

SYNAPSE



M
A
Y
-
J
U
N
E

2
0
2
4

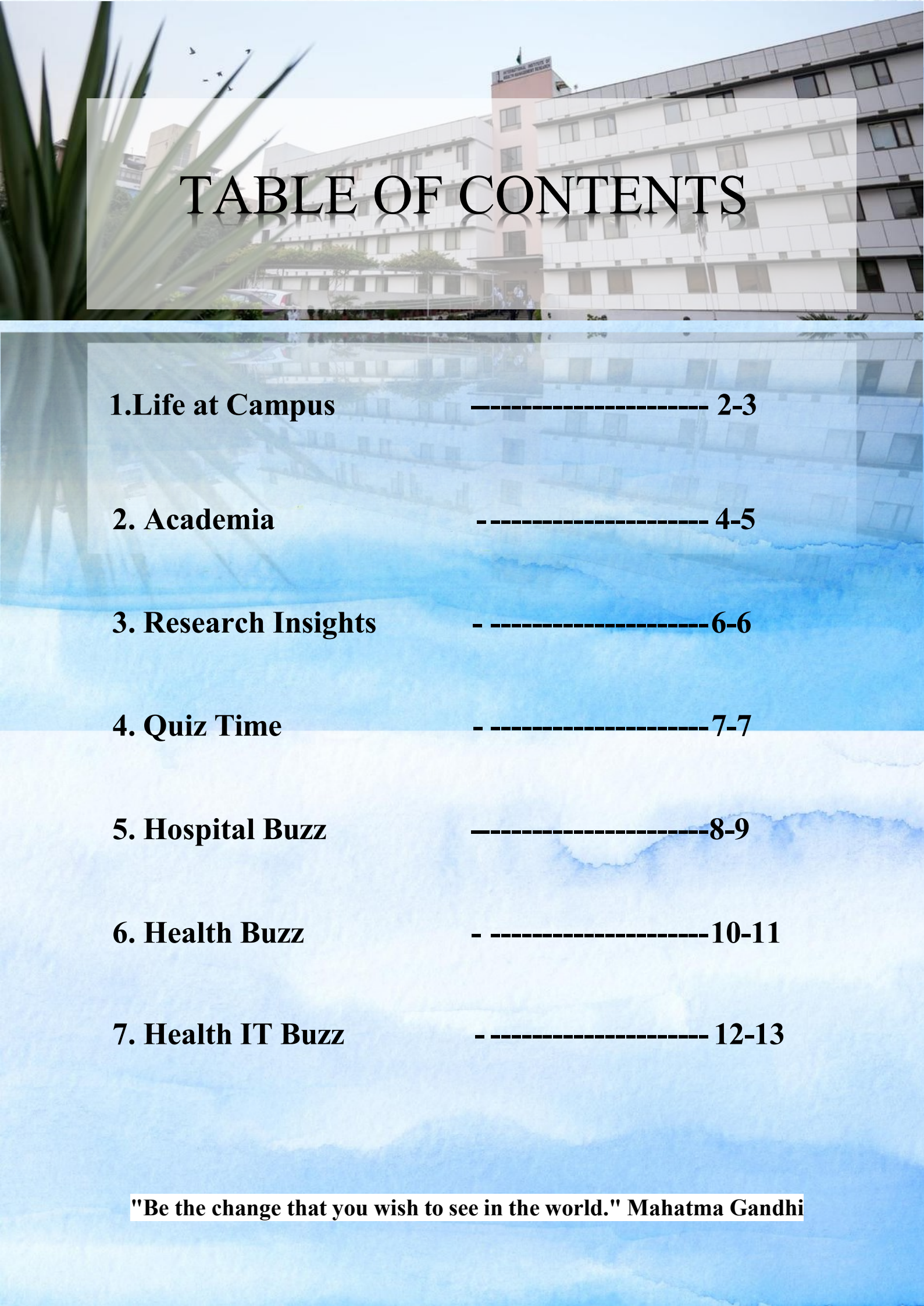


TABLE OF CONTENTS

1.Life at Campus	----- 2-3
2. Academia	----- 4-5
3. Research Insights	- -----6-6
4. Quiz Time	- -----7-7
5. Hospital Buzz	-----8-9
6. Health Buzz	- -----10-11
7. Health IT Buzz	- ----- 12-13

