



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Friday

201901108

HIV

New HIV strain discovered after nearly 2 decades (The Tribune: 201901108)

<https://www.tribuneindia.com/news/features/health/>

A team of scientists at pharmaceutical major Abbott has identified a new subtype of the Human Immunodeficiency Virus (HIV), called HIV-1 Group M, subtype L.

The discovery marks the first time a new subtype of HIV-1 has been identified since 2000.

The findings, published in the Journal of Acquired Immune Deficiency Syndromes (JAIDS), show the role next-generation genome sequencing is playing in helping researchers stay one step ahead of mutating viruses and avoiding new pandemics. Since the beginning of the global AIDS pandemic, 75 million people have been infected with HIV and 37.9 million people are living with the virus.

"In an increasingly connected world, we can no longer think of viruses being contained to one location," said Carole McArthur, Professor at University of Missouri, Kansas City, and one of the study authors.

Group M viruses are responsible for the global pandemic, which can be traced back to the Democratic Republic of Congo (DRC) in Sub-Saharan Africa.

To determine whether an unusual virus is in fact a new HIV subtype, three cases must be discovered independently.

The first two samples of this subtype were discovered in the DRC in the 1980s and the 1990s. The third, collected in 2001, was difficult to be sequenced at that time because of the amount of virus in the sample and the existing technology.

Today, next-generation sequencing technology allows researchers to build an entire genome at higher speeds and lower costs.

In order to utilise this technology, Abbott scientists had to develop and apply new techniques to help narrow in on the virus portion of the sample to fully sequence and complete the genome.

"Identifying new viruses such as this one is like searching for a needle in a haystack," said Mary Rodgers, a principal scientist and head of the Global Viral Surveillance Program, Diagnostics, Abbott, and one of the study authors.

"By advancing our techniques and using next generation sequencing technology, we are pulling the needle out with a magnet. This scientific discovery can help us ensure that we are stopping new pandemics in their tracks." IANS

Child Obse

Only child' 7 times more likely to be obese (The Tribune: 201901108)

<https://www.tribuneindia.com/news/health/-only-child-7-times-more-likely-to-be-obese/857661.html>

Parents with only child are more likely to tackle an obese kid as children without siblings may be at a higher risk of gaining weight than those who have brothers and sisters, say researchers.

This is because families with multiple children tend to make more healthy eating decisions than families with a single child, the study added.

The study, published in the Journal of Nutrition Education and Behavior, found that this kind of obesity could be seven times more common among youngsters.

"Healthier eating behaviours and patterns may result from household-level changes rather than peer exposure, as peer exposure is also present in away-from-home care," said study lead author Chelsea L. Kracht from the University of Oklahoma in the US.

According to the researchers, data was self-reported in daily food logs kept by mothers over the course of three days -- two weekdays and one weekend day. Teachers kept logs by proxy for any food children ate while at school.

Mothers also completed the Family Nutrition and Physical Activity questionnaire to evaluate typical family eating behaviour like food and beverage choice.

Researchers have found that only-children, who researchers refer to as 'singletons,' had less healthy family eating practices, beverage choices, and total Healthy Eating Index 2010 score, coming in lower on three out of the 12 areas measured.

They also had significantly lower total scores across weekdays, weekends, and on average, indicating there are both individual and collective differences in eating patterns between the groups.

Researchers found mothers of singleton children were more likely to be obese themselves. Moreover, maternal BMI had a much stronger connection to child BMI percentile and waist circumference percentile than singleton status.

Maternal BMI did not significantly contribute to overall eating patterns but did contribute to empty calories.

The research also found that time spent in away-from-home care like school and daycare was not connected to children's eating patterns.

"Nutrition professionals must consider the influence of family and siblings to provide appropriate and tailored nutrition education for families of young children," said Kracht.

"Efforts to help all children and families establish healthy eating habits and practices must be encouraged," Kracht added.

Pollution (Hindustan Times: 201901108)

13 spots where air is always polluted choked PM and AQI levels at these hot spots usually remain high than other parts of Delhi; preventive measures bear no fruit

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

The pollution hot spots of city

Despite specific action plans and intensive patrolling by pollution control agencies, the quality of air has not shown any substantial improvement in these areas - which are among 13 identified hot spots of pollution. The SC had asked Delhi government to fix these hot spots within a week.

