

Epidemiological Update Influenza

14 June 2019

Considering the early start of the influenza season in some countries of the Southern Hemisphere, it is possible that the maximum seasonal peak will be reached in the coming weeks. The Pan American Health Organization / World Health Organization (PAHO/WHO) recommends Member States to adopt the necessary measures for ensuring appropriate clinical management, strict compliance with infection prevention control measures in health care services, adequate supplies of antivirals, and prevention, and timely treatment of associated complications.

Situation summary

Following is a summary of the influenza situation by sub-regions in the Region of the Americas.¹ The situation of the Southern Cone subregion; which presents an earlier than expected influenza season is reported first; the situation for the other subregions with expected activity is then presented in alphabetical order. More detailed information on the situation of influenza and other respiratory viruses can be obtained from the PAHO/WHO Regional Influenza Update, published weekly, on the PAHO/WHO website at: www.paho.org/influenzareports.

In the **Southern Cone sub-region²**, increased influenza and severe-acute respiratory infection (SARI) activity were reported throughout the since epidemiological week (EW) 13 of 2019, with a predominance of influenza A(H1N1)pdm09 in most of the countries.

In **Argentina**, an early start of influenza season has been recorded since EW 13 of 2019 with influenza A(H3N2) predominating. SARI activity measured by hospitalizations is at moderate levels but increasing.

In **Chile**, the influenza season appears to have started earlier in comparison to previous years with an increasing trend in influenza activity since EW 17 of 2019; and a steep increase recorded between EW 21 and EW 22 of 2019. Influenza A(H1N1)pdm09 predominated with cocirculation of influenza A(H3N2) and influenza B (B/Yamagata lineage predominated). SARI activity, as measured by hospitalizations and intensive care unit (ICU) admissions, is elevated in comparison to previous seasons, and influenza deaths recorded are alike the same period of previous years.

In **Paraguay**, as of EW 22 of 2019, influenza activity continues elevated with influenza A(H1N1)pdm09 predominance. A steep increase was recorded between EW 21 and 22 of

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¹ The information presented in this update is from the data reported by Ministries of Health, National Influenza Centers (NICs) of Member States via PAHO/WHO platforms (i.e., FluNet and FluID), information from weekly reports, and bulletins published online by Ministries of Health or shared directly with PAHO/WHO.

² Argentina, Brazil, Chile, Paraguay, and Uruguay.

2019. SARI activity measured by hospitalizations and intensive care unit (ICU) admissions is at elevated levels in comparison to previous seasons and the number of influenza deaths recorded is below expected levels in comparison to previous years.

In **Brazil**, as of EW 22 of 2019, influenza activity remained low with influenza A(H1N1)pdm09 predominating; SARI activity measured by hospitalizations is elevated in comparison to previous year.

In **Uruguay**, influenza activity is at low levels but increasing. In EW 21 of 2019, SARI activity measured by hospitalizations and intensive care unit admissions is at moderate levels in comparison to previous seasons.

In the **Andean sub-region³**, as of EW 22 of 2019, low influenza activity has been reported with influenza A(H3N2) predominance.

In **Bolivia**, influenza and severe acute respiratory infections (SARI) have been increasing slowly in recent weeks but remained at expected levels.

In **Colombia**, influenza and SARI activity are at low levels but increasing; respiratory syncytial virus (RSV) activity remained at moderate levels as of EW 22 of 2019.

In **Ecuador**, influenza percent positivity increased overpassing the alert threshold although the percentage of SARI cases remained at expected levels.

In **Peru**, as of EW 22 of 2019, low influenza and SARI activity with moderate RSV activity was reported.

In **Venezuela**, influenza activity was low with influenza A(H1N1)pdm09 predominance.

In the **Caribbean sub-region**⁴, from EW 4 to EW 16 of 2019, influenza activity was elevated in the with predominance of influenza A(H1N1)pdm09. As of EW 22 of 2019, influenza and SARI activity are low and continue to decrease; influenza A(H3N2) predominated in recent weeks, except for Puerto Rico, whereas of EW 16 of 2019, influenza activity is at moderate levels compared to previous season in 2018.

In the **Central American sub-region**⁵, as of EW 22 of 2019 influenza and SARI activity remained at low levels in most countries with influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B co-circulating.

Nevertheless, in **Costa Rica**, as of EW 22 of 2019 influenza activity is at moderate levels with an increasing trend since EW 17 of 2019; influenza A(H1N1)pdm09 and influenza A(H3N2) cocirculate. SARI activity, as measured by hospitalizations, intensive care unit (ICU) admissions and deaths, increased slightly in recent weeks but remained within expected levels.

Moreover, in **Guatemala**, influenza activity was reported as moderate between EW 9 and 17 of 2019, however, detections have been trending downward since EW 18 of 2019; SARI activity remained at low levels as of EW 22 of 2019.

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³ Bolivia (Plurinational State of), Colombia, Ecuador, Peru, and Venezuela (Bolivarian Republic of).

⁴ Aruba, the Bahamas, Barbados, Bermuda, the Cayman Islands, Cuba, Curacao, Dominica, the Dominican Republic, French Guiana, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

⁵ Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

In the **North American sub-region**⁶, as of EW 22 of 2019, influenza activity remained at low levels and decreased to inter-seasonal levels.

Recommendations

PAHO/WHO reiterates its recommendations to Member States regarding to surveillance, clinical management of patients, implementation of infection prevention control measures in health care services, and communication with the public about preventive measures. These areas are important to address considering the early intense season seen in countries in the Southern Hemisphere.

