## STATE AEFI TECHNICAL COLLABORATION CENTRE DEPARTMENT OF COMMUNITY MEDICINE MAULANA AZAD MEDICAL COLLEGE, DELHI





# OUTBREAK ALERT: INDIA & GLOBALLY

Yellow Fever
Cholera
Measles

#### RECENT UPDATES

Link Between
COVID-19 & Sudden
Death
HIV Vaccine Trial
Stalled

Resurgence of VPD
TB & MR elimination
Progress

### CELEBRATING CREATIVITY

World Immunization Week: Poetry Contest

#### RESEARCH

Factors associated with Sudden Adult Deaths

#### **EDITORS**

Dr Pragya Sharma
Dr Shivani Rao
Dr Amod L. Borle
Dr Amita Raoot
Dr Warisha Mariam
Dr Madhyi Dhamania

### E-NEWSLETTER

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# FROM THE EDITOR'S DESK: MONSOON MOMENTUM – STRENGTHENING SURVEILLANCE & IMMUNIZATION IN 2025

Dear Readers,

As the monsoon rains sweep across the country, they bring both relief and rising public health challenges. Our Monsoon 2025 Edition arrives with timely insights into emerging outbreaks, strengthened surveillance, and scientific updates that help guide our collective response.

In this Edition, we bring you up-to-date national and global alerts on outbreaks of vaccine-preventable diseases (VPDs), as well as insights into recent health developments. We cover critical issues including the resurgence of VPDs, the halt of a promising HIV vaccine trial, and an in-depth look at sudden deaths and the clarified link—or lack thereof—with COVID-19 vaccination.

Our AEFI surveillance efforts in Delhi continue to serve as a backbone of vaccine safety assurance, while the TB and Measles-Rubella elimination updates reflect the progress being made towards key public health goals.

We're also excited to present the results of our World Immunization Week Poetry Contest in the "Celebrating Creativity" section—a window into the passion, empathy, and advocacy of young minds across the country. Meanwhile, our "Rendezvous with Research" segment dives into findings from national studies on factors associated with sudden deaths, offering evidence-based clarity amidst public concern.

As we navigate this season of change and challenges, let's channel the momentum of the monsoon to strengthen our commitment to surveillance, science, and service. Your continued dedication drives the impact we strive for—and every drop of effort contributes to a healthier, safer future for all.

Wishing you a season of resilience, reflection, and renewed resolve!

email: aefitechnicalcentre.mamc2021@gmail.com website:

https://mamc.delhi.gov.in/mamc/aefi-technical-collaboration-centre-department-community-medicine



### <sup>CC</sup> OUTBREAK ALERTS



National and International Round-up of Vaccine Preventable Outbreaks

#### Yellow Fever Resurgence in the Americas Sparks WHO Concern

The World Health Organization (WHO) has reported a troubling resurgence of yellow fever across five countries in the Americas between late December 2024 and April 26, 2025, with 212 confirmed cases and 85 deaths—reflecting a high case fatality rate of 40%. Brazil leads in reported cases (110) and deaths (44), followed by Colombia (60 cases, 24 deaths), while Peru, Ecuador, and Bolivia have also recorded infections and fatalities.

Unlike the previous year, when cases were mostly localized to the Amazon basin, 2025 has witnessed the virus expanding into new regions such as São Paulo (Brazil) and Tolima (Colombia). This geographical shift highlights growing vulnerability due to uneven vaccination coverage and limited vaccine stockpiles.

In response, national authorities have scaled up immunization campaigns, surveillance activities, and preventive measures. WHO has flagged this outbreak as a significant public health threat, urging countries to strengthen diagnostics, bolster cross-border collaboration, and prioritize vaccine accessibility. As emphasized by global health experts, vaccination remains the cornerstone of effective yellow fever control and outbreak prevention.

