Middle East, Eurasia and Africa
ME'NA-ISN
Influenza Stakeholders Network

Semi-annual Bulletin

Half year summary (July-December) 2024
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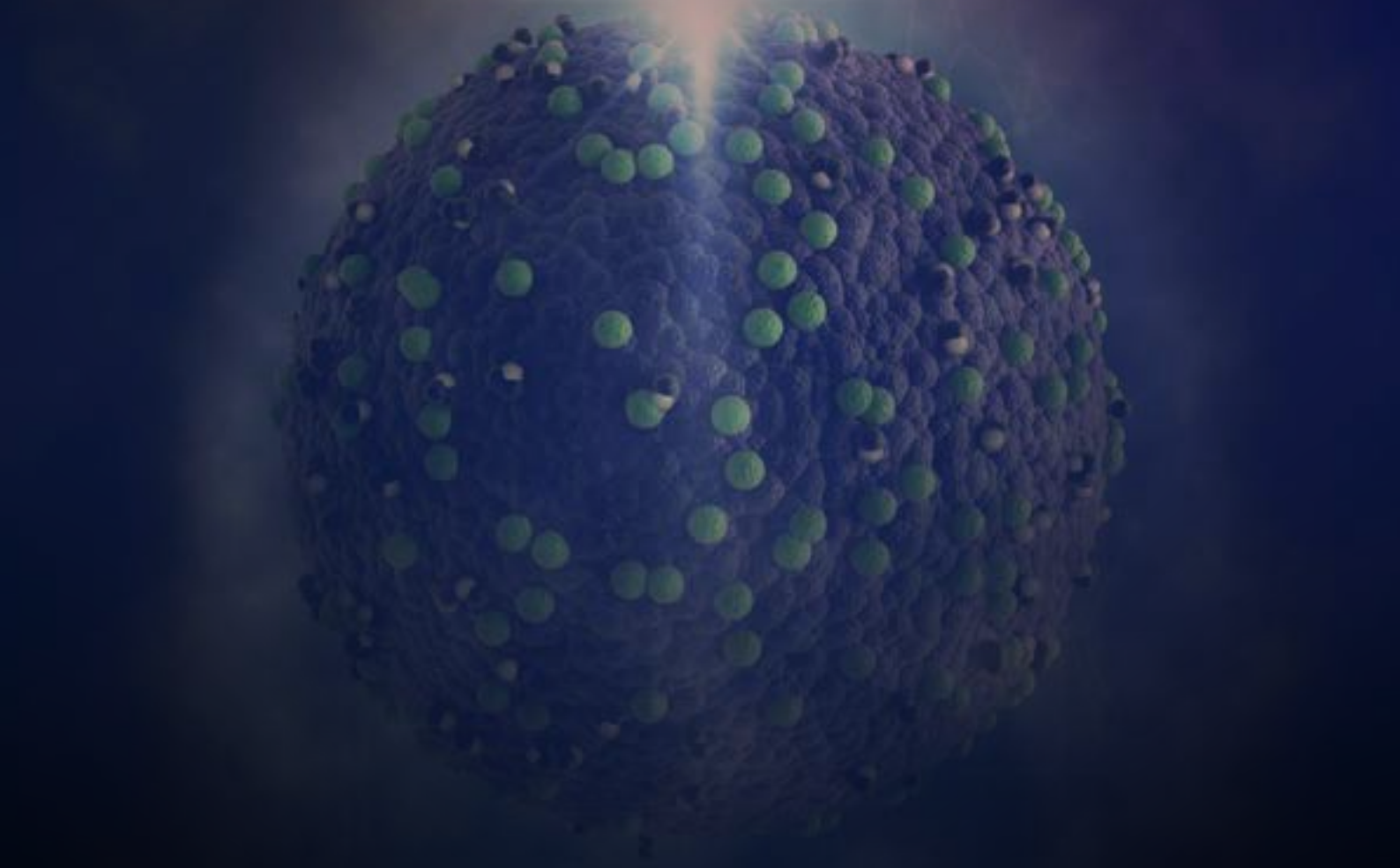

