

# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Thursday
20220203

### कोरोना

ढलान पर कोरोना की तीसरी लहर, एक सप्ताह में 7 लाख कम हुए एक्टिव केस (Hindustan: 20220203)

https://www.livehindustan.com/national/story-corona-virus-cases-india-daily-report-dead-numbers-today-omicron-updates-5725893.html

देश में बीते दिन कोरोना के 1,72,433 नए केस मिले। मंगलवार को तुलना में यह आंकड़ा 6.8% ज्यादा है। बुधवार को 1008 संक्रमितों की मौत हुई और 2,59,107 लोग रिकवर हुए। इस समय रिकवरी रेट 95.14% है।

फिलहाल इलाज करा रहे मरीजों की संख्या 15,33,921 है। बीते सप्ताह की शुरुआत में यह आंकड़ा 22 लाख के करीब था, जो अब 15 लाख के आसपास आ गया है। एक्टिव केस की दर 3.67% है। अगर डेली पॉजिटिविटी रेट की बात करें तो यह 10.99%) है। वहीं, वीकली पॉजिटिविटी रेट इससे थोड़ा ज्यादा 12.98% पर है।

अब तक 167.87 करोड़ वैक्सीन डोज लगी

बुधवार को कुल 15,69,449 कोरोना टेस्ट हुए। पूरे देश में अब तक 73.41 कोविड टेस्ट हो चुके हैं। वहीं, देश में कोरोना महामारी के खिलाफ वैक्सीनेशन कैंपेन जारी है। अब तक 167.87 करोड़ वैक्सीन डोज लगाई जा चुकी हैं।

राजस्थान में ब्धवार को कोरोना के 8,428 नए केस मिले

राजस्थान में बुधवार को कोरोना वायरस संक्रमण के 8,428 नए मामले सामने आए, जबिक संक्रमण से 22 मरीजों मौत हो गई। चिकित्सा और स्वास्थ्य विभाग के अनुसार, बुधवार शाम तक राज्य में कोरोना वायरस से संक्रमित 8,428 नए मरीज सामने आए हैं। नए मामलों में राजधानी जयपुर में 1944, जोधपुर में 599, गंगानगर में 509, उदयपुर में 433, अलवर में 390, अजमेर 380 और राजसमंद में 328 संक्रमित शामिल हैं।

MP में कोरोना के 7,359 नए मामले सामने आए

मध्य प्रदेश में बुधवार को कोरोना वायरस संक्रमण के 7,359 नए मामले सामने आने से संक्रमितों की संख्या बढ़कर 9,81,103 हो गई। स्वास्थ्य विभाग के अधिकारी ने कहा कि पिछले 24 घंटों में प्रदेश में छह लोगों की मौत इस बीमारी से हुई है। इसे मिलाकर राज्य में अब तक कुल 10,624 लोगों ने इस बीमारी से जान गंवाई है।

India reports over 1.72 lakh Covid-19 cases, daily positivity rate up by 1.73% (The Indian Express: 20220203)

 $\underline{https://indian express.com/article/india/india-covid-cases-positivity-rate-active-numbers-deaths-7754185/$ 

As many as 2,59,107 people recovered in the same period and the active case load now stands at 15,33,921. The weekly and daily positivity rates are 12.98 per cent and 10.99 per cent percent respectively.

India reported 1,72,433 new Covid-19 cases in the last 24 hours, up by 6.8 per cent from Wednesday's 1.61 lakh infections, as per the data by Union Ministry of Health and Family Welfare. As many as 2,59,107 people recovered in the same period and the active case load now stands at 15,33,921. The weekly and daily positivity rates are 12.98 per cent and 10.99 per cent percent respectively. The country also reported 1,008 deaths in the same period, taking the total number of fatalities to 4,98,983.

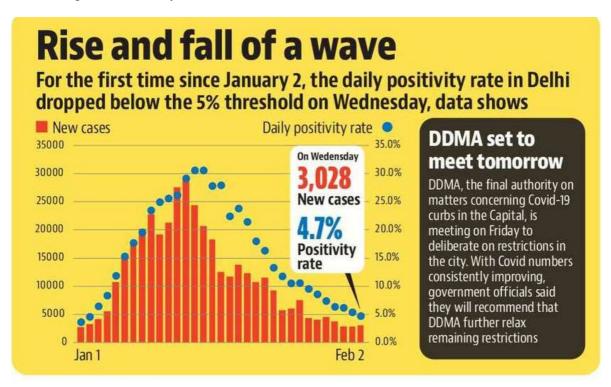
Meanwhile, the Tripura government has said people with a valid Covid-19 negative RT-PCR report, done 72 hours prior to travel, or with a double vaccination certificate will no longer need to undergo mandatory testing upon arrival in the state. This comes two days after the government relaxed night curfew restrictions due to a decline in the number of Covid-19 cases.

Coming to Delhi, as Covid-19 cases continue to dip in the city — 3,028 were reported at a positivity rate of 4.73% on Wednesday — the Delhi Disaster Management Authority (DDMA) will meet on Friday to discuss the reopening of schools and gyms, sources said.

"DDMA will have a meeting on Friday and the matter of reopening of schools and gyms across the city will be discussed. Covid cases are under control, so there will be some relaxation. Almost all the children aged between 15 and 17 years have got at least one shot of the vaccine. Hence, schools may be reopened for students of Classes 9 to 12," sources added.

### https://epaper.hindustantimes.com/Home/ArticleView

New Delhi: As the Covid-19 positivity rate in the national capital dropped below the 5% mark for the first time in a month, officials in Delhi government's health department said that the administration has decided to recommend the easing of the last set of curbs that still remain in place in the city.



