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RESEARCH POSTER

INFLUENZA A IN SOUTHEAST ASIA: TEN-YEAR TRENDS IN INCIDENCE, DISTRIBUTION, AND RISK FACTORS

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Introduction

Influenza A is an emerging and re-emerging disease with pandemic potential, significantly contributing to global morbidity and mortality. Southeast Asia is a hotspot due to high population density, cross-border mobility, live poultry markets, human–animal interactions, and tropical–subtropical climates. Global Health Security (GHS) and the International Health Regulations (IHR 2005) emphasize the importance of surveillance, laboratory capacity, cross-border response, and compliance. Although the 2009 H1N1 pandemic demonstrated Influenza A's pandemic potential, no comprehensive synthesis has yet examined its incidence, distribution, and risk factors in Southeast Asia over the past decade (2015–2025).

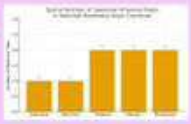
Objectives

To analyze ten-year trends (2015–2025) of Influenza A in Southeast Asia, focusing on its incidence, distribution, and key risk factors.

Methods

- A narrative review was conducted using major databases (PubMed, Scopus, Google Scholar) and official reports from WHO FluNet/GISRS, national Ministries of Health, and ASEAN sources.
- Inclusion criteria: peer-reviewed articles and official surveillance reports (English or Indonesian) focusing on Influenza A in Southeast Asia from 2015–2025.
- Exclusion criteria: editorials, opinion papers, and studies conducted outside the Southeast Asian region.

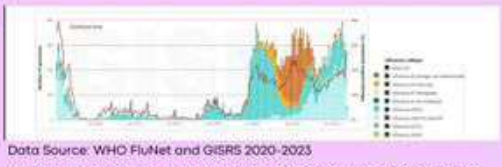
Results



Indonesia and Myanmar typically reported one annual Influenza peak, while Thailand, Vietnam, and the Philippines experienced two peaks influenced by climate. Subtype dominance alternated annually between A(H1N1)pdm09 and H3N2.

Data Source: WHO FluNet 1996-2021

FluNet reported Southeast Asia's positivity rate (18.5%) above the global average (16.2%).



Data Source: WHO FluNet and GISRS 2020-2023

A sharp decline occurred in 2020 during COVID-19, followed by resurgence in 2022–2023, notably in Indonesia, Thailand, and Vietnam.

Key risk determinants included human–poultry contact, cross-border mobility (Thailand–Myanmar, Malaysia–Singapore), urban density (Jakarta, Manila, Bangkok), and low vaccination rates.

Conclusion

Influenza A remains a major public health concern in Southeast Asia. Strengthening sentinel surveillance, genomic capacity, timely GISRS reporting, and inter-country coordination under IHR is essential to strengthen regional health security.

KEYWORDS

Influenza A; Southeast Asia; Global Health Security; Surveillance; Risk Factors

Reference

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