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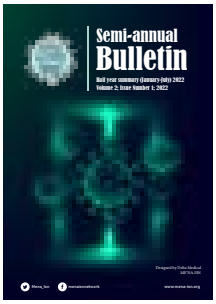
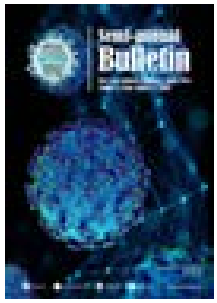




Message from the Editor

Dr. Nazish Badar is a Ph.D doctor and has been trained in basic and molecular virology. She has completed her M.Phil in biotechnology from Quaide Azam University Islamabad. Her research focused on Hepatitis B virus and she completed her research at NIBGE. Dr. Badar has completed her PhD in the discipline of Biotechnology with a specialization in Molecular Virology from Quaide Azam University Islamabad. She has been working in different capacities at NIC-NIH since 2007. During her experience in the Public Health Laboratories Division, she has been participating in the implementation of number of projects related to infectious diseases, laboratory diagnosis and surveillance. She currently serves as Technical lead for laboratory and diagnostics in the emerging and remerging respiratory virus team, is a certified Biorisk Manager and IATA shipper, and has been actively involved in trainings on Biorisk Management (BRM) and Lab quality management and diagnostics. Dr. Nazish Badar engaged in establishing Influenza sentinel site network in Pakistan. She designed and established a system of External Quality Assurance Panel for SARS Cov-2 testing laboratories from National Institute of Health Pakistan. She established whole genome sequencing at NIH for Influenza virus. She has ample experience in managing administrative work as well as direct collaboration with all major donors including WHO, CDC and GIHSN.

Welcome to the 7th edition of our newsletter, where we bring you key updates and insights from the Middle East and North Africa Influenza Surveillance Network (ME'NA-ISN). This edition highlights significant milestones and activities that underscore our commitment to improving influenza surveillance and public health in the region.

We begin with a comprehensive overview of *Influenza Day 2024*, showcasing the critical discussions, research presentations, and collaborative efforts aimed at strengthening our response to seasonal influenza. In Viral Vibes, we explore how social media has become an influential tool for disseminating influenza-related news and raising public awareness.

Our section on *Activities of ME'NA-ISN* delves into the network's recent initiatives and outreach programs, while *Influenza Surveillance and Monitoring Tools* offers an in-depth look at the technological advancements and methodologies enhancing our surveillance capabilities. The *Publications of ME'NA-ISN* highlight recent research contributions that have furthered the scientific understanding of influenza trends and prevention strategies.

We also spotlight the *Connections of ME'NA-ISN with Other Societies*, emphasizing our growing partnerships and collaborative projects that extend our impact beyond regional borders. The *Projects of ME'NA-ISN* section details ongoing and upcoming initiatives designed to address key public health challenges.

In *Talks from ME'NA-ISN*, we feature thought-provoking discussions and expert insights from recent events. This volume pays tribute to *Professor Ossama Rasslan*, honoring his groundbreaking contributions to infection control and his enduring legacy in the field.

Finally, we are excited to introduce the *New Members of ME'NA-ISN*, whose fresh perspectives and expertise will undoubtedly enrich our network's mission and activities. We hope this edition provides valuable insights and inspires continued collaboration in our shared mission to combat influenza and enhance public health across the region.

Dr. Nazish Badar
Editor

INFLUENZA DAY 2024

The Middle East and North Africa Influenza Stakeholder Network (MENA-ISN) held its annual Influenza Day on November 2, 2024, in the dynamic city of Istanbul, Turkey. This eagerly awaited event gathered prominent experts, policymakers, researchers and healthcare professionals to explore strategies for addressing the persistent challenges of influenza across the MENA region.

Theme and Focus

The 2024 Influenza Day centered around the theme "Strengthening Regional Collaboration and Preparedness Against Influenza". The event focused on enhancing surveillance systems, promoting vaccination strategies and improving response mechanisms to seasonal and pandemic influenza threats. Key discussions highlighted the importance of cross-border cooperation, evidence-based policymaking and integrating innovative research to build resilient healthcare infrastructures throughout the MENA region.