With 3,028 new infections reported from 63,982 samples tested, the positivity rate in Delhi fell to 4.7% on Wednesday — the lowest since January 2, or in 30 days. Positivity rate dropping below the 5% threshold is a crucial indicator for the contracting Omicron wave as it means that the outbreak in the city is no longer a cause for concern, as per the World Health Organization (WHO) recommendations.

Even according to Indian guidelines, if the positivity rate in Delhi remains below 5% for a week, the city will enter the "green zone".

With numbers consistently improving over the past two weeks, senior government officials said they have decided to recommend to the Delhi Disaster Management Authority (DDMA) that remaining restrictions on mobility in the city also be relaxed. DDMA, the final authority on matters concerning Covid-19 curbs in the Capital, is meeting on Friday to deliberate on restrictions in the city.

Currently, only two major restrictions remain in place in Delhi – all schools in the city are shut for in-person classes, and a night curfew is in place between 10pm and 5am. Over the past week, experts have written to the government days that even these curbs now be removed.

"The positivity rate is around 5% for the last two-three days. We are conducting regular meetings to assess the current Covid situation... if the positivity rate remains in the 5% range for the next few days then we will send our recommendations to DDMA that the remaining Covid restrictions can be eased. The final call, however, will be theirs," said a senior health official who did not wish to be identified.

In the DDMA meeting on January 27, the authorities decided to lift the weekend curfew and also allow the opening of all non-essential shops in the city. The government also permitted restaurants and bars to reopen with 50% capacity, in view of improving Covid-19 situation.

The call for removing the remaining restrictions, in particular the opening of schools, has been growing louder. Several education experts and teachers' associations have written to lieutenant governor (LG) Anil Baijal, who heads DDMA, urging him that schools be reopened.

The Delhi government has also backed this step, and called for reopening of schools even during last week's DDMA meeting.

Sudha Acharya, the chairperson of the National Progressive School Conference (NPSC), which has 122 Delhi schools as members, said that the continued closure of schools would have long-lasting repercussions if schools were not reopened now.

"Unfortunately, Delhi schools have had pandemic driven closures for about a colossal span of two years and this has taken a massive toll on the mental and physical health of children of all age groups. The present scenario is creating huge learning gaps leading to a generational catastrophe which will unfailingly have a long term and deep-rooted repercussion," said Acharya in a letter to the LG on Monday, urging him to take steps for school reopening.

Delhi, which was one of the country's first outbreak centres in the Omicron wave in India, has seen a consistent decline over the past two-and-a-half weeks.

The seven-day average of daily cases in the city, which had soared to a peak of 23,529 cases a day for the week ended January 15, has since dropped to 4,257 for the week ended Wednesday – a decline of 82%. An analysis by HT on Saturday had shown that Delhi has seen the second-largest reversal in case trend in the country after West Bengal. At its worst during this wave, the city had recorded a positivity rate of 30.6% on January 14.

According to government guidelines, if an area reports weekly average Covid positivity rate of below 5% it is classified as a green zone, if it is between 5-10% it is considered an orange zone and if the average positivity rate for a week stays above the 10% mark, it is marked as a red zone

Delhi government officials cited above said that in a meeting of the health department and the district administration on Wednesday, the fall in Covid positivity rate was the main area of discussion, which prompted their decision to recommend the easing the remaining restrictions.

They added that the district administration has also been asked to amplify efforts to vaccinate maximum people, now that the current Omicron fuelled Covid-19 wave has subsided. "Our next priority is that maximum people, who are yet to be vaccinated or receive their booster doses, get it done as soon as possible. Vaccinating our population is what helped us get by this wave without seeing the worst," the above-quoted official said.

Health experts have also argued the effectiveness of restricting economic activities to control Covid infections.

"No domain expert is of the opinion that restricting activities will help control infections. People who are pressing for curbs might be those who have some kind of financial gains from it...the government can now ease restrictions. The number of daily infections is expected to come down further now," said Dr Sanjay Rai, professor (community medicine), All India Institute of Medical Sciences (AIIMS).

## गर्भधारण

लॉकडाउन के दौरान गर्भवतियां ज्यादा तनाव की शिकार (Hindustan: 20220203)

https://www.livehindustan.com/lifestyle/story-pregnant-women-suffer-more-stress-during-lockdown-5725696.html

कोरोना काल में बंदी के चलते घर में रह रहे लोगों के दिमाग पर नकारात्मक प्रभाव पड़ा है। इसका खासा प्रभाव गर्भवती महिलाओं में देखने को मिला है। एक शोध में दावा किया गया है कि कोरोना काल में गर्भवती महिलाएं अवसाद का शिकार हुईं। यह अध्ययन बीएमसी जर्नल में प्रकाशित हुआ।

अध्ययन के लेखक डॉ. सिल्विया रिगाटो का कहना है कि कोरोना महामारी ने दुनियाभर में लोगों को घरों में कैद कर दिया। उन्होंने कहा कि एक तरफ जहां कोरोना के प्रसार को रोकने के लिए ये कदम कारगर साबित हुए। वहीं, दूसरी ओर कोरोना काल में गर्भधारण करने वाली महिलाओं में नकारात्मक

प्रभाव पड़ा। संक्रमण काल के दौरान गर्भधारण करने वाली महिलाओं में अवसाद या चिंता की समस्याएं देखी गईं।

संक्रमण काल में अवसाद दर में वृद्धि

संक्रमण काल में गर्भधारण करने वाली 30 फीसदी महिलाओं को अध्ययन में शामिल किया गया। शोधकर्ताओं ने पाया कि महिलाओं में अवसाद दर 17 फीसदी से बढ़कर 47 फीसदी हो गई। वहीं, चिंता की दर 37 फीसदी से बढ़कर 60 फीसदी हो गई।