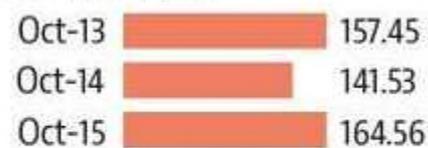
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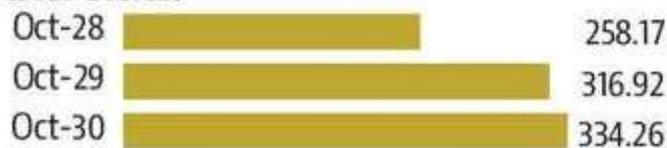
Before the hotspot plan



Before Diwali

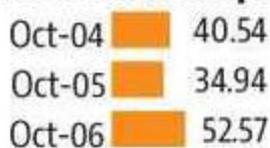


After Diwali



PUNJABI BAGH

Before the hotspot plan



Before Diwali



After Diwali

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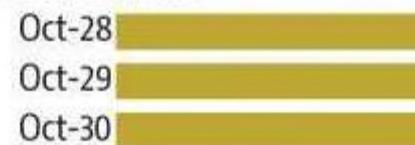
Before the hotspot plan



Before Diwali



After Diwali



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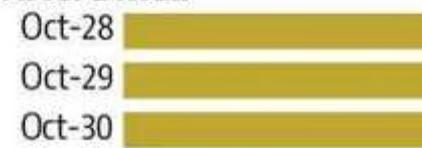
Before the hotspot plan



Before Diwali

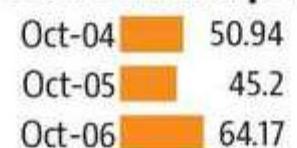


After Diwali



WAZIRPUR

Before the hotspot plan



Before Diwali



After Diwali

New Delhi : In at least 13 neighbourhoods in the capital -- identified as Delhi's pollution hot spots — the air is noxious for most of the day while monitoring stations often show 'deep red'. Despite specific action plans and intensive patrolling by pollution control agencies, the quality of air has not shown any substantial

Air pollution

Spike in air pollution levels in southern, eastern India (Hindustan Times: 201901108)

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

There was a spike in air pollution levels in eastern and southern India on Thursday with the Air Quality Index (AQI) in some parts of Chennai touching 300 over the past 24 hours. Officials said that this was primarily because winds were carrying pollutants from the northern plains towards the Bay of Bengal and local poor dispersal of pollutants.

A Central Pollution Control Board official, who did not want to be named, said that north-westerly winds have blown the smoke created because of stubble burning in Punjab and Haryana from the northern plains because of a developing cyclonic depression over the Bay of Bengal.

Pollution spikes are common in the first half of November in northern India as farm fires peak in Punjab and Haryana during this time and the resulting smoke settles over the region. Farmers often burn stubble left behind after harvest as a quick and cheap way of clearing their fields for the next round of sowing.

The air quality in Delhi was reduced to its worst level since 2016 on Sunday as the AQI sharply rose to a severe level of 494, which can worsen existing respiratory illnesses and affect even healthy people.

The CPCB's real-time monitor showed the AQI crossing the 300-mark in some parts of Chennai. The average AQI of Chennai was 272, almost double the level on November 2. Odisha's Talcher recorded the highest AQI in the country--413. The air quality is considered good when the AQI is below 50 and satisfactory when it is under 100.

The AQI in Andhra Pradesh's Visakhapatnam and Vijayawada rose to 224 and 204—from 252 and 197 last Saturday. The AQI in Kolkata was 215 while it was 317 a day earlier. The pollution levels dipped in Bangalore with the AQI being 156 compared to 165 on Wednesday because of the local weather conditions.

An India Meteorological Department (IMD) official said that the cyclonic storm, which is expected to make landfall on Friday, is preventing pollutants from dispersing over the Bay of Bengal as it is moving towards the eastern coast. "In fact, strong inward winds from... [the Bay of Bengal] have pushed the winds carrying the smoke towards south from eastern India..." an IMD scientist said.

The CPCB official quoted above said that the pollution levels in southern and eastern cities have also increased because of the local factors like emissions from vehicles but the spike was because of the winds carrying the particulate matter.

The CPCB official cited above said the impact of the depression in the Bay of Bengal will also end with heavy rains, which is also expected to bring some respite.

Officials said that unlike in the northern Indian plains, the air pollution monitoring in eastern and southern India, considered to be comparatively cleaner, is less common. For instance, Kolkata has only seven monitoring stations, Chennai four and Visakhapatnam one. Delhi has 38 pollution monitoring stations.

Environmentalist Nityanand Jayaraman said that Chennai's air pollution has worsened due to growing vehicles, three harbours, thermal power plants and oil refineries. "The wind blowing from...[north India] is also causing pollution here...," he said.

