COVID XBB1.16 (The Times of India: 20230321)


COVID XBB1.16: CENTRE LISTS OBESITY AND 7 OTHER HIGH RISK FACTORS FOR COVID SEVERITY; KNOW MORE

01/17 High concern for COVID in the country currently due to recombinant variant, XBB 1.16

A new advisory has been released by the government for managing COVID crisis. "COVID-19 National Task Force under Ministry of Health and Family Welfare releases revised clinical guidance for the management of adult COVID-19 patients," news agency ANI tweeted on Sunday. COVID cases are rising in the country. A total of 918 new cases of COVID were recorded in the last 24 hours. Amid the increasing threat, a new variant has come to the notice of COVID trackers. The XBB1.16, a variant of the recombinant XBB variant of COVID's Omicron variant, is picking pace in the country. As per the latest data
from INSACOG, the forum that studies and monitors COVID variants, the total number of XBB1.16 samples in the country is 76 right now.

**READM2/7**

**High risk factor for severe disease or mortality due to COVID**

In its guidelines, shared by the news agency, the government has listed 8 high risk factors that can lead to severe diseases or even mortality due to COVID. Risk factor means posing high risk and increasing chances of developing serious health complications. These factors increase the patient's susceptibility towards damaging issues when others recover from the infection quickly.

**03/7**

**Obesity and other 7 other risk factors pose threat to human health**

The list released by AIIMS/ ICMR COVID-19 National Task Force/ Joint Monitoring Group has stressed on 8 risk factors. Old age or those aged above 60 years. Those who have cardiovascular diseases and coronary artery
Those with diabetes mellitus and other immunocompromised states like HIV; those who are struggling with active tuberculosis; patients who have chronic lung, kidney or liver disease; those suffering from cerebrovascular disease; those who are obese. And, those who are not vaccinated. In India three doses of COVID vaccine are administered; two of these are primary and the third one is a precautionary dose.

04/7 What makes obese people so vulnerable to COVID complications?

Obesity affects the immune system, lung function and increases the chances of hospitalization and ICU admission hence increasing the risk of mortality. Obesity is also associated with several health complications like type 2 diabetes, heart diseases, stroke, and certain types of cancers which again makes it closer towards COVID complications. "During the 2009 H1N1 pandemic, patients with severe obesity were more likely to require hospitalization, ICU admission, and death due to the disease. Data over the years have indicated that obesity negatively impacts host immune defense making it vulnerable to infectious disease," says a 2021 study titled 'Obesity and COVID-19: what makes obese host so vulnerable?' published in Immunity and Ageing.

READMORE
The government warns against use of antibiotics

"Antibiotics should not be used unless there is clinical suspicion of bacterial infection, and systemic corticosteroids are not indicated in mild disease," the guidelines read. The government has urged people to not use medicines like: lopinavir-ritonavir, hydroxychloroquine, ivermectin, neutralizing monoclonal antibody, convalescent plasma, molnupiravir, favipiravir, azithromycin, and doxycycline.

How to distinguish severe COVID from mild and moderate infection?

If you are experiencing upper respiratory tract symptoms and/or fever without shortness of breath or hypoxia it is a mild disease which can be handled with home isolation. Those who have a respiratory rate greater than 24/min and the SPO2 is 90% to <93% on room air have moderate infection and need to be
admitted in ward. These patients. Those with respiratory rate more than 30 per minute need to be admitted in HDU or ICU.

**07/7 Precautionary measures to follow**

Physical distancing and wearing masks remain the gold standard precautionary measures against COVID. Avoid going to crowded places unless and until it is necessary. Do not touch your face without cleaning your hands. Sanitize your hands at regular intervals. Avoid touching exposed surfaces as they are likely to be contaminated with germs. Keep kids and older people at home away from those who are infected.