Following is a summary of the main recommendations for surveillance, clinical management, communication, and vaccination.

Surveillance

PAHO/WHO recommends continuing to strengthen influenza like illness (ILI) surveillance systems and prioritizing SARI surveillance to monitor epidemiological behavior, viral circulation, trends, clinical severity and affected groups at risk.

To accompany indicator-based surveillance, PAHO/WHO recommends Member States implement event-based surveillance. Event-based surveillance is the organized and rapid capture of information about events that may pose a potential risk to public health. The information may come from rumors and/or other ad-hoc reports transmitted through formal (pre-established routine information systems) or informal -not pre-established routine information systems (i.e., media, direct communication from health care workers or non-governmental organizations) channels. Event-based surveillance is a functional component of the early warning and response mechanism.⁷

Respiratory events that are unusual should be investigated immediately. Unusual events include influenza cases with atypical clinical progression; acute respiratory infection associated with animal disease exposure or observed in travelers to areas prone to novel influenza virus emergence; SARI among health care professionals; or clusters of influenza viral infection outside the typical circulation season.

As part of routine surveillance, and for the etiological confirmation of unusual cases, nasopharyngeal and oropharyngeal specimens (or bronchial lavage in severe cases) should be obtained for the detection of respiratory viruses. Always prioritize the laboratory analysis of the most serious cases, especially fatal cases (deaths) where tissue samples from respiratory tract are also recommended (if possible). All the biosafety measures for respiratory pathogens should be granted. The technical guidelines and diagnostic algorithms of the National Influenza Center or the national reference laboratory responsible for laboratory surveillance should be followed?

⁶ Canada, Mexico, and the United States of America.

⁷ World Health Organization. Early detection, assessment and response to acute public health events: Implementation of Early Warning and Response with a focus on Event-Based Surveillance. Interim Version. WHO/HSE/GCR/LYO/2014.4. Geneva: WHO: 2014. Available at: http://www.who.int/ihr/publications/WHO HSE GCR LYO 2014.4/en/

Influenza-positive specimens from severe cases or from those with unusual presentations must be sent to the PAHO/ WHO Collaborating Center at the United States Centers for Disease Control and Prevention (CDC) in Atlanta for further characterization, according to WHO guidelines¹⁰. Un-subtypeable samples of influenza A must also be sent immediately to the PAHO/WHO Collaborating Center at the U.S. CDC.

Clinical management

Recommendations for the clinical management of patients with severe respiratory disease indicated in previous PAHO/WHO Epidemiological Alerts and Updates⁸ on Influenza continue to apply.

Groups at higher risk of complications related to influenza infection include children less than two years of age; adults over 65 years; pregnant or post-partum women; people with underlying clinical morbidity (e.g., chronic lung disease, asthma, cardiovascular diseases, chronic kidney disease, chronic liver disease, diabetes mellitus, neurological conditions such as central nervous system injuries and delayed cognitive development); people with immunosuppression (e.g., HIV/AIDS or due to medications); and people with morbid obesity (body mass index greater than 40). In these cases, the administration of antiviral treatment (oseltamivir) at the start of symptoms should be considered if influenza infection is suspected. Treatment should be initiated even before having laboratory confirmation of influenza infection as treatment is more successful if started early. Additionally, any person with severe or progressive clinical presentation of respiratory illness should be treated with antivirals as soon as influenza is suspected.

For more details see the paper, "Considerations and interim recommendations for the clinical management of human infection with the pandemic influenza A(H1N1)pdm09. PAHO/WHO expert consultation," available at: https://bit.ly/2FdOpWA.

Communication

Seasonal influenza is an acute viral infection that spreads easily from person to person. Seasonal influenza viruses circulate worldwide and can affect anyone from any age group. Influenza A (H1N1)pdm09, which caused the 2009 pandemic, circulates annually and is now considered a seasonal influenza strain. Influenza vaccination prior to the start of seasonal virus circulation remains the best preventive measure against severe influenza.

The public should be informed that the main mode of transmission of influenza is by interpersonal contact. Hand washing is the most efficient way to decrease transmission. Knowledge about "respiratory etiquette" also helps to prevent transmission.

People with fever should avoid going to workplaces or public places until the fever subsides. Similarly, school-age children with respiratory symptoms and / or fever should stay at home and not go to school.

⁸ PAHO/WHO Epidemiological Alerts on Influenza are available at: www.paho.org/epialerts

² Manual for the laboratory diagnosis and virological surveillance of influenza. 2011. Available at: https://www.who.int/influenza/gisrs_laboratory/manual_diagnosis_surveillance_influenza/en/

¹⁰ Operational Guidance on Sharing Seasonal Influenza viruses with WHO Collaborating Centres (CCs) under the Global Influenza Surveillance and Response System (GISRS). 2017. Available at: www.who.int/influenza/gisrs laboratory/seasonal sharing guide/en/

Vaccination

Influenza vaccination prevents complications related to this disease. PAHO/WHO encourages Member States to continue vaccinating individuals to avoid serious cases and deaths.

PAHO/WHO recommends pregnant women have the highest priority in receiving influenza vaccines due to their vulnerability to complications from the disease. Other risk groups, in addition to pregnant women, that should be given priority for vaccination are the elderly, children 6 to 59 months of age, people with chronic medical conditions, and health care workers. Vaccination against influenza is not a strategy to control outbreaks, but rather a preventive measure to avoid complications related to influenza.

Related Links

- Influenza update. World Health Organization. Available at:
 http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html
- Influenza Reports. Pan American Health Organization / World Health Organization. Available at: http://www.paho.org/influenzareports