवार को हुई। देश में लगातार 13 दिनों से उपचारार्थ लोगों की संख्या तीन लाख से कम है। दुनिया के अन्य देशों के मुकाबले भारत में संक्रमण दर बेहद कम है। दो सप्ताह के आंकड़े देखें तो भारत में सक्रिय मामले 20 हजार या इससे कम बने हुए हैं। वहीं, ब्रिटेन, अमेरिका जैसे देशों में

21822

नए मामले सामने आई पिछले 24 घंटे के दौरान देश में

299

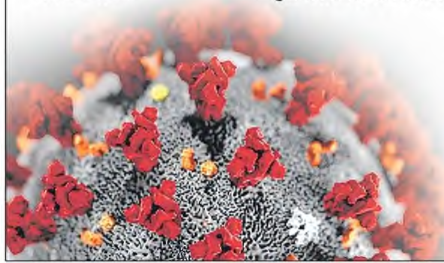
लोगों की मौत हुई इस दौरान कोरोना वायरस से

स्वस्थ होने वालों की दर 96% के पार

कोरोना के कारण संक्रमितों से ज्यादा स्वस्थ हो रहे लोगों की संख्या है। आंकड़ों के अनुसार, संक्रमण के कुल मामले बढ़कर 1.02 करोड़ से अधिक हो गए, जिनमें से 98.60 लाख से अधिक संक्रमण मुक्त हो चुके हैं। इसके साथ ही देश में मरीजों के ठीक होने की दर बढ़कर 96.04 प्रतिशत हो गई है। यह विश्व में सबसे अधिक है। वहीं कोविड-19 से मृत्यु दर कम होकर 1.45 प्रतिशत पर आ गई है। देश में अभी 2,57,656 लोगों का कोरोना वायरस संक्रमण का इलाज चल रहा है, जो कुल मामलों का 2.51 प्रतिशत है।

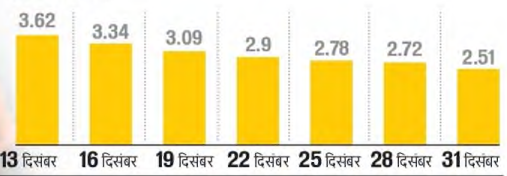
ऐसे कम होती गई पॉजिटिव होने की दर

18 दिसंबर	15.89	6.28
20 दिसंबर	16.11	6.22
22 दिसंबर	16.31	6.17
24 दिसंबर	16.53	6.12
26 दिसंबर	16.71	6.08
28 दिसंबर	16.88	6.05
30 दिसंबर	17.09	5.99



सक्रिय मामले तीन लाख से कम

(आंकड़े लाख में)



रोजाना रिकॉर्ड मामले दर्ज किए जा रहे हैं। 33 राज्यों और केंद्र शासित प्रदेशों में कोरोना वायरस के 20 हजार से कम

सक्रिय मामले हैं। कोरोना वायरस के कुल सक्रिय मामलों में 40 फीसदी मामले केरल और महाराष्ट्र से हैं।

80 फीसदी नए मामले 10 राज्यों में
: स्वास्थ्य मंत्रालय के अनुसार, कोरोना के रोजाना मिलने वाले सक्रिय मामलों में

80 फीसदी केवल 10 राज्यों से हैं। इनमें पिछले 24 घंटों में सबसे ज्यादा केरल में 6268 नए मामले सामने आए हैं।

Vaccine (Hindustan: 20210101)

https://epaper.livehindustan.com/imageview_546030_55434968_4_1_01-01-2021_6_i_1_sf.html

ऑक्सफोर्ड-एस्ट्राजेनेका का टीका ऐसे संक्रमित होने से बचाएगा

ब्रिटेन के अधिकारियों ने ऑक्सफोर्ड-एस्ट्राजेनेका वैक्सीन को मंजूरी दे दी है। ट्रायल के शुरुआती आंकड़ों के अनुसार यह टीका 62 फीसदी प्रभावी पाया गया है। हालांकि यह टीका अब तक स्वीकृत एमआरएनए टीकों की 95 प्रतिशत प्रभावकारिता से कम है। वहीं, यह टीका अधिकतर नियामकों द्वारा निर्धारित 50 फीसदी बार से अधिक है। आईए जानते हैं इसके बारे में सबकुछ...