Source: WHO-Disease Outbreak News

#### Cholera Outbreak in Odisha During Raja Festival Raises Public Health Alarms

n June 2025, a cholera outbreak in Odisha's Jajpur district resulted in 11 deaths and over 120 hospitalizations during the Raja festival celebrations. The outbreak affected villages including Kalapada, Tarailo, and Nanpur, triggered by contaminated water and communal feasting. Vibrio cholerae was confirmed as the cause. Health authorities responded with emergency surveillance teams, setting up temporary health camps and issuing advisories discouraging mass gatherings and feasts after the cholera outbreak in Odisha. Contaminated water and poor sanitation were key causes. The administration intensified water chlorination, distributed ORS and antibiotics, and promoted hygiene awareness. The outbreak highlights the urgent need for stronger WASH systems and targeted cholera vaccination in vulnerable rural areas.

**Source:** Press Information Bureau

Contributed By: Dr Madhvi Dhamania (Assistant Professor, PSM)

#### Measles Returns to Belize After Over 30 Years

Between April and July 2025, Belize reported seven confirmed cases of measles—the first since 1991—mostly in the Cayo and Corozal districts. The outbreak began in the Mennonite community of Spanish Lookout, linked to an unvaccinated traveler returning from Mexico. All cases were unvaccinated, highlighting persistent vaccine hesitancy in certain populations. No deaths have been reported, but the Ministry of Health has launched targeted vaccination campaigns, isolation measures, and contact tracing. WHO and PAHO are assisting in outbreak control. This incident highlights the fragility of measles-free status in regions with declining immunization coverage. WHO emphasized the need to sustain high routine coverage and community outreach to prevent such resurgence.

Source: WHO News Section

### ്ര STAY IN THE LOOP: STAY INFORMED! 👓

**Up-to-Date With Events and Recent Advances** 

### No Link Between COVID-19 Vaccines and Sudden Deaths: ICMR-AIIMS Studies Confirm

Extensive investigations by national health agencies, including the Indian Council of Medical Research (ICMR) and the National Centre for Disease Control (NCDC), have found no evidence linking COVID-19 vaccines to sudden, unexplained adult deaths in India. These findings confirm that vaccines used in India are safe and effective, with serious adverse events being extremely rare. Sudden cardiac deaths are more likely linked to underlying health issues, lifestyle choices, genetic factors, and post-COVID complications. Two major studies were conducted to explore this. The first, led by ICMR's National Institute of Epidemiology, was a multicentric case—control study conducted across 47 hospitals in 19 states, focusing on healthy individuals aged 18–45 who died suddenly between October 2021 and March 2023. Results showed no increased risk of sudden death due to vaccination.

The second study, currently underway at AIIMS New Delhi in collaboration with ICMR, aims to identify causes of sudden deaths in young adults. Preliminary findings point to heart attacks as the leading cause, with no significant change in patterns over recent years. In many cases, genetic mutations were found to be contributing factors. Experts warn that false claims linking COVID vaccines to sudden deaths are misleading and dangerous, as they undermine public trust in vaccines. The Government of India remains committed to evidence-based public health research and emphasizes the importance of vaccination in saving lives and maintaining public health.

**Source:** Press Information Bureau

#### HIV Vaccine Trials Stall in South Africa Amid U.S. Funding Cuts

A highly anticipated HIV vaccine trial planned for early 2025 under the BRILLIANT consortium in South Africa has been abruptly halted due to the sudden withdrawal of U.S. funding. Despite having secured all regulatory approvals, the project is now on hold, with prepared vaccine doses lying unused in laboratories. This setback is part of a wider funding crisis impacting health research and services in the region—clinics have been forced to close, staff laid off, and programs like the MATRIX project, which aimed to develop HIV prevention tools for women, have shut down across Africa following the collapse of USAID partnerships. In response, researchers are urgently exploring new funding avenues, including collaborations with private donors and pharmaceutical firms. While the future remains uncertain, there is cautious optimism that South Africa's resilient scientific infrastructure may still sustain efforts in the ongoing battle against HIV.

**Source:** Global Health Now **Contributed By:** Dr Madhvi Dhamania (Assistant Professor, PSM)







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**Up-to-Date With Events and Recent Advances** 

### Unpacking Causes Behind the Resurgence of Vaccine-Preventable Diseases

Despite steady progress over the years, the global fight against vaccine-preventable diseases (VPDs) is witnessing significant challenges. A joint update from the World Health Organization (WHO), UNICEF, and Gavi during World Immunization Week 2025 highlighted the increasing frequency and scale of disease outbreaks across regions. Measles has been identified as one of the most concerning, with a growing number of countries facing widespread or disruptive surges in cases—a trend not seen in recent years. Meningitis has also resurfaced in several African nations, raising concerns over its spread. Yellow fever, previously under control in many areas, is now being reported in places where cases were uncommon in the recent past.