नकारात्मक जवाब देने वाली महिलाओं में चिंता अधिक

डॉ. रिगाटो ने बताया कि अध्ययन में गर्भवती महिलाओं से कोरोना के प्रभाव को लेकर सवाल किए गए। इस दौरान जिन महिलाओं ने कोरोना के प्रभाव को लेकर नकारात्मक जवाब दिए उनमें चिंता की समस्या अधिक पाई गई। इसके अलावा जिन महिलाओं ने सकरात्मक जवाब दिया उनमें यह समस्या कम पाई गई।

जन्म के बाद बच्चे से जुड़ाव कम रहा

रिगाटो ने बताया कि अप्रैल 2020 से जनवरी 2021 के बीच किए गए अध्ययन में पता चला कि कोरोना काल में अधिकांश लोगों में मानसिक स्वास्थ्य संबंधी समस्याएं बढ़ीं। अध्ययन में पाया गया कि जिन महिलाओं ने बच्चे को जन्म दिया, उनका जुड़ाव बच्चे से कम महसूस किया गया।

दवाओं का इस्तेमाल न करें

कोरोना के दौरान गर्भवितयों के अवसादग्रस्त होने के कई मामले सामने आए। विशेषज्ञों का कहना है कि इनमें से कई ऐसे मामले सामने आए जिसमें मिहलाएं अपने आने वाले बच्चों को लेकर चिंता जताई। विशेषज्ञों ने महामारी के बीच अवसाद की शिकार मिहलाओं को दवाओं का इस्तेमाल न करने की सलाह दी है। विशेषज्ञों का कहना है कि कोरोना महामारी के दौरान गर्भवती मिहलाएं मानसिक तनाव से गुजर रहीं थीं।

# भविष्य में गर्भ से बाहर विकसित होगा भ्रूण (Hindustan: 20220203)

 $\underline{https://www.livehindustan.com/lifestyle/story-bhroon-in-future-the-embryo-will-develop-outside-the-womb-5725890.html}$ 

चीन के वैज्ञानिकों ने दावा किया है कि आने वाले कुछ सालों में भ्रूण गर्भ से बाहर विकसित होगा। इतना ही नहीं इसका ख्याल रखने के लिए आर्टिफिशियल इंटेलिजेंस (एआई) वाली दाई होगी।

वैज्ञानिकों का कहना है कि कृत्रिम भ्रूण के विकास संबंधी हर पहलू पर एआई से चलने वाले रोबोट नजर रखेंगे। यह अध्ययन जर्नल ऑफ बायोमेडिकल इंजीनियरिंग में प्रकाशित हुआ। चीन के शुझोउ इंस्टीट्यूट ऑफ इंजीनियरिंग एंड टेक्नोलॉजी के वैज्ञानिकों ने दावा किया है कि वह चूहों पर कृत्रिम भ्रूण विकसित कर रहे हैं।

इतना ही नहीं एआई से चलने वाली रोबोट दाई भ्रूण पर नजर रख रही है, उन्हें विकसित होते देख रही है। वैज्ञानिकों ने बताया कि आने वाले कुछ वर्षों में इस तकनीक का इस्तेमाल महिलाओं पर भी किया जा सकेगा। ऐसे में महिलाओं को गर्भ के दौरान की समस्याओं से निजात मिल जाएगी। वह बच्चे को कृत्रिम भ्रूण में बड़ा होता देख सकेंगी। वैज्ञानिकों ने बताया कि यह तकनीक हमें जीवन के विकास को समझने में मदद कर रहा है। इसके जिए हम भविष्य में इंसानी भ्रूण के विकास को और नजदीक से समझ पाएंगे। साथ ही जन्म संबंधी दिक्कतों को दूर कर पाएंगे।

## कोविड-19 इग

## फ्रांस करेगा फाइजर की कोविड-19 इंग का इस्तेमाल (Dainik Jagran: 20220203)

https://www.jagran.com/world/other-france-to-start-using-pfizer-covid-19-drug-first-in-eu-22434419.html

कोरोना संक्रमण के इलाज के लिए फाइजर की दवा पैक्सलोविड (Paxlovid) के 10000 डोज वाली पहली खेप फ्रांस पहुंच गई। इसी शुक्रवार से सभी फार्मेसी के पास यह दवा उपलब्ध हो जाएगी। यह जानकारी देश के स्वास्थ्य मंत्रालय ने ब्धवार को दी।

पेरिस, एपी। फ्रांस में फाइजर के कोरोना वायरस एंटीवायरल ड्रग का इस्तेमाल इस सप्ताह शुरू किया जाएगा। यूरोपीय संघ के 27 सदस्य देशों ने कोविड-19 के इलाज के लिए पहली दवा को मंजूरी दी है। अभी भी देश में संक्रमण के मामले बड़ी संख्या में मिल रहे हैं लेकिन अस्पतालों में इस बीमारी के मरीजों का आंकड़ा काफी कम हुआ है। इसके मद्देनजर फ्रांस की सरकार ने बुधवार से प्रतिबंधों में छूट देने की शुरुआत की दी है।

बता दें कि अब फ्रांस में घर से बाहर भी मास्क को अनिवार्य नहीं किया गया है। सामूहिक आयोजनों वाली भीड़ को भी अनुमित मिल गई है और कंसर्ट व स्पोर्ट्स वेन्यू (क्रीड़ास्थलों) में लोगों की भीड़ देखी जा सकती है। इसके अलावा सरकार द्वारा घोषित वर्क फ्राम होम जैसे नियमों को हटा दिया गया है। इस बीच फाइजर की दवा पैक्सलोविड (Paxlovid) के 10,000 डोज वाली पहली खेप फ्रांस पहुंच गई। इसी शुक्रवार से सभी फार्मेसी के पास यह दवा उपलब्ध हो जाएगी। यह जानकारी देश के स्वास्थ्य मंत्रालय ने बुधवार को दी। मंत्रालय ने बताया कि यूरोपीय संघ (European Union) का यह पहला देश है जहां इस दवा को उपलब्ध कराया जा रहा है।