टीका कैसे काम करता है

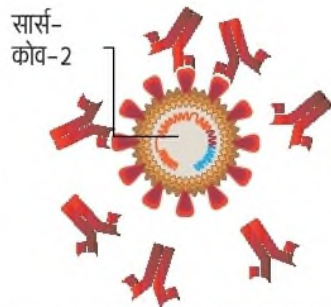
1 टीके में चिम्पांजी में सर्दी की वजह बनने वाले वायरस (एडेनोवायरस) को कमजोर कर इस्तेमाल किया गया है। इसमें नोवल कोरोना वायरस का जेनेटिक मटेरियल है। वैक्सीनेशन के जरिए सरफेस स्पाइक प्रोटीन बनता है और यह कोरोना के खिलाफ इम्यून सिस्टम बनाता है।



2 चिम्पांजी वायरस कोशिकाओं में तो प्रवेश कर सकता है, लेकिन जेनेटिकली मोडिफाई होने की वजह से यह प्रतिकृति नहीं बनने देता है। यह कोशिका के अंदर स्पाइक प्रोटीन के लिए कोड उत्पन्न करता है।

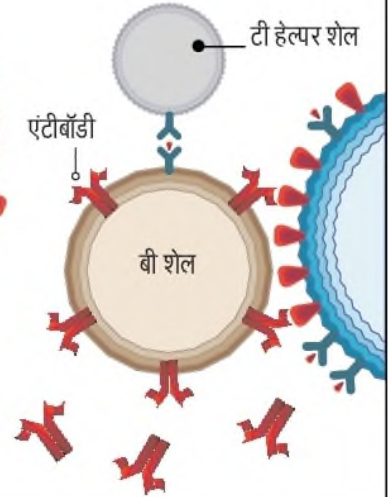


3 होस्ट सेल (मेजबान कोशिका) कोड को पढ़ लेता है। कोड पढ़ने के बाद होस्ट सेल स्पाइक का निर्माण करने लगता है।



5 यह वास्तविक कोरोना वायरस को पहचानता है और स्पाइक के सहारे असली वायरस को नियंत्रित करता है।

4 इसके बाद स्पाइक प्रोटीन रोग प्रतिरोधक क्षमता को मजबूत करने लगता है। इसके साथ ही महत्वपूर्ण एंटीबॉडी सेल का निर्माण करने लगता है।



लाम

- एस्ट्राजेनेका की वैक्सीन एक वायरल वेक्टर वैक्सीनेशन है, जो सामान्य कोल्ड वायरस के कमजोर संस्करण पर आधारित है।
- नए साल में टीकाकरण शुरू हो जाएगा। कई देशों में अगले साल की पहली तिमाही में करोड़ों डोज पहुंचाई जानी है।

चिंताएं

- शुरुआती चरण के क्लिनिकल डाटा के मुताबिक यह उतना एंटीबॉडी रिस्पांस उत्पन्न नहीं कर सका, जितना एमआरएनए पर आधारित टीका करता है।

ऑक्सफोर्ड-एस्ट्राजेनेका

टीका का नाम: एजेडडी1222

- प्लेटफॉर्म - एडेनोवायरस
- डोज - दो खुराक
- ट्रायल - 20 हजार लोग
- प्रभावी - 62 फीसदी
- गंभीर मामला - कोई नहीं
- सप्लाय क्षमता - 2.90 अरब
- डील - 3.2 अरब
- कीमत - 4-5 डॉलर (पर वाइल)

मॉडर्ना

टीका: एमआरएनए-बीटीएन1273

- प्लेटफॉर्म - एमआरएनए
- डोज - दो खुराक
- ट्रायल - 30 हजार लोग
- प्रभावी - 95 फीसदी
- गंभीर मामला - 11
- सप्लाय क्षमता - 1 अरब
- डील - 7 करोड़
- कीमत - 25-37 डॉलर (पर वाइल)

फाइजर-बायोएनटेक

टीका का नाम: एमआरएनए-बीटीएन162

- प्लेटफॉर्म - एमआरएनए
- गंभीर मामला - 10

Medicine (Hindustan: 20210101)

https://epaper.livehindustan.com/imageview_546030_55430580_4_1_01-01-2021_6_i_1_sf.html

दवाई के साथ कड़ाई भी जरूरी होगी : मोदी

नया मंत्र

अहमदाबाद | एजेसी

प्रधानमंत्री नरेंद्र मोदी ने गुरुवार को कहा कि देश में कोरोना संक्रमण के नए मामलों की संख्या कम हो रही है लेकिन इसका मतलब ये नहीं कि लोग लापरवाही बरतें। उन्होंने नए साल में 'दवाई भी, कड़ाई भी' का मंत्र देते हुए टीकाकरण के बाद भी सावधानी बरतने का देशवासियों से आग्रह किया।

प्रधानमंत्री ने राजकोट में अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स) की आधारशिला रखने के बाद यह विश्वास व्यक्त किया कि कोरोना के खिलाफ टीकाकरण अभियान को सफल बनाने के लिए भी पूरा भारत एकजुटता से आगे बढ़ेगा। उन्होंने कहा कि कोरोना के टीके को लेकर भारत में सभी जरूरी तैयारियां चल रही हैं। उन्होंने लोगों को सचेत करते हुए कहा कि कोरोना के टीके को लेकर विभिन्न लोग विभिन्न प्रकार की अफवाहें भी फैला सकते हैं, लेकिन देशवासियों को इनसे सावधान रहना चाहिए। उन्होंने दावा किया कि कुछ लोग तो अभी से अफवाहें फैलाने लगे हैं।



