Weeks 27-28: June 30 - July 13, 2013

Summary

The Florida Department of Health (FDOH) monitors multiple surveillance systems such as the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) notifiable disease reports (Merlin), National Respiratory and Enteric Virus Surveillance System (NREVSS), EpiCom, and Florida ILINet in order to track influenza activity in the state.

Novel influenza:

- One outbreak of four confirmed cases of influenza A H3N2v infection was reported in Indiana. Influenza A H3N2v infection in humans was first identified in the Unites States in 2011. Since then, CDC reports 325 cases and one fatality.
- The H3N2v strain originates from influenza that circulates in pigs. Nearly all persons infected with H3N2v have reported direct or indirect contact with swine. No sustained human to human transmission has been identified.
- No cases of H3N2v infection have been reported in Florida. More information can be found at: http://www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm
- For current information on novel or pandemic strains of influenza (including avian or swine origin influenza A) visit http://www.doh.state.fl.us/Environment/medicine/arthoviral/zoonoses/Zoonotic-avian.html.

State:

- Emergency department (ED) and urgent care center (UCC) influenza-like illness (ILI) visits have decreased overall in recent weeks. In EDs and UCCs reporting to ESSENCE-FL, the statewide percent of emergency department visits for ILI is at typical levels for this time of year in all regions of Florida.
- Influenza virus is circulating at very low levels in Florida, which is typical for this time of year. In weeks 27 and 28, three specimens tested PCR positive for influenza A 2009 H1N1 and one specimen tested PCR positive for influenza A H3 at the Bureau of Public Health Laboratories (BPHL).
- Nationally (including Florida), almost all circulating influenza is a good match for the vaccine.
- One ILI outbreak was reported in an Orange County nursing home.
- The preliminary estimated number of Florida deaths due to pneumonia or influenza in week 28 is lower than the seasonal baseline, based on previous years' data. Estimated deaths due to pneumonia and influenza are identified using preliminary death certificate data viewed in ESSENCE-FL.

TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 28

<table>
<thead>
<tr>
<th>Measure</th>
<th>Difference from previous week</th>
<th>Current week 28</th>
<th>Previous week 27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of total visits to participating outpatient ILINet providers for ILI</td>
<td>▼ 0.4</td>
<td>0.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Percent of emergency department and urgent care center visits (from ESSENCE-FL) due to ILI</td>
<td>▼ 0.1</td>
<td>1.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Number of laboratory specimens that were positive for influenza (out of total number tested)</td>
<td>▲ 4</td>
<td>4 (of 21)</td>
<td>0 (of 7)</td>
</tr>
<tr>
<td>Number of ILI outbreaks reported in EpiCom</td>
<td>No Change</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

NREVSS Respiratory Virus Surveillance