"Be the change that you wish to see in the world." Mahatma Gandhi

LIFE AT CAMPUS

Anti-Tobacco Day 2024: Advocating for a Smoke-Free Future

IIHMR-Delhi championed the cause of a smoke-free future, reinforcing its commitment to health and wellness on Anti-Tobacco Day, which was observed on 31st May 2024. The event underscored the harmful impacts of tobacco use and advocated for informed

choices that promote healthier lifestyles. The students of IIHMR Delhi actively participated in the Arise Young India campaign, aligning with national efforts to raise awareness and drive positive change.



Environment Day 2024: Celebrating with a Plantation Drive

IIHMR-Delhi celebrated the Environment Day on 5th June 2024 with a plantation drive and emphasizing the commitment to sustainability and environmental conservation. The event saw enthusiastic participation from faculty, and staff, who together planted

numerous saplings across the campus. This initiative aimed to enhance the green cover to instill a sense of responsibility towards our nature and reaffirming our dedication to environmental stewardship.



Embracing Wellness: Celebrating International Yoga Day

IIHMR Delhi observed the International Yoga Day on 21st June 2024. Faculty, staff, and students came together to mark this special occasion and promote health, harmony, and well-being. A group yoga session led by Ms. Suman Negi was conducted. The

event also marked an informative talk on incorporating yoga into daily routines for sustained benefits. This event not only promoted physical fitness but also fostered a sense of community and shared purpose among participants.



"Success is most often achieved by those who don't know that failure is inevitable." -
- Coco Chanel

ACADEMIA

Climate Change and Health: A Growing Public Health Concern

Climate change is increasingly recognized as a significant public health challenge, impacting populations globally. The escalating frequency and intensity of extreme weather events, rising temperatures, and shifting precipitation patterns have profound direct and indirect effects on human health. Understanding these impacts and addressing them through effective policies and strategies is crucial for safeguarding public health.

One of the most immediate health impacts of climate change is the rise in heat-related illnesses. As global temperatures continue to climb, heatwaves are becoming more frequent and severe. These extreme heat events can lead to heat exhaustion, heatstroke, and even death, particularly among vulnerable populations such as the elderly, children, and those with preexisting health conditions. The World Health Organization (WHO) reported that heatwaves during the summer resulted in thousands of deaths, underscoring the urgent need for effective heatwave preparedness and response strategies. Cities around the world are developing heat action plans to protect their citizens, including establishing cooling centers and issuing heat alerts to prevent heat-related illnesses and fatalities.

Climate change also exacerbates air pollution, contributing to the deterioration of air quality. Increased levels of ground-level ozone and particulate matter can lead to respiratory and cardiovascular diseases. According to the American Lung Association, over 40% of Americans live in areas with unhealthy air quality, and climate change is expected to worsen these conditions. Poor air quality disproportionately affects individuals with asthma, chronic obstructive pulmonary disease (COPD), and other respiratory conditions, highlighting the need for robust air quality management and public health interventions. Initiatives to reduce emissions from transportation and industry, along with promoting cleaner energy sources, are critical in improving air quality and protecting public health.

Another significant health impact of climate change is the spread of vector-borne diseases. Warmer temperatures and changing rainfall patterns create favorable conditions for the proliferation of vectors such as mosquitoes and ticks. This leads to the increased transmission of diseases like malaria, dengue fever, and chikungunya. The National Vector Borne Disease Control Programme has noted an expansion in the range of these vectors in India, presenting new public health challenges. Addressing these challenges requires enhanced surveillance, public education, and targeted vector control measures. For instance, increasing public awareness about the importance of mosquito control and personal protective measures can help reduce the incidence of vector-borne diseases.

