



# Epidemiological Alert

## Beginning influenza season in the Caribbean and South America

28 March 2014

As the Southern Hemisphere influenza season in the Caribbean and South America is approaching, the Pan American Health Organization / World Health Organization (PAHO/WHO) recommends Member States start preparing for influenza season that might be similar to the one seen in the Northern Hemisphere. Actions should include provision of seasonal influenza vaccination to reach the most at risk populations, increasing public awareness of influenza prevention methods, strengthening influenza surveillance, and strengthening of health services.

### Situation summary

To prepare for the upcoming influenza season in the Caribbean and South America, it is important to consider the 2013-2014 influenza season in the Northern Hemisphere. The season was characterized by the predominance of influenza A(H1N1)pdm09<sup>1</sup> and mainly young adults were affected.

In Canada, the predominant virus was influenza A(H1N1)pdm09. Of more than 18,000 cases for which information on age and influenza type/sub-type was available, 55% occurred in individuals between the ages of 20 and 64 years. Of the influenza-associated hospitalizations recorded between the start of the season<sup>2</sup> and epidemiological week (EW) 11 of 2014, there were 1,250 influenza-associated hospitalizations, 88% of which were due to influenza A(H1N1)pdm09. Of those hospitalized, 73% had not been vaccinated against influenza. More than three-quarters of the hospitalizations and approximately 80% of patients admitted to Intensive Care Units (ICU) were 45 years or older.

In Mexico, influenza A(H1N1)pdm09 virus was predominant as well. From the beginning of the season to EW 12 of 2014, 6,627 influenza cases were recorded. Of these cases, 5,241 (79%) were confirmed as influenza A(H1N1)pdm09, and a majority occurred among those aged 30 to 44 years. Of 704 deaths recorded, 531 (75%) occurred in the 40 to 59 year age group, 68% had at least one comorbid condition, and 90% of them had not been vaccinated against influenza.

In the United States of America, influenza A(H1N1)pdm09 virus was also predominant and approximately 61% of influenza hospitalizations occurred among those aged 18 to 64 years. This number is higher than that recorded in the previous influenza season when influenza A(H3N2) predominated. During the 2013-2014 influenza season, 25 to 64 year-olds accounted for almost 60% of influenza deaths, exceeding numbers from the last three

<sup>1</sup> Influenza A(H1N1)pdm09 is a seasonal virus, signifying that it will continue to circulate like other influenza viruses.

<sup>2</sup> Epidemiological week 40 of 2013.

influenza seasons when they accounted for 18% (2012-2013), 30% (2011-2012) and 47% (2010-2011) of deaths. During the 2009-2010 pandemic, 63% of deaths occurred in those between 25 and 64 years of age.

In summary, the 2013-2014 influenza season in the Northern hemisphere was characterized by a predominant circulation of influenza A(H1N1)pdm09 and, according to available data, primarily affected young adults. These trends might not be replicated in the same manner in the Southern hemisphere; however, they offer possible lines of action for countries to prepare themselves.

## **Recommendations**

The Pan American Health Organization / World Health Organization (PAHO/WHO) recommends that those Member States of the Caribbean and South America where the influenza season is beginning, start to prepare for an influenza season potentially similar to that observed in the Northern hemisphere. In order to prevent hospitalizations and avoid deaths, seasonal influenza vaccination efforts should be accelerated to reach the most-at-risk populations. In addition, public awareness campaigns on influenza prevention methods should be implemented. PAHO/WHO also recommends strengthening health services to address the possible increase in patients, and ensure appropriate clinical management and an adequate supply of antivirals and surveillance activities.

## **Vaccination**

PAHO/WHO recommends that, due to the increased vulnerability to developing complications, pregnant women be given the highest priority in influenza vaccination programs. Additional at-risk groups include, in no particular order, children aged 6–59 months (especially those between 6 months to 2 years old), the elderly, individuals with specific chronic medical conditions, and health-care workers.

Countries already implementing influenza vaccination programs targeting any of these groups should continue to do so, also making sure to incorporate immunization of pregnant women.

## **Information for the Public**

PAHO/WHO recommends that Member States strengthen their public communication and outreach efforts from the earliest point of the onset of the influenza season. The public should be informed of what seasonal influenza is, what its risks are, how it can be prevented, and how it is treated. The public should be reminded of the fact that the primary form of influenza transmission is through interpersonal contact. Given this, it is also important to:

- Remind the public that washing hands is the most effective way of reducing transmission.
- Disseminate “respiratory etiquette” knowledge to help prevent transmission of the virus.
- Recommend that persons with fever not leave their home to go to work or to other public places until the fever has subsided.