Highlights of the Event

Influenza Day 2024 featured a series of insightful keynote speeches, interactive panel discussions and collaborative workshops. Experts shared the latest research on influenza surveillance, vaccine efficacy and emerging strains affecting the MENA region. Policymakers and healthcare leaders discussed strategies to improve vaccination coverage and address public health challenges, while case studies from various countries showcased successful influenza prevention and response initiatives. The event also provided a platform for networking, fostering partnerships between researchers, healthcare professionals and government stakeholders to strengthen regional preparedness efforts.

Outcome, Vision and Future Recommendations

The 2024 Influenza Day concluded with a renewed commitment to enhancing regional collaboration and strengthening influenza prevention and response strategies across the MENA region. Key outcomes included the development of action plans to improve vaccination uptake, bolster surveillance systems and promote data sharing among countries. The vision moving forward is to establish a more resilient and unified approach to managing seasonal and pandemic influenza threats, with an emphasis on innovation, research and public awareness. Future recommendations highlighted the need for sustained investment in healthcare infrastructure, continuous training for healthcare professionals and fostering partnerships between governments, research institutions and international health organizations to ensure a proactive and coordinated response to influenza challenges.

MENA-ISN Holds Workshop on Motivational Interviewing Techniques

The Middle East, Eurasia, and Africa Influenza Stakeholders Network (ME'NA-ISN) organized a two-day workshop titled "Motivational Interviewing Techniques in Vaccination Advocacy" on September 7-8, 2024, at Istanbul, Turkey. The workshop brought together master trainers from Gulf Cooperation Council countries, including Oman, Kuwait, Saudi Arabia, the United Arab Emirates, and Qatar, aiming to enhance their skills in applying motivational interviewing techniques to improve influenza vaccination rates.

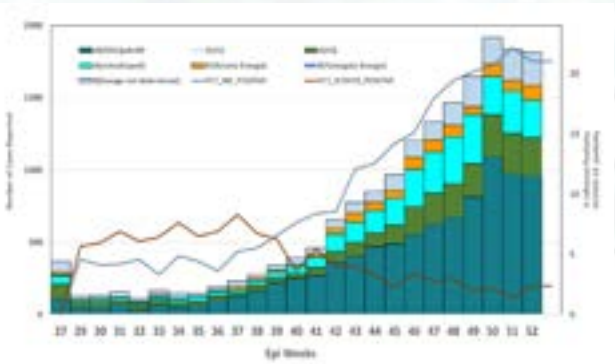
The event was scientifically justified as motivational interviewing–a person-cantered counseling approach–is recognized for its effectiveness in addressing vaccine hesitancy by fostering intrinsic motivation for behavior change. Participants, including healthcare professionals such as physicians, nurses, and pharmacists, explored strategies to communicate effectively with diverse populations, particularly the elderly.

The agenda included sessions on key principles of motivational interviewing, building effective communication skills, and overcoming resistance to vaccination. Practical applications and case studies were shared to support participants in cascading this knowledge within their health systems.

This workshop reflects ME'NA-ISN's ongoing commitment to empowering healthcare professionals and advancing public health through innovative, evidence-based approaches.

Integrated surveillance of influenza and COVID-19

Recent surveillance data show a steady increase in influenza cases, with a sharp surge starting around epidemiological week 40. Influenza positivity rates rose from 4.5% in week 27 to over 22% by week 50, signaling heightened transmission. The most detected strains include Influenza A (H1N1)pdm09, A (H3), and B (lineage undetermined), with A (H1N1)pdm09 being the dominant subtype. Influenza B cases, primarily of the B/Victoria lineage, also showed a steady increase. Meanwhile, COVID-19 positivity rates fluctuated between 2% and 7% throughout the period. A notable decline was observed from week 39, where positivity was 3.6%, down to around 1.3% in week 50, indicating a relative stabilization of COVID-19 cases despite the rise in influenza. These trends highlight the growing influenza burden while COVID-19 remains at a lower but persistent level. Continued surveillance, vaccination efforts, and public health measures remain crucial to managing both respiratory infections effectively