Climate change also threatens food and water security, which are critical determinants of health. Changes in temperature and precipitation patterns affect agricultural productivity, leading to food shortages and malnutrition. Extreme weather events, such as floods and droughts, contaminate water supplies and disrupt sanitation systems, increasing the risk of waterborne diseases. The United Nations has raised concerns about the impact of climate change on global food and water security, urging immediate action to mitigate these risks.



Efforts to develop climate-resilient crops and improve water management practices are essential in ensuring food and water security in the face of climate change.

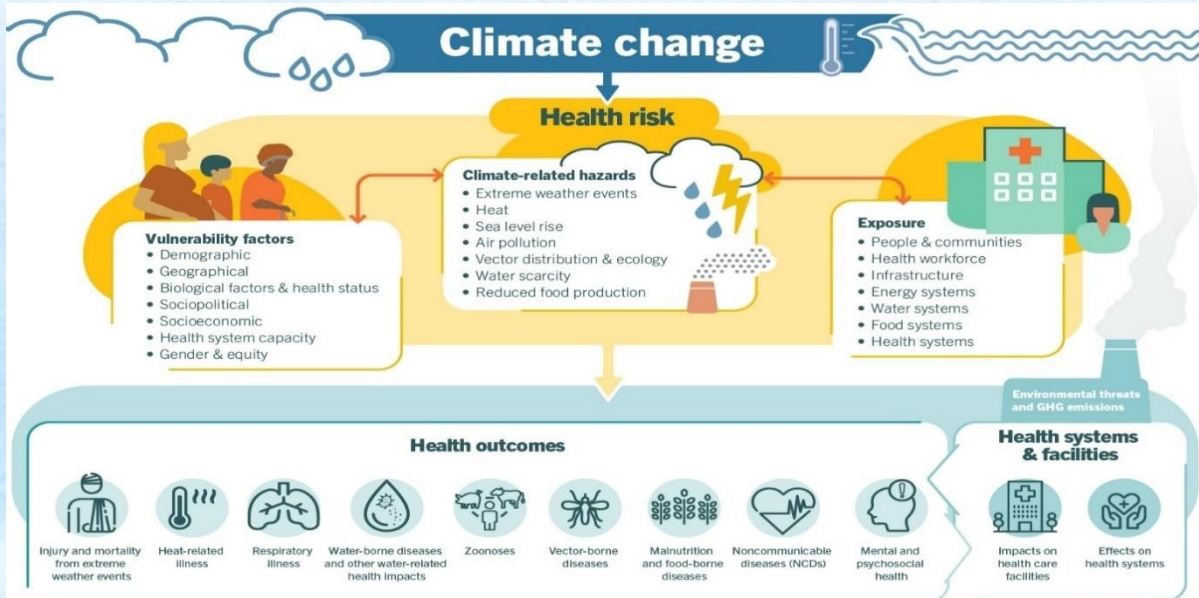


Figure: An overview of climate-sensitive health risks, their exposure pathways and vulnerability factors. Climate change impacts health both directly and indirectly, and is strongly mediated by environmental, social and public health determinants.

Source: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

India has been actively participating in global climate initiatives and has committed to ambitious targets under the Paris Agreement. The Indian government has also launched various programs to address climate change and its health impacts. For instance, the National Action Plan on Climate Change (NAPCC) outlines eight national missions focusing on different aspects of climate change, including health.

The Indian government has also taken steps to address climate-related health risks. In 2022, the Ministry of Health and Family Welfare released the "Health Adaptation Plan on Climate Change" to integrate climate change considerations into public health planning and policy-making. This plan includes measures such as strengthening health infrastructure, enhancing disease surveillance, and promoting community awareness about climate-related health risks. Additionally, various state governments have developed localized climate action plans to address specific regional vulnerabilities.