उल्लेखनीय है कि अमेरिका की फार्मा कंपनी फाइजर ने आर्थिक रूप से कमजोर देशों के लिए कोरोना की सस्ती दवा तैयार करने की तैयारी की है। कंपनी ने कहा है कि अभी इस दवा को लांच करने में देरी हो रही है, जिसकी वजह से फिलहाल एक अंतरिम उपाय के तौर पर कोविड एंटीवायरल ड्रग पैक्सलोविड (Paxlovid) को आर्थिक रूप से कमजोर देशों को दिया जा रहा है। हाल में ही कोविड एंटीवायरल ड्रग मोलनुपिराविर के जेनेरिक वर्जन को भारत में मंजूरी मिली है। इसके पूरे कोर्स के लिए व्यक्ति को करीब 1,400 रुपये खर्च करने होंगे, जो अभी के हिसाब से सबसे किफायती दवा है।

फाइजर की पैक्सलोविड दवा तमाम वैरिएंट्स पर काफी प्रभावी है। इसे अमेरिका और यूके समेत की देशों में इमर्जेंसी इस्तेमाल की मंजूरी मिल चुकी है। संयुक्त राष्ट्र समर्थित मेडिसिंस पेटेंट पूल ने नवंबर में फाइजर के साथ एक लाइसेंस एग्रीमेंट किया था, जिसके तहत फाइजर कंपनी को पैक्सलोविड के लिए सब-लाइसेंस देने की इजाजत मिली है।

# सर्दी-जुकाम

अगर आप भी रहते हैं सर्दी-जुकाम से अक्सर परेशान, तो इन घरेलू नुस्खों से करें इसका उपचार (Dainik Jagran: 20220203)

https://www.jagran.com/lifestyle/health-if-you-also-live-often-troubled-by-cold-and-cold-then-treat-it-with-these-home-remedies-22435055.html

सर्दी-जुकाम बेशक कोई बड़ी समस्या नहीं है लेकिन जब ये आपको अक्सर परेशान करने लगे तो ये संकेत है आपके कमजोर इम्यून सिस्टम का। जिसके दुरुस्त करने में यहां दिए जा रहे घरेलू नुस्खे आ सकते हैं बेहद काम।

कम या ज्यादा वजन, तनाव की अधिकता, अनिद्रा, शरीर में पोषक तत्वों की कमी, लंबे वक्त तक दर्द निवारक दवाओं का सेवन, खराब लाइफस्टाइल आदि रोग-प्रतिरोधक क्षमता कमजोर पड़ने के प्रमुख कारण हैं। जिसकी वजह से संक्रामक बीमारियां बहुत जल्द और ज्यादातर अटैक करती रहती हैं तो इसके लिए यहां दिए जा रहे घरेलू नुस्खे इम्युनिटी मजबूत करने में आपकी मदद कर सकते हैं।

- 1. एक कप से थोड़े ज्यादा पानी में एक टीस्पून कूटा हुआ अदरक और एक चुटकी हल्दी को तीन मिनट तक ढककर पकाएं। फिर उसे छलनी में छानकर पी लें। सर्दियों में हफ्ते में दो बार पानी पीने से इम्यून सिस्टम दुरुस्त रहता है।
- 2. सहजन के गाढ़े सूप में भुना जीरा, सौंफ और काला नमक एवं काली मिर्च मिलाकर लेने से इम्युनिटी बढ़ती है।

- 3. एक टीस्पून शहद में लहसुन की दो कलियां पीसकर मिला लें। रोज सुबह-शाम इसे खाने से रोग-प्रतिरोधक क्षमता में इजाफा होगा।
- 4. दिन में कम से कम एक बार दही जरूर खाएं। आप दही में ताजे फल, शहद और शक्कर मिलाकर उसका स्वाद बढ़ा सकते हैं।
- 5. रोज आधा टीस्पून आंवला पाउडर में एक टीस्पून शहद मिलाकर खाने से रोग-प्रतिरोधक क्षमता मजबूत होती है।
- 6. दो कीवी को छीलकर छोटा-छोटा काट लें। इस पर काली मिर्च लगाकर रोज सुबह नाश्ते में खाएं। इम्यून सिस्टम ठीक रहेगा।
- 7. आधा टीस्पून अजवाइन, 5 तुलसी की पत्तियां, आधा टीस्पून काली मिर्च पाउडर को एक ग्लास पानी में उबाल लें। पानी जब गुनगुना हो जाए तो इसमें एक टीस्पून शहद मिलाएं। कमजोर इम्युनिटी से परेशान लोग हफ्ते में एक बार इसे पी सकते हैं।
- 8. ज सुबह एक ग्लास पानी में एक नींबू का रस निचोड़कर पीने से रोग-प्रतिरोधक क्षमता में इजाफा होता है।
- 9. तीन-चार मुनक्का के बीज निकालकर गूदे को हाथ में मसल लें। इसमें एक टीस्पून शहद मिलाकर रोज स्बह-शाम खाएं। मौसमी बीमारियां परेशान नहीं करेंगी।
- 10. रोज रात को दूध में एक टीस्पून शहद और चुटकीभर हल्दी मिलाकर पीने से रोग-प्रतिरोधक क्षमता दुरुस्त रहती है।
- 11. दिन में एक बार हल्दी की चाय और एक बार हल्दी वाला दूध पीएं। साथ ही हफ्ते में कम से कम एक बार हल्दीयुक्त काढ़ा पीने की आदत डालें। इम्युनिटी मजबूत होगी।
- 12. बदलते मौसम में तुलसी, मुनक्का, दालचीनी, सौंठ और काली मिर्च से बनी हर्बल टी दिन में एक बार पीने से इम्युनिटी दुरुस्त रहती है।
- 13. दिन में दो-तीन बार ग्रीन-टी पीएं। रोग-प्रतिरोधक क्षमता में इजाफा होगा।
- 14. हेल्दी इम्यून सिस्टम के लिए रोज 8-10 बादाम खाएं।

#### IVF treatment

How early can you opt for IVF treatment post Covid recovery? Here's what an expert says (The Indian Express: 20220203)

https://indianexpress.com/article/lifestyle/health/ivf-treatment-post-covid-recovery-7750252/

Dr Y Swapna, a fertility consultant, said the most important factor that determines this is the severity of infection.