Week-wise distribution of Influenza & SARS Cov-2 in MENA region

This bar chart illustrates the distribution of influenza subtypes across various MENA (Middle East and North Africa) region countries. It categorizes positive cases by viral subtypes, including A(H1N1)pdm09, A(H1), A(H3), AH5, A (not subtyped), and B (Victoria lineage). The data indicate a significant variation in influenza burden, with the highest number of cases reported in the United Arab Emirates, Egypt, and Yemen. The dominant subtype appears to be A(H1N1)pdm09, followed by A(H3) and B (Victoria lineage). Countries like Algeria, Lebanon, and Libya show minimal reported cases. This epidemiological insight is crucial for understanding regional influenza trends and guiding public health interventions.

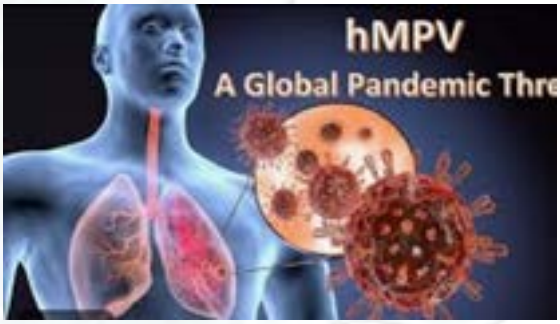
Viral Vibes / News Social Media

Burden of Influenza 2024 and beyond: Preparing for the next pandemic

Understanding the burden of influenza, including its mortality and morbidity, is essential for informed health policy decisions and resource allocation. These estimates help governments and vaccine manufacturers determine the necessary supplies and assess the broader impact of the disease. The WHO, through its GISRS network, tracks seasonal and potential pandemic influenza viruses, acting as an early warning system and strengthening laboratory surveillance. GISRS is expanding to monitor other respiratory viruses like RSV and SARS-CoV-2. Additionally, the WHO's PIP Framework coordinates global pandemic preparedness, securing vaccine supplies for future outbreaks. Individuals can protect themselves through vaccination and good hygiene, while WHO continues to support global readiness for emerging health threats.

hMPV Cases on the Rise in China – No Need to Panic

Authorities in China are reporting an increase in cases of human metapneumovirus, or hMPV, a respiratory virus that often circulates during the winter and spring seasons. Despite the rise in infections, health officials emphasize that there is no immediate cause for concern.



hMPV is a common respiratory virus that typically causes mild symptoms such as cough, fever, and nasal congestion. While severe cases can occur, particularly among young children, the elderly, and those with underlying health conditions, the majority of cases resolve without complications.

Health officials in China have assured the public that healthcare systems are well-prepared to manage the current situation. They are advising citizens to practice good hygiene and take preventive measures, including:

- Regular handwashing.
- Avoiding close contact with those who are unwell.
- Disinfecting frequently touched surfaces.

Unlike other respiratory viruses, such as COVID-19 or influenza, hMPV is not considered a widespread public health threat. Experts are monitoring the situation closely and stress that there is no need for alarm at this time.

For more information: https://theconversation.com/hmpv-may-be-spreading-in-china-heres-what-to-know-about-this-virus-and-why-its-not-cause-for-alarm-246775

CDC estimates at least 24 million have had seasonal flu

According to the Centers for Disease Control and Prevention (CDC), this season's flu outbreak has already affected an estimated 24 million people. Hospitalizations due to the flu remain high, with nearly 49,000 patients admitted in the week ending February 1. The CDC reports that emergency department visits for the flu are "very high" and increasing, while COVID-19 and respiratory syncytial virus (RSV) visits are decreasing. Overall, respiratory illness activity remains "very high," with a significant number of people seeking medical care.