Climate change poses a multifaceted threat to public health, necessitating comprehensive and collaborative efforts to mitigate its effects. Addressing the root causes of climate change through policies that reduce greenhouse gas emissions is essential for protecting public health. Additionally, implementing adaptive strategies, such as enhancing heatwave preparedness and improving air quality management, can help mitigate the health impacts of climate change. Public health professionals, policymakers, and communities must work together to tackle this pressing issue and ensure a healthier future for all. By taking proactive steps now, we can build more resilient communities and safeguard public health in the face of a changing climate. Integrating climate change considerations into public health planning and policy-making is crucial for effectively addressing this global challenge.

"Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work." Steve Jobs

RESEARCH INSIGHTS

Effect of smoke-free policies in outdoor areas and private places on children's tobacco smoke exposure and respiratory health: a systematic review and meta-analysis



Environmental tobacco smoke exposure (TSE) from second- and third-hand smoke is extremely harmful to children's health, causing respiratory infections, wheezing, and asthma. According to several research, smoke-free laws, especially in enclosed public settings, have been shown to prevent unfavourable respiratory health outcomes and hospitalisation in children. Expanding these policies to include outdoor, semi-private, and private locations such as automobiles and residences could help protect children by lowering TSE. However, the

efficacy of these extended regulations is unclear and requires additional research. This study conducts a thorough analysis of the influence of such policies on children's TSE and respiratory health to advise future legislation.

A significant immediate decrease in kid TSE in cars was observed in a meta-analysis of smoke-free car policy. Mixed findings were seen in the secondary outcomes, with one study indicating elevated salivary cotinine levels. Fewer hospital admissions for respiratory infections and lower TSE at home were among the health outcomes. The intended health effect evaluation, which estimated a possible decrease in asthma diagnoses owing to TSE, was restricted to smoke-free automobile rules. Socio-economic analysis revealed that TSE was lower across all education and income categories, but relative inequalities remained unchanged.

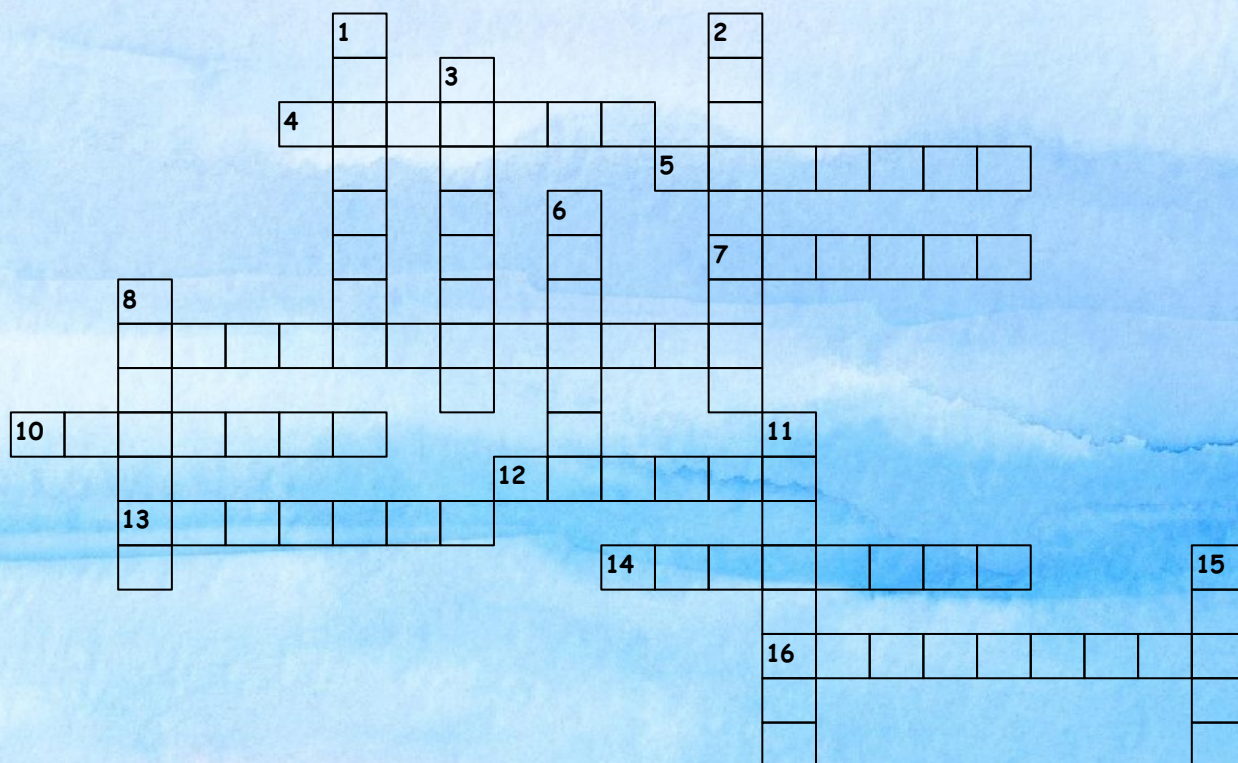
According to the systematic review and meta-analysis, smoke-free car laws considerably decreased children's TSE in cars, which may have resulted in a 0.2-2.4% drop in asthma diagnoses. Extending smoke-free policies to school grounds, and public and private locations may help prevent youngsters from TSE and enhance their health results. This is the first thorough analysis of the impact of such policies on the respiratory health and TSE of children. To guarantee reliable results, the review adhered to Effective Practice and Organisation of Care (EPOC) criteria and employed a comprehensive search method. Although quasi-experimental studies include a risk of bias, six of the seven included studies exhibited low to moderate bias, increasing trust in the conclusions.

