



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Tuesday 20201222

New coronavirus variant in Britain

**The new coronavirus variant in Britain: How worrying is it?
Said to be up to 70% more transmissible than previously dominant strain in UK (The rTribune: 20201222)**

<https://www.tribuneindia.com/news/health/the-new-coronavirus-variant-in-britain-how-worrying-is-it-187575>

A new variant of the pandemic SARS-CoV-2 coronavirus is spreading rapidly in Britain and prompting high levels of concern among its European neighbours, some of which have cut transport links.

The strain, referred to by some experts as the B.1.1.7 lineage, is not the first new variant of the pandemic virus to emerge, but is said to be up to 70% more transmissible than the previously dominant strain in the United Kingdom.

Are the concerns justified?

Most scientists say yes. The new variant has rapidly become the dominant strain in cases of COVID-19 in parts of southern England, and has been linked to an increase in hospitalisation rates, especially in London and in the adjacent county of Kent.

(Click here for the latest developments on Covid-19 epidemic)

While it was first seen in Britain in September, by the week of December 9 in London, 62% of COVID-19 cases were due to the new variant. That compared to 28% of cases three weeks earlier.

The governments of Australia, Italy and the Netherlands say they detected cases of the new strain.

It was identified in the Netherlands in early December.

A few cases of COVID-19 with the new variant have also been reported to the ECDC, Europe's disease monitoring agency, by Iceland and Denmark. Media reports in Belgium say cases have also been detected there.

"It is right to take it seriously," said Peter Openshaw, a professor of experimental medicine at Imperial College London.

Shaun Fitzgerald, a visiting professor at the University of Cambridge, said the situation was "extremely concerning."

Why?

The main worry is that the variant is significantly more transmissible than the original strain. It has 23 mutations in its genetic code -- a relatively high number of changes -- and some of these are affecting its ability to spread.

Scientists say it is about 40%-70% more transmissible. The UK government said on Saturday it could increase the reproduction "R" rate by 0.4.

This means it is spreading faster in Britain, making the pandemic there yet harder to control and increasing the risk it will also spread swiftly in other countries.

"The new B.1.1.7 ... still appears to have all the human lethality that the original had, but with an increased ability to transmit," said Martin Hibberd, professor of emerging infectious disease at the London School of Hygiene & Tropical Medicine.

Will Covid-19 vaccines protect against this variant?

Scientists say there's no evidence that vaccines currently being deployed in the UK -- made by Pfizer and BioNtech -- or other COVID-19 shots in development will not protect against this variant.

"It's unlikely that this will have anything more than a minor, if any, effect on the vaccine's effectiveness," said Adam Finn, a vaccine specialist and professor of paediatrics at Bristol University.

Britain's chief scientific adviser Patrick Vallance also said COVID-19 vaccines appeared to be adequate in generating an immune response to the variant of the coronavirus.

"We are not seeing...any gross changes in the spike protein that will reduce vaccine effectiveness so far," said Julian Tang, professor and clinical virologist at Leicester University.

Does the new variant affect testing?

To some extent, yes.

One of the mutations in the new variant affects one of three genomic targets used by some PCR tests. This means that in those tests, that target area, or "channel", would come up negative.

“This has affected the ability of some tests to detect the virus,” said Robert Shorten, an expert in microbiology at the Association for Clinical Biochemistry & Laboratory Medicine.

Since PCR tests generally detect more than one gene target, however, a mutation in the spike protein only partly affects the test, reducing that risk of false negative results.

Are there other significant SARS-COV-2 variants about?

Yes. Strains of the COVID-19-causing virus have emerged in recent months in South Africa, Spain, Denmark and other countries that have also raised concern.

However none, so far, has been found to contain mutations that make it more deadly, or more likely to be able to evade vaccines or treatments.

Did this new variant originate in Britain?

Vallance said on Saturday he thought the new variant might have started in the UK. Some scientists in Europe have credited British expertise in genomic surveillance for identifying the mutation.

“The UK has one of the most comprehensive genetic surveillance programmes in the world - 5% to 10% all virus samples are genetically tested. Few countries do better,” Steven Van Gucht, head of viral diseases at the Belgian Institute of Health, told a news conference on Monday. Reuters

India can inoculate priority groups by June 2021: Fitch Solutions
Country has one of the largest vaccine manufacturing capacities in the world

A vaccine against COVID-19

**India can inoculate priority groups by June 2021: Fitch Solutions (The
rTribune: 20201222)**

<https://www.tribuneindia.com/news/health/india-can-inoculate-priority-groups-by-june-2021-fitch-solutions-187560>

A vaccine against COVID-19 can cover priority groups in India by June next year if inoculation is quickly ramped up to roughly the same level as the 1 million coronavirus tests conducted each day in the country, Fitch Solutions said on Monday.

“India’s role in the global COVID-19 vaccine rollout will be significant both as a recipient of the medicine as well as a producer,” Fitch said in a report.

(Click here for the latest developments on Covid-19 epidemic)

India, it said, has one of the largest vaccine manufacturing capacities in the world (including the largest vaccine producer – Serum Institute India, SII) and has secured authorisation to mass-produce the AstraZeneca, Novavax and Gamaleya Research Institute vaccines.

With a population of 130 crore (and 9.4 crore over 65-year-olds), the domestic vaccination drive will be the largest in the world.

“The country has a good track record of such drives with masses of the population regularly gaining inoculation for various diseases such as polio and cholera,” it said.

India’s vaccine rollout will begin in first quarter of 2021 (January to March), with frontline healthcare workers and individuals over the age of 50 years gaining priority.

Fitch said the government aims to vaccinate some 25 crore people over six-to-eight months, which is “a lofty goal”.

“However, if India can quickly ramp up vaccinations to roughly the same level as the 1 million (10 lakh) COVID-19 tests it conducts each day, then we expect coverage across priority groups can be achieved by June 2021,” it said.

