

## Briefing note: Influenza A(H3N2) subclade K (J.2.4.1), considerations for the Americas Region

11 December 2025

The Pan American Health Organization / World Health Organization (PAHO/WHO) is issuing this Briefing Note to inform Member States about the influenza A(H3N2) situation related to subclade K in various regions of the world and to reiterate the recommendations made in the PAHO/WHO Epidemiological Alert on seasonal influenza in the Americas Region published 4 December 2025 (1).

On 4 December 2025, the Pan American Health Organization / World Health Organization (PAHO/WHO) reported through its epidemiological alert that, in recent months, the circulation of the A(H3N2) subclade K (J.2.4.1) virus has increased rapidly in Europe and several countries in East Asia (1, 2). The A(H3N2) viruses of the K subclade are genetically derived from related J.2.4 viruses and, through a process of natural evolution, have accumulated several amino acid changes in their hemagglutinin compared to the J.2.4 viruses that circulated previously (3).

In Europe, influenza activity began earlier than usual, and the K subclade accounted for almost half of the sequences reported between May and November 2025 (2). Thus far, no significant change in clinical severity has been documented, in terms of hospitalizations, intensive care admissions, or deaths. However, seasons dominated by the A(H3N2) subtype are often associated with greater severity, especially among older people (4).

In the Americas Region, specifically in the subregion of North America (5–7), a sustained increase was observed, mainly due to influenza type A. In fact, in the United States of America and Canada, there was increased circulation of subtype A(H3N2), with a progressive increase in detections of influenza A(H3N2) subclade K (5).

On 10 December 2025, the WHO reported on its Epidemic Outbreaks website that the genetic sequence data available from the Global Initiative on Sharing All Influenza Data (GISAID) showed a significant increase in the K subclade in many parts of the world, with the exception, to date, of South America (3).

East Asian countries, which are now recording a decline in influenza A(H3N2) circulation, have not reported greater disease severity to date (2). Phylogenetic analyses of A(H3N2) subclade K

**Suggested citation:** Pan American Health Organization/World Health Organization. Briefing Note: Influenza A(H3N2) subclade K (J.2.4.1), considerations for the Region of the Americas – 11 December 2025. Washington, D.C.: PAHO/WHO; 2025.

strains circulating in these countries suggest that they are not different from those present in European countries.

Despite the antigenic differences observed in the A(H3N2) subclade K, preliminary vaccine effectiveness data show that protection against hospitalizations remains at levels similar to previous seasons ( $\approx$ 70–75% in children and 30–40% in adults) (8).

For the Americas Region, this situation reinforces the importance of closely monitoring the evolution of the virus (genomic surveillance), maintaining high vaccination coverage, the timely treatment of cases, and ensuring preparedness for possible early or more intense activity during the 2025-26 season. It is essential that the population, especially older adults and people with risk factors, receive the influenza vaccine in order to protect themselves individually and reduce pressure on health services, particularly hospitalization services.

## **Recommendations for Member States**

PAHO/WHO reminds Member States that the recommendations made in the PAHO/WHO Epidemiological Alert: Seasonal Influenza in the Region of the Americas: End of the 2025 Season in the Southern Hemisphere - Start of the 2025-26 Season in the Northern Hemisphere - 4 December 2025, are available from: <a href="https://www.paho.org/en/documents/epidemiological-alert-seasonal-influenza-americas-region-end-2025-season-southern">https://www.paho.org/en/documents/epidemiological-alert-seasonal-influenza-americas-region-end-2025-season-southern</a> (1).

## References

- Pan American Health Organization / World Health Organization. Epidemiological Alert Seasonal Influenza in the Americas Region: End of the 2025 Season in the Southern Hemisphere Start of the 2025-26 Season in the Northern Hemisphere - 4 December 2025. Washington, D.C.: PAHO/WHO; 2025. Available from: Available from: <a href="https://www.paho.org/en/documents/epidemiological-alert-seasonal-influenza-americas-region-end-2025-season-southern">https://www.paho.org/en/documents/epidemiological-alert-seasonal-influenza-americas-region-end-2025-season-southern</a>.
- European Centre for Disease Prevention and Control (ECDC) 2025. Threat Assessment Brief: Assessing the risk of influenza for the EU/EEA in the context of increasing circulation of A(H3N2) subclade K. Stockholm: ECDC; 2025. Available from: <a href="https://www.ecdc.europa.eu/en/publications-data/threat-assessment-brief-assessing-risk-influenza-november-2025">https://www.ecdc.europa.eu/en/publications-data/threat-assessment-brief-assessing-risk-influenza-november-2025</a>.
- 3. World Health Organization. Disease Outbreak News. Seasonal influenza Global situation. 10 December 2025. Geneva: WHO; 2025. Available at: <a href="https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON586">https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON586</a>.
- 4. Sumner K, Masalovich S, O'Halloran A, Holstein R, Reingold A, Kirley P, et al. Severity of influenza-associated hospitalizations by influenza virus type and subtype in the USA, 2010-19: a repeated cross-sectional study. Lancet Microbe. 2023 Nov;4(11):e903-e912. Available from: https://doi.org/10.1016/s2666-5247(23)00187-8.
- 5. Government of Canada. Canadian respiratory virus surveillance report. Ottawa: PHAC; 2025. Available from: <a href="https://health-infobase.canada.ca/respiratory-virus-surveillance/influenza.html">https://health-infobase.canada.ca/respiratory-virus-surveillance/influenza.html</a>.
- 6. Centers for Disease Control and Prevention. Weekly US Influenza Surveillance Report: Key Updates for Week 45, ending 8 November 2025. Atlanta: CDC; 2025. Available from: https://www.cdc.gov/fluview/surveillance/2025-week-45.html.
- 7. Mexican Ministry of Health. Weekly Reports for Epidemiological Surveillance of Influenza, COVID-19, and Other Respiratory Viruses 2025. Mexico City: Health; 2025. Available from: <a href="https://www.gob.mx/salud/documentos/informes-semanales-para-la-vigilancia-epidemiologica-de-influenza-covid-19-y-otros-virus-respiratorios-2025">https://www.gob.mx/salud/documentos/informes-semanales-para-la-vigilancia-epidemiologica-de-influenza-covid-19-y-otros-virus-respiratorios-2025</a>.
- 8. Kirsebom C, Thompson C, Talts T, Kele B, Whitaker H, Andrews N, et al. Early influenza virus characterization and vaccine effectiveness in England in Autumn 2025, a period dominated by influenza A(H3N2) subclade K. Euro Surveill. 2025 Nov;30(46):2500854. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/41267661/">https://pubmed.ncbi.nlm.nih.gov/41267661/</a>.