The analysis emphasises the need for additional research to completely comprehend the consequences of smoke-free laws in public and private spaces. The available data, however, points to these policies' possible positive effects on health. The efficiency of smoke-free policies depends on compliance and enforcement, although difficulties still exist, particularly in public and outdoor areas. Penalties, signs, and education campaigns are examples of actions that can improve adherence and safeguard the health of children. Overall, this systematic analysis emphasises the need for comprehensive smoke-free regulations for reducing and enhancing children's respiratory health. While the global health burden from TSE has decreased, more inclusive tobacco control strategies can help to reduce it even further. The review promotes children's right to clean air in all situations, emphasising the need for more comprehensive smoke-free regulations to achieve this goal.

Source: [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(21\)00097-9.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(21)00097-9.pdf)

“Nothing can destroy iron but it's own rust can. Likewise nothing can destroy a person but his mindset can”-Ratan Tata

QUIZ TIME



ACROSS

4. The practice of keeping yourself and your surroundings clean to prevent illness
5. Essential mineral for strong bones and teeth
7. A state of physical, mental, and social well-being
9. A condition where blood pressure is abnormally high
10. A doctor who performs surgeries
12. A respiratory condition marked by spasms in the bronchi of the lungs
13. Essential nutrient for muscle repair and growth
14. A condition characterized by the inability to fall or stay asleep
16. A viral infection that affects the respiratory system

DOWN

1. A common symptom of allergies, characterized by an itchy nose and sneezing
2. The act of inhaling and exhaling air
3. A condition where the body cannot properly process glucose
6. Vaccine-preventable disease caused by a virus
8. Treatment intended to relieve or heal a disorder
11. Substance in food that provides energy
15. An organ that pumps blood throughout the body



HOSPITAL BUZZ

1. AIIMS Delhi performs India's first successful foetal blood transfusion to save child with rare disorder

A woman who previously suffered seven failed pregnancies has recently delivered a healthy child with the help of doctors at AIIMS Delhi after they successfully treated her foetus suffering from a rare blood disorder through the transfusion of O D phenotype red cell units brought all the way from Japan.

This medical achievement marks the first procedure of its kind in India and only the eighth case reported globally, according to the doctors of All India Institute of Medical Sciences (AIIMS).