**Eating can cure insomnia (The Times of India: 20230321)**


**EATING CAN CURE INSOMNIA: EXPERT RECOMMENDS THE BEST FOODS AND DRINKS TO HAVE**
The health toll of poor sleep is too much. It exposes one to lifestyle disorders like diabetes, thyroid, hypertension, obesity and much more. We spoke to Azhar Ali Sayed, Holistic Health coach, Author of ‘Eat your cake, lose your weight’ to know if we can eat our way to sleep. Azhar says, “One of the most crucial aspects of our daily life is sleep. Our bodies need time to rest, repair, and rebuild, which is why getting a good night's sleep is so important for our health. Your immune system, motor abilities, and performance during physical activity can all be negatively impacted by sleep deprivation in addition to your mood. Although many people find it difficult to get enough sleep, it's typically advised that you obtain between 7 and 9 hours per night. Making dietary adjustments is one way to encourage restful sleep as various foods and beverages have sleep-inducing qualities.”

Here are some superfoods that have sleep-promoting properties and may help cure insomnia.

**Chamomile tea**

Research suggests that consuming chamomile tea strengthens the immune system and lowers anxiety and despair, two of the main causes of sleep disturbances. The active antioxidant Apigenin found in chamomile tea induces muscle relaxation and sedation. It also has some anti-inflammatory and neuroprotective properties. This antioxidant attaches to the brain receptors that increase drowsiness and stop insomnia.

**Bananas**

Bananas are rich in magnesium and contain tryptophan, both are proven to be beneficial for good sleep, hence adding these to your diet may help overcome insomnia.

**Walnuts**

Walnuts are rich sources of ALA and omega-3 fatty acids (EPA & DHA) which help in synthesis of Serotonin, which is a sleep-enhancing chemical.
Lean protein

Chicken, turkey, fish and eggs are examples of lean proteins. Tryptophan, an amino acid found in abundance in these foods has been shown to increase serotonin levels hence promoting sleep.

Milk

Consuming warm milk at Bedtime is a popular home remedy to induce sleep. This effect is mainly attributed to Tryptophan and Milk peptides called casein tryptic hydrolysate (CTH), that relieves stress and enhances sleep.

Top myths about heart attack in women (Hindustan Times: 20230321)


Top myths about heart attack in women busted by expert

Does rapid heart rate indicate cardiac trouble in women? Expert busts popular myths surrounding women's heart health in an interview.

Heart issues are no longer restricted to elderly and are becoming common in women of all age groups. Young women due to their multiple responsibilities at work and home often find themselves unable to manage stress which is a big risk factor for heart disease. Poor eating habits, not exercising enough and obesity are other causes of heart ailments in women. However, even those who look fit and fine should worry about cardiac ailments if they have family history of heart diseases, have faulty lifestyle habits like smoking and drinking among other factors. (Also read: Heart attack warning signs that women may confuse with menopause symptoms)
There are many myths around women's heart health that they believe in and which can put them at an increased risk of heart diseases. (Shutterstock)

There are many myths around women's heart health that they believe in and which can put them at an increased risk of heart diseases. It's believed that women should worry more about breast cancer than heart attack, a myth that needs to be dispelled. It is also believed that a woman's increased heart rate could be linked to impending heart attack which again is far from true.

Dr Bipeenchandra Bhamre, Consultant Cardiac Surgeon at Sir H. N. Reliance Foundation Hospital and Research Centre in Mumbai talks about top heart-related myths that women should stop believing.

"Currently, the cases of heart attacks, cardiac failure, and coronary artery disease (CAD) are rising at an alarming rate in the country when it comes to women. Not only older but even younger women are getting diagnosed with heart problems. Certain factors such as stress, high blood pressure and high blood sugar levels, poor eating habits, and lack of physical activity can raise the risk of heart problems in females and males. However, many women suffer in silence and a majority of cases go unreported. Thus, it is essential to create awareness regarding heart problems and dispel the myths surrounding them," says Dr Bhamre.

**Myth: Heart Disease is only seen in men**
Fact: It is believed that women should only worry about breast cancer and not heart disease. But, this is false. Heart disease leads to higher mortality and morbidity rates in women. Women with early menopause and rheumatoid arthritis have higher chances of developing heart disease. Moreover, women who get detected with preeclampsia (high blood pressure in pregnancy) should take precautions to keep heart problems at bay.