Raj Bhagat Palanichamy, a remote sensing analyst with the World Resources Institute blamed the farm fires' smoke for the rise in pollution levels in eastern and southern India.

HIV, AIDS, immune system,

First time in two decades, new HIV subtype found by genetic sequencing (Hindustan Times: 201901108)

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

Pharma major Abbott has reported that a team of Abbott scientists have identified the HIV-1 Group M, subtype L virus. The findings have been published in the Journal of Acquired Immune Deficiency Syndromes (JAIDS).

HIV, AIDS, immune system, HIV subtype found, HIV subtype genetic sequencing, HIV treatment for cure, gene editing, HIV infection

Pharma major Abbott has reported that a team of Abbott scientists have identified the HIV-1 Group M, subtype L virus.

For the first time in almost two decades, a new subtype of the Human Immunodeficiency Virus (HIV) that causes AIDS has been identified through genetic sequencing. The subtype belongs to the M group of HIV that is said to have caused the most infections.

Pharma major Abbott has reported that a team of Abbott scientists have identified the HIV-1 Group M, subtype L virus. The findings have been published in the Journal of Acquired Immune Deficiency Syndromes (JAIDS).

Specimen CG-0018a-01, which has been sequenced to reveal that it is a hitherto unknown subtype of HIV, was collected in 2001 in the Democratic Republic of Congo (DRC) as part of an HIV prevention of mother to child transmission (PMTCT) study.

"In an increasingly connected world, we can no longer think of viruses being contained to one location. This discovery reminds us that to end the HIV pandemic, we must continue to out-think this continuously changing virus and use the latest advancements in technology and

resources to monitor its evolution,” according to Carole McArthur, professor, oral and craniofacial sciences departments, University of Missouri, Kansas City, and one of the study authors.

To determine whether an unusual virus is in fact a new HIV subtype, three cases must be discovered independently. The first two samples of this subtype were discovered in DRC in the 1980s and the 1990s. The third, collected in 2001, was difficult to sequence at that time because of the amount of virus in the sample and the existing technology.

The Abbott research marks the first time a new subtype of “Group M” HIV virus has been identified since guidelines for classifying new strains of HIV were established in 2000. Group M viruses are responsible for the global pandemic, which can be traced back to the DRC in Sub-Saharan Africa.

“We conclude that the epidemiologically unlinked isolates CG-0018a-01, 83CD003, and 90CD121E12 may now be classified as HIV-1 group M, subtype L. This is the first new subtype classification identified since the nomenclature guidelines were established in 2009,” the researchers wrote in the JAIDS article.

“Despite being the most recently sequenced subtype L strain, CG-0018a-01 branched basal to the two older strains from 1990 and 1983, consistent with CG-0018a-01 being more closely related to the ancestral subtype L strain than the other two isolates. Therefore, the CG-0018a-01 sequence will be important for determining the origins and age of subtype L,” the researchers noted.

A senior faculty member at AIIMS, New Delhi, who did not want to be named said that sequencing of this strain is a significant development in understanding, prevention and treatment of HIV because it is part of what has caused the most infections in humans.

Mortality in India’

Telling Numbers: Excess deaths due to climate change, projected state by state (Hindustan Times: 201901108)

<https://indianexpress.com/article/explained/telling-numbers-excess-deaths-due-to-climate-change-projected-state-by-state-6108688/>

The study, ‘Climate Change and Heat-Induced Mortality in India’, was conducted by the Climate Impact Lab in collaboration with the Tata Centre for Development at the University of Chicago.

A new study has projected that 1.5 million more Indians may die per year from extreme heat due to climate change by 2100, and that India’s energy use will more than double in the next 20 years, driven largely by fossil fuels. If emissions continue to be as high as they are at present, India will see a death rate of about 60 per 100,000 by 2100, the study says.

This projected death rate is double the current death rate from oral cancer in India, which is the most common cancer in the country. The study, ‘Climate Change and Heat-Induced Mortality

in India', was conducted by the Climate Impact Lab in collaboration with the Tata Centre for Development at the University of Chicago.

It says the average annual temperature in India is expected to increase from 24°C to 28°C. The number of extremely hot days (above 35°C) across India is expected to increase by over eight times, from 5.1 per year in 2010 to 42.8 in 2100. By 2050, there are expected to be 15.8 extremely hot days a year.

The National Capital Region is projected to see 22 times more extremely hot days and more than 23,000 climate-related deaths annually by 2100 in a high-emission scenario. Odisha is projected to see the highest increase in the number of extremely hot days, at about 30 times more than what it is today. Punjab is projected to experience 85 extremely hot days a year, the highest among all states.