Source: The Indian Express

[Click here for full text](#)

2. Top Indian private hospital chains announce major expansion in FY25

India's leading private hospital chains have unveiled expansion plans for 2024-25, on the back of an increase in the average revenue per occupied bed (ARPOB) per day in 2023-24. Max Healthcare is planning significant additions this financial year, with 300 operational beds expected to be added in Dwarka by June 2024. The company also plans to expand bed capacity at their Lucknow and Nagpur units by December, Abhay Soi, chairman and managing director of Max Healthcare recently told Business Standard. Fortis Healthcare, too, has outlined a plan to add approximately 700 beds in FY25. Apollo Hospitals Enterprise is set to add 1,170 beds in 2024-25.

Source: Business Standard

[Click here for full text](#)

3. Delhi Heatwave: RML Hospital's heatstroke response plan includes inflatable tubs with ice

With rising temperatures and heat waves in the capital city, RML Hospital has made special arrangements to treat heat stroke patients effectively. According to a report by ANI, Dr Seema Balkrishna Wasnik, Head of Emergency Medicine at RML, spoke about the urgency and critical care measures in place. "At RML Hospital, if any patient (of heat stroke) comes in a critical situation he is taken to the red zone, intubated, we have inflatable tubs. We can still put the patient on a ventilator and also in the bathtub filled with ice and cold water and bring down the temperature simultaneously", said Dr Seema, as reported by ANI.

Source: Financial Express

[Click here for full text](#)

4. IAF successfully airdrops portable hospital BHISHM in Agra

The Indian Air Force (IAF) successfully tested portable hospital cubes Bharat Health Initiative for Sahyog, Hita and Maitri (BHISHM) for the first time in Uttar Pradesh's Agra. The test aimed to assess the capability of portable hospitals to be deployed across the country during emergencies. Weighing about 720kg, the portable hospital was dropped from 1,500 feet using specially designed parachutes by the Air Delivery Research and Development Establishment (ADRDE) in Agra.

As per a press release by the Ministry of Information and Broadcasting, the cubes are part of "Project BHISHM," which can treat up to 200 casualties

Source: The Hindustan Times

[Click here for full text](#)

5. Delhi Govt orders fire audit at all health facilities

Addressing concerns about the circumstances surrounding the fire, he revealed plans for a thorough audit of all hospitals. “We have ordered fire audits at all hospitals, with compliance reports due by June 8,” he stated, highlighting the government’s proactive approach to mitigate fire risks.

“In summer, the power load increases, which can lead to short circuits. We have also asked hospitals to carry out an audit of their electrical system to ensure that it can withstand the load,” Bharadwaj added.

In recognition of acts of bravery amidst the tragedy, Bharadwaj commended the selfless actions of two nurses and five local citizens who risked their lives to save others. “We will propose their names for bravery awards,” he said, praising their courage and valor.

Source: Tribune India

[Click here for full text](#)

6. Health Minister directs special heatwave units in all central govt hospitals amid killer heatwave

Amid scalding temperatures in large parts of the country, Union Health Minister JP Nadda reviewed the heatwave situation and preparedness of central government hospitals. Nadda directed officials to ensure that all hospitals are prepared for providing the best care to those affected. He also ordered that special heatwave units be started in the central government-run hospitals.

The Union health ministry urged states and Union Territories to conduct follow-up reviews for ensuring dedicated heatstroke rooms, ORS corners and strengthening surveillance, besides implementing critical fire and electrical safety measures at all healthcare facilities. They were asked to assess the preparedness for heatwave conditions and the fire and electrical safety measures adopted by the healthcare facilities.

Source: The Indian Express

[Click here for full text](#)

“It's fine to celebrate success but it's more important to heed to the lessons of failure”-Bill Gates



HEALTH BUZZ

1. HIV breakthrough: Drug trial shows injection twice a year is 100% effective against infection.

Secondly, the trial also tested whether Descovy F/TAF, a newer daily pill, was as effective as F/TDF. The newer F/TAF has superior pharmacokinetic properties to F/TDF. Pharmacokinetic refers to the movement of a drug into, though, and out of the body. F/TAF is a smaller pill and is in use among men and transgender women in high-income countries.