Myth: Heart failure indicates that the heart has stopped beating
Fact: There is often confusion regarding heart failure and cardiac arrest. During cardiac arrest, one’s heart stops pumping blood. Heart failure means the heart fails to function the way it is expected to. Hence, one will exhibit symptoms such as shortness of breath, swelling in the ankles or feet, and inability to sleep. So, remember that heart failure and cardiac arrest are two different things.

Myth: A woman may experience a heart attack if her heart is beating fast
Fact: The heart rate goes up with moderate to strenuous exercise and even after consuming caffeine. It is not a matter of concern unless it happens frequently and impacts your heart. Then, you will have to consult a cardiologist and seek timely intervention.

Myth: There is no connection between leg pain and heart problem
Fact: Pain in the muscles of the legs can suggest that there is a plaque build-up in the arteries and one may suffer from heart disease. So, people with peripheral artery disease, are at a higher risk for heart attack or even a stroke. Avoid ignoring the leg pain and try to determine the underlying cause behind it with the help of a doctor.

Myth: Diabetes cannot impact the heart when one takes medication recommended by the doctor
Fact: Even if one’s blood sugar level is under control, anyone with diabetes has the chance of getting detected with cardiovascular disease. To keep your heart healthy, stop smoking, maintain an optimum weight, exercise, and eat well.

Myth: Heart problems are seen in only older women
Fact: Even young women can be detected with heart problems due to stress, poor eating habits, failure to exercise, and obesity. So, heart problems are not limited to only older people and are commonly seen in young women.

Myth: Heart disease doesn’t impact women who are fit and healthy
Fact: Even if you’re fit, certain factors such as poor eating habits, smoking, high blood sugar, high blood pressure, and cholesterol levels, family history of heart problems can invite heart disease. So, it is essential to go for regular cardiac check-ups as suggested by the doctor.

Bird flu outbreak (Hindustan Times: 20230321)

BIRD FLU OUTBREAK: WILL IT CAUSE THE NEXT PANDEMIC?

A new lineage of avian flu H5N1 is ripping through wild bird populations and also affecting mammals, such as minks, badgers, pigs, bears. Are humans next?

Scientists are already talking about the largest observed avian influenza epidemic in European history. And it started around the same time as COVID-19. There are a number of different types of avian influenza that can infect birds. One of them is called avian flu H5N1. It first emerged in 1997 and in the past two decades has infected about 850 people. Although that's a very small number, around half of those infected have died.
If a single bird in a flock is infected with avian influenza, the entire flock has to be culled. (FERNANDO VERGARA/AP Photo/picture alliance)

A new lineage of the virus, called avian flu A (H5N1) emerged in 2020. Since then, it has ripped not only through wild bird populations, but also through specific species of mammals, such as minks, badgers, pigs and bears. Fewer than 10 people are documented to have become infected with this specific lineage, and at least one person has died.

Between the beginning of October 2021 and the beginning of October 2022, authorities have detected 6,615 cases in animals across 37 countries. This year alone, since October 2022, researchers have observed a total of 2,701 cases.

**Will H5N1 cause the next human pandemic?**

This strain of bird flu has a 50% mortality rate and public health authorities consider that cause for concern.

The H5N1 mortality rate is higher than that of other viruses that have caused recent flu pandemics, including the 2009 H1N1 swine flu pandemic. Researchers say that if this new lineage of H5N1 were to find a way to efficiently spread between humans, the effects could be catastrophic. But at this point, experts say the risk of that happening is very low.
All the people who tested positive for the new avian flu lineage had had close contact with wild birds, said Richard Pebody, head of the High-threat Pathogen Team at WHO/Europe (World Health Organization).

"They have either been working on a poultry farm and involved in culling flocks or had contact with backyard flocks," Pebody said.

That suggests that if you don't have close contact with sick birds, you are safer than people who do.

**How would avian influenza spread through human communities?**

In order for avian flu H5N1 to spread more widely through the general public, it would have to adapt the ability to easily spread between people. And, so far, there is no evidence to indicate that this lineage of H5N1 has found a way to do that.

But researchers have expressed some concern that the virus is starting to spread among other, non-human mammals.

A massive outbreak occurred on a farm with 52,000 minks in Galicia, Spain, in October 2022. Researchers looking into that outbreak said it is possible that the virus had spread between the minks themselves.