In India, a visible resurgence of VPDs has followed the disruptions caused by the COVID-19 pandemic. While efforts to restore routine immunization are ongoing, some diseases like measles and diphtheria have shown reappearance in areas previously thought to be under control.

Several intertwined reasons contribute to these developments. Interruptions to routine vaccination during the pandemic created immunity gaps, especially in underserved and hard-to-reach communities. Countries affected by conflict or political instability face additional challenges in delivering essential health services, including immunization. Global reductions in donor funding have further strained national immunization programs, slowing recovery efforts. Socioeconomic inequities—such as inadequate sanitation, limited healthcare access, and undernutrition—continue to restrict vaccine coverage in many rural and tribal regions. At the same time, operational challenges such as storage issues, limited trained personnel, and the spread of misinformation through digital platforms are undermining public trust in vaccines.

Overcoming these challenges requires a comprehensive and collaborative approach. Prioritizing equitable access to routine vaccinations, strengthening healthcare infrastructure, training frontline health workers, and improving cold-chain logistics are key actions. Engaging communities through awareness campaigns to dispel myths and encourage participation is equally vital. Sustained global partnerships, financial commitments, and political will are needed to ensure no one is left behind in the fight against preventable diseases. As envisioned in the Immunization Agenda 2030, our collective goal must be to create resilient systems that protect every individual, regardless of location or circumstance.

Contributed By: Dr Surbhi Khanna (Junior Resident, PSM, MAMC)

#### Health Minister Reviews TB, MR Elimination and PM-ABHIM Progress

On May 30, 2025, the Union Health Minister held high-level discussions with Health Ministers from six States and Union Territories to review the progress on tuberculosis (TB) and measles—rubella (MR) elimination, as well as assess fund utilization under PM-ABHIM and the 15th Finance Commission. The 100-day TB-Mukt Bharat Abhiyan screened nearly 12.97 crore people, identifying over 7.19 lakh TB cases, including 2.85 lakh asymptomatic individuals. Key areas of focus included expanding NAAT testing, targeting vulnerable populations such as migrants, HIV-positive individuals, and alcohol-dependent patients, and boosting nutritional support through Ni-kshay Poshan and Ni-kshay Mitra schemes. The Minister called on states to reduce TB incidence to below 47 per lakh and mortality to under 3 per lakh, while also reinforcing immunization efforts to eliminate measles and rubella.

Source: Press Information Bureau

### COSTAY IN THE LOOP: STAY INFORMED! DO

**Up-to-Date With Events and Recent Advances** 

#### **RESURGENCE COVID-19: ECHOS OF PANDEMIC**

Early June 2025 witnessed a surge in COVID-19 cases, primarily driven by the emergence of the NB.1.8.1 variant, along with other new subvariants such as LF.7, XFG, and JN.1, which contributed to increased transmission. According to the World Health Organization (WHO), 91,583 new global cases were recorded in the 28 days leading up to May 11, prompting the classification of NB.1.8.1 as a "variant under monitoring" due to its rapid spread. As of July 1, 2025, there are 1,691 active COVID-19 cases nationwide, with 26,011 recoveries. Kerala (429), Delhi (201), and Gujarat (173) account for the majority of cases.

The Indian Council of Medical Research (ICMR) notes that most current infections are caused by Omicron sub-lineages and typically result in mild symptoms—such as fever, cough, shortness of breath, difficulty breathing, persistent chest pain or pressure, confusion, inability to stay awake, bluish lips or face, and loss of taste or smell. High-risk individuals include older adults, children, pregnant women, and those who are immunocompromised.

Prevention remains the most effective strategy—wear masks, stay vaccinated, practice cough etiquettes, hand hygiene, and maintain a distance of six feet from symptomatic or confirmed cases.

#### Vaccination status and efficacy:

Both vaccination and prior infection offer a degree of protection against severe outcomes. While those who have received a recent booster dose, remain well protected against hospitalization and death; however, immunity may wane over the time.