Ever since the pandemic started, it delayed plans to start a family for many people worldwide. Now, with people getting vaccinated every day, some couples are considering parenthood. For those who have opted for IVF for conception, there may be many questions as to when it the right time to begin the process, especially if the woman has recently recovered or is recovering from a Covid infection.

Dr Y Swapna, fertility consultant at Nova IVF Fertility, Vijayawada, says the most important factor that will determine this is the degree of the severity of infection. "If the Covid infection was mild and you recovered quickly, it is safe to go for IVF treatment once you are feeling healthy. If the infection was moderate to severe, you need to get yourself assessed both from a physician and a fertility specialist and then take a call according to their advice," she advises.

Dr Swapna adds that after the complete assessment is done, the doctor will advise a treatment plan. "Usually for mild infection the recommended waiting period is 2 months post recovery. If the infection was moderate to severe, the call will completely depend on the condition of your health."

Steps to be taken post Covid to help start IVF treatment:

1. Get vaccinated: The importance of the vaccination cannot be stressed enough. If you are not vaccinated post Covid, you need to get your shot first.

IVF treatment, IVF treatment post Covid recovery, Covid-19 and IVF treatment, how soon to start IVF treatment after Covid recovery, indian express news You have to consciously make an effort to reduce your stress. (Photo: Getty/Thinkstock)

- 2. Practice Covid precautions: Continue to follow Covid precautions like wearing masks, hand hygiene and social distancing. Being infected once does not mean that you cannot get Covid again.
- 3. Have a healthy lifestyle: This is the most crucial bit. Staying healthy is important, not just for IVF but to improve your overall quality of life. Post recovery, once you start feeling

better, you can start exercising gradually. Avoid habits like smoking and drinking. Exercising will improve not just your physical but also your mental health.

- 4. Nutritious diet: This is a fundamental practice that you should be following. Covid will have exposed your body to a lot of stress and medications. Getting your health on track with a nutritious diet is essential. Avoid junk food.
- 5. Reduce your stress: You have to consciously make an effort to reduce your stress. Do not jump back into your old routine immediately post recovery. Do it gradually to avoid being overwhelmed.

#### Omicron

A dose of realism: On COVID-19 surge post Omicron (The Hindu: 20220203)

https://www.thehindu.com/opinion/editorial/a-dose-of-realism-the-hindu-editorial-on-covid-19-surge-post-omicron/article38366639.ece

Disease prevention with COVID-appropriate behaviour and vaccination is still necessary

The World Health Organization (WHO) chief, Dr. Tedros Ghebreyesus, in a recent briefing, noted that 90 million cases of coronavirus have been reported since the Omicron variant was first identified 10 weeks ago. His statement comes in the context of many countries easing their restrictive movement measures amid public fatigue. From WHO's perspective, the blanket lifting of restrictions poses a problem as most people appear to believe that Omicron is less threatening compared to previous variants and that two shots of vaccines are an adequate defence against the virus. He underlined that a narrative that "preventing transmission is no longer possible and no longer necessary" had taken hold and this was problematic. This was false, he underscored at the briefing, as the virus continues to evolve and four of the six WHO regions globally are reporting an increasing trend in deaths.

Britain, France, Ireland, the Netherlands and Finland are on the path of easing COVID-19 restrictions. In India too, with current evidence pointing to a fall in the daily caseload, several States have moved to ease movement restrictions. WHO has also said that the newly emerged variant, BA.2, is as transmissible as Omicron and that all measures needed to contain the original Omicron variant are applicable to it too. After facing criticism that it did not move soon enough in 2020 to alert the world of the magnitude of the calamity that it awaited, WHO, which takes a global view of the crisis, cannot be faulted for airing concerns from the

evidence available so far. It has also consistently warned that the pandemic cannot be over until all regions of the world are sufficiently vaccinated and that economic inequity continues to be a driver of the pandemic. The coronavirus, while secular in its infectiousness, affects nations differently. The richer ones can afford to bear the consequences of disrupted social activity a little longer than the rest. Just about half the world has been fully vaccinated; unfortunately, so far, the available vaccines are only equipped to protect against disease rather than infection. WHO must use its influence to continue to encourage vaccination and step in with advice and expertise to help countries access necessary doses and bear upon governments to do more to meet vaccination targets. Framing the pandemic as a war that humanity must 'win' was useful to accelerate the development of vaccines. However, science is not equipped yet to predict the future trajectory of the coronavirus; COVID-appropriate behaviour, vaccines and accessible health care remain the only credible defences.

#### **Lung abnormalities**

Lung abnormalities found in long COVID patients with breathlessness (The Hindu: 20220203)

 $\underline{https://www.thehindu.com/sci-tech/science/lung-abnormalities-found-in-long-covid-patients-with-breathlessness/article 38345141.ece$ 

Nurse adjusts an oxygen mask on a patient at the respiratory diseases unit of Lisbon's main Santa Maria Hospital

Researchers used a novel xenon gas scan method to pick up lung abnormalities in coronavirus patients who have not been hospitalised but still experience breathlessness.

Lung abnormalities have been discovered in long COVID patients suffering from breathlessness, according to a study that raises the possibility that coronavirus may cause hidden damage to the lungs that is not detected with routine tests.

Researchers used a novel xenon gas scan method to pick up lung abnormalities in coronavirus patients who have not been hospitalised but still experience breathlessness.