For more information: https://www.aha.org/news/headline/2025-02-10-cdc-estimates-least-24-million-have-had-seasonal-flu

Viral Vibes / News Social Media

More than 85,000 infants and toddlers diagnosed with RSV in 2024 ahead of national vaccine rollout

ABC News (Australia), 31 January 2025

GPs say they're continuing to see respiratory syncytial virus (RSV) in summer after Australia experienced a record 175,786 cases nationwide in 2024. A total 86,205 (49 per cent) of those diagnosed with the disease were young children under four years old, according to the National Notifiable Diseases Surveillance System. In 2024, Australia recorded its highest number of cases since the virus became notifiable in 2021. RSV is the most common cause of respiratory infections in children, with an average of 12,000 babies ending up in hospital with the virus every year. Symptoms include fever, a runny nose, a severe cough, difficulty breathing, sneezing and headache.

For more information: https://www.abc.net.au/news/2025-01-31/rsv-case-numbers-australia/104872260

New tool can detect fast-spreading SARS-COV-2 variants before they take off

Doherty Institute (Australia), 29 January 2025

Researchers have developed a tool to detect highly transmissible SARS-CoV-2 variants before they become widespread, aiding public health efforts. By analyzing millions of viral genome sequences, scientists from the Doherty Institute and the University of Pittsburgh identified key mutations that enhance the virus's spread. Many of these mutations are in the spike protein, but others affect viral binding, immune evasion, and protein structure. The model, which uses genomic surveillance data, is simple yet effective and can potentially be adapted for other pathogens like influenza. This tool provides a valuable way to track and manage emerging infectious diseases.

For more information: https://www.doherty.edu.au/news-events/news/new-tool-can-detect-fast-spreading-sars-cov-2-variants-before-they-take-off

New strain of bird flu is detected in a Nevada dairy worker

A dairy worker in Nevada has contracted a new strain of bird flu, known as D1.1, which is different from the B3.13 strain that has been spreading in US herds since last year. This is the first time the D1.1 strain has been linked to a cow, although it had previously been seen in people exposed to poultry in five states, including Iowa, Louisiana, Oregon, Washington, and Wisconsin. The worker experienced mild symptoms, including eye redness and irritation, and has since recovered. According to the CDC, the virus poses a low risk to the general public, but people with close contact with infected animals are advised to take precautions, including wearing protective equipment.

For more information: https://www.newsandsentinel.com/news/business/2025/02/cdc-new-strain-of-bird-flu-is-detected-in-a-nevada-dairy-worker/

Viral Vibes / News Social Media

Strengthening influenza vaccination policies and programmes

WHO, in alignment with global health strategies, supports countries in updating influenza vaccination policies for seasonal and pandemic management. In July 2024, WHO held a meeting to discuss strengthening national influenza vaccination programs, bringing together global health experts and partners. Participants identified challenges, opportunities, and future needs, shaping key global actions and priorities. The discussions emphasized adaptable vaccination targets, locally tailored programs, global resources, strong partnerships, and high-level advocacy to enhance vaccination efforts worldwide.

The best preparation for the next pandemic is leveraging what we have now

- adaptable global targets for seasonal influenza vaccination programmes;
- integrated vaccination programmes that are tailored to local contexts and informed by local, regional, and/or global evidence to optimize uptake;
- global resources and tools (e.g. programme review, policy brief, disease burden and burden adverted, cost-effectiveness, and drivers of vaccine uptake) which support national programme strengthening;
- partnerships with the private sector, professional associations, civil society, and faith-based organizations at the national, regional, and global levels; and
- high level advocacy (within and between countries) and peer exchange to facilitate sharing of good practices.

For more information: https://www.who.int/news/item/04-02-2025-strengthening-influenza-vaccination-policies-and-programmes

The changing face of pandemic risk: how we need to adapt, protect and connect

Pandemic preparedness is a critical global health priority, requiring adaptation to evolving risks, protection of communities, and stronger cross-sector connections. The Global Preparedness Monitoring Board (GPMB) report emphasizes the need for proactive strategies to prevent, detect, and respond to emerging threats like mpox, Marburg virus, and avian influenza H5N1. Adapting pandemic plans to address factors such as climate change, urbanization, and misinformation is essential. Strengthening health systems, expanding social protections, and improving public trust are key to protecting populations. Collaboration across sectors and borders enhances surveillance, knowledge-sharing, and resource distribution. Investing in preparedness safeguards global health, economic stability, and social cohesion, making it both a moral and economic necessity.