टीकाकरण कार्यक्रम की तैयारी आखिरी चरण में

प्रधानमंत्री मोदी ने कहा कि देश में कोविड-19 के टीकाकरण कार्यक्रम की तैयारी आखिरी चरण में है। उन्होंने कहा, साल 2020 में संक्रमण की निराशा थी, चिंताएं थी, चारों तरफ सवालिया निशान थे। लेकिन 2021 टीके के चलते इलाज की आशा लेकर आ रहा है।

भारत में चिकित्सा शिक्षा में सुधार की जरूरत

मोदी ने कहा कि साल 2020 को राजकोट एम्स जैसी एक नई स्वास्थ्य सुविधा के साथ विदाई देना इस साल की चुनौती को भी बताता है और नए साल की प्राथमिकता को भी दर्शाता है। उन्होंने कहा, हम भारत में चिकित्सा शिक्षा में सुधार के लिए मिशन मोड में काम कर रहे हैं।

राजधानियों में टीकाकरण की परख होगी

नई दिल्ली | एजेसी

देश के सभी राज्यों और केंद्र शासित प्रदेशों में 2 जनवरी को कोरोना वायरस के खिलाफ वैक्सीनेशन का ड्राई रन (पूर्वाभ्यास) किया जाएगा। गुरुवार को इसका ऐलान करते हुए केंद्र सरकार ने कहा कि सभी राज्यों की राजधानियों में कम से कम तीन जगहों पर ये ड्राई रन किया जाएगा।

केंद्रीय स्वास्थ्य मंत्रालय ने कहा कि कुछ राज्यों में इस कवायद को ऐसे जिलों में भी अंजाम दिया जाएगा, जहां पहुंच आसान नहीं है तथा जहां साजो-सामान संबंधी सुविधाओं की अच्छी व्यवस्था नहीं है। कहा कि महाराष्ट्र और केरल का अपनी राजधानियों के अलावा बड़े

सरकार ने 83 करोड़ सिरिंज का ऑर्डर दिया

सरकार ने टीकाकरण में उपयोग होने वाली सिरिंज के लिए ऑर्डर दे दिया है। स्वास्थ्य मंत्रालय ने गुरुवार को जानकारी देते हुए बताया है कि सरकार ने 83 करोड़ सिरिंज की खरीद के लिए ऑर्डर दिया है। बयान के मुताबिक, 35 करोड़ अधिक अतिरिक्त सिरिंज के लिए भी बोलियां आमंत्रित की गई हैं और बीते नौ महीनों में देश भर के सरकारी अस्पतालों में 36,433 वेंटिलेटर वितरित किए गए हैं।

शहरों में टीकाकरण के पूर्वाभ्यास को अंजाम दिए जाने की संभावना है।

केंद्रीय स्वास्थ्य सचिव राजेश भूषण ने गुरुवार को प्रधान स्वास्थ्य सचिवों और सभी राज्यों एवं केंद्रशासित प्रदेशों के अन्य स्वास्थ्य अधिकारियों के साथ एक उच्चस्तरीय बैठक की और कोविड-19 टीकाकरण के लिए सत्र स्थलों पर तैयारियों की समीक्षा की। देश

के सभी राज्यों में जिन तीन जगहों को ड्राई रन के लिए चिह्नित किया जाएगा। वहां के संबंधित प्रभारी मेडिकल अधिकारी 25 स्वास्थ्यकर्मियों को चिह्नित करेंगे। राज्यों तथा केंद्र शासित प्रदेशों को कहा गया है कि वे यह सुनिश्चित करें कि इन सभी चिह्नित लाभार्थियों के आंकड़े को-विन ऐप पर अपलोड हों।

चिंताजनक : नए वायरस से अब तक 25 संक्रमित

नई दिल्ली | एजेसी

ब्रिटेन में मिले कोरोना वायरस के नए प्रकार से अबतक भारत में कुल 25 लोगों के संक्रमित होने की पुष्टि हुई है। यह जानकारी केंद्रीय स्वास्थ्य मंत्रालय ने गुरुवार को दी।

मंत्रालय ने बताया कि इन 25 संक्रमितों में मंगलवार और बुधवार को वायरस के नए प्रकार से संक्रमित 20 मरीज भी शामिल हैं। इन सभी 25 मरीजों को चिकित्सालयों में एकांतवास में रखा गया है। सरकार के मुताबिक, गुरुवार को नए वायरस से संक्रमित

ब्रिटेन से लौटे 565 लोग
तीन दिन बाद भी नहीं मिले

लखनऊ। ब्रिटेन से यूपी लौटे लोगों में से 565 लोगों को तीन दिन बाद भी ढूंढा नहीं जा सका है। बुधवार को जरूर पांच की पहचान की गई और उनका नमूना लेकर जांच के लिए सीएसआईआर दिल्ली भेजा गया। 9 दिसम्बर के बाद प्रदेश में आए इन लोगों में से ज्यादातर के मोबाइल स्वीच ऑफ हैं।

मिले पांच मरीजों में से चार में संक्रमण की पुष्टि राष्ट्रीय विषाणु विज्ञान संस्थान, पुणे में हुई जांच से हुई।