Risks to this outlook include the sheer scale of the project and with relatively weak institutions and healthcare infrastructure, these challenges could result in a slower rollout than expected, it added.

Access to COVID-19 vaccines is set to vary significantly across Asia depending on the advance purchase agreements a given country has reached with vaccine developers.

Developed markets have generally purchased access to vaccines from Pfizer, Moderna and AstraZeneca, smaller countries with strong healthcare systems will have an advantage in rolling out vaccines.

“Vaccine access for emerging markets is likely to be more varied with a larger role for supply from China and Russia and their state-developed vaccine candidates. We note that some markets have already begun mass vaccinations with limited Phase III trial data available,” Fitch said.

It said multiple COVID-19 vaccines are expected by the end of first quarter of 2021.

The first COVID-19 vaccine approval (based on Phase III data) was announced on December 2, 2020 by the UK’s medicine regulator MHRA.

“We expect further approvals from various national regulators and for different vaccines over late 2020 and throughout 2021 as candidates reach clinical endpoints,” it said adding many of the vaccines use the same approach of targeting the spike protein of the virus structure - an approach that has shown to be successful so far.

The initial distribution of COVID-19 vaccines, it said, is likely to be skewed towards wealthier nations in line with advance purchase agreements (APAs).

“We believe this is largely due to the ability to pay and the commercially focussed approach adopted by the vaccine developers which will be the first to gain approval,” it said. “This theme also applies to Asia where some countries have secured access to vaccines while others have not.”

For countries with confirmed supply, vaccinations are set to begin with priority populations made up of frontline healthcare workers, populations over 65 years of age, and those with underlying health conditions. Epidemiological data show that these groups (along with 50-65-year-olds) make up around 99 per cent of the preventable mortality from COVID-19 and a large proportion of hospitalisations.

“We expect that, as these populations gradually reach protection, governments eager to return to economic normality will look to begin easing restrictions,” Fitch said. “Different countries will enact this easing at different paces depending on the progress of vaccine rollout.” PTI

Avoiding hospital in pandemic increased heart disease deaths: Study Excess cardiac mortality may have been as high as 232 deaths per week (The Tribune: 20201222)

<https://www.tribuneindia.com/news/health/avoiding-hospital-in-pandemic-increased-heart-disease-deaths-study-187520>

Avoiding hospital in pandemic increased heart disease deaths: Study
Excess cardiac mortality may have been as high as 232 deaths per week. Image: iStock

Reduced hospital visits for urgent heart problems during the initial phase of the Covid-19 pandemic may have contributed to hundreds of avoidable deaths, new research has found.

In the wake of the coronavirus pandemic, a marked decline inpatient visits to emergency departments (EDs) was observed in England and the US, including for people with heart problems.

In this study, published online in the journal *Circulation: Cardiovascular Quality and Outcomes*, researchers at University College London's Institute of Health Informatics estimated the effect of reduced emergency departments visits for suspected cardiac disease on non-Covid-19 related cardiac mortality in England.

The researchers estimated that the excess cardiac mortality due to non-attendance at Emergency Departments, during the initial phase of the pandemic, may have been as high as 232 deaths per week.

To quantify the number of excess deaths due to cardiac disease, the team used mortality counts from the Office of National Statistics (ONS) for England.

To quantify the change in daily ED visits, researchers used data from the Public Health England (PHE) Emergency Department Syndromic Surveillance System (EDSSS): a network of sentinel EDs across England.

To explore how the reduction in ED visits may have affected cardiac mortality, researchers implemented causal inference methodology.

"During the initial phase of the pandemic, between March 12 and April 15, 2020, there was an estimated fewer ED visits of 2,750 per week for suspected cardiac disease; this is around a 35 per cent decrease compared to the pre-pandemic period this year," said lead study author Michail Katsoulis.

"Our analysis suggested that one cardiac death might have been prevented or delayed for every additional 12 ED visits for suspected cardiac conditions." March 12 was the day the UK's Chief Medical Officer raised the risk to the UK from moderate to high and the government advised that anyone with a new continuous cough or a fever should self-isolate for seven days.

"Our results suggest that the pandemic response may have led to the undertreatment of non-Covid-19 diseases, including heart conditions, with important impacts on the excess mortality observed during this period," said senior study author Tom Lumbers.

"These results provide evidence of the stark indirect effects of the Covid-19 pandemic on mortality in England." -

COVID-19

Men have 30 per cent higher risk of dying from COVID-19 than women: Study

Patients who were obese, had hypertension or poorly managed diabetes had a higher risk of dying (The Tribune: 20201222)

<https://www.tribuneindia.com/news/health/men-have-30-per-cent-higher-risk-of-dying-from-covid-19-than-women-study-187030>

Men have 30 per cent higher risk of dying from COVID-19 than women: Study
Men have a 30 per cent higher risk of dying from COVID-19. Tribune photo,

Men have a 30 per cent higher risk of dying from COVID-19 compared to women of the same age and health status, according to a new study which analysed the link between common patient characteristics and the risk of dying from the novel coronavirus infection.

Hospitalised COVID-19 patients have a greater risk of dying if they are men or if they are obese or have complications from diabetes or hypertension, the study, published in the journal *Clinical Infectious Diseases*, noted.

In the research, the scientists from the University of Maryland School of Medicine (UMSOM) in the US assessed nearly 67,000 hospitalized COVID-19 patients in 613 hospitals across the country.

They said the patients who were obese, had hypertension or poorly managed diabetes had a higher risk of dying compared to those who did not have these conditions.

The study noted that COVID-19 patients aged 20 to 39 with these conditions had the biggest difference in their risk of dying compared to their healthier peers.

"Knowledge is power in many ways, so I think understanding which hospitalized COVID-19 patients are at highest risk of mortality can help guide difficult treatment decisions," said study corresponding author Anthony D. Harris.

The researchers believe healthcare providers could consider these risks when determining which COVID-19 patients could benefit the most from antibody therapies that, if given in the first few days of the infection, can reduce hospitalisation risk.