However, the researchers said that it is difficult to identify how exactly the virus spread. They said it was hard to disentangle whether all the minks had been exposed to the virus through a source of food, for example, or whether the virus had spread among the minks — or a mix of the two possibilities.

**Mammalian adaptation of H5N1 is a 'red flag'**

Pebody said that proof of the virus spreading between the minks would present a "red flag [...] that the virus is changing in ways which are more concerning."

"Humans are mammals as well," he added. "So, if the virus is showing some suggestion of mammalian adaptation — its ability to spread in a mammalian host — that's just one step closer to it having biological characteristics which [would] make it more attractive to spread in the human population."
Scientists are closely monitoring all large outbreaks of the virus among mammals to understand how it is spreading and evolving. In March 2023, authorities reported an outbreak in Peru, where thousands of sea lions — up to 3% of the population — had died of H5N1. Researchers are in the process of trying to identify any potential sea lion-to-sea lion spread of the virus.

**Sick birds also mean rising food prices**

Birds often get influenza, but the H5N1 strain has been especially deadly. Researchers estimate that over 60 million wild birds have died due to the virus or a cull in the past year. When a single bird in a flock develops the virus, farmers are required to kill the entire flock. And fewer farm birds mean fewer chickens in shops and at markets. The current outbreak among birds has already contributed to higher egg prices in the US and could lead higher poultry prices in general in the coming months.

How to protect yourself against avian influenza

Pebody said the best way for people to protect themselves — if they don't have to work in direct contact with birds — is to avoid picking up birds on the street. But the risk, said Pebody, is still low. "It's important to highlight that there have been millions of birds that have died and we're only seeing a small number of human cases," said Pebody. "So, the risk at the moment remains relatively low. But there is a risk nonetheless."

Pebody added that people who work on poultry farms or who have chickens or hens in their backyards should wear personal protective equipment when dealing with the animals.

The WHO says that the incubation period after an infection with avian influenza A (H5N1) averages between 2 and 5 days, but it can take up to 17 days before we see symptoms.

Researchers are developing a vaccine for humans, Pebody said.
If you have had contact with dead or sick birds and develop respiratory symptoms, you should contact your doctor and local health authorities, get tested, and seek advice about antiviral treatment.

**H3N2 Influenza (Hindustan Times: 20230321)**

https://www.hindustantimes.com/lifestyle/health/most-effective-techniques-to-diagnose-h3n2-influenza-know-if-you-are-at-risk-101679298594219.html

**H3N2 Influenza: Most effective techniques to diagnose it; know if you are at risk**

H3N2 Influenza hospitalisations are on rise in India; children and elderly could be most at risk. Know the risk factors and the best ways to diagnose it.

**H3N2 Influenza** virus has been increasing the number of hospitalisation cases in Delhi and surrounding areas and while most cases out of the 1000 detected in the country have been mild, government advisory has warned people to take precautions like cleanliness, preventing crowding, and hand hygiene. Children below 6 years and adults above 65 years have been asked to take special precautions as they are among the vulnerable group. (Also read: **H3N2 Influenza: Signs and symptoms of severe illness to watch out for**)

![Image of a person with a tissue]
All viral respiratory illnesses be it influenza A- H3N2, H1N1 variant, novel coronavirus 19, and omicron sub variant, are steadily increasing, because of host of environmental factors (REPRESENTATIVE IMAGE)

Respiratory diseases may be on rise this spring due to a host of factors from pollution, festive gatherings, lack of hand hygiene, and lowered immunity among others. It is important to distinguish H3N2 influenza symptoms from those of Covid as while the latter is said to last for 2-3 days and the patient recovers soon, H3N2 and H1N1 can stretch for a couple of weeks and may even has more chances of leading to pneumonia or a secondary bacterial infection, say experts.