Overall, the six states of Uttar Pradesh (4,02,280), Bihar (1,36,372), Rajasthan (1,21,809), Andhra Pradesh (1,16,920), Madhya Pradesh (1,08,370) and Maharashtra (1,06,749) are projected to account for over 64 per cent of the heat-related deaths.

Source: Climate Impact Lab

While the projected death rate in a high-emission scenario is 60 per 100,000 by 2100, mitigation of emissions will bring down the death rate to roughly about 10 per 100,000, the study says. According to the report, the risks associated with extreme temperatures vary around the world and are dependent upon the wealth of a country. For instance, the impact of a single hot day on the annual mortality rate of a wealthy and warm city such as Houston, US, will be 0.4 deaths per 100,000. The same will be double for a warm and poorer city such as Delhi, at 0.8 deaths per 100,000.

Junking fast food

Junking fast food: On norms against food rich in fat, sugar and salt (The Hindu: 201901108)

<https://www.thehindu.com/opinion/editorial/junking-fast-food/article29912569.ece>

Enforcement is key in preventing school children from accessing unhealthy food

In a welcome step, the Food Safety and Standards Authority of India (FSSAI) has notified a draft regulation aimed at prohibiting the sale and advertisement

Diet

EAT-Lancet diet too costly for 1.58 billion people, says study (The Hindu: 201901108)

<https://www.thehindu.com/life-and-style/food/eat-lancet-diet-too-costly-for-158-billion-people-says-study/article29912474.ece>

At \$2.84 per day, it exceeds daily per capita income in many low-income nations'

A diet meant to improve both human and planetary health would be unaffordable for at least 1.58 billion people, mostly in sub-Saharan Africa and

Mortality (Hindustan: 201901108)

http://epaper.livehindustan.com/textview_367041_70956222_4_1_14_08-11-2019_1_1.html

भारत में मातृ मृत्युदर अनुपात (एमएमआर) में वर्ष 2013 से अबतक 26.9 प्रतिशत की कमी आई है। यह जानकारी गुरुवार को जारी नमूना पंजीकरण प्रणाली बुलेटिन-2016 से मिली है। दक्षिणी राज्यों में प्रति एक लाख जन्म पर एमएमआर 77 से घटकर 72 पर आ गया है। जबकि अन्य राज्यों में यह आंकड़ा 93 से घटकर 90 हो गया है।

पहली रिपोर्ट में 2006 में जारी की गई थी

महापंजीयक कार्यालय की ओर से जारी विशेष बुलेटिन के मुताबिक, 2011-2013 के बीच एमएमआर 167 था जो 2014 से 2016 के बीच घटकर 130 पर आ गया। वर्ष 2015-17 में इसमें और कमी आई और यह 122 पर आ गया। पिछले सर्वे 2014-2016 के मुकाबले इसमें 6.15% की कमी आई है। बुलेटिन में कहा गया है कि यह उत्साहजनक है कि मातृ मृत्युदर अनुपात 2014-2016 के 130 से घटकर 2015-2017 में 122 रह गया।

सबसे अधिक कमी असम में : सबसे अधिक कमी सशक्त कार्य समूह (ईएजी) राज्य असम में हुई जहां एमएमआर 188 से घटकर 175 पर आ गया है। मातृ मृत्युदर अनुपात को बेहतर तरीके से समझने के लिए खासतौर पर क्षेत्रीय आधार पर, सरकार ने राज्यों को ईएजी, दक्षिण राज्यों और अन्य में श्रेणीबद्ध किया है।

श्रीनगर। जम्मू कश्मीर के बारामूला जिले में गुरुवार को चार सक्रिय आतंकवादियों को गिरफ्तार किया गया।

अधिकारियों ने बताया कि सेना की 32 आरआर (राष्ट्रीय राइफल्स) यूनिट ने जिले के सोपोर इलाके में वाटरगाम में मोटर वाहन जांच के दौरान इन सक्रिय आतंकवादियों को पकड़ा।

उन्होंने बताया कि संदिग्धों की तलाशी लेने पर उनके पास से एक पिस्तौल और कुछ संदेहास्पद दस्तावेज बरामद किए गए। अधिकारियों ने बताया कि बाद में उन्हें स्थानीय पुलिस के हवाले कर दिया गया। (एजेंसी)