According to the study, age remained the strongest predictor of mortality from COVID-19.

It noted that overall, nearly 19 per cent of hospitalised COVID-19 patients died from their infection with the lowest mortality among pediatric patients, which was less than two per cent.

Mortality rates increased with each decade of life with the highest mortality, 34 per cent, among those aged 80 and older.

"Older patients still have the highest risk of dying, but younger patients with obesity or hypertension have the highest risk of dying relative to other patients their age without these conditions," said study lead author Katherine E. Goodman. PTI

Coronavirus strain

What we know so far about the new coronavirus strain (The Hindu: 20201222)

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

Over the weekend, officials in London announced a new variant of the Sars-Cov-2 appeared to be taking hold in some parts of the country. They said it could be up to 70% more transmissible than the old variant.

There is, however, no evidence yet to suggest it is more lethal or causes more severe illness, or that vaccines will be any less effective against the new variant. The announcement forced countries around the world to soon announce restrictions on flights from the UK. Till Monday, the number of nations that unveiled such restrictions had grown to at least 33. Scientific knowledge about the new variant suggests there is reason for concern, but none for panic.

Covid-19: What you need to know today (Hindustan Times: 20201222)

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

The big news of Monday was the big news of Sunday, which was the big news of Saturday – the new strain of the coronavirus in the UK. Following the lead of many other countries, India too stopped flights from the UK till the end of the year, but it may be too late. According to a report in virological.org by researchers from several UK universities – the report was authored for the Covid-19 Genomics Consortium, UK, a public-private partnership that seeks to “collect, sequence and analyse the whole genomes of virus samples in the UK” – the first samples of the strain (now called B.1.1.7) was collected on September 20. That’s three months back, which probably means that most countries barring the entry of travellers from the UK, or stopping flights to and from that country are probably too late. There is a very high probability that the strain has already entered their countries.

Between the time I wrote Dispatch 229 on Sunday and the time I am writing this, scientists have figured out even more about this strain, and the bad news would appear to be that, at least in a laboratory setting, it is more infective than the older strain. It also emerges that the strain is now the dominant one, at least in the UK, but that should not come as a surprise to anyone – that’s how mutations often work. According to the report in virological.org, three of the new strain’s multiple mutations (17, according to most reports), are interesting. One, which I wrote about in yesterday’s dispatch, Mutation N501Y, effects a change in the spike protein of the virus, possibly making it bind better with human cells; another, also in the spike protein, could, researchers suspect, help the virus evade the host’s immune system; and the third, whose effects are not known, is close to the cleavage site of the spike protein. This is the site which reacts with the human enzyme furin, resulting in the spike protein breaking into two parts, with one part (S1), attaching itself to the ACE receptor found in human cells, facilitating the entry of the viral matter. It’s easy to see how all this could make the new strain more infective, but as I pointed out yesterday, we will not know for sure till more studies of infectivity happen, and more genomes of the virus are analysed – and both need to happen across the globe.

India may be seeing a lull in new cases, but this is no guarantee that the new strain isn’t here already. The country has had a so-called travel bubble with the UK since May, with 70 flights a week between the countries. This can be established through a large-scale genomic analysis. India has been analysing viral genomes from around the country, and while this does not seem to have been on the same scale as the UK’s, if there were a new strain of the virus rapidly emerging as the predominant one, it is likely to have been picked up.

The UK scare is likely to push India (and many other countries) to sequence more genomes of the virus. According to an article in Science (sciencemag.org), the UK’s efforts at identifying

the new strain were helped by the fact that one of the commonly used RT-PCR tests in that country, TaqPath, showed pieces of only two genes in the result if the virus was the new strain (as compared to pieces of three genes for the older strain; one of the genes is hidden by one of the mutations). This kit is approved for use in India too (according to the website of the Indian Council of Medical Research), but this columnist doesn't know how many labs, if any at all, use it. That would be a good starting point for India's investigations into the new strain.

Virus variant

Virus variant: On temporary travel ban from U.K. (Hindustan Times: 20201222)

<https://www.thehindu.com/opinion/editorial/virus-variant-on-temporary-travel-ban-from-uk/article33387993.ece>

Increased transmissibility is one more reason to follow non-pharmaceutical interventions. With nearly a dozen countries in Europe and elsewhere temporarily banning travel from the U.K. after a new variant of the novel coronavirus was found to be causing an increased number of new cases there, India too has followed suit — flights, with some exceptions, have been temporarily suspended from Tuesday night till December 31. On Saturday, the U.K. imposed strict restrictions in greater London and much of southeast England. The variant — VUI-202012/01 (the first 'variant under investigation' in December 2020) — has 23 mutations in all. Though a few of these are seen in the region of the virus that binds to the human receptor, a single mutation — N501Y — has been found to increase the binding affinity, making the variant more transmissible. On December 20, the COVID-19 Genomics UK Consortium, which identified the variant on September 20, said the variant has been “growing in frequency” since November 2020 and is “responsible for an increasing proportion of SARS-CoV-2 cases in the UK”. Based on modelling, it has been found to be 70% more transmissible but this is yet to be confirmed in lab experiments. The European Centre for Disease Prevention and Control says that in a preliminary study, the variant has the potential to increase by over 0.4 the number of people a person can infect. There is no evidence as yet that it can cause any change in disease severity or increase the risk of reinfection.

Though the N501Y and other mutations are found in the spike protein region of the virus, it is unlikely that the mutations would make the two COVID vaccines that have secured emergency use approval and the ones in final stages of testing less effective. This is because vaccines produce antibodies against many regions of the spike protein, and there is also the T-cell immunity that would come into play to clear the virus. However, as the virus accumulates more mutations, there is a possibility that vaccines might require minor tweaking. The emergence of the new variant underlines the compulsion to undertake surveillance following vaccination to track vaccine effectiveness and to look for the appearance of vaccine-escape mutants. SARS-CoV-2 being an RNA virus tends to have a higher mutation rate, but the presence of 23 mutations strongly suggests that the variant has not emerged through gradual accumulation of mutations. According to COG-UK, it is probably due to prolonged infection in a single patient, potentially with reduced immunocompetence. While a few cases caused by the new variant have been reported, the extent of international spread is unknown. Since far fewer SARS-CoV-2 genomes are sequenced at regular intervals in India, it is unclear if the variant is already

present here. The emergence of the new variant with increased transmissibility is one more reason why non-pharmaceutical interventions should be strictly adhered to.