Source: The Economics Times

[Read the full article](#)

2. Flesh-Eating Bacteria Threat: Experts Warn of Japan's Rise and India's Risk

The recent outbreak of a flesh-eating bacteria or Streptococcal Toxic Shock Syndrome (STSS) in Japan has emerged as a cause of concern in the medical fraternity. Decoding the problem the experts did not anticipate the possibility of the disease outbreak in India in the near future, however they suggested to remain vigilant and practice hygiene and noted that those above 50 age-groups as the most vulnerable demographic.

Source: The Economics Times

[Read the full article](#)

3. How precision radiation treatment supports in lung cancer: Research

The study explores how intensity-modulated radiation therapy can help patients with locally advanced, unresectable non-small cell lung cancer.

Source: Hindustan Times

[Read the full article](#)

4. IISc researchers design novel 3D hydrogel culture

IISc researchers design novel 3D hydrogel culture to study TB infection and treatment "In a tissue culture plate, there are no ECM molecules, and even if a very thin layer of ECM is coated on these plates, the lung cells 'see' the ECM on one side at best," explains Vishal Gupta, PhD student at BE and first author.

Source: The Economics Times

[Read the full article](#)

5. Uttar Pradesh becomes first state to generate one crore tokens through ABHA ID

Recently, Uttar Pradesh also set a new record by surpassing the figure of 80 lakhs in ABHA-based OPD registration. Previously, the state had achieved acclaim for creating 10 crores of ABHA IDs. Source: The Economics Times

[Read the full article](#)

6. NEET-UG 2024: Controversy surrounds alleged exam paper leak

At one end, the Supreme Court, which was hearing the petitions, denied a stay on the counseling dates. The other, the Union Education Minister, dismisses the chance of a "paper leak." Surprisingly, Bihar Police's Economic Offences Unit (EOU) discovered post-dated cheques signed out to a mafia, raising the possibility of a paper leak.

Source: Education Post

[Read the full article](#)

7. Heat wave kills at least 56 in India, nearly 25,000 heat stroke cases, from March-May

A confluence of factors has led to a very hot summer in South Asia, a trend scientists say has been worsened by human-driven climate change. At least 33 people, including election officials on duty in India's just-concluded general election, died of suspected heatstroke in the states of Uttar Pradesh and Bihar in the north, and Odisha in the east on Friday.

Source: The Economics Times

[Read the full article](#)

8. Haryana announces free renal and liver transplant under MMMIY

Health, medical education, and research minister, Kamal Gupta said that government is committed to healthcare reform and patient welfare. With this new initiative, identified patients will be able to receive critical renal and liver transplants at the Post Graduate Institute of Medical Sciences (PGIMS) in Rohtak without worrying about the prohibitive costs

Source: The Economics Times

[Read the full article](#)

“Work like there's someone working 24 hours to take it all away from you”

-Mark Cuban



HEALTH IT BUZZ

1. Tech leader attempts to work MAGIC with AI incubator and research collaborative

Humberto Farias of Concepta Technologies discusses his new Machine Advancement and General Intelligence Center and offers AI advice for healthcare C-suite executives and other health IT decision makers. Our mission is to push the boundaries of AI research and development while providing practical applications and services that address real-world problems. At MAGIC, we aim to foster cutting-edge research for both fundamental technologies and applied solutions, support and nurture early-stage AI ventures, educate and train professionals in AI skills, provide consulting services, and build a network of collaboration.

Source- Healthcare IT News

[Read Full Article Here](#)

2. UnitedHealth has a strong second quarter, but cyberattack keeps it cautious on outlook for this year.

New Delhi: UnitedHealth Group topped second-quarter expectations but remained cautious on its outlook for the year as it continued to eat costs from a massive cyberattack to its Change Healthcare business. The health care giant on Tuesday stuck to its projections of adjusted earnings between \$27.50 and \$28 in 2024, the same outlook it released in the fall.