मातृ मृत्यु दुर्लभ घटना है और आकलन करने के लिए वृहद स्तर पर नमूनों की जरूरत होती है। इसलिए नमूना पंजीकरण प्रणाली में नमूनों को सबल करने के लिए विश्वसनीय स्रोतों के तीन साल के मातृ मृत्युदर के आंकड़ों का इस्तेमाल किया गया है। मातृ मृत्युदर अनुपात पर भारत में पहली रिपोर्ट अक्टूबर 2006 में जारी की गई थी। इसमें 1997 से 2003 के आंकड़ों का इस्तेमाल किया गया था और प्रचलन, कारण और खतरे को रेखांकित किया गया था।

Exercise (Hindustan: 201901108)

http://epaper.livehindustan.com/imageview_367049_71467552_4_1_08-11-2019_22_i_1_sf.html

रोज कसरत से दिमागी रोग का खतरा घटेगा



सेहत

लंदन | एजेसी

नियमित रूप से व्यायाम करने से अवसाद होने का खतरा काफी कम हो सकता है। भले ही आपको आनुवंशिक रूप से इस रोग का खतरा हो। यह बात एक शोध में सामने आई है। वैज्ञानिकों का कहना है कि जो लोग प्रतिदिन केवल 30 मिनट या हर सप्ताह चार घंटे व्यायाम करते हैं, उनको मानसिक बीमारियां होने का खतरा 17 फीसदी कम होता है।

शारीरिक गतिविधि का होता है सकारात्मक प्रभाव : हार्वर्ड यूनिवर्सिटी के शोधकर्ताओं का कहना है कि दिन में 30 मिनट की शारीरिक गतिविधि का सकारात्मक प्रभाव पड़ता है। इन गतिविधियों में योगा और नृत्य शामिल

दौड़ने से अवसाद का खतरा होता है कम

अगर अधिक आनुवंशिक खतरे वाले लोग नियमित तौर पर व्यायाम करते हैं, तो उनमें अवसाद होने की संभावना 17 प्रतिशत कम हो जाती है। दौड़ने से अवसाद का खतरा 13 फीसदी और चलने से 11 फीसदी कम हो जाता है।

कर सकते हैं। यह दोनों गतिविधियां मानसिक और शारीरिक स्वास्थ्य के लिए काफी फायदेमंद हैं। शोधकर्ताओं के मुताबिक, केवल जिम में पसीना बहाकर बीमारियों के खतरों को नहीं रोका जा सकता। योग, नृत्य और अन्य व्यायाम भी समान ही लाभ पहुंचाते हैं। डॉ. कर्मेल् चोई और उनके सहयोगियों ने पार्टनर्स हेल्थकेयर बायोबैंक के लगभग 8,000 प्रतिभागियों का डाटा निकाला।

Pollution

दिल्ली-NCR में जानलेवा बना पराली का धुआं, सांस की बीमारी से रोजाना 27 मौतें (Dainik Jagran: 20191108)

<https://www.jagran.com/delhi/new-delhi-city-ncr-delhi-pollution-2019-daily-27-people-dies-due-to-respiratory-disease-in-national-capital-delhi-jagran-special-19736662.html>

दिल्ली में मौजूदा प्रदूषण के लिए आंतरिक स्रोत नहीं बल्कि पराली का धुआं ही जिम्मेदार है। केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) के आंकड़े भी अब इसकी तस्दीक कर रहे हैं।

नई दिल्ली [संजीव गुप्ता]। दिल्ली में मौजूदा प्रदूषण के लिए आंतरिक स्रोत नहीं, बल्कि पराली का धुआं ही जिम्मेदार है। केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) के आंकड़े भी अब इसकी तस्दीक कर रहे हैं। नासा की सेटेलाइट इमेज भी बताती है कि हालात 10 अक्टूबर से ही बिगड़ने शुरू हुए थे, जब पंजाब एवं हरियाणा में पराली जलाने के मामले सामने आने लगे। इस कारण प्रदूषण प्रलयकारी मोड़ की तरफ बढ़ने लगा।

सीपीसीबी के एक अगस्त से सात नवंबर तक के आंकड़ों पर नजर डालें तो पता चलता है कि अगस्त और सितंबर में एक भी दिन दिल्ली की हवा खराब श्रेणी में नहीं पहुंची। इसी तरह अक्टूबर में भी नौ तारीख तक हवा संतोषजनक या सामान्य श्रेणी में चल रही थी, लेकिन पंजाब-हरियाणा में पराली जलना शुरू होते ही 10 तारीख से यह खराब श्रेणी में जा पहुंची और फिर बहुत खराब से गंभीर श्रेणी में जाती रही। वहीं, दिल्ली में सांस की बीमारी के चलते रोजाना 27 लोगों की मौत हो रही है।