"Currently approximately 30 per cent of patients visit with symptoms of upper or lower respiratory issues. Symptoms are more or less the same for any viral illness- sore throat, dry cough, headache, myalgia, diarrhoea, only difference is that in the present clinical scenario, Covid symptoms barely last for 2-3 days and the patient recovers soon without any hassles and any major treatment. Whereas with H3N2 and H1N1 has more predilection for productive and wet coughs which lasts longer for a few weeks and has more chances of getting pneumonia or a secondary bacterial infection. Irrespective of the virus if there is a major comorbid factor there are more chances of morbidity and mortality,"

Dr Samrat Shah, Senior Consultant, Internal Medicine, Sir HN Reliance Foundation Hospital told HT Digital.

Elaborating on the causes of rise in respiratory infections, Dr Shah said, "in the current scenario, all viral respiratory illnesses be it influenza A- H3N2, H1N1 variant, novel coronavirus 19, and omicron sub variant, these are steadily increasing, because of host of environmental factors. Some of the host factors are avoidance of face masks, casual attitude towards general health, lack of hand hygiene, and more social gatherings. Some of the environmental factors contributing to the increase in cases are poor air quality and excessive construction pollution. The only way to prevent this influenza virus complication is by vaccinating once a year with the quadrivalent flu vaccine."

**Why there is surge of Influenza infections and hospitalisations in India**
"India is currently seeing a surge in influenza viral infections due to H3N2. Influenza A viruses infect humans and many different animals. The emergence of a new and very different influenza A virus with the ability to infect people and have sustained human to human transmission, can cause an influenza pandemic and therefore is of most significance to public health," says Dr Sunita Kapoor, Director and Consultant Pathologist at City X-ray & Scan Clinic. "Influenza type A viruses are classified into subtypes according to the combinations of different virus surface proteins, hemagglutinin (HA) and neuraminidase (NA). Current subtypes of influenza A viruses that routinely circulate in people include A(H1N1) and A(H3N2). In years in which H3N2 is the predominant strain, there are more hospitalisations. Human infections are primarily acquired through direct contact with infected animals or contaminated environments, these viruses have not acquired the ability of sustained transmission among humans," adds Dr Kapoor.

**Who is at risk from H3N2 influenza virus**

Dr Kapoor says small children and elderly are among those who are most at risk of this virus while pregnant women, those with weakened immune system, chronic illnesses and travellers might be at risk of this virus too.

**Here are those who are at risk of H3N2 influenza virus:**

- Young children under age 2
- Adults older than age 65
- Residents of nursing homes and other long-term care facilities
- People who are pregnant or plan to be pregnant during flu season
- People with weakened immune systems
- People who have chronic illnesses, such as asthma, heart disease, kidney disease, liver disease and diabetes
- Health care workers performing aerosol generating procedures.
- Travelers to countries and people living in countries with known outbreaks of avian influenza

**Diagnosis of H3N2 virus**
Dr Kapoor says influenza virus detection techniques have been classified into four categories:

- **Traditional methods**, e.g., viral culture serological methods, e.g., immunofluorescence assays, complement fixation, immunodiffusion test, virus neutralization method, hemagglutination method, rapid antigen testing.

- **Advanced quick methods** which include NAT (Nucleic acid tests) like RT PCR, multiplex PCR, nucleic acid sequence-based amplification (NASBA), and conventional PCR.

- **Bio-sensing methods** which include includes optical biosensors, giant magneto-resistance biosensors, aptamer-based biosensors, and electrochemical biosensors

**Nucleic acid-based tests**

"Nucleic acid tests (NAT) employ PCR and virus-specific RNA or DNA sequences/genetic material instead of viral antibodies or antigens. These are much more susceptible and specific as compared to serological assays and can diagnose viruses in many earlier clinical samples. An antibody-based test takes time because the human body cannot make antibodies instantly at a detectable level. Therefore, NAT can overcome this limitation of serological methods. Most of these methods take 2–4 hours to complete the detection," says Dr Kapoor.

**RT-PCR**

This technique is considered the most powerful tool for the detection of the influenza virus. Nested primers are utilised to detect and subtype influenza viruses. The results of this test present extremely high sensitivity and specificity, the greatest of all traditional detecting approaches.