For more information: https://www.who.int/news/item/05-02-2025-the-changing-face-of-pandemic-risk--how-we-need-to-adapt--protect-and-connect

A crucial task: building an integrated, resilient and sustainable approach to pathogen preparedness in Africa

The Preparedness and Resilience to Emerging Threats (PRET) initiative, launched in April 2023, is strengthening Africa's capacity to respond to respiratory pathogen threats through a coordinated, multi-sectoral approach. The WHO Regional Office for Africa is supporting Member States in integrating pandemic preparedness into national health systems, aligning with the 5Cs of the HEPR Framework: Collaborative Surveillance, Emergency Coordination, Access to Countermeasures, Clinical Care, and Community Protection. Since its launch, PRET has been introduced in 21 African countries, with workshops held to identify gaps and improve response strategies. Insights from COVID-19 have helped shape future preparedness plans, with national governments and partners collaborating to refine strategies, as seen in a South African simulation exercise that enhanced pandemic planning.

For more information: https://www.who.int/news/item/04-02-2025-a-crucial-task--building-an-integrated--resilient-and-sustainable-approach-to-pathogen-preparedness-in-africa

Influenza Surveillance and Monitoring Tools

Pandemic Influenza Severity Assessment Tool (PISA)

In 2011, following the 2009 H1N1 pandemic, the IHR Review Committee recommended that WHO develop tools to **assess the severity of every influenza epidemic**. As a result, WHO created the PISA framework–intended for use by Member States and WHO to inform proportional response actions and improve preparedness. It assesses three key factors: **transmissibility, seriousness of disease and impact on healthcare systems**. By analyzing epidemiological data, hospitalization rates and mortality trends, PISA helps guide public health responses, resource allocation and mitigation strategies. This dynamic tool enables authorities to monitor and adapt their response as a pandemic evolves, ensuring effective risk communication and preparedness.

Latest PISA guidance (2024) can be found here:

https://iris.who.int/bitstream/handle/10665/376841/9789240093881-eng.pdf

WHO Influenza Disease Burden Tool

The **WHO Influenza Disease Burden Tool** is a vital resource for estimating the impact of seasonal and pandemic influenza on public health. It provides standardized methods to calculate the disease burden in terms of **morbidity, mortality and healthcare utilization**. By analyzing data on influenza-related hospitalizations, deaths and overall disease incidence, the tool helps public health authorities assess the strain on healthcare systems and prioritize interventions. The WHO Influenza Disease Burden Tool is essential for monitoring trends, guiding vaccination strategies and enhancing preparedness efforts to mitigate the global impact of influenza.

For more details: https://www.who.int/news/item/14-10-2022-estimating-seasonal-influenza-burden-across-the-disease-severity-pyramid

PRET Tool (Pandemic Risk Evaluation Tool)

The **Pandemic Risk Evaluation Tool (PRET)** is a comprehensive tool developed by the World Health Organization (WHO) to assess and manage the risks associated with potential pandemics. PRET enables countries to evaluate their pandemic preparedness across various dimensions, including **surveillance, response capacities, healthcare infrastructure and public health interventions**. By providing a systematic approach to identifying vulnerabilities and gaps the tool supports governments and health organizations in strengthening their pandemic response plans. PRET helps ensure timely, effective action to reduce the impact of future pandemic threats, fostering global collaboration and resilience in public health systems.

For more details: https://www.who.int/initiatives/preparedness-and-resilience-for-emerging-threats

Influenza Surveillance and Monitoring Tools

WHO Influenza Vaccine Recommendations for Northern Hemisphere 2024-2025

The World Health Organization (WHO) plays a crucial role in shaping the composition of influenza vaccines. Through consultations with experts from WHO Collaborating Centres and WHO Essential Regulatory Laboratories, the WHO analyzes influenza virus surveillance data to inform vaccine development. The World Health Organization (WHO) recommended in February 2024 that B/Yamagata strains be removed from seasonal influenza vaccines. For the 2024-2025 northern hemisphere influenza season, the WHO advises that egg-based trivalent vaccines contain three specific virus strains: A/Victoria/4897/2022 (H1N1)pdm09-like virus, A/Thailand/8/2022 (H3N2)-like virus, and B/Austria/1359417/2021 (B/Victoria lineage)-like virus.