गौरतलब है कि नेशनल ग्रीन ट्रिब्यूनल (एनजीटी), पर्यावरण प्रदूषण नियंत्रण प्राधिकरण (ईपीसीए) और सुप्रीम कोर्ट की सख्ती व आदेश दोनों ही हवा-हवाई साबित हो रहे हैं। स्थिति का अनुमान इसी से लगाया जा सकता है कि दिल्ली में प्रदूषण में पंजाब और हरियाणा में पराली जलाने से निकले धुएं की हिस्सेदारी इस बार 46 फीसद तक पहुंच चुकी है। पर्यावरण के क्षेत्र में काम कर रहे गैर सरकारी संगठन टेरी (द एनर्जी एंड रिसोर्स इंस्टीट्यूट) ने भी दावा किया है कि मौजूदा समय में दिल्ली को प्रदूषित करने वाली सबसे बड़ी वजह पराली का धुआं ही है। टेरी के अनुसार पिछले 15-20 दिनों से दिल्ली के जो हालात हैं उसमें मुख्य भूमिका पड़ोसी राज्यों में जल रही पराली की ही है।

सांस की बीमारी से 27 लोगों की रोजाना मौत

राजधानी दिल्ली में सांस की बीमारियों से प्रतिदिन 27 लोगों की मौत हो रही है। दिल्ली में स्वास्थ्य की स्थिति पर प्रजा फाउंडेशन द्वारा जारी वार्षिक रिपोर्ट में यह बात कही गई है। सांस की बीमारियों और उसके कारण होने वाली मौत का बड़ा कारण प्रदूषण बताया गया है।

रिपोर्ट के अनुसार, वर्ष 2017 में श्वसन तंत्र से संबंधित कैंसर से 551 व सांस की अन्य बीमारियों से पीड़ित 9321 मरीजों की मौत हुई थी। फाउंडेशन ने यह रिपोर्ट तैयार करने के लिए केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) से प्रदूषण से संबंधित चार साल के आंकड़े जुटाए थे। जिसमें कहा गया है कि चार साल में दिल्ली में हवा की गुणवत्ता खराब रही। रिपोर्ट में कहा गया है कि डेंगू की रोकथाम में कामयाबी मिली है लेकिन वर्ष 2018-19 में डायरिया से पांच लाख 14 हजार 52 लाख लोग व टाइफाइड से 51,266 लोग पीड़ित हुए। इसका कारण पेयजल दूषित होना बताया गया है। वर्ष 2018 में लोगों ने दूषित जल की 36,426 शिकायतें कीं।

यहां केवल छह फीसद लोगों के पास स्वास्थ्य बीमा है। गत वित्त वर्ष में पार्श्वों ने स्वास्थ्य से जुड़े 1252 मामले व विधायकों ने 264 मामले उठाए। नगर निगम की डिस्पेंसरियों में डॉक्टरों की 21 फीसद व दिल्ली सरकार की डिस्पेंसरियों में 34 फीसद कमी है।

3 दशक में सांस के मरीजों की संख्या में करीब दोगुना वृद्धि

प्रदूषण के दुष्प्रभाव से सांस की बीमारियां बढ़ रही हैं। एक अध्ययन में कहा गया है कि पिछले तीन दशक में सांस की बीमारी सीओपीडी (क्रोनिक ऑब्सट्रक्टिव पल्मोनरी डिजीज) से पीड़ित मरीजों की संख्या देश में करीब दोगुनी हो गई है। इसका सबसे बड़ा कारण प्रदूषण बन रहा है। इसके अलावा अस्थमा की बीमारी भी बढ़ी है। यह बात जेसीएस इंस्टीट्यूट- पल्मोनरी क्रिटिकल केयर अस्पताल के चेयरमैन डॉ. जेसी सूरी ने कही।

उन्होंने कहा कि अंतरराष्ट्रीय मेडिकल जर्नल लांसेट में यह रिपोर्ट प्रकाशित हुई है। इस रिपोर्ट में कहा गया है कि दुनिया में जितने लोग सांस की क्रोनिक (पुरानी बीमारी) से पीड़ित होते हैं, उनमें 32 फीसद भारत में हैं। अध्ययन की रिपोर्ट के अनुसार, वर्ष 1990 में सीओपीडी से करीब 2.81 करोड़ लोग पीड़ित हुए थे। वर्ष 2016 में मरीजों की संख्या बढ़कर 5.53 करोड़ हो गई।