Drugs (The Asian Age: 20201222)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=15297342>

Global pharma may look at India for APIs

SANGEETHA G.
CHENNAI, DEC. 21

Global pharma companies are actively looking at de-risking their supply chain from China by adding new suppliers of active pharmaceutical ingredients (APIs) and India, which is increasing its production, is in a sweet spot.

Global companies, especially those based in the US and Europe, are actively looking at de-risking their supply chain from China. "They have three options: They can either produce APIs in-house or outsource manufacturing to other US or Europe-based companies. The third option is to choose a supplier from a developing country ex-China. However, the first two options are not viable for their entire portfolio, leaving the third option," finds Emkay Global Financial Services.

Indian companies have an edge, given their long history of supplying formulations and APIs globally, better quality and regulatory compliance and better supply reliability.

However, the financial



impact of the decision of global companies will take time as adding an API supplier will take 6-18 months, depending on regulatory pathway.

Production-linked incentive schemes and bulk drug parks will increase production of APIs, especially the 53 APIs included in the PLI scheme. They will also lower the cost differential between India and China to close to zero.

According to Ravi Uday Bhaskar, director general of the Pharmaceuticals Export Promotion Council of India (Pharmexcil), the schemes will help increase India's production of chemicals and intermediates. "We are trying to consolidate our position in generic formulations as well as APIs.

Currently, China is the largest supplier of APIs. We need to work on improving our cost efficiency as well," he said.

The PLI scheme and bulk drug parks will address most of the key elements needed to improve cost efficiency.

Higher volumes, lower cost of utilities such as electricity, steam, warehousing, lower effluent treatment costs, cost of labour and technology are the key drivers of efficiency.

Bulk drug park scheme will address utilities costs and effluent treatment costs, while PLI scheme's 20 per cent incentive on fermentation based APIs and 10 per cent for chemical-based API will further bridge the cost gap.

Pregnancy

How exposure to metals during pregnancy may affect baby's health (New Kerala: 20201222)

<https://www.newkerala.com/news/2020/220434.htm>

Exposure to metals such as nickel, arsenic, cobalt and lead may disrupt a woman's hormones during pregnancy which may lead to children's later health and disease risks, says a new study.

Exposure to metals has been associated with problems at birth such as pre-term birth and low birth weight in babies, and pre-eclampsia in women.

However, little is known about how metals exposure can lead to such problems.

This new research, published in the journal *Environment International*, shows that some metals may disrupt the endocrine system, which is responsible for regulating our body's hormones.

These disruptions may contribute to children's later health and disease risks.

"A delicate hormonal balance orchestrates pregnancy from conception to delivery and perturbations of this balance may negatively impact both mother and foetus," said lead author Zorimar Rivera-Nunez, Assistant Professor at the Rutgers University in the US.

The researchers analysed blood and urine samples from 815 women enrolled in the Puerto Rico Test site for Exploring Contamination Threats (PROTECT) study.

Initiated in 2010, PROTECT is an ongoing prospective birth cohort studying environmental exposures in pregnant women and their children around the northern karst zone, which include urban and mountainous rural areas of Puerto Rico.

They found that metals can act as endocrine disruptors by altering prenatal hormone concentrations during pregnancy. This disruption may depend on when in the pregnancy the mother was exposed.

Among pregnant women, metal exposure is higher in those living in Puerto Rico than in those in the continental United States.

"This is important because, compared to the US overall, women in Puerto Rico have significantly higher rates of preterm birth (nearly 12 per cent) and other adverse birth outcomes," Rivera-Nunez said.

SARS-CoV-2,

New lethal Covid variant puts world on high alert (New Kerala: 20201222)

<https://www.newkerala.com/news/2020/220382.htm>

While several countries are still struggling to tame the novel coronavirus (SARS-CoV-2), the emergence of the new and deadly mutated variant of the "pandemic coronavirus" has put the world once again on high alert as 2021 knocks at the door.

The scientists have scrambled to figure out whether the UK variant titled 'B.1.1.7' is really more adept at human-to-human transmission. They're also wondering how it evolved so fast.

According to the prestigious journal Science, the 'B.1.1.7' variant has acquired 17 mutations all at once -- a feat never seen before.

"There's now a frantic push to try and characterise some of these mutations in the lab," Andrew Rambaut, a molecular evolutionary biologist at the University of Edinburgh, was quoted as saying by the magazine on Sunday.

According to the researchers, it seems that this variant (also dubbed as VUI-202012/01) is now starting to dominate over existing versions of the coronavirus.

The worry is Scientists say that 'B.1.1.7' may already be much more widespread. Other than the UK, it has been detected in the Netherlands, Denmark, Italy and Australia.

"The United Kingdom may just have picked it up first because that country has the most sophisticated SARS-CoV-2 genomic monitoring in the world. Many countries have little or no sequencing," said the report.

According to Rambaut, among the 17 are eight mutations in the gene that encodes the spike protein on the viral surface, two of which are particularly worrisome.

"One, called N501Y, has previously been shown to increase how tightly the protein binds to the ACE2 receptor, its entry point into human cells," he noted.

The other, named 69-70del, leads to the loss of two amino acids in the spike protein and has been found in viruses that eluded the immune response in some immuno-compromised patients.

"There's now a frantic push to try and characterise some of these mutations in the lab."

The evolutionary process that led to B.1.1.7 may also occur elsewhere, fear the scientists.

