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## Editorial

Annually, Influenza Virus causes epidemics with varying severity. Important cause of mortality and morbidity in childhood and older peoples, generating a high indices of hospitalization in this age, it is also involved in a high level of absenteeism in work active population, bring economic losses. Since 2009, when the world suffered H1N1 Pandemic, this virus has received less attention in the non-scientific media, but not by scientists, they are working hard in surveillance and researches.

Annual, influenza epidemics has the peaking in the cold months. From a healthcare system point of view, predictions of the magnitude and timing of upcoming influenza epidemic could greatly assist in early preparations and developing mitigation strategies. For this, there are a constant surveillance in several countries evaluating flu activities, like antigenic characterization, circulating strains, seasonality, antiviral resistance, and vaccine efficiency.

The last report of CDC (week 45-November 2-8, 2014), show the circulation in the United States, of Flu A (H1N1) pdm09 (pH1N1), with the predominance of A/Texas/50/2012-like (H3N2) strain, a component of the 2014-2015 Northern Hemisphere influenza vaccine. Both B/Victoria and B/Yamagata are circulating now. However to date, results of antigenic characterization are available only for B/Victoria lineage viruses, that were characterized as B/Brisbane/60/2008-like, which is included as an influenza B component of the 2014-2015 Northern Hemisphere quadrivalent influenza vaccine (Data from 2014-15 Influenza Season-Week 45, ending November 8, 2014).

The pH1N1 and H3N2 circulating, remains with high levels of resistance to adamantane and rimantadine. But all circulating virus were susceptible to Oseltamivir and Zanamivir with sporadic resistance found in pH1N1 and H3N2 (Data from 2014-15 Influenza Season-Week 45, ending November 8, 2014).

## Notices about Avian Flu

Human infections with a new avian influenza A (H7N9) virus were first reported in China in March 2013. Most of these infections are

believed to result from exposure to infected poultry or contaminated environments, as H7N9 viruses have also been found in poultry in China. While some mild illnesses in human H7N9 cases have been seen, most patients have had severe respiratory illness, with about one-third resulting in death. No evidence of sustained person-to-person spread of H7N9 has been found, though some evidence points to limited person-to-person spread in rare circumstances. The first case outside of China was in Malaysia and was reported on February 12, 2014 (Data from 2014-15 Influenza Season-Week 45, ending November 8, 2014).

Data, like this generating by all sentinels of all continents, are compiled and help design the vaccine of next season, and feed both the basic and applied researches in understanding the viral biology and provide bases for development of new diagnosis tools.

In parallel with this work, we have thousands of basic or applied research being published, bringing innovations to support and network surveillance of influenza and bringing us new diagnostic tools [1-4].

## References

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