अस्थमा रोगियों में भी इजाफा

वहीं, अस्थमा के मरीजों की संख्या 2.29 करोड़ से बढ़कर 3.79 करोड़ हो गई। इस रिपोर्ट के अनुसार देश में करीब 4.2 फीसद लोग सीओपीडी से पीड़ित हैं। वहीं, 2.9 फीसद लोग अस्थमा से पीड़ित हैं। सीओपीडी से पीड़ित 53.7 फीसद मामलों में बीमारी के लिए वायु प्रदूषण जोखिम भरा कारण है। वहीं, 25.4 फीसद मामलों में धूमपान व 16.5 फीसद मामलों में व्यावसायिक परिस्थितियां बीमारी का कारण बन रही हैं।

पीएम-2.5 और पीएम 10 में इजाफा बना परेशानी

डॉ. जेसी सूरी ने कहा कि प्रदूषण बढ़ने पर वातावरण में पार्टिकुलेट मैटर बढ़ जाते हैं। पीएम-10 और उससे छोटे कण सांस के जरिये फेफड़े में प्रवेश कर जाते हैं। इस वजह से सांस की बीमारियां होती हैं। दिल्ली में पूरे साल प्रदूषण की समस्या रहती है। इस वजह से पड़ोसी राज्यों में पराली जलाने पर यहां प्रदूषण की स्थिति खतरनाक बन जाती है। इसलिए पराली जलाने पर रोक लगाने के साथ-साथ दिल्ली में वाहनों की संख्या कम करना भी जरूरी है।

पंजाब-हरियाणा में पराली जलाने पर रोक जरूरी

जस्मिन शाह (उपाध्यक्ष, दिल्ली डायलॉग एंड डेवलपमेंट कमीशन) के मुताबिक, सीपीसीबी के आंकड़ों और नासा की सेटेलाइट इमेज देखने के बाद अब यह साबित हो गया है कि दिल्ली में इस समय जो प्रदूषण है, उसकी मुख्य वजह पराली ही है। दिल्ली का अपना प्रदूषण है, इससे इनकार नहीं, लेकिन दिल्ली सरकार उस पर काबू करने के लिए तमाम उपाय कर रही है। दुखद यही है कि पंजाब और हरियाणा सरकार बार-बार अनुरोध करने पर भी पराली जलाने की घटनाओं पर अंकुश नहीं लगा पा रही है। इसका खामियाजा दिल्लीवासियों को स्वास्थ्य संबंधी समस्याओं के रूप में भुगतना पड़ रहा है।

Zika treatments?

Can one protein open the door to West Nile and Zika treatments? (Medical News Today: 20191108)

<https://www.medicalnewstoday.com/articles/326938.php#1>

The West Nile and Zika viruses are responsible for healthcare emergencies around the world, affecting hundreds of people. Currently, however, there are no antiviral treatments that specifically target these viruses. Can the findings from a new mouse study turn the table on West Nile and Zika?

A new finding from a study in mice may lead to a targeted treatment for the West Nile and Zika viruses.

Over the past few years, researchers and medical professionals far and wide have joined forces to confront several viral outbreaks.

Two of the most concerning outbreaks have been of the West Nile and Zika viruses.

The West Nile virus is carried by mosquitoes, and it originally affected only regions in temperate and tropical regions.

However, since it entered the United States in 1999, it has been a constant presence in the country. Rates of infection have been on the rise this past year, with 834 cases Trusted Source across 47 states and the District of Columbia having been reported to the Centers for Disease Control and Prevention (CDC).

Of these, 65% were severe, leading to neuroinvasive conditions such as meningitis and encephalitis.

As yet, there have been no outbreaks of the Zika virus — which is also carried by mosquitoes — in the U.S. However, there were many cases of this virus carried by people who had traveled to affected areas, such as Brazil.

The most cases of "imported" Zika virus in the U.S. occurred in 2015 and 2016 Trusted Source, when the Zika outbreak peaked in South America.

Although the Zika virus does not usually produce any concerning symptoms in adults, if it infects a pregnant woman, it can cause microcephaly in the fetus.

Despite the potential dangers that accompany these viruses, there are currently no antiviral treatments that specifically target either of them. Doctors usually focus on symptom management.

Now, however, the findings of a recent study in mice may finally lead to a targeted treatment for both Zika and the West Nile virus.

'A better way of fighting viruses in the brain'

A team from Georgia State University in Atlanta conducted this research, the results of which feature in the journal *Frontiers in Microbiology*. It used mice to find out what biological mechanisms might lead the way to an effective therapy against flaviviruses such as Zika and West Nile.

The investigators focused on the Z-DNA binding protein 1 (ZBP1), which is involved in triggering the immune response against viruses.

