

Influenza and Influenza-like Illness Surveillance

MMWR Week 4
January 25-31, 2009

Media Talking Points

Activity Level: **Local Activity**

- Definition: Increased ILI in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI, OR 2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions.

Surveillance Data:

- Influenza-like Illness (ILI) Sentinel Providers reported 1.14% of patients had ILI signs and symptoms. Influenza-like Illness is defined as a fever ($\geq 100^{\circ}$ F), **and** cough and/or sore throat. Temperature can be measured in the physician's office or at home.
- Over-the-counter (OTC) sales experienced a statistically significant deviation from the expected in one region.
- Emergency department visits experienced a statistically significant deviation from the expected in five regions.
- ODH lab reported 14 positive confirmed isolates (total through 2/3/09). Circulating Strains: (12) Influenza A/ (H1N1), (2) Influenza B/Malaysia-like.
- Influenza-associated hospitalizations reported indicate 10 positive results by culture confirmation (total through 2/3/09): (9) Influenza A, (1) Influenza B.
- Incidence of 2009 confirmed influenza-associated hospitalizations = 49 (total through 2/3/09).
- No pediatric influenza-associated mortality reports have been made (through 2/3/09).

2008-09 Season Cumulative Influenza Results reported by ODH Lab by County*

| County | # A/(H1N1) | # A/(H3N2) | # B/Florida-like | # B/Malaysia-like | Total |
|----------------------|------------|------------|------------------|-------------------|-----------|
| Cuyahoga | 2 | | | 1 | 3 |
| Franklin | 4 | | | 1 | 5 |
| Hamilton | 1 | | | | 1 |
| Knox | 3 | | | | 3 |
| Stark | 2 | | | | 2 |
| | | | | | |
| Season Totals | 12 | 0 | 0 | 2 | 14 |

*Lab data based on county of provider that submitted specimen.

Analysis Considerations:

- No significant or confirmed geographic clustering of any data was detected.
- No outbreaks are indicated.
- Influenza-associated hospitalization became a reportable condition on 1/1/09. Therefore, only cases that were entered after 1/1/09 will be considered for analysis purposes.
- Care should be given when relying on results of point of care rapid diagnostic test kits during times when influenza is not circulating widely. The sensitivity and specificity of these tests vary and the positive predictive value may be low outside of the time of peak influenza activity. Therefore, the Ohio Department of Health Laboratory (ODHL) conducts culture confirmation for influenza testing, and these results are used in conjunction with other data sources to determine Ohio's influenza activity level each week. Viral culture tests that are reported for cases of influenza-associated hospitalizations will also be taken into consideration when determining influenza activity levels.

Oseltamivir Resistance among circulating influenza A (H1N1) viruses:

On December 19, 2008 the Centers for Disease Control and Prevention (CDC) released a Health Advisory, in which they issued interim recommendations for the use of influenza antiviral medications for the 2008-2009 influenza season. The changes made to the current recommendations were in response to increasing evidence of oseltamivir (Tamiflu) resistance among circulating influenza A (H1N1) viruses.

Based on the new recommendations, the selection of antiviral treatment is now largely dependent on which influenza virus subtypes are circulating in our area. Therefore, up to date influenza surveillance data is critical. Please recommend that local clinicians, hospitals and laboratories submit their facility's next 3-5 positive influenza specimens to the Ohio Department of Health Laboratory for viral culture and subtyping. These specimens will help identify which influenza viruses are circulating in Ohio and will support decision-making for treatment options under the new interim recommendations. If needed, contact Shannon Page for more information on specimen collection and shipping instructions. Shipping instructions and the virus isolation form that must be included with each specimen submitted to the ODHL have also been posted on OPHCS in the 'Seasonal Influenza' folder, in the subfolder labeled 'Flu Specimen Shipping and Submission.'

National activity levels and more information can be found at the following CDC pages:

- <http://www.cdc.gov/flu/weekly/usmap.htm>
- <http://www.cdc.gov/flu/>

If you have any further questions or comments about surveillance for seasonal influenza for the State of Ohio, please contact Shannon Page at Shannon.Page@odh.ohio.gov or by telephone at (614) 466-0456.