Vaccine	Dose	Key notes
Booster (Covisheild/Covaxin)	0.5ml, IM	Suggested for _Child above 18 yrs _High risk travellers _Minimum gap of 6 months after last COVID vaccine dose.
iNCOVACC (Recombinant Adenoviral vector vaccine)	2 doses + 1 Booster dose 4 drops in each nostril 28 days apart	-Intranasal COVID vaccine approved to be used in India -developed by Bharat Biotech in collaboration with Washington University -Accessible at selected private hospital and bookable via CoWIN platform.

By staying vigilant, following public health guidance, and supporting vaccination efforts, we can collectively mitigate the impact of the current COVID-19 surge and protect our communities.

- Contributed By: Dr Bibhu (Junior Resident, PSM, MAMC)



### RENDEZVOUS WITH RESEARCH



Factors associated with unexplained sudden deaths among adults aged 18-45 years in India - A multicentric matched case-control study

#### **Background**

In view of anecdotal reports of sudden unexplained deaths in India's apparently healthy young adults, linking to coronavirus disease 2019 (COVID-19) infection or vaccination, we determined the factors associated with such deaths in individuals aged 18-45 years through a multicentric matched case-control study.

#### **Methods:**

This study was conducted through participation of 47 tertiary care hospitals across India. Cases were apparently healthy individuals aged 18-45 years without any known co-morbidity, who suddenly (<24 h of hospitalization or seen apparently healthy 24 h before death) died of unexplained causes during 1 st October 2021-31 st March 2023. Four controls were included per case matched for age, gender and neighborhood. We interviewed/perused records to collect data on COVID-19 vaccination/infection and post-COVID-19 conditions, family history of sudden death, smoking, recreational drug use, alcohol frequency and binge drinking and vigorous-intensity physical activity two days before death/interviews. We developed regression models considering COVID-19 vaccination ≤42 days before outcome, any vaccine received anytime and vaccine doses to compute an adjusted matched odds ratio (aOR) with 95 per cent confidence interval (CI).



#### Results

Seven hundred twenty nine cases and 2916 controls were included in the analysis. Receipt of at least one dose of COVID-19 vaccine lowered the odds [aOR (95% CI)] for unexplained sudden death [0.58 (0.37, 0.92)], whereas past COVID-19 hospitalization [3.8 (1.36, 10.61)], family history of sudden death [2.53 (1.52, 4.21)], binge drinking 48 h before death/interview [5.29 (2.57, 10.89)], use of recreational drug/substance [2.92 (1.1, 7.71)] and performing vigorous-intensity physical activity 48 h before death/interview [3.7 (1.36, 10.05)] were positively associated. Two doses lowered the odds of unexplained sudden death [0.51 (0.28, 0.91)], whereas single dose did not.

#### Conclusion

COVID-19 vaccination did not increase the risk of unexplained sudden death among young adults in India. Past COVID-19 hospitalization, family history of sudden death and certain lifestyle behaviors increased the likelihood of unexplained sudden death.

**Source:** Ponnaiah M, Bhatnagar T, Abdulkader RS, Elumalai R, Surya J, Jeyashree K, Kumar MS, Govindaraju R, Thangaraj JW, Aggarwal HK, Balan S. Factors associated with unexplained sudden deaths among adults aged 18-45 years in India–A multicentric matched case–control study. Indian journal of medical research. 2023 Oct 1;158(4):351-62.

### World Immunization Week 2025: Winning Entries in the Poem Competition

#### **First Prize:**

Simra Mahin Shadan Institute of Medical Sciences, Hapur

#### Get Immunized, Live Life Bright

As vital as breath, as precious as air, Immunization shows how deeply we care. From TB to rabies, from fever to flu, Vaccines stand strong, protecting me and you.

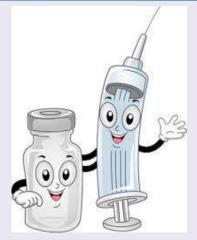
BCG guards against TB's hold, OPV for polio, brave and bold. In tiny drops or a gentle prick, They work their magic, strong and quick.

Just one shot, maybe two, Can shield a life—yes, even you. Timely doses, a powerful key, To unlock a life that's healthy and free.