"Whatever enabled the B.1.1.7 lineage to emerge is likely going on in other parts of the world. Will we be able to actually detect it and then follow up on it? That, to me is one of the critical things," said Kristian Andersen, an infectious disease researcher at Scripps Research.

Scientists are becoming more convinced that the new variant of coronavirus is more transmissible.

"Notes from a meeting of the UK's New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) on December 18 state that the group "has moderate confidence that VUI-202012/01 demonstrates a substantial increase in transmissibility compared to other variants."

That might seem obvious given how quickly the strain appears to be spreading, but it can be hard to exclude other explanations such as a super-spreader event giving the variant a boost - particularly since scientists don't know what might be making the viral strain more infectious.

"Whilst previous variants have successfully emerged in periods of low prevalence without clear evidence of having a selective advantage, the emergence and subsequent dominance of VUI-202012/01 in a period of relatively high prevalence suggests VUI-202012/01 does have a selective advantage over other variants," wrote the scientists who were part of UK's New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG).

The new strain "has demonstrated exponential growth during a period when national lockdown measures were in place," the NERVTAG said in a note.

The scientists estimate that the growth rate of the virus is 71 per cent higher than other variants of the virus.

"Four probable reinfections have been identified among 915 subjects with this variant."

The NERVTAG scientists, however, wrote that there is currently insufficient data to say what the mechanism of increased transmissibility is or whether the variant is more deadly.

So far, four deaths in around 1,000 cases have been identified and more data was being collected.

The World Health Organisation (WHO) has said it is working closely with the UK medical authorities to understand how the new mutant coronavirus variant is likely to affect the course of the pandemic.

Vaccine codeveloper

Sputnik V can be highly effective against new COVID-19 strain: Vaccine codeveloper (New Kerala: 20201222)

<https://www.newkerala.com/news/2020/220235.htm>

: Sputnik V, the world's first COVID-19 vaccine, will be highly effective against the new strain of coronavirus found in Europe, said Kirill Dmitriev, Chief Executive Officer (CEO) of Russian Direct Investment Fund, the company which codeveloped the vaccine.

"According to our information, Sputnik V will be as highly effective against the new strain of the coronavirus found in Europe as against the existing strains. Sputnik V has been showing its efficacy over a period of time despite the previous mutations of S-protein," he said, according to Sputnik V's Twitter handle.

Dmitriev added that it would jointly work with AstraZeneca, another vaccine manufacturing company, to combat the new mutation strain of the COVID-19.

"Joint work with such a pharmaceutical giant as AstraZeneca is becoming particularly important today, in light of combating the new mutating strains of the coronavirus," he said

The RDIF CEO also said that the Sputnik V has been registered for use in Belarus.

Last week, Russian President Vladimir Putin said that Sputnik V is over 95 per cent effective.

Taking to Twitter, Russia's Ministry of Foreign Affairs (MFA) cited Putin saying that some health specialists have claimed that the vaccine's protection level reaches up to 96-97 per cent.

Russia became the first country to register the world's first COVID-19 vaccine on August 11, named after Russia's first satellite.

Cardiovascular disease

How treatment of cardiovascular disease has evolved (New Kerala: 20201222)

<https://www.newkerala.com/news/2020/220130.htm>

According to an estimate, at present 4.77 million people die in India due to cardiovascular disease, and this number is increasing rapidly. New treatment techniques have come up to make the treatment much easier for those patients who are unable to undergo open chest surgery due to old age or other issues.

World class techniques are now available in India for the treatment of severe heart disease like aortic stenosis or dangerous calcified blockages in the coronary artery, says Dr Ravindra Singh Rao, Specialist, Structural Heart Disease, Jaipur.

Heart valve will change without surgery

About three lakh patients in India do not undergo open chest surgery due to old age or other health related problems. In such a situation, TAVR technology can prove to be a boon for them, believes the doctor. Till now the patient underwent major open chest surgery at the contraction of the aorta valve. It took time of several days for the patient to recover after surgery. But now the Transcatheter Aorta Valve Replacement procedure can replace the patient's valve without a single cut on the body or any major surgery of the patient. For this, an artificial valve can be reached up via catheter (simply using a flexible tube inserted through a narrow opening into a body cavity) from thigh vein to the aorta and the artificial valve can be implanted. In just one to one and a half hours this procedure is completed and on the next day of the procedure, the patient starts moving.

This technique does not have all the risks as in an open heart surgery and the patient can get discharged from hospital in just 4-5 days prior to the procedure. He may soon return to his normal routine. Whereas after open chest surgery, it takes about six months to one year for the patient to recover completely, says Dr Ravindra Singh Rao.

When calcified blockage occurs now, Shock Wave Lithotripsy Angioplasty is an alternative of bypass surgery

Heart blockages occurring in about 90 percent of men and 67 percent of women over the age of 70 are of calcium. Until now, bypass surgery was the only means to correct these blockages, but Shock Wave Lithotripsy Angioplasty Technique has come now as an option to treat patients. It is now possible to insert stents through intervention by doing Angioplasty. This will be helpful for those patients who do not have the capacity to bear bypass surgery. Until now, it was very difficult to perform stenting from interventions in arteries with calcified blockages as there is a 30 to 50 percent risk of re-closure or rupture of arteries after stenting.

Shock wave lithotripsy is a sonographic technique. In this technique, calcium is broken through a sonographic wave and a stent is inserted. This causes no damage to the artery and fine particles of calcium become part of the artery. Angioplasty with this technique takes 45 minutes to an hour and the chances of recurrence of blockage remains about five to seven percent only.

Covid management

Need common vision to guide Covid management in Europe: Experts (New Kerala: 20201222)

<https://www.newkerala.com/news/2020/220012.htm>

Britain, a group of more than 300 leading scientists across the globe are calling for European governments to work together in managing the pandemic and make a clear commitment to Covid-19 case number targets.

The letter, co-authored by Dr Deepti Gurdasani from Queen Mary University of London and coordinated by Viola Priesemann from the Max Planck Institute for Dynamics and Self-Organization in Gottingen, Germany, was published in the journal The Lancet.