**COVID-19 (The Hindu: 20230321)**

Biden signs bill on COVID-19 origins declassification

The legislation directs the Office of the Director of National Intelligence to declassify intelligence related to China’s Wuhan Institute of Virology

In this file photo taken on February 3, 2021, security personnel stand guard outside the Wuhan Institute of Virology in Wuhan as members of the World Health Organization (WHO) team investigating the origins of the COVID-19 coronavirus make a visit to the institute in Wuhan in China’s central Hubei province. President Joe Biden on March 20, 2023, signed into law a bill requiring the release of intelligence materials on potential links between the outbreak of the Covid pandemic and a laboratory in the Chinese city of Wuhan. | Photo Credit: AFP

President Joe Biden signed a bipartisan bill on Monday that directs the federal government to declassify as much intelligence as possible about the origins of COVID-19 more than three years after the start of the pandemic.

The legislation, which passed both the House and Senate without dissent, directs the Office of the Director of National Intelligence to declassify intelligence related to China’s Wuhan Institute of Virology. It cites “potential links” between the research that was done there and the outbreak of COVID-19, which the World Health Organization declared a pandemic on March 11, 2020. The law allows for redactions to protect sensitive sources and methods.

H3N2 वायरस (Hindustan: 20230321)


झारखंड मेंमिलेहांगकांग फ्लूके 3 मरीज, कोरोना संक्रमितों की संख्या 16 तक पहुंची झारखंड में हांगकांग फ्लू (एच-3 एन-2) और कोरोना का कहर बढ़ता जा रहा है। सोमवार को हांगकांग फ्लूके तीन और मरीज मिले। तीनों जमशेदपुर के हैं। उधर, सोमवार को कोरोना के भी 5 संक्रमित मिले।

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भी 5 संक्रमित मिले। इनमें 4 जमशेदपुर के हैं। देवघर मेंभी 1 संक्रमित मिला है। राज्य में कोरोना के एक्टिव वरीयों की संख्या अब 16 पर पहुंच गई। करीब 110 दिन बाद कीर्ति के एक्टिव वरीयों की संख्या दहाई पार पहुंची है। विज्ञापन हांगकांग फ्लूसंक्रमितों में 2 बच्चा जमशेदपुर सेमिली जानकारी के अनुसार हांगकांग फ्लूसंक्रमितों नए संक्रमितों में एक बुजुर्ग और 7-8 साल के 2 बच्चेयों में संक्रमित हैं। तीनों का इलाज तीएमएच में चल रहा है। सिविल सर्जन डॉ. नजर बाज़ी का कहना है कि भीड़भाड़ पर नजर रखी जा रही है। बता दे कि 18 मार्च को जमशेदपुर मेंएक वृद्ध और एक बच्चा हांगकांग फ्लूसंक्रमित मिले। इस बीच, हांगकांग फ्लूकोरोना को देख सीमावर्ती को राष्ट्रीय स्वास्थ्य निदेशक ने राज्य के सभी निजी अस्पताल एवं जांचघर के नोडल अफसरों को इन्फ्ल्यूएंजा एंड ए की जांच अद्यतन रिपोर्ट रोज उपलब्ध करानेका नदेश ददया है। कहा है कि इन्फ्ल्यूएंजा एंड लाइक इलीनेस (आईएलआई) की निगरानी के लिए सभी निजी लैब एवं अस्पताल रोज की रिपोर्ट आईडीएसपी को भेजना सुनिश्चित करेगे। अगला लेख ऐस पर पत्र स्वास्थ्य विभाग नेताजी ने हांगकांगलाइन गौरतलब है कि पिढ़लेदियों स्वास्थ्य विभाग नेगाइडलाइन जारी की थी। लोगों सेंकोविड प्रोटोकॉल का पालन करनेको कहा गया था। भीड़भाड़ वाली जगहों पर मास्क लगानेको कहा गया है। यदि किसी में कोरोना अथवा हांगकांग फ्लूके लक्षण दखलते हैंतो अविलंब जांच करवानेवाली सलाह दी गई है। लोगों भेजकर है कि यदि लक्षण हैं भीड़भाड़ वाली जगह पर ना जाएं। यदि जांच करें एंड बायोटिक दवाएं ना लें। गर्म-पानी पीनेकी भी सलाह दी गई है। ठंड सेंबरचनेकी सलाह दी गई है। विभाग नेकहा कि घरराखना नहीं है।