A happier world, disease kept away With every vaccine, we light the way. So tell each parent, tell each friend, Immunization is the health we send.

From infant cries to grown-up cheer, Let's spread the message loud and clear: Get immunized, don't delay, For a safe tomorrow, start today!





बचपन की मुस्कान बचाए, टीका जीवन में रंग लाए। हर सुई में रक्षा छुपी है, हर बूँद में शक्ति जुड़ी है।

माँ की गोद में जब रोता है, बच्चा डर से कांपता है। पर टीके की वो चुभन भी, लाती है जीवन में छाँव सी।

नन्हीं जान को ढाल मिले, बीमारियों से लड़ने का हौसला मिले। हर घर में उजियारा हो, हर बच्चा स्वस्थ हमारा हो।

टीकाकरण है प्यार का काम, जीवन रक्षा का सुंदर नाम। डॉक्टर, नर्स जब आगे आते, देते हैं सेहत के वरदान सुनाते।

छोटी सुई, बड़ी कहानी, इसमें छुपी है ज़िंदगानी। हर टीका एक कसम है, कि बचपन सुरक्षित हर दम है।

समय पे टीका लगवाओ, बीमारी को दूर भगाओ। संकोच नहीं, समझ बढ़ाओ, टीकाकरण को अपनाओ।

#### **Second Prize:**

Ramit Kukreja
Saraswathi Institute Of Medical
Sciences

### World Immunization Week 2025: Winning Entries in the Poem Competition

"मैं था एक बच्चा, छोटा सा, डरा हुआ, सर्दी, बुखार ने मुझे तंग किया था, थका हुआ। माँ-पापा ने कहा, "तू डर मत, हम तुझे बचाएंगे, टीका लगवाकर, तुझे सुरक्षित बनाएंगे।"



पहली बार जब डॉक्टर ने मुझे टीका लगाया, दर्द थोड़ा सा था, लेकिन फिर भी मैंने साहस पाया। वो टीका था सुरक्षा का चमत्कार, जिससे दूर हुआ हर डर, हर बार-बार।

बड़ी हुई मैं, समझने लगा अब बात, टीका ही तो है, हर बीमारी से बचने की रेशमी राह। गांव में लोग कहते, "ये क्या जरूरी था?" फिर मैंने सबको समझाया, ये तो है <mark>जीवन का</mark> तात्कालिक प्रमाण।

धीरे-धीरे सब ने माना, और सबको टीका लगवाया, अब गांव में कोई नहीं बीमार, सबने इसे अपनाया। टीकाकरण है सबका हक, इसे लगवाओ, बीमारियों से खुद को बचाओ, और भारत को बढ़ाओ।

हर बच्चा, हर महिला, हर बूढ़ा, यह सुरक्षा पाओ, टीका ही है जो स्वस्थ जीवन का रास्ता दिखाए। लगा लो टीका, डर को भगाओ, स्वस्थ भारत के लिए कदम उठाओ।

सभी को सुरक्षा मिलनी चाहिए, यही हमारा काम, टीकाकरण से भारत होगा स्वस्थ और शान में तमाम।"

#### **Third Prize:**

Nitish Arora
Saraswathi Institute
of Medical Sciences



#### **Upcoming Events: Mark Your Calendar!!**

#### **National Events:**

- 1.11th South Central Zone IAPSM Conference 2025;Dr LN Pandey Medical College,Ratlam on Nov 28, 2025, 9:00 AM Nov 29, 2025, 5:00 PM
- 2. EFICON 2025, All India Institute of Medical Sciences, New Delhi on Nov 11 Nov 13, 2025.
- 3. Applied Research International Conference on Pediatrics & Neonatology (ARICPN); Delhi, India on August 19, 2025

#### International events

- 1.6th International Conference on Vaccines, Vaccination and Immunization Paris, France August 26–27, 2025
- 2.19th Vaccine Congress Kyoto International Conference Center, Japan September 7–10, 2025
- 3.3rd International Summit on Vaccines Research and Development (ISVRD 2025) Frankfurt, Germany September 11–13, 2025

Editors: Dr Pragya Sharma, Dr Shivani Rao, Dr Amod L. Borle, Dr Amita Raoot, Dr Warisha Mariam, Dr Madhvi Dhamania