Breathlessness is a symptom in most long COVID patients, but it has been unclear whether this is linked to other factors such as changes in breathing patterns, tiredness, or something more fundamental.

The Explain study, a pilot study involving 36 patients, suggests there is significantly impaired gas transfer in the lungs to the bloodstream in long COVID patients - despite other tests including CT scans coming back normal.

"We knew from our post-hospital COVID study that xenon could detect abnormalities when the CT scan and other lung function tests are normal. What we've found now is that, even though their CT scans are normal, the xenon MRI scans have detected similar abnormalities in patients with long COVID," said Fergus Gleeson, the study's chief investigator.

"These patients have never been in hospital and did not have an acute severe illness when they had their COVID-19 infection. Some of them have been experiencing their symptoms for a year after contracting COVID-19," said Gleeson, who is also a professor of radiology at the University of Oxford and consultant radiologist at Oxford University Hospitals NHS Foundation Trust.

The professor said there were important questions to answer such as how many patients with long COVID will have abnormal scans, the significance of the abnormality that has been detected, the cause of the abnormality, and its longer-term consequences.

"Once we understand the mechanisms driving these symptoms, we will be better placed to develop more effective treatments," Gleeson said.

The study, which involves teams from Sheffield, Oxford, Cardiff and Manchester, had 36 participants split into three groups. The full study will recruit around 400 participants.

Emily Fraser, Respiratory Consultant who leads the Oxford Post-COVID Assessment Clinic, said these are interesting results and may indicate that the changes observed within the lungs of some patients with long COVID-19 contribute to breathlessness.

"However, these are early findings and further work to understand the clinical significance is key. Extending this study to larger numbers of patients and looking at control groups who have recovered from COVID should help us to answer this question and further our understanding of the mechanisms that drive long Covid," Fraser said.

Professor Jim Wild, head of imaging and professor at the University of Sheffield, said Xenon MRI was uniquely placed to help understand why breathlessness persists in some patients post COVID-19 infection.

"Xenon follows the pathway of oxygen when it is taken up by the lungs and can tell us where the abnormality lies between the airways, gas exchange membranes and capillaries in the lungs.

"This multicentre study is very exciting, and I really look forward to it helping translate lung MRI methods that we have developed further towards clinical use in the U.K.," Wild said.

"More than a million people in the U.K. continue to experience symptoms months after having COVID-19, with breathlessness one of the most commonly reported symptoms. This early research is an important example of both the committed effort the U.K. research

community is taking to understand this new phenomenon, and the world-leading expertise that community contains," said Professor Nick Lemoine, Chair of NIHR's Long Covid funding committee and Medical Director of the NIHR Clinical Research Network.

The study received government funding and is being supported by the National Institute for Health Research's (NIHR) Oxford Biomedical Research Centre. Its findings, which have not been peer-reviewed, were posted on the bioRxiv pre-print server.

#### **Covid Vaccine**

Boost 2nd dose coverage for teens: Centre to states (The Times of India: 20220203)

https://timesofindia.indiatimes.com/india/boost-2nd-dose-coverage-for-teens-centre-to-states/articleshow/89308414.cms

NEW DELHI: The Centre on Wednesday asked states to accelerate second dose coverage for Covid vaccine among adolescents of 15-17 years.

The government also plans to soon start giving ZyCoV-D in seven states under the immunisation programme. The states include Bihar, Jharkhand, Maharashtra, Punjab, Tamil Nadu, UP and West Bengal.

In a letter to the states and UTs, health secretary Rajesh Bhushan directed states to formulate a specific communication strategy, focused on adolescent population and their caregivers. He also asked states to review the progress in coverage on a daily basis. "A tailored communication strategy focused at adolescents population and their caregivers should also be rolled out to make them aware about the timely completion of vaccination schedule and sustain their vaccine confidence," he stated.

Around 4.9 crore or 67% of total 7.4 crore adolescents of 15-17 years age have received at least first dose of Covid vaccines till Wednesday. Around 21 lakh youngsters are fully vaccinated with two doses of Covaxin. As per Bhushan's letter, 42 lakh adolescents who received the first dose of Covaxin on January 3 became eligible for second dose on January 31

Bhushan further stated, "It is important that the coverage of second dose amongst adolescents is reviewed daily at your level at state/UT and similar review is undertaken at district level too".

#### **Hypertension**

Hypertension: Hospitalizations more than doubled between 2002 and 2014, study finds (Medical News Today: 20220203)

https://www.medicalnewstoday.com/articles/hypertension-hospitalizations-more-than-doubled-between-2002-and-2014-study-finds

Researchers have found that people have gotten better at controlling their blood pressure.

However, the annual rate of people being hospitalized due to a hypertensive crisis more than doubled between 2002 and 2014.

In a new study, researchers have found that the annual incidence of people requiring hospital treatment due to a hypertensive crisis — where a person's blood pressure dangerously increases — more than doubled between 2002 and 2014 in the United States.

The research, published in the Journal of the American Heart Association, comes at a time when other studiesTrusted Source have suggested people have gotten better at controlling their blood pressure, with a consequent reduction in cardiovascular events.

## Hypertension

According to the Centers for Disease Control and Prevention (CDC)Trusted Source, high blood pressure — also known as hypertension — increases a person's chances of having a serious cardiovascular event such as a stroke or heart attack.

A person can reduce their blood pressure by exercising regularly, not smoking, eating a diet low in salt, avoiding overweight and obesity, and reducing stress.

The American Heart Association (AHA)Trusted Source defines a hypertensive crisis as a situation where a person's blood pressure suddenly increases to dangerous levels — specifically, 180/120 or more. This reading means a person's systolic blood pressure is 180 millimeters of mercury (mm Hg) or above, and their diastolic blood pressure is 120 mm Hg or above.