It highlights how uncontrolled spread in one region can put the successful management of the pandemic in other regions at risk, suggesting a common vision is needed to achieve this goal.

"Across Europe, the Covid-19 pandemic is causing excess deaths, placing a burden on societies and health systems, and harming the economy," the experts wrote.

"Yet European governments have yet to develop a common vision to guide the management of the pandemic."

The letter outlines the need for a pan-European commitment to reducing and maintaining case numbers for Covid-19 at very low levels to protect people's health, society and economies.

"With open borders across Europe, a single country alone cannot keep the number of Covid-19 cases low; thus joint action and common goals among countries are essential," the authors wrote.

"We, therefore, call for a strong, coordinated European response and clearly defined goals for the medium and long term."

To better manage the Covid-19 pandemic, the scientists proposed aiming for a target of no more than 10 new Covid-19 cases per million people per day, with synchronisation across all European countries so that SARS-CoV-2 infections are not imported across borders.

With continued and improved mitigation measures -- such as mask wearing, hygiene, moderate contact reduction, testing and contact tracing -- a strategy for delivering at least 300 tests per million people per day, and rapid response to local outbreaks could help better manage the pandemic, said the experts.

They also proposed developing a longer-term Europe-wide common vision.

"We urge governments throughout Europe to agree on clearly formulated common goals, to coordinate their efforts, to develop regionally adapted strategies to reach the goals, and thereby work resolutely towards low case numbers," the scientists wrote.

New Virus (Hindustan: 20201222)

https://epaper.livehindustan.com/imageview_527842_85961984_4_1_22-12-2020_0_i_1_sf.html

ब्रिटेन से भारत आने-जाने वाली उड़ानें बंद, हर्षवर्धन बोले- घबराएं नहीं

ब्रिटेन में नए वायरस के बाद दुनिया ने बंद किए दरवाजे

नई दिल्ली | विशेष संवाददाता

ब्रिटेन में नए प्रकार का कोरोना वायरस मिलने के बाद दुनियाभर में हड़कंप है। 45 से ज्यादा देशों ने ब्रिटेन से आने वाली सभी उड़ानें रद्द कर दी हैं। सऊदी अरब ने सीमाएं बंद कर दी हैं। भारत सरकार ने भी 23 से 31 दिसंबर तक ब्रिटेन आने जाने वाली उड़ानों पर पाबंदी लगा दी है। हालांकि, आपात बैठक के बाद स्वास्थ्य मंत्री डॉ. हर्षवर्धन ने कहा कि सरकार ने एहतियातन उड़ानें रद्द की हैं। घबराने या चिंता करने की कोई बात नहीं है।

चिंता काल्पनिक: ब्रिटेन में संक्रमण को लेकर पूछे गए सवाल पर स्वास्थ्य मंत्री ने कहा, 'मैं कहना चाहूंगा कि ये काल्पनिक स्थितियां हैं, ये काल्पनिक बातें हैं, ये काल्पनिक चिंताएं हैं। अपने आप को इनसे दूर रखें। सरकार हर चीज के बारे में पूरी तरह जागरूक है। इतना घबराने की कोई जरूरत नहीं है। हमने बीते एक साल में बहुत कुछ सीखा है।'

हालात देखते हुए फैसला: उड्डयन मंत्रालय ने बताया कि ब्रिटेन में मौजूदा हालात को देखते हुए 22 दिसंबर की रात 11:59 बजे से 31 दिसंबर रात तक



कई देशों के लिए विमान सेवाएं रद्द किए जाने बाद लंदन के हीथ्रो हवाई अड्डे पर सोमवार को काफी अफरातफरी रही। • रायटर्स

उड़ानें स्थगित रहेंगी। 22 दिसंबर तक आने वाले यात्रियों को आरटी-पीसीआर टेस्ट करवाना जरूरी होगा। ब्रिटेन में हवाईअड्डे पर ही ये जांच होगी। उधर, विस्तार एयरलाइंस के प्रवक्ता ने कहा

कि हम प्रभावित लोगों को बिना किसी शुल्क के फिर बुकिंग की सुविधा देंगे। **दिल्ली सरकार भी सतर्क:** दिल्ली के स्वास्थ्य मंत्री सत्येंद्र जैन ने बताया कि विदेश से आने वाले सभी यात्रियों की

सतर्कता

फ्रांस, जर्मनी, इटली, रूस, बेल्जियम, डेनमार्क, ऑस्ट्रिया बुल्गारिया, कनाडा, तुर्की इजरायल समेत करीब 45 देशों ने उड़ानें रद्द कर दी। एयर इंडिया ने ओमान की उड़ानें भी निलंबित कर दीं।

सुकून

सीएसआईआर के डीजी शेखर मांडे ने कहा कि कोरोना का टीका वायरस के बदले रूप के खिलाफ भी उतना ही कारगर होगा। घबराने की जरूरत नहीं।



सरकार हर चीज के बारे में पूरी तरह जागरूक है। वायरस के नए प्रकार को लेकर इतना घबराने की कोई जरूरत नहीं है।

-डॉ. हर्षवर्धन, स्वास्थ्य मंत्री

असर: सेंसेक्स लुढ़का, 6.59 लाख करोड़ डूबे

वायरस के फिर उभार की चिंता से सोमवार को शेयर बाजार में हाहाकार जैसी स्थिति रही। सेंसेक्स 1,406 अंक लुढ़कने से निवेशकों के 6.59 लाख करोड़ डूब गए। > ब्योरा पेज 13

कोरोना जांच की जाएगी। रिपोर्ट पॉजिटिव आने पर क्वारंटाइन सेंटर भेजा जाएगा। निगेटिव रिपोर्ट आने पर होम क्वारंटाइन में रहना होगा।

> दुनिया में दहशत पेज 08

Vaccine (Hindustan: 20201222)

https://epaper.livehindustan.com/imageview_527842_85961674_4_1_22-12-2020_0_i_1_sf.html