For more details: https://www.businesswire.com/news/home/20240702966375/en/GSK-Begins-Shipping-Influenza-Vaccine-Doses-for-2024-25-Season

ME'NA-ISN PROJECT

Honoring the Legacy of Professor Ossama Rasslan: A Pioneer in Infection Control

MENA ISN community mourns the untimely loss of Professor Rasslan, a founding member of our organization. Professor Ossama Shamseldin Rasslan, born on November 10, 1951, was a distinguished Egyptian educator and immunologist. He served as the Secretary General of the Arab Medical Union and was a professor of Medical Microbiology, Immunology, and Infection Control. As the Dean of the Arab Institute for Continuing Professional Development, he was instrumental in advancing medical education in the region.

In 1992, Professor Rasslan founded the Egyptian Society for Infection Control, which later became the first international chapter of the Association for Professionals in Infection Control and Epidemiology (APIC). He also established the Infectious Diseases Research and Infection Control Unit at Ain Shams Faculty of Medicine, Cairo, contributing significantly to research and training in infection prevention.

His leadership extended to the Ministry of Health and Population in Egypt, where he designed and instructed the Professional Diploma in Infection Control, awarded by the Arab Institute for Continuing Professional Development. He chaired the Egyptian Fellowship Board of Infection Prevention and Control and was the technical supervisor of the National Infection Control Program.

Professor Rasslan was a founding member of the MENA ISN and played a pivotal role in shaping the association, particularly in the areas of ethics and the organization of various elections. His contributions were instrumental in establishing infection control programs within Egypt's Ministry of Health, enhancing healthcare standards nationally and regionally.

Beyond his administrative roles, he was a prolific educator and researcher, founding and editing the Egyptian Journal of Medical Laboratory Sciences.

His dedication to patient safety led to the establishment of the Pan Arab Patient Safety Association, reflecting his commitment to healthcare excellence.

Professor Rasslan's legacy in public health, infection control, and medical education will continue to inspire future generations. His unwavering commitment to improving healthcare has left an indelible mark on the medical community in Egypt and the broader MENA region.

The MENA ISN community deeply mourns the demise of Professor Rasslan and extends its deepest condolences to Professor Rasslan's family, colleagues, and all who were touched by his work. We are profoundly grateful for his invaluable contributions and unwavering commitment to public health. His memory will continue to inspire our efforts in advancing healthcare and infection control.

PUBLICATIONS

1 **Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in Oman: Current Situation and Going Forward**

https://doi.org/10.5001/omj.2019.36

2 **Unraveling influenza sentinel surveillance in Pakistan 2008-2024: Epidemiological insights during the pre and post pandemic period of COVID-19**

https://doi.org/10.1016/j.jiph.2024.102595

3 **Lung function and onset of cardiometabolic diseases in the longitudinal Burden of Obstructive Lung Disease study**

https://doi.org/10.1136/bmjresp-2024-002442

4 **Vaccinating against the absent: Risks of the B/Yamagata strain in the live attenuated vaccine**

https://doi.org/10.2807/1560-7917

PUBLICATIONS

5 **Vaccinating against the absent: Risks of the B/Yamagata strain in the live attenuated vaccine**

https://doi.org/10.1007/s44197-024-00292-8

6 **Expert panel opinion on adult pneumococcal vaccination in the post-COVID era (NAP- EXPO Recommendations-2024).**

10.4103/lungindia.lungindia_8_24

Publications of ME'NA

The Vaccination Acceptance, Confidence and Conviction on Influenza in the Middle East, Eurasia and Africa Among Healthcare Providers (VACCIMENA-HCP) Project 2023: Determinants of accination Behavior

https://doi.org/10.1016/j.ijregi.2025.100572

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