

# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY Friday 20201113

### निमोनिया

हर सांस है कीमती है, जानिए कैसे बचाना है अपने नन्हें शिशु को निमोनिया के प्रकोप से (Hindustan: 20201113)

https://www.livehindustan.com/lifestyle/story-know-how-to-protect-your-child-from-pneumonia-3625238.html

बढ़ते प्रदूषण के बीच छोटे बच्चों का सबसे ज्यादा ख्याल रखने की जरूरत है, आंकड़े बताते हैं कि पांच वर्ष से कम आयु के बच्चों को निमोनिया का सबसे ज्यादा जोखिम होता है।

एक तरफ कोविड-19 का डर उस पर दिवाली के आसपास वातावरण में बढ़ता जा रहा प्रदूषण। ये सभी आपके फेफड़ों को नुकसान पहुंचाने वाले कारक हैं। पर क्या आप जानती हैं कि आपके छोटे बेबी के छोटे-छोटे फेफड़े भी इस समय जोखिम ग्रस्त हो सकते हैं। वह जोखिम है निमोनिया का। वर्ल्ड निमोनिया डे पर आपको जानना चाहिए कि क्यों छोटे बच्चे होते हैं निमोनिया के सबसे ज्यादा जोखिम में।

# निमोनिया क्या है?

असल में निमोनिया किसी एक या दोनों फेफड़ों में होने वाला संक्रमण है। इस स्थिति में फेफड़ों के वायु मार्ग में कफ या बलगम इकट्ठा हो जाता है। कभी-कभी यह मामूली होता है, पर कभी-कभी यह रकावट खतरनाक स्तर पर भी पहुंच जाती है। जिसका असर आपकी उम्र, स्वास्थ्य स्थिति और संक्रमण के प्रकार पर भी निर्भर करता है।

क्या हो सकते हैं निमोनिया के कारण

यह फेफड़ों में बाधा पैदा करने वाला संक्रमण है। इसकी वजह बैक्टीरियल, वायरल और फंगल संक्रमण कुछ भी हो सकता है। इनमें सबसे आम कारण है बैक्टीरिया। बच्चों में अमूमन यह सर्दी या फ्लू के कारण अपने आप विकसित हो जाता है।

निमोनिया का कारण बनने वाले बैक्टीरिया मेडिकल साइंस में मुख्यत: स्ट्रैपटोकोकस निमोनिया, लेगियोनेला न्यूमोफिला या लीजियोनिरेस, माइकोप्लाज्मा निमोनिया, क्लैमाइडिया निमोनिया और हेमोफिलस इन्फ्ल्एंजा माना जाता है।

श्वसन पथ को संक्रमित करने वाले वायरस निमोनिया का कारण बन सकते हैं।

बदलते मौसम में होने वाला वायरल निमोनिया अक्सर हल्का होता है। ज्यादातर बच्चे इसके शिकार होते हैं और कुछ ही हफ्तों में ठीक भी हो जाते हैं। पर कभी-कभी यह इतना गंभीर हो जाता है कि इसके लिए अस्पताल में भर्ती करवाने की भी नौबत आ जाती है।

कोविड-19 के समय में आपको अपने और अपने परिवार के स्वास्थ्य के प्रति ज्यादा सतर्क होने की जरूरत है। रेस्पिरेटरी सिंक्राइटियल वायरस (RSV), सामान्य सर्दी और फ्लू वायरस, SARS-CoV-2 वायरस और फंगल निमोनिया अकसर उन लोगों के लिए गंभीर हो जाते हैं, जिनकी इम्युनिटी कमजोर है।

किन्हें सबसे ज्यादा हो सकता है निमोनिया का जोखिम

हालांकि बदलते मौसम और प्रदूषण के कारण किसी को भी निमोनिया हो सकता है। पर नेशनल इंस्टीट्यूट ऑफ हेल्थ (NIH) के अनुसार कुछ लोग इसके सबसे ज्यादा जोखिम में होते हैं :-

वे बच्चे जिनकी उम्र दो साल से कम है65 वर्ष से अधिक उम्र के बुजुर्ग व्यक्तितवे लोग जिनके वातावरण में प्रदूषण अधिक हैजहरीले धुएं के संपर्क में आने वाले लोगस्मोकिंग या शराब ज्यादा पीने वाले लोगवे लोग जिनमें पोषण की कमी हैअगर आपको पहले से ही फेफड़े संबंधी कोई परेशानी है, तब भी आप निमोनिया के सबसे ज्यादा जोखिम में हो सकते हैं।

समझिए निमोनिया के लक्षण?