कम उम्र के बीमार लोगों को भी पहले चरण में टीका

नई दिल्ली | बृजेश सिंह

दिल्ली में घातक बीमारियों से ग्रसित 50 साल से कम उम्र के लोगों को भी पहले चरण में कोविड का टीका दिया जाएगा। इसके लिए राज्य सरकार ने सर्वेक्षण का काम शुरू कर दिया है।

दिल्ली सरकार स्वास्थ्य निदेशालय ने इसके लिए जिला स्तर पर टीम तैनात की है। स्वास्थ्य विभाग के एक वरिष्ठ अधिकारी ने बताया कि कंटेनमेंट जोन में कराए गए सर्वे के दौरान का डाटा हमारे पास मौजूद है। इसमें हाई रिस्क समूह वाले लोगों का डाटा भी है। पर अब कंटेनमेंट जोन में बाहर रहे इलाकों में भी ऐसे लोगों को चिन्हित किया जाएगा ताकि उन्हें प्राथमिकता के आधार पर टीका उपलब्ध हो सके। दिल्ली में 2.50

कोरोना से जंग

- राज्य सरकार ने बीमारों पहचान के लिए सर्वेक्षण शुरू कराया
- स्वास्थ्यकर्मी और फ्रंटलाइन वॉरियर भी प्राथमिकता में

लाख से अधिक स्वास्थ्यकर्मी, 13 लाख बुजुर्ग, सात लाख पुलिसकर्मी, सिविल डिफेंसकर्मी, सफाईकर्मी और फ्रंटलाइन वॉरियर्स हैं।

इससे पहले कोविड टीकाकरण में स्वास्थ्यकर्मियों, बुजुर्गों को प्राथमिकता के आधार पर टीका लगाने की बात कही गई थी। पर अब गंभीर बीमारी से ग्रसित लोगों का सर्वे करके भी इसमें शामिल किया जाएगा।

➤ टीकाकरण केंद्र बनेंगे पेज 03

Infection (Hindustan: 20201222)

https://epaper.livehindustan.com/imageview_527844_86101544_4_1_22-12-2020_3_i_1_sf.html

• 17 अगस्त के बाद कोरोना के हजार से कम नए मामले आए • सरकार ने टीकाकरण के लिए भी तैयारियां तेज की

दिल्ली में अबतक की सबसे कम संक्रमण दर



कोरोना से जंग

तीन सुखद संकेत

1 संक्रमण दर 1.29%
राजधानी में सोमवार को कोरोना संक्रमण की दर 1.29 फीसदी दर्ज की गई। यह अभी तक की सबसे कम संक्रमण दर है।

2 803 नए केस
दिल्ली में सोमवार को आई रिपोर्ट में कोरोना के 803 मामले सामने आए। यह संख्या 17 अगस्त के बाद सबसे कम है।

3 गौतं 30 से कम
महामारी से होने वाली मौतों में भी कमी आई है। सोमवार को आई रिपोर्ट के अनुसार कोरोना से जान गंवाने वालों की संख्या 27 रही।

सभी जिलों में कोविड टीकाकरण केंद्र बनेंगे

नई दिल्ली | विश्व संवाददाता

दिल्ली में कोरोना संक्रमण तेजी से घट रहा है। वहीं, राजधानी में सोमवार को अभी तक सबसे कम संक्रमण दर दर्ज की गई। कोरोना के पिछले 24 घंटे में जांचिए गए 62440 सैंपल में 1.29 फीसदी मरीज संक्रमित पाए गए। सोमवार को 17 अगस्त के बाद कोरोना के सबसे कम मामले मिले। वहीं, मौत का आंकड़ा भी 30 के नीचे पहुंच गया।

दिल्ली के स्वास्थ्य विभाग के अनुसार सोमवार को 803 नए कोरोना मरीजों की पुष्टि हुई। यह 17 अगस्त के बाद सबसे कम मामले हैं। 17 अगस्त को 787 मामले सामने आए थे। रविवार को दिल्ली में किए गए 62440 टेस्ट में 1.29 फीसदी मरीज कोरोना संक्रमित पाए गए। दिल्ली में कुल कोरोना संक्रमित मरीजों की संख्या 617808 हो गई है। सोमवार को 27 मरीजों ने कोरोना के कारण दम तोड़ दिया। 1669 मरीजों को छुट्टी दी गई। दिल्ली में अभी तक 598249 मरीजों को छुट्टी दी जा चुकी है। जबकि, 10304 मरीजों को कोरोना से मौत हो चुकी है।

दिल्ली में कोरोना से मृत्यु दर 1.67 फीसदी है। सक्रिय मरीजों की संख्या घटकर 9255 हो गई है। इनमें से 5405 सक्रिय मरीज अपने-अपने घरों में

ऐसे घटते गए महामारी के मामले



पॉजिटिविटी रेट में रू. आई गिरावट



15 हजार से ज्यादा बिस्तर खाली पड़े

दिल्ली के विभिन्न कोविड-19 अस्पतालों में 15 हजार से भी ज्यादा बिस्तर खाली हैं। दिल्ली में 18 हजार बिस्तर विभिन्न अस्पतालों में उपलब्ध हैं। ऐसा पहली बार है जब अस्पतालों में इतनी तादाद में कोरोना के बिस्तर उपलब्ध हो। दिल्ली के अस्पतालों में कुल बिस्तर 18786 हैं जिनमें से 15877 खाली हैं। कोविड केयर सेंटर में 7792 बिस्तरों में से 7399 बिस्तर खाली हैं।

उपचाराधीन हैं। जबकि, 2909 मरीज विभिन्न अस्पतालों में भर्ती हैं। कोविड केयर सेंटर में 112 और कोविड

कोविड 19 की रोकथाम पर मुस्तैदी बरतें: एलजी

राजधानी दिल्ली में टैंड के मौसम को देखते हुए उप राज्यपाल अनिल बैजल ने कोविड-19 की रोकथाम पर पूरी मुस्तैदी बरतने के निर्देश दिए हैं।