A hypertensive crisis puts a person at risk of having a cardiovascular event. The AHA recommends that a person call the emergency services if their blood pressure is 180/120 or greater and they are experiencing pains in their chest, shortness of breath, numbness, weakness, back pain, issues with vision, or problems speaking.

Researchers have foundTrusted Source that people in the U.S. have tended to better control their blood pressure in recent years and have seen a reduction in the overall number of cardiovascular events occurring.

However, the findings of a new study show that hospitalizations due to a hypertensive event increased between 2002 and 2014.

Dr. Joseph E. Ebinger, M.D., a clinical cardiologist, director of clinical analytics at the Smidt Heart Institute, and first author of the study, says that "[a]lthough more people have been able to manage their blood pressure [...], we're not seeing this improvement translate into fewer hospitalizations for hypertensive crisis."

Dr. Ebinger and his colleagues drew on data from the National Inpatient Sample, which included information on all hospitalizations across the U.S. during the years in question.

Hospitalizations more than doubled

Dr. Ebinger and his colleagues found that the annual level of hospitalizations due to hypertensive crises more than doubled between 2002 and 2014.

Breaking the data down based on sex, the researchers found that hospitalization due to hypertensive crisis increased from 0.17% of all admissions to 0.39% among men.

For women, there was an increase from 0.16% to 0.34%.

The overall risk of mortality due to a hypertensive crisis dropped during the study period. However, despite women tending to have fewer comorbidities related to cardiovascular health than men, they nonetheless saw the same death rates.

Medical News Today spoke with Dr. Ebinger about the study findings.

"Despite effective methods for diagnosis and treatment, hypertension remains one of the largest modifiable risk factors for cardiovascular disease, itself the leading killer of people globally every year."

#### – Dr. Ebinger

"For a number of years, we appreciated improvement in the overall control of blood pressure in the outpatient setting. However, less was known about the rates of extreme blood pressure levels that send people to the hospital, known as hypertensive crises. We pursued this work to see if the gains made in blood pressure control during the study period were being translated to reduced rates of admission for hypertensive crisis."

"As the results show, this was not the case, with the rates of hospitalization for hypertensive crisis increasing over a 13-year period."

"Our group has also been interested in differential patterns and response to hypertension between men and women. We stratified our analysis to look at differences between sexes."

"What we found is that, while admissions for hypertensive crisis increased for both groups, it increased more quickly for men than women. Conversely, both sexes saw a reduction in inhospital mortality associated with hypertensive crisis."

"While this is good news, the fact that women experienced similar improvements in case fatality, despite having fewer other medical conditions, indicates that there may still be an underlying physiologic difference in how hypertension affects the health of women," said Dr. Ebinger.

MNT also spoke with Dr. Eileen Handberg of the American College of Cardiology. Dr. Handberg was not involved in the study.

"Any data that advances our understanding of health-related issues is important. The data here is important because in spite of our efforts to better control hypertension — and we are getting better at it — there is an increase in the number of people who go to the hospital with a hypertensive crisis," she said.

"As the data shows, it's higher in males and older patients and those with more comorbidities, which is not unanticipated. The mortality rates are not rising in this admitted population, which is good, but the impact on health care resources and costs is still expensive," continued Dr. Handberg.

Study limitations and future research

Dr. Ebinger said that there are likely to be many reasons for this increase, although precisely what accounts for it is not yet clear.

"It is important to note that this was a retrospective study, so we cannot draw causal relationships. What the data do tell us is that there are several avenues that would benefit from further investigation to better understand what may be driving these findings."

"For example, whether the increased hospitalization rate is due to episodic high blood pressure events in individuals whose blood pressure is usually well-controlled or clustering of poorly controlled blood pressure among a subset of the population remains unknown," said Dr. Ebinger.

Dr. Handberg also said that many factors could be at play that explain the increase in hospitalization rates.

"What [the researchers] point out that is true is that the reasons for the very elevated blood pressure is multifactorial, and they did not have access to information that might provide insight into the issues. And there is not really a good place to be able to pull all of this information together in the patient population studied."

"However, from other work, we know that many factors like being insured, [medication coverage and availability], complexity of medical therapy — how many meds are they taking for all of the comorbidities? — so are they compliant, did they run out of meds, [are they unable to] afford them, [and] other social determinants of health [play] a role," said Dr. Handberg.

Improving heart health

Dr. Ebinger said that the findings might help clinicians and individuals improve heart health.

"Clinicians should be mindful that improvements in outpatient blood pressure control may not translate to reductions in hospitalization risk, at least at a population level."

"For patients, it's important to pay attention to your blood pressure. Be screened for hypertension, take your medications as prescribed, and practice healthy lifestyle choices, like diet and exercise. Patients should also be mindful of things that may inadvertently raise their blood pressure, such as salt or excessive use of nonsteroidal anti-inflammatory [drugs]."

"In regards to policy, [there should be] continued focus on research and funding to adequately address hypertension control measures. This includes work focused on both understanding biologic principles, but also how best to ensure that all patients receive high quality, effective clinical care," said Dr. Ebinger.

Dr. Handberg stressed that there was still room to improve public messaging on heart health — particularly following the COVID-19 pandemic.

"We have made progress with identification [and treatment] of hypertension, but there is a lot of room to continue to improve."

"Weight, activity level, salt intake, and smoking all play a role in hypertension, and better focus on all of these will help patients get to goal. Patients knowing their numbers is crucial, being a part of the plan of care so the patients can tell us what their barriers are so we can try and mitigate those if possible."

"There are lots of education and public health messages out but I do wonder if rather than having 50 messages from every group/country/public health group could we come up with something more consistent and really get that message out there. Million Hearts attempted to do that and made some great strides, but there is so much opportunity."