They observed that in mice infected with either the West Nile virus or Zika, ZBP1 appeared to restrict virus replication, thereby barring it from spreading. It also seemed to prevent mice infected with more severe forms of the West Nile virus from developing encephalitis.

However, they also saw that in mice engineered not to produce ZBP1, strains of West Nile virus that did not infect the brain led to mortality in every single case.

"It's significant," says senior study author Mukesh Kumar, "because you take a virus that has never been shown to kill anything and if you block this protein the virus will just kill everything."

"We discovered that when cells are infected with viruses such as Zika and West Nile, they respond by triggering necroptosis, a form of programmed cell death, via ZBP1 signaling," he adds.

"This inhibits viral replication and spread, allowing the immune system to clear the virus," notes Kumar.

Following on from these results, the researchers believe that finding a way of increasing ZBP1 expression might provide an effective weapon against flaviviruses.

Such a treatment would also be able to safely target West Nile once it reaches the nervous system — a feat that current treatments are incapable of.

"If you try to open barriers to the brain, you may be making it worse," says Kumar. "That's why we try to modulate some part of the host immune response."

"Manipulating a host protein already inside the genome to trigger the body's natural immune response is a better way of fighting viruses already in the brain."

Depression in PTSD

Could cannabis use help avert depression in PTSD? (Medical News Today: 20191108)

<https://www.medicalnewstoday.com/articles/326945.php#4>

Could people with post-traumatic stress disorder (PTSD) benefit from using cannabis to help reduce depressive episodes and thinking about suicide? A study of a population survey from Canada suggests that the preliminary answer is yes.

New research looks into the benefits of cannabis for relieving depressive symptoms in PTSD.

A recent paper on the findings appears in the Journal of Psychopharmacology.

The paper describes how researchers from the British Columbia Centre on Substance Use (BCCSU), and the University of British Columbia (UBC), both in Vancouver, Canada, analyzed nationally representative data that Canada's national statistical office had collected in a 2012 mental health survey.

The data that they included in their analysis came from more than 24,000 Canada residents who were at least 15 years of age.

The analysis revealed that those with PTSD who reported not using cannabis in the last 12 months were considerably more likely to experience severe depression and thinking about suicide than those who said that they had used the substance.

"These findings are promising," says senior study author Michael J. Milloy, "and merit further study in order to fully understand the benefits of cannabis for people living with PTSD."

Milloy is a research scientist at BCCSU and the Canopy Growth Professor of Cannabis Science at UBC.

Depression, suicide higher with PTSD

The populations of Canada and the United States have some of the highest rates of PTSD in the world. A 2016 study found that 9.2% of people in Canada and 7.2% of those in the U.S. are likely to experience PTSD in their lifetime.

PTSD is a serious psychiatric condition with a cluster of symptoms that can develop in people who have had a traumatic, dangerous, or scary experience. These experiences can involve violence, conflict, and injury.

Nearly everyone will have stress-related symptoms following a trauma, but most will recover after a short while. However, for some people, the symptoms — such as fearful thoughts, bad dreams, and flashbacks — do not go away. Individuals with PTSD continue to experience trauma reactions, even when there is no threat.

People with PTSD are at considerably higher risk of depression and suicide, and many use cannabis to alleviate symptoms.

Prof. Milloy and colleagues wanted to find out whether cannabis helped lessen depressive episodes and suicidal thoughts in people with PTSD.

"We know that with limited treatment options for PTSD, many patients have taken to medicating with cannabis to alleviate their symptoms," says first study author Stephanie Lake, a doctoral candidate at UBC and a research assistant at BCCSU.

Contrasts of cannabis users and nonusers

Of the people whose data they analyzed, the researchers found that 28.2% of those with PTSD reported having used cannabis in the last 12 months compared with 11.2% of those without PTSD.

Further analysis revealed that among nonusers of cannabis, the chances of having experienced a major depressive episode or having had suicidal thoughts in the last 12 months was much higher in those with PTSD than those without it. The chances were 7.2 times higher for depressive episodes and 4.8 times higher for suicidal thoughts.

In contrast, PTSD "was not associated with either outcome among cannabis-using respondents," write the authors.

The researchers conclude that the findings offer preliminary evidence from a population survey that cannabis use may help to reduce the link between PTSD and severe depressive episodes and suicidal states.

They suggest that there is a growing need for high quality experimental studies to investigate the effectiveness of using cannabis and cannabinoids to treat PTSD.

"We're only just beginning to understand what the therapeutic potential of cannabis may be for a variety of health conditions."