Source- ET Healthworld

[Read Full Article Here](#)

3. Indegene ties up with Microsoft to leverage generative AI for the Medical Industry

Indegene partnered with Microsoft on Thursday to leverage generative AI for the medical industry, the company informed the exchange in a filing. The partnership aims to help empower global life sciences companies to scale up the adoption of enterprise-grade Generative AI (GenAI) services, driving faster innovation.

Source- ET Healthworld

[Read Full Article Here](#)

4. VA awards Abridge and Nuance AI contract to help reduce burnout

The companies will further develop speech-to-text technology that takes healthcare provider's notes and can upload key excerpts to EHR-agnostic files, while the agency accepts feedback on the sole-source solicitations.

Source- Healthcare IT News

[Read Full Article Here](#)

5. Former BharatPe CPO Ankur Jain develops AI doctor to serve 8 billion people

Jivi.ai was established in January 2024 by Ankur Jain. Within a few months, the startup introduced its initial model, Jivi MedX, which surpassed well-known models such as Google's Med-PaLM 2 and OpenAI's GPT-4 on the Open Medical LLM Leaderboard. s

Source- ET Healthworld

[Read Full Article Here](#)

6. Pulsus Group to invest Rs 300 crore in AI-driven pharma healthcare IT hub in Telangana

Announcing this at the inaugural day of the 73rd Indian Pharmaceutical Congress here on Friday, Pulsus Group CEO & managing director Dr Srinubabu Gedela said the project will catalyse the healthcare and IT landscape with an estimated 10,000 direct jobs and around 40,000 indirect jobs through supporting industries and services.

Source- ET Healthworld

[Read Full Article Here](#)

7. ONC proposed rule targets interoperability for public health, payers

The Office of the National Coordinator for Health Information Technology released a sweeping proposed rule Tuesday that includes plans to improve data sharing with public health authorities — a major challenge during the COVID-19 pandemic. The proposal, called the Health Data, Technology, and Interoperability: Patient Engagement, Information Sharing, and Public Health Interoperability rule, or HTI-2, builds on the agency's long-term work to improve interoperability and information sharing between providers, payers and the public health ecosystem.

Source- Healthcaredive

[Read Full Article Here](#)

8. Why an 'AI health coach' won't solve the world's chronic disease problems

Altman and Huffington say Thrive AI Health will use the "best peer-reviewed science" and users' "personal biometric, lab and other medical data" to "learn your preferences and patterns across the five behaviours" that are key to improving health and treating chronic diseases: sleep, food, movement, stress management and social connection.

Source- ETHealthworld

[Read Full Article Here](#)

9. Bangkok Hospital streamlines patient flow with AI

Bangkok Hospital, one of Thailand's largest private healthcare providers, has moved away from the paper and manual process of registering and managing patient flow in its headquarters.

AI technologies provided by its partner, local startup Agnos Health, now underpin its patient registration and management systems.

Source- Healthcare IT News

[Read Full Article Here](#)

10. Healthcare startup, Biostate AI launches free for use RNA sequencing data analysis tools

The two products total RNA sequencing and OmicsWeb Copilot uses patent-pending Barcode-Integrated Reverse Transcription (BIRT) technology and large-language models (LLMs) respectively to help biologist in analysing the data gathered through RNA sequencing of a patient.

Source- ETHealthworld

[Read Full Article Here](#)

“Whatever you are, be a good one.” - Abraham Lincoln



SYNAPSE TEAM MEMBERS

1. Ms. Anamika Singh
2. Ms. Anushi Bhardwaj
3. Dr. Arpita Lohani
4. Dr. Anshuma Mahalle
5. Ms. Krati Gupta
6. Ms. Eshika Bindal
7. Dr. Bhumika Hooda
8. Dt. Priya Bansal
9. Dr. Ssamridhi Kaur
10. Mr. Rohit Upadhyay
11. Ms. Sweksha Gupta