"People have been so overwhelmed with COVID-19 for the last two years that many have forgotten some of the additional real threats to global health — gaining that extra 20 [pounds] during COVID-19 alone can drive up blood pressures!"

#### **Diet/ Nutrition**

# Chemicals in everyday plastic items may lead to weight gain (Medical News Today: 20220203)

Changes in diet and exercise do not fully explain the steep rise in overweight and obesity over recent decades.

One theory claims that chemicals in everyday plastic products promote weight gain by changing human metabolism.

A new study found that a range of plastic household items contain thousands of chemicals, many of them unknown.

One-third of the items contained chemicals that, after extraction, caused the growth and proliferation of mouse fat cells in the lab.

Chemicals in plastic household items such as drinks bottles, yogurt pots, and freezer bags may be contributing to the global epidemic Trusted Source of obesity, a new study suggests.

The chemicals may alter human metabolism by promoting the growth of fat cells, or adipocytes.

According to the World Health Organization (WHO)Trusted Source, the number of people with obesity has nearly tripled globally since 1975.

The WHO estimates that in 2016, more than 1.9 billion adults were overweight. Of these individuals, more than 650 million had obesity.

Having excess body weight increases a person's risk of type 2 diabetes, cardiovascular disease, hypertension, non-alcohol-related fatty liver disease, stroke, and certain types of cancer.

Research suggests that factors such as changes in diet are insufficient to explain the scale of the obesity epidemic and the speed with which it has spread around the world.

One possible culprit is the effect of synthetic chemicals in our environment called endocrine disruptors. These influence the endocrine system, which includes the hormones that regulate appetite, metabolism, and weight, among other bodily functions.

The most well-known endocrine disruptors are bisphenol A and phthalates, which are present in some plastics.

These chemicals affect human development and fertility, and lab-based experiments indicate that they may also promote obesity.

However, plastics contain thousands of chemicals. Products made from plastic comprise one or more polymers, but manufacturers also add chemical fillers and additives to achieve the desired properties.

A 2019 study estimates that plastic food packaging alone could contain more than 4,000 known substances that appear in chemical databases.

#### Unidentified chemicals

However, biologists at the Norwegian University of Science and Technology in Trondheim suspected that there might be many unknown chemicals in plastic products that do not appear in the databases.

They used methanol to extract chemicals from 34 everyday products, including freezer bags, yogurt pots, drinks bottles, vegetable trays, scouring pads, and coffee cup lids.

Crucially, they used a technique called nontarget high resolution mass spectrometry, which identifies both known and unknown substances, to find chemicals.

They detected a total of 55,300 chemical features and tentatively identified 629 substances that are already in databases, including 11 that are known to disrupt metabolism.

Finally, they tested extracts from each of the products on a type of mouse precursor cell that can differentiate into fat cells

They compared the effect of the extracts with those of a reference chemical — a diabetes drug called rosiglitazone (Avandia) that has well-known metabolic effects.

The chemical cocktails from four out of the 34 products transformed precursor cells into adipocytes that were larger and contained more fat than rosiglitazone-treated cells. Chemicals from 11 of the products induced the formation of adipocytes.

The results have been published in Environmental Science & Technology.

#### Not the usual suspects

"It's very likely that it is not the usual suspects, such as bisphenol A, causing these metabolic disturbances," says first author Johannes Völker, Ph.D., who is affiliated with the university's biology department.

"This means that other plastic chemicals than the ones we already know could be contributing to overweight and obesity," he adds.

The scientists report that chemical cocktails from PVC and PUR products were most likely to promote the creation of fat cells, whereas those from PET, HDPE, and PLA products were inactive

They emphasize that food packaging is not the only potential source of metabolism-disrupting chemicals.

The substances may also find their way into the body through the skin — for example, from plastic shower slippers or when inhaling dust that has been in contact with plastic flooring.

In their paper, the authors conclude:

"Given the potency of the extracted mixtures and considering our close and constant contact with plastics, our results support the idea that plastic chemicals can contribute to an obesogenic environment and, thus, the obesity pandemic."

However, they acknowledge that the results are not definitive, since the experiments took place in cells growing in dishes in the lab rather than in whole animals.

"It is too early to quantify the contribution of plastic chemicals to obesity from a public health perspective, mainly because our work was done in vitro, not in vivo, and the causative chemicals remain unknown," said senior author Martin Wagner, Ph.D., an associate professor of biology at the university.

"So, we cannot draw a causal link to what is happening in human populations so far," he told Medical News Today.

However, he pointed out that there is good evidence from in vivo and epidemiological studies that bisphenol A is associated with obesity.

In a tweet, he called for manufacturers to make their plastics chemically simpler and safer.

#### Criticism of the study

The researchers used methanol to extract chemicals from the plastics, which may not reflect what happens under everyday conditions.

"The authors are studying extraction rather than migration," said Chris Howick, who is chairperson of the product safety committee at the British Plastics Federation.

"The authors are removing ingredients that would normally remain in the sample throughout its lifetime — as an example, flexible PVC products do not generally become brittle over their lifetimes since the plasticizer remains in the product," he told MNT.

However, Prof. Wagner said that in a previous study, his team demonstrated that many chemicals do, in fact, leach from plastic products in a standard test for food contact materials that uses water only.

"We also found that these migrates induced in vitro toxicity, including endocrine-disrupting effects," he said.

"For the metabolism-disrupting compounds, we have not done this type of experiment yet, so it is too early to tell if these also leach," he added.

In their new paper, the authors also acknowledge that they analyzed plastic packaging that had contained food or personal care products.

"Because chemical migration is not a one-way street, we cannot exclude the possibility that compounds from the contents migrated into the packaging," they write.

"This is an ever-present challenge in migration studies, and it is common, especially for food with a high fat content, for migration of food into the plastics to exceed any migration from the plastic into the food," said Howick.

He also pointed out that certain foods have well-established effects on the endocrine system.