बुखार, ठंड लगना, कफ के साथ खांसी, सांस लेने में किठनाई, सांस लेते समय सीने में दर्द होना, मतली और / या उल्टी और दस्त। हालांकि उम्र के हिसाब से सभी में इसके लक्षण अलग-अलग अथवा कम या ज्यादा हो सकते हैं। सबसे ज्यादा खतरा छोटे बच्चों को होता है। क्योंकि उनमें लक्षण बहुत कम नजर आते हैं और सांस लेने में तकलीफ होने पर वे अपनी समस्या बताने की स्थिति में भी नहीं होते।

अगर आपकी इम्युनिटी अच्छी है, तो आप सांस लेने में दिक्कत और बेचैनी महसूस कर सकते हैं। जबिक एजिंग पेरेंट्स में अकसर सांस संबंधी दिक्कतों के साथ मानसिक जागरुकता में भी कमी देखी जा सकती है।

# क्योंकि हर सांस है कीमती

भारत में पांच साल से कम आयु के बच्चों में 15 प्रतिशत की मृत्यु का कारण निमोनिया है। इसलिए इस पर लगाम लगाने के लिए केंद्रीय स्वास्थ्य और परिवार कल्याण मंत्रालय (MoHFW) ने SAANS अभियान की शुरुआत की है।

केंद्रीय स्वास्थ्य मंत्री डॉ. हर्षवर्धन के अनुसार इस अभियान का अर्थ है 'सामाजिक जागरूकता और न्यूमोनिया को सफलतापूर्वक समाप्त करने की कार्रवाई' छोटे बच्चों का रखना है ज्यादा ख्याल

स्वास्थ्य प्रबंधन सूचना प्रणाली (HMIS) से प्राप्त आंकड़ों के अनुसार भारत में जन्मे 1000 बच्चों में से, 37 की मृत्यु पांच वर्ष से कम आयु में हो जाती है। इनमें से 5.3 मौतें निमोनिया के कारण होती हैं। इसलिए यह जरूरी है कि छोटे बच्चों को इससे बचाने पर हमें ज्यादा ध्यान देने की जरूरत है।

कैसे आप अपने बच्चे को निमोनिया से बचा सकती हैं

यह सबसे ज्यादा जरूरी है कि आप इस प्रदूषण भरे माहौल में अपने बच्चे का ज्यादा से ज्यादा ख्याल रखें।

इस मौसम में प्रदूषण अकसर बढ़ जाता है, ऐसे में यह सुनिश्चित करें कि छोटे बच्चों को घर से बाहर ले जाना बिल्कुल अवॉइड करें।घर के वातावरण को साफ-सुथरा बनाए रखने के लिए यह सुनिश्चित करें कि घर में वेंटिलेशन की उचित व्यवस्था हो। आप घरेलू एयर प्यूरीफायर का भी इस्तेमाल कर सकती हैं।बच्चे की इम्युनिटी आपके स्तनपान करवाने पर निर्भर करती है। इसलिए ढाई वर्ष तक की आयु के बच्चे को स्तनपान जरूर करवाएं।यह भी सुनिश्चित करें कि आप या आपके परिवार का कोई और सदस्य घर में स्मोक न करे।

खासतौर से दिवाली के समय बच्चे को प्रदूषित माहौल से बचाकर रखें।बच्चा अगर दूध नहीं पी रहा है या दूध उलट रहा है, तो डॉक्टर को जरूर दिखाएं।

क्या निमोनिया को रोका जा सकता है?

जी हां, वैक्सीन न्यूमोकॉकल बैक्टीरिया या फ्लू वायरस के कारण होने वाले निमोनिया को रोकने में मदद कर सकती हैं। पर इसके साथ ही यह भी जरूरी है कि आप अच्छी स्वच्छता, धूम्रपान न करना और स्वस्थ जीवनशैली का भी पालन करें।

## कोरोना

हाई ब्ल्ड शुगर, कमजोरी या पेट संबंधी शिकायतें भी कोरोना के लक्षण, जानें किस उम के लोगों को ज्यादा परेशानी (Hindustan: 20201113)

https://www.livehindustan.com/lifestyle/story-covid-19-high-blood-sugar-or-diabetes-weakness-or-stomach-complaints-are-also-symptoms-of-coronavirus-3621508.html

कोरोना महामारी के लगातार बढ़ते मामलों के बीच इसके नए-नए लक्षण सामने आ रहे हैं। ताजा शोध के मुताबिक कमजोरी, पेट संबंधी विकार और डायबिटीज को भी नए लक्षणों के रूप में पहचाना गया है। अमेरिकन जर्नल ऑफ इमरजेंसी मेडिसिन में प्रकाशित इस शोध में यह दावा किया गया है।

वैज्ञानिकों ने न्यूयॉर्क शहर स्थित कोविड अस्पतालों में भर्ती बारह हजार से अधिक मरीजों पर अध्ययन किया। इसके निष्कर्षों के आधार पर इन लक्षणों की पृष्टि की गई है। शोधकर्ताओं ने बताया कि अस्पताल पहुंचे करीब 57 फीसदी मरीजों को कमजोरी की शिकायत थी, इन्हें बाद में जांच में कोविड-19 से संक्रमित पाया गया। वहीं, 55 फीसदी मरीज ऐसे थे जिनका ब्ल्ड शुगर लेवल काफी बढ़ा हुआ था जबकि 51 फीसदी को पेट संबंधी शिकायतों के बाद अस्पताल में भर्ती होना पड़ा था।

65 वर्ष से अधिक वालों को ज्यादा परेशानी :