## Epidemiological and Laboratory Surveillance

Routine influenza surveillance activities should be continued, and should include both epidemiologic and laboratory surveillance. Epidemiological surveillance should include outpatient influenza-like illness (ILI) and hospital admissions for severe acute respiratory illness (SARI). In the latter cases, samples should be taken and analyzed within the capacity of the national laboratory system.

To understand, identify and characterize influenza virus circulation, PAHO/WHO recommends following SARI surveillance guidelines, as indicated in the PAHO/WHO SARI Surveillance Protocol.

All specimens that cannot be subtyped and those with inconclusive or unexpected subtyping results should be forwarded, as soon as possible, to the WHO Collaborating Center for influenza (United States Centers for Disease Control and Prevention) for additional testing.

As in the past, before the onset of seasonal influenza season in the Northern hemisphere, PAHO/WHO reminds Member States to continue to apply the recommendations made in the 31 May 2013 Epidemiological Update on Influenza, available at:

[http://www.paho.org/hq/index.php?option=com\\_docman&task=doc\\_view&gid=21763&Itemid=](http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=21763&Itemid=)

## Response and Organization of Health Services

Health services have to prepare for a possible increase in the number of patients with respiratory symptoms. For this, detailed guidelines to assist countries in their preparation were elaborated by PAHO/WHO in 2009 and are available at:

[http://new.paho.org/hq/index.php?option=com\\_content&view=article&id=3353&Itemid=2470&to=2256&lang=en](http://new.paho.org/hq/index.php?option=com_content&view=article&id=3353&Itemid=2470&to=2256&lang=en).

One element of utmost impact on health services organization is the availability of a proper triage system. Its objective is to identify suspected cases in a timely manner in order to reduce the risk of viral transmission in outpatient and clinical care services (patients and health workers).

General measures for triage in primary care are to: a) identify a space that is adequate for dealing with cases of respiratory infection; b) make available personal protection equipment (PPE) to health care workers, according to the complexity of care; and C) rigorously implement standard and droplet precautions in clinical care.

## Patient Management

Influenza should be suspected in any febrile patient, hospitalized with respiratory symptoms.

Some population groups are more susceptible to developing complications from influenza infection, and require special attention. Such groups include children less than 2

years of age, adults over 65 years of age, pregnant women, and individuals with underlying clinical conditions. In these cases antiviral treatment (e.g. oseltamivir) should be considered at the onset of symptoms.

Treatment should be initiated even in the absence of influenza laboratory confirmation. Treatment success rates are highest when treatment is administered early. For additional information, refer to:

[http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_view&gid=8223&Itemid=](http://new.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=8223&Itemid=)

## Infection Control

Adequate measures must always be implemented to prevent and control infections in all situations (standard and droplet precautions). When implementing aerosol generating procedures (such as bronchoscopy or any other procedure that produces respiratory tract aspiration), it is necessary for health care workers to utilize particulate- filtering face piece respirators (N95, FFP2 or equivalent), eye protection, gown and gloves. Also, the procedure should take place in room that can be naturally or mechanically ventilated, in accordance with the WHO Guidelines.<sup>3</sup>

## References

1. CDC Reports Flu Hit Younger People Particularly Hard This Season. United States Centers for Disease Control and Prevention. Last updated 20 March 2014. Available at: <http://www.cdc.gov/media/releases/2014/p0220-flu-report.html>
2. Weekly Influenza Surveillance report prepared by the Influenza Division. Center for Disease Control and Prevention. Available at: <http://www.cdc.gov/flu/weekly/>
3. Influenza report of the Public Health Agency of Canada. FluWatch. Available at: <http://www.phac-aspc.gc.ca/fluwatch/index-eng.php>
4. Weekly epidemiological report on influenza. General Directorate of Epidemiology. Ministry of Health of Mexico. Available at: <http://www.epidemiologia.salud.gob.mx/informes/2014/influenza/influenza-semanas.html>
5. PAHO/WHO Operational Guidelines for intensified national severe acute respiratory illness (SARI) surveillance, 2011. Available at: [http://new.paho.org/hq/index.php?option=com\\_content&view=article&id=3353&Itemid=2470&to=2256&lang=en](http://new.paho.org/hq/index.php?option=com_content&view=article&id=3353&Itemid=2470&to=2256&lang=en)

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<sup>3</sup> [http://www.who.int/csr/resources/publications/infection\\_control/en/index.html](http://www.who.int/csr/resources/publications/infection_control/en/index.html)

## Related links:

- Influenza Update. World Health Organization. Available at:  
[http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/index.html](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html)
- Regional surveillance of influenza and other respiratory viruses. Available at:  
[http://www.paho.org/hq/index.php?option=com\\_content&view=article&id=3352&Itemid=2469&to=2246&lang=en](http://www.paho.org/hq/index.php?option=com_content&view=article&id=3352&Itemid=2469&to=2246&lang=en)