सोमवार को आयोजित दिल्ली अमदा प्रबंधन की 14वीं बैठक में उन्होंने दिल्ली में कोरोना महामारी की वर्तमान स्थिति की समीक्षा की। दिल्ली में महामारी के प्रबंधन के लिए उठाए कदमों के लिए सभी संबंधित पक्षों की सहजता करते हुए उन्होंने कहा कि कोरोना जांच को और तेज किए जाने और मरीजों के संघर्ष में आने वाले लोगों की पहचान व

मंडिकल सेंटर में 26 मरीज भर्ती हैं। रविवार को दिल्ली में आरटीपीसीआर से 34,288 और रैपिड एंटीजन से



उनकी जांच की प्रक्रिया को पूरी मुस्तैदी से चलाने की जरूरत है। वीडियो कॉन्फ्रेंसिंग के जरिए हुई बैठक में मुख्यमंत्री, मुख्य सचिव, पुलिस आयुक्त आदि शामिल रहे।

28152 टेस्ट किए गए। दिल्ली में अभी तक 78.62 लाख से भी अधिक सैंपल की जांच हो चुकी है।



वैक्सिन अपडेट

नई दिल्ली | विश्व संवाददाता

नए साल के साथ कोविड टीका मिलने की उम्मीद बढ़ गई है। दिल्ली सरकार का कहना है कि कोविड टीकाकरण को लेकर उनकी तैयारी अंतिम चरण में है। अब सरकार ने सभी जिलाधिकारियों को अपने-अपने जिले में कोविड टीकाकरण केंद्र के लिए जगह चिह्नित करने का निर्देश दिया है।

सूत्रों की माने तो सरकार 600 से अधिक कोविड टीकाकरण केंद्र बनाएगी जिससे लोगों को टीका लगवाने के लिए दूर न जाना पड़े। इसमें सरकार डिस्पेंसरी, निजी अस्पताल व क्लिनिक के अलावा सामुदायिक भवन का भी प्रयोग करेगी। दिल्ली में 300 डिस्पेंसरी हैं। एक जिलाधिकारी ने कहा कि हम इसपर पहले से काम कर रहे हैं।

पहले घरों में इन्हें लगेगा टीका

स्वास्थ्य विभाग के एक वरिष्ठ अधिकारी के मुताबिक पहले घरों में जिन लोगों को टीकाकरण के लिए चिह्नित किया गया है उससे बुजुर्ग, अनुसूचित जाति 40 लाख लोग इनके दायरे में आएंगे। इसमें बुजुर्ग, स्वास्थ्यकर्मी, पुलिस, साफाईकर्मी, सिविल डिफेंस, गंभीर रूप से बीमार लोग और जो लोग कोलेज से परीक्षाएं पर तैयार हैं हैं वे भी पहले चिह्नित होंगे।

600 से ज्यादा कोविड टीकाकरण केंद्र बनाने की तैयारी है

गोहल्ला वलीनिक का प्रयोग भी हो सकता है

सरकार मोहल्ला वलीनिक का प्रयोग भी टीकाकरण के लिए कर सकती है। कोविड टीकाकरण के लिए ऐसी जगह तलाशने को कहा गया है जहां की कनेक्टिविटी बेहतर हो। टीका लगवाने आने वाले लोगों को वहां पहुंचने में सहूलियत हो।

पैरामेडिकल स्टाफ का प्रशिक्षण अंतिम चरण में

सरकार के अनुसार दिल्ली में कोविड टीकाकरण के लिए लगाए गए डॉक्टर, पैरामेडिकल स्टाफ व अन्य सहायकों का प्रशिक्षण कार्यक्रम चल रहा है। उम्मीद है कि इस माह के अंत तक यह प्रशिक्षण कार्यक्रम पूरा हो जाएगा।

Fungal Infection (Hindustan: 20201222)

https://epaper.livehindustan.com/imageview_527844_86094962_4_1_22-12-2020_3_i_1_sf.html

ठीक हुए मरीजों में फंगल संक्रमण के मामले बढ़े

नई दिल्ली | वरिष्ठ संवाददाता

दिल्ली में कोरोना से ठीक हुए कम प्रतिरोधक क्षमता वाले मरीजों में म्यूकोर माइकोसिस फंगल संक्रमण के मामले बढ़ रहे हैं। गंगाराम अस्पताल में जहां 15 दिनों में 13 ऐसे मामले आए थे अब इनकी संख्या बढ़कर 25 हो गई है।

चिकित्सकों के अनुसार, यह फंगल संक्रमण मरीजों की आंख, नाक और जबड़े को चीरकर गला देता है। मैक्स अस्पताल में पिछले साल सिर्फ चार ऐसे मरीज आए थे। लेकिन, इस साल कोरोना काल में इनकी संख्या बढ़कर 24 हो गई है।

एम्स के ईएनटी विभाग के प्रोफेसर डॉक्टर राकेश कुमार के मुताबिक यह बीमारी कई सालों से हो रही है। कम

यह भी जानें

- **24** मामले आए मैक्स में, इनमें से 20 की आंखों की रोशनी चली गई
- **15** दिनों में पांच मामले सामने आए लेडी हॉर्डिंग में
- **07** मामले सामने आए अपोलो में, इनमें तीन की जान चली गई
- **13** मामले सबसे पहले गंगाराम अस्पताल में सामने आए थे

प्रतिरोधक क्षमता वाले मरीजों को यह अपना शिकार बनाती है। उन्होंने बताया कि संभव है कि कोरोना के मरीजों में स्टेरॉइड लेने की वजह से प्रतिरोधक क्षमता कम हुई हो और उन्हें बाद में यह फंगल संक्रमण हुआ हो। लेकिन, कोरोना संक्राण की वजह से यह बढ़ रहा है, इसके लिए हमें व्यापक शोध की जरूरत होगी।