अध्ययन में यह भी पाया गया कि 65 वर्ष से अधिक उम्र के मरीजों में गैस, डायरिया जैसी परेशानी होने पर अस्पताल में भर्ती किया गया और बाद में जांच में ये सभी संक्रमित मिले। शोधकर्ताओं में शामिल इक्हान स्कूल ऑफ मेडिसिन के प्रोफेसर डॉ. क्रिस्टोफर क्लिफर्ड के अनुसार, नए अध्ययन से ज्यादा मरीजों की जान बचाने में मदद मिलेगी।

# वैक्सीन की राह में बड़ी चुनौती :

कोरोना वायरस से निपटने के लिए तैयार की जा रही अधिकांश वैक्सीन के ट्रायल अंतिम चरण में हैं। ऐसे में नए लक्षणों की पहचान ने वैज्ञानिकों के लिए चुनौती बढ़ा दी है। माना जा रहा है कि अब तक परीक्षण में सफल उतरे टीकों को तैयार करते वक्त इन लक्षणों पर उतना ध्यान नहीं दिया गया। निश्चित ही अब दवा कंपनियां इन पहलुओं पर भी गौर करेंगी। ऐसे में बेसब्री से कोरोना वैक्सीन का इंतजार कर रही दुनिया को कुछ और इंतजार करना पड़ सकता है।

# पहले ये लक्षण माने जाते थे कारण

- सेंटर फॉर डिजीज कंट्रोल एंड प्रिवेंशन (सीडीसी) ने अगस्त माह में कोविड-19 को लेकर छह नए लक्षणों के बारे में बताया था। जिनमें सर्दी लगना, ठिठुरन, मांसपेशियों में दर्द, सिरदर्द, गले में खराश और सूंघने या स्वाद लेने की क्षमता कम होना शामिल था।
- सितंबर माह में नेशनल हेल्थ सर्विस ने आंखों संबंधी समस्या, खांसी, अधिक बेचैनी और चमड़ी के रंग बदलने को भी कोरोना के नए लक्षणों में शामिल किया था।

# कोरोना काल में प्रदूषण... सांसों पर दोहरा संकट (Dainik Tribune: 20201113)

https://www.dainiktribuneonline.com/news/features/pollution-in-the-corona-period-double-crisis-on-breath-14431

यूं तो इस मौसम में हर साल दिल्ली-एनसीआर में बढ़ते प्रदूषण के कारण सांस लेने में तकलीफ बढ़ने लगती है, लेकिन इस बार कोरोना काल के चलते यह स्थिति ज्यादा खतरनाक है। कोरोना संक्रमण भी फेफड़ों पर हमला करता है और प्रदूषण भी। दोनों की वजह से सांस लेने में परेशानी होती है। इसलिए अतिरिक्त सावधानी की जरूरत है। सांस लेने में इसे केवल प्रदूषण का असर मानकर घर में न बैठे रहें, अपने डॉक्टर से संपर्क करें। दिल्ली में एक बार फिर कोरोना संक्रमण के मामले बढ़ने शुरू हो गए हैं। संक्रमण के मामले बढ़ने का ख़तरा दिल्ली से सटे एनसीआर के तमाम शहरों पर भी मंडरा रहा है। यही कारण है कि डॉक्टर लगातार सावधान रहने की सलाह दे रहे हैं। प्रदूषण बढ़ने के साथ सांस लेने में परेशानी और आंखों में जलन होना दिल्ली-एनसीआर में रहने वालों के लिये सामान्य सी बात है। लेकिन डॉक्टरों की मानें तो यह अलार्मिंग वाली स्थिति है।

डॉक्टरों का कहना है कि प्रदूषण होने पर खाली पेट बाहर जाने से बचें। घर से कुछ खाकर ही निकलें और पानी पीते रहें। इंडियन मेडिकल एसोसिएशन के पूर्व अध्यक्ष डॉ. केके अग्रवाल का कहना है कि हृदय रोगियों के लिए प्रदूषण का बढ़ता स्तर बहुत खतरनाक है। प्रदूषण के छोटे कण फेफड़ों के जिरए रक्त में चले जाते हैं और धमनियों को ब्लॉक कर देते हैं। इससे हार्ट अटैक का खतरा काफी बढ़ जाता है। हृदय और उच्च रक्तचाप के रोगी स्बह और शाम बाहर निकलने से बचें।

मॉर्निंग वॉक पर जाना है तो 8 बजे के बाद ही जाएं, जब धूप अच्छी तरह से खिल चुकी हो। मास्क का इस्तेमाल करें। अपने घरों के खिड़की दरवाज़े बंद रखें और हो सके तो घर में एयर प्यूरीफायर का इस्तेमाल करें। खिड़कियों के पर्दे गीले करने से प्रदूषण को अंदर आने से रोका जा सकता है।

### ब्लड प्रेशर के रोगियों को खतरा

ब्लड प्रेशर के रोगियों के लिए प्रदूषण का बढ़ता स्तर काफी खतरनाक साबित हो सकता है। यहां तक कि ब्रेन स्ट्रोक का कारण भी बन सकता है। दरअसल वायु प्रदूषण में होने वाले बहुत छोटे कण संवहनी प्रणाली (वस्कुलर सिस्टम) में प्रवेश कर जाते हैं। लंबे समय तक प्रदूषित हवा के संपर्क में रहने से दिमाग को नुकसान पहुंचाकर ब्रेन स्ट्रोक का कारण बन जाते हैं। धूम्रपान और नियमित खानपान इस खतरे को कई गुना बढ़ा देता है। यशोदा अस्पताल के न्यूरो फिजीशियन डॉ. राकेश कुमार का कहना है कि स्ट्रोक की समय से पहचान और उपचार जरूरी है।

# गर्भवती महिलाएं अपना खास ख्याल रखें

प्रदूषण की स्थिति को देखते हुए डॉक्टर गर्भवती महिलाओं को अपना खास ख्याल रखने की सलाह दे रहे हैं। अधिक देर तक प्रदूषित हवा में रहने से गर्भपात की आशंका बनी रहती है। आने वाला बच्चा कुपोषण का शिकार भी हो सकता है। यही नहीं ऐसे बच्चों का जन्म के समय वज़न कम होने की आशंका रहती है।

स्वास्थ्य सेवा महानिदेशालय, लखनऊ में अपर निदेशक डॉ. दीपा त्यागी का कहना है कि गर्भवती महिलाएं अपने खानपान का विशेष ध्यान रखें और सुबह-शाम घर से बाहर जब भी निकलें तो मास्क का प्रयोग करें।

वायु गुणवत्ता सूचकांक

हवा में पीएम-2.5 और पीएम-10 की मात्रा बढ़ने से दिल्ली-एनसीआर की हवा सीवियर कैटेगरी में पहुंच गई है। बता दें कि वायु गुणवत्ता सूचकांक (एक्यूआई) को केंद्रीय प्रदूषण नियंत्रण बोर्ड ने छह श्रेणियों में विभाजित किया है। एक्यूआई (0-50) को अच्छा, 51 से 100 को संतोषजनक, 101 से 200 को सामान्य, 201 से 300 को खराब, 301 से 400 को बहुत खराब और 401 से 500 एक्यूआई को गंभीर यानी सीवियर श्रेणी में रखा गया है। पराली और वाहनों से हुए प्रदूषण ने दिल्ली एनसीआर और आसपास की हवा को सीवियर श्रेणी में पहुंचा दिया है।

Arvind Kejriwal: Delhi Covid-19 situation should come under control in 7-10 days (The Indian Express: 20201113)

https://indianexpress.com/article/cities/delhi/arvind-kejriwal-delhi-covid-19-cases-spike-situation-should-come-under-control-in-7-10-days-7050403/

Arvind Kejriwal said, "We have been taking all appropriate measures to control it. We are considering taking more steps next week. I think the situation should come under control in 7 to 10 days and the cases should start decreasing."

Arvind Kejriwal blamed pollution for the surge in coronavirus cases in Delhi. (File)

A day after Delhi reported 7,053 new cases and 104 Covid deaths, the highest so far, Chief Minister Arvind Kejriwal Friday said the situation in the national capital should come under control in seven to 10 days and that his government is taking several steps in this regard next week. The total number of Covid-19 infections has crossed 4.67 lakh in Delhi and the death toll has risen to 7,332. On Wednesday, the city had recorded its highest single-day spike of 8,593 cases.

Addressing a press conference, the chief minister said, "COVID-19 cases have been increasing for the last few days. I am also concerned about it. We have been taking all

appropriate measures to control it. We are considering taking more steps next week. I think the situation should come under control in 7 to 10 days and the cases should start decreasing."

The Chief Minister also blamed pollution for the surge in coronavirus cases in the city. "Pollution is biggest reason behind the spike in COVID-19 cases in Delhi. We had situation under control until October 20," Kejriwal added.

Asserting that the anti-stubble solution prepared by the Indian Agricultural Research Institute, Pusa, decomposed 70 to 95 per cent of crop residue in 24 villages in Delhi, Kejriwal said his government will submit the report along with a petition to Commission for Air Quality Management in the National Capital Region (NCR) and adjoining areas, and urge it to issue directions to all state government to implement it.

On Thursday, the state government told the Delhi High Court that it will request the Lieutenant Governor for a meeting of the Disaster Management Authority (DMA) to discuss the Covid-19 situation in the city, including unlock norms.

The Delhi government has since May maintained that a lockdown was not the solution and that people would have to learn to live with the virus and governments would have to strengthen the healthcare system.

According to Delhi government officials, though, locking down again was much easier said than done. "Some states were averse to unlocking but it did not slow down the spread of the disease as they had hoped it would. One of the biggest reasons Delhi is seeing such high cases is that it is testing the most in the country. Even today, we did over 60,000 tests. Anyone can come forth and get tested in Delhi; there are no restrictions, unlike in some other states," said a senior Delhi government official.

According to the unlock guidelines passed by the Centre, states are not allowed to impose lockdown without consulting it. Another official said several options are still open. "We haven't ruled anything out but any decision can be taken only after meeting the stakeholders. It is a situation that requires reassessment but experts have said that the third wave is expected to start abating soon," the official said.

Meanwhile, the Delhi High Court Thursday permitted the Delhi government to enforce its order asking 33 major private hospitals to reserve 80% ICU beds for coronavirus patients. It vacated a stay order on the matter passed by a single bench last month, on a petition filed by a group of healthcare providers, noting that the ground reality had "radically changed" since then.

#### Evidence of two-way transmission found on mink farms (The Hindu: 20201113)

https://www.thehindu.com/sci-tech/science/coronavirus-evidence-of-two-way-transmission-found-on-mink-farms/article33082056.ece?homepage=true

Denmark had on November 6 ordered culling of the entire farmed mink population of 17 million to prevent further changes to the virus emerging among minks. | Photo Credit: AFP

The researchers performed an in-depth investigation among the first 16 infected farms in the Netherlands

An analysis of outbreaks of the novel coronavirus on 16 mink farms in the Netherlands has revealed that the COVID-19 virus is capable of transmission between humans to minks, as well as from these mammals to people.

While the virus was initially introduced from humans to the minks, the researchers, including Bas B. Oude Munnink from the Erasmus University Medical Center in the Netherlands, said it has since evolved. "More research in minks and other mustelid species is important to understand if these species are at risk of becoming a reservoir of SARS-CoV-2," they wrote in the study, published in the journal Science.

According to the scientists, the virus was first diagnosed on two mink farms in late April of 2020 in the Netherlands. In response, they said an extensive surveillance system was set up.

The researchers performed an in-depth investigation among the first 16 infected mink farms in the Netherlands using a combination of coronavirus diagnostics, whole-genome sequencing, and in-depth interviews with farm workers.

By the end of June, they found that 66 of 97 of the mink farm residents, employees and/or contacts tested had evidence for SARS-CoV-2 infection.

According to the study, the mink virus genome analysis revealed a diversity of sequences. These large clusters of infection were initiated by COVID-19 cases with viruses that bear the "D614G mutation", which has come to dominate human infections in several parts of the world, the scientists said.

They also found that some people were infected with strains of the virus with an animal sequence signature, providing evidence of animal to human transmission.

However, they did not find any evidence of spillover to people living in close proximity to mink farms. "It is imperative that fur production and trading sector should not become a reservoir for future spillover of SARS-CoV-2 to humans," the scientists wrote in the study.

#### Healthcare

# WHO to set up centre for traditional medicine in India (The Hindu: 20201113)

 $\underline{https://www.thehindu.com/news/national/who-to-set-up-centre-for-traditional-medicine-in-india/article 33091388.ece$ 

WHO Director General Tedros Adhanom Ghebreyesus made the announcement in a video message at an event in which PM Modi inaugurated two future-ready Ayurveda institutions in Jaipur and Jamnagar

The World Health Organisation announced on Friday that it will set up a Global Centre for Traditional Medicine in India, with Prime Minister Narendra Modi expressing confidence that just like the country has emerged as the 'pharmacy of the world', the WHO institution will become the centre for global wellness.

WHO Director General Tedros Adhanom Ghebreyesus made the announcement in a video message at an event in which Prime Minister Modi inaugurated two future-ready Ayurveda institutions in Jaipur and Jamnagar via video conferencing on the occasion of the 5th Ayurveda Day.

The Institute of Teaching and Research in Ayurveda (ITRA), Jamnagar (Gujarat) and the National Institute of Ayurveda (NIA), Jaipur (Rajasthan) are both premier institutions of Ayurveda in the country.

The Jamnagar institute has been conferred the status of an Institution of National Importance (INI) by an act of Parliament and the one at Jaipur has been designated an Institution Deemed to be University (De novo Category) by the University Grants Commission (UGC), according to the AYUSH Ministry.

"I am pleased to announce that we have agreed to open a WHO Global Centre for Traditional Medicine in India to strengthen the evidence, research, training and awareness of traditional and complementary medicine," Mr. Ghebreyesus said.

"This new centre will support WHO's efforts to implement the WHO traditional medicine strategy 2014-2023 which aims to support countries in developing policies and action plans to strengthen the role of traditional medicine as part of their journey to universal health coverage and a healthier, fairer and safer world," he said.

Mr. Modi said Ayurveda is India's heritage whose expansion entails the welfare of humanity and all Indians will be happy to see that the country's traditional knowledge is making other countries prosperous.

"It is a matter of pride for all Indians that the WHO has chosen India for establishing its Global Centre for Traditional Medicine. Now work will be done in this direction from India," Mr. Modi said.

"I would like to thank the WHO and particularly its Director General Tedros for giving this responsibility to India. I am confident that just like India has emerged as the pharmacy of the world, in the same manner this centre for traditional medicine will become the centre for global wellness," he added.

The Ministry of AYUSH, since 2016, has been observing "Ayurveda Day" every year on the occasion of Dhanwantari Jayanti (Dhanteras).

Considering the prevailing situation of COVID-19, the 5th Ayurveda Day, 2020 is being observed largely on virtual platforms at national and international levels.

## **Drug News**

18 generic drug companies pledge to make COVID-19 drugs for developing countries (The Hindu: 20201113)

https://www.thehindu.com/sci-tech/health/18-generic-drug-companies-pledge-to-make-covid-19-drugs-for-developing-countries/article33080671.ece?homepage=true

Indian companies that have pledged to manufacture COVID-19 drugs include Sun Pharma, Lupin, Aurobindo, Zydus Cadila, Hetero, Natco and Strides Shasun.

The companies have come together under the umbrella of the non-profit Medicines Patent Pool (MPP).

A coalition of 18 pharma companies located in India, China, Bangladesh and South Africa that manufacture generic drugs have pledged to work together to accelerate access to millions of doses of new interventions for COVID-19 for low- and middle-income countries.

The companies have come together under the umbrella of the non-profit Medicines Patent Pool (MPP).

Indian companies that have pledged to manufacture COVID-19 drugs include

Sun Pharma

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Aurobindo

Zydus Cadila

Hetero

Natco

Strides Shasun

"This unprecedented cooperation from companies that are typically competitors represents a breakthrough in our efforts to level the playing field for access to drugs that will be crucial to controlling and defeating this pandemic," Charles Gore, Executive Director of MPP said in a release.

All the 18 companies have the capacity to deliver substantial amounts of conventional drugs and biologics, including monoclonal antibodies.

"We affirm our joint engagement and offer our capacity to develop and supply COVID-19 treatments – re-purposed, new, small molecules and biologics – to those in need," the pledge by the companies that have the capacity to produce large volumes of high-quality COVID-19 treatments reads. MPP believes that the pledge will encourage companies now developing new drugs or testing existing drugs for COVID-19 to negotiate agreements allowing rapid access to those in need.

"Today, we call on other leading manufacturers, suppliers and distributors of medicines from all around the world to join us in this united effort and sign this pledge so that we can work shoulder to shoulder to end this pandemic," the pledge notes.

This can be either through licensing of their intellectual property, or where licences are not needed, facilitating ways to scale up manufacturing capacity to meet the high demands, the release states.

"Each of us stands ready to contribute to the fight against COVID-19 through our technical expertise and longstanding experience in manufacturing and distribution of quality-assured medicines," the companies say in the pledge. "We are convinced that through a transparent approach, in working together, we can offer more than the sum of our individual capacities. In our mission to fight COVID-19 and prevent millions of unnecessary deaths everywhere, we commit to SUCCESS (Sustainable Universal access through Collaboration, Coordination, Emergency measures, Scale and Speed)."

#### Child Health

Why flu shots for kids is important during the pandemic (The Indian Express: 20201113)

https://indianexpress.com/article/parenting/health-fitness/why-flu-shots-for-kids-is-important-during-the-pandemic-7048841/

The flu shot has been touted to act as a preventive shield against the soaring viral infection and decrease the risk of developing respiratory problems like H1N1 and pneumonia, which could aggravate a person's risk of getting COVID-19.

Flu is an epidemic and children need to get flu shots to build their immunity. (Source: getty images/file)

Making your kids get flu shots every year is a great idea, but even more this year as the coronavirus continues to spread throughout much of India. Considering seasonal changes and other factors, parents are aware that bouts of cold and flu also bring in several respiratory issues among children. However, falling sick with both flu and covid can be a recipe for disaster and in that case hospitalisation of kids becomes inevitable. As all hospitals are being filled up with sick patients, public health leaders are urging everyone to get the flu vaccine to both protect ourselves and prevent hospitals from being overcrowded with sick patients.

Though the idea of taking flu shots in India is not that common as in the western countries, doctors are now recommending people to get a flu vaccine shot as it is the need of time. The flu shot has been touted to act as a preventive shield against the soaring viral infection and decrease the risk of developing respiratory problems like H1N1 and pneumonia, which could aggravate a person's risk of getting COVID-19.

Flu is an epidemic and children need to get flu shots to build their immunity, because if not, they might end up being hospitalised. Morbidity (health issues) of flu is high whether it is swine flu or normal flu and children act as super spreaders in spreading the flu to other household members. However, it is also important to keep your child away from people having the flu in your household as they are more vulnerable and susceptible to contract it.

It is important to immunise children up to five years. The first flu shot is given at six months after they are born, as up to six months they have their mother's immunity to protect them. Therefore, once a child turns six months, parents must ensure they get their child a flu shot every year until five years of age. Children above six years can still develop flu if they have predisposing factors like asthma, immune problems or heart issues. The current recommendation by Indian Academy of Paediatrics and ACVIP (Advisory Committee on Vaccinations and Immunisations Practices) does not recommend routine flu shots after five years of age.

In this pandemic, it is said to keep children safe from flu or other diseases because if they get both flu and COVID it's a double whammy, which means the morbidity and mortality are exponentially raised. According to doctors, there's no particular season to get shots, but in India, flu shots are given before the onset of monsoon because this is the time when most fluctuations happen in the weather so to keep children safe before monsoon, flu shots are recommended. Despite COVID, there's a lot of traveling happening inter-country and also from outside countries, so doctors recommend having a flu shot irrespective of the time of year, because getting immune at the earliest is very important.

Other preventive measures that can be taken by children alongside flu shots is to stay away from people who are sick, wash their hands frequently, avoid touching your eyes and mouth, continue to wear masks in public places and social distancing.

It is very important and necessary for the parents to take care of their children during this pandemic because a little carelessness can result in getting them sick. Considering the country's condition where every day there is a rise in COVID cases, it's preferred to take care of your children at home and get the flu shot at the earliest possible. A flu shot can definitely cut the risk of catching infection and also save kids from hospitalisation at this critical juncture when it is important to save resources for people in need.

#### **Air Pollution**

Delhi's air quality expected to go worse on Diwali: IMD (The Indian Express: 20201113)

 $\underline{https://www.hindustantimes.com/delhi-news/delhi-s-air-quality-expected-to-go-worse-on-diwali-imd/story-puCVtGNGOzXxsGwKb17v8O.html}\\$ 

Delhi woke up to "very poor" air quality on Friday morning. The AQI was 328 this morning, while on Thursday the AQI was 314.

Delhi's AQI was 'severe' for six days, starting November 6.

The Indian Meteorological Department on Friday said that the air quality in Delhi is currently very poor and it is expected to go worse to severe on Diwali, i.e. November 14.

"Presently Delhi's air quality is very poor and is expected to go worse to severe tomorrow. It can be worse if there are additional emissions. AQI will improve after Diwali and there are

chances of drizzle and rain on 15th November," Dr VK Soni, Head, Environment and Research Centre, IMD said.

Delhi woke up to "very poor" air quality on Friday morning. The AQI was 328 this morning, while on Thursday the AQI was 314.

Delhi's AQI was 'severe' for six days, starting November 6. Due to a change in wind speeds, Delhi's air quality had marginally improved on Wednesday and Thursday but scientists have warned that respite from severe pollution will be short-lived.

The System of Air Quality and weather Forecasting and Research (SAFAR) under the Indian Institute of Tropical Meteorology, has released a similar forecast for Delhi's air quality for the Diwali weekend. "The stubble burning induced impact in AQI is expected to increase from negligible to moderate for the next two days," the SAFAR forecast read.

The forecast added that even if residents do not burn any crackers, the PM 2.5 level is still expected to be on the higher-end of 'very poor' or the lower-end of 'severe' category. However, despite unfavourable weather conditions, the forecast said the AQI is expected to be better this year, as compared to Diwali day and the days after the festival for the past four years.

On Thursday, Delhi's minimum temperature, recorded at the Safdarjung observatory, which is considered the official reading for the city, was 11.6 degree Celsius – two notches below normal. The maximum temperature was 29.2 degree Celsius – one degree above normal.

#### **Heart Disease**

Walnuts may have anti-inflammatory effects that reduce risk of heart disease: Study (Hindustan Times: 20201113)

https://www.hindustantimes.com/more-lifestyle/walnuts-may-have-anti-inflammatory-effects-that-reduce-risk-of-heart-disease-study/story-BKlwhMsovkP2H4LSDYBuQJ.html

Findings from a randomized controlled trial indicate that people in their 60s and 70s who regularly consume walnuts may have reduced inflammation, a factor associated with a lower risk of heart disease, compared to those who do not eat walnuts.

Findings from a randomized controlled trial indicate that people in their 60s and 70s who regularly consume walnuts may have reduced inflammation, a factor associated with a lower risk of heart disease, compared to those who do not eat walnuts.

The research was part of the Walnuts and Healthy Aging (WAHA) study - the largest and longest trial to date exploring the benefits of daily walnut consumption.

The study has been published in the Journal of the American College of Cardiology.

In the study, conducted by Dr. Emilio Ros from the Hospital Clinic of Barcelona, in partnership with Loma Linda University, more than 600 healthy older adults consumed 30 to 60 grams of walnuts per day as part of their typical diet or followed their standard diet (without walnuts) for two years.

Those who consumed walnuts had a significant reduction in inflammation, measured by the concentration of known inflammatory markers in the blood, which were reduced by up to 11.5 per cent.

Of the 10 well-known inflammatory markers that were measured in the study, six were significantly reduced on the walnut diet, including interleukin-1b, a potent pro-inflammatory cytokine which pharmacologic inactivation has been strongly associated with reduced rates of coronary heart disease.

The study's conclusion is that the anti-inflammatory effects of walnuts provide a mechanistic explanation for cardiovascular disease reduction beyond cholesterol lowering.

"Acute inflammation is a physiological process due to activation of the immune system by injuries such as trauma or infection, and is an important defense of the body", said Dr. Emilio Ros, a lead researcher in the study.

"Short-term inflammation helps us heal wounds and fight infections, but inflammation that persists over time (chronic), caused by factors such as poor diet, obesity, stress and high blood pressure, is damaging instead of healing, particularly when it comes to cardiovascular health. The findings of this study suggest walnuts are one food that may lessen chronic inflammation, which could help to reduce the risk for heart disease - a condition we become more susceptible to as we age," added Ros.

Chronic inflammation is a critical factor in the development and progression of atherosclerosis, which is the buildup of plaque or "hardening" of the arteries, the principal cause of heart attacks and stroke. Therefore, the severity of atherosclerosis depends greatly on chronic inflammation, and dietary and lifestyle changes are key to mitigating this process.

While existing scientific evidence establishes walnuts as a heart-healthy1 food, researchers continue to investigate the "how" and "why" behind walnuts' cardiovascular benefits.

According to Dr. Ros, "Walnuts have an optimal mix of essential nutrients like the omega-3 alpha-linolenic acid, or ALA (2.5g/oz), and other highly bioactive components like

polyphenols2, that likely play a role in their anti-inflammatory effect and other health benefits."

The study findings were also reinforced by an editorial in the same publication entitled "Ideal Dietary Patterns and Foods to Prevent Cardiovascular Disease: Beware of Their Anti-Inflammatory Potential", which concludes that a better knowledge of the mechanisms of health protection by the different foods and diets, mainly their anti-inflammatory properties, should inform healthier food choices.

While these results are promising, the research does have limitations. Study participants were older adults who were healthy and free living with the option to eat a variety of other foods in addition to walnuts. Additionally, further investigation is needed in more diverse and disadvantaged populations.

(This story has been published from a wire agency feed without modifications to the text. Only the headline has been changed.)

#### **Diabetes**

Type 2 diabetes: Drug duo may remain effective for 2 years (Medical News Today: 20201113)

https://www.medicalnewstoday.com/articles/type-2-diabetes-drug-duo-may-remain-effective-for-2-years#Conclusions

A trial suggests that in patients who are no longer responding to metformin, taking a combination of two newer drugs is safe and yields clinical benefits for at least 2 years.

Insulin helps regulate the amount of glucose circulating in the blood. In type 2 diabetes, the body does not produce enough insulin, its cells no longer respond effectively to the hormone, or both.

In the long term, high blood glucose levels can cause a wide range of debilitating and potentially life threatening complications. These include high blood pressure, damage to organs such as the heart and kidneys, nerve damage, and blindness.

According to the Centers for Disease Control and Prevention (CDC), type 2 diabetes affects more than 30 million individuals in the United States and accounts for 90–95% of all cases of diabetes.

Type 2 diabetes used to be called adult-onset diabetes because it mostly affects people over the age of 45. But in recent decades, rates of type 2 diabetes in children, teenagers, and young adults have increased in the U.S.

Lifestyle changes can control or even reverse the condition. Doctors also prescribe drugs to stabilize patients' blood glucose levels.

The first-line treatment is metformin, but in some patients, the drug's efficacy can decline over time, necessitating alternative treatments.

### Drug combination

A clinical trial called DURATION-8 investigated a combination of two newer drugs — exenatide and dapagliflozin — in patients whose blood glucose levels did not respond to metformin.

Initially, the trial lasted 28 weeks, but it was later extended to 52 weeks. The results suggest that the combination was safe and continued to be more effective than either drug alone.

In addition to stabilizing blood glucose levels, the drug combination was associated with lower blood pressure and body weight.

The researchers report in the journal Diabetes Care that the drug duo remained safe and effective 2 years (104 weeks) after treatment began, following a second extension of the trial.

"Many therapies in diabetes management are short-lived, which is why it is useful to test for long-term effect," says first author Dr. Serge Jabbour, director of the division of endocrinology and the Diabetes Center at Thomas Jefferson University in Philadelphia, PA.

Exenatide belongs to a class of drugs called glucagon-like peptide-1 receptor agonists, which work by promoting insulin secretion, reducing the release of glucose from the liver, and increasing the feeling of fullness after a meal.

Dapagliflozin belongs to a class called sodium-glucose cotransporter-2 inhibitors, which boost the amount of glucose that is excreted in urine.

"These two classes work synergistically to help control a type 2 diabetes patient's glucose levels and other measures associated with diabetes," says Dr. Jabbour. "We can now feel more confident about prescribing these medications long term."

AstraZeneca, which makes branded versions of both drugs, funded the study. The company also played a role in designing the study, gathering the data, and evaluating it.

#### Study design

The researchers randomly assigned 695 adults with type 2 diabetes whose blood glucose was not adequately controlled by metformin to three treatment groups:

a weekly injection of exenatide and a daily oral dose of dapagliflozin

weekly exenatide and daily oral placebo

a weekly placebo injection and daily oral dapagliflozin

After 2 years, 431 patients remained in the trial. Most of the participants who dropped out did so because they did not want to sign up to an extension of the trial.

After adjustments for other possible contributing factors, those who received both drugs saw the greatest average reduction in their glycated hemoglobin (HbA1c) levels — a measure of the stability of blood glucose levels — compared with the start of the trial.

In patients who took both drugs, there were also improvements in blood glucose levels after fasting and 2 hours after eating, and reductions in body weight and systolic blood pressure.

The researchers report that patients tolerated well the combination of exenatide and dapagliflozin.

While patients experienced no episodes of major hypoglycemia (dangerously low levels of blood glucose), there were more episodes of minor hypoglycemia in patients who took both drugs compared with the other two experimental groups.

#### Conclusions

The authors conclude that the clinical benefits of taking both drugs were maintained for 2 years, with "no unexpected safety findings." They continue:

"Further studies are needed to investigate whether the combination treatment effects observed in DURATION-8 could potentially extend to a reduced incidence of [cardiovascular] and renal events in patients with type 2 diabetes."

The authors acknowledge that the relatively high proportion of patients who withdrew from the study after 1 year limits the "robustness" of its findings after 2 years.

Finally, they note that their findings may not apply to all patients. Treatment should be tailored to individuals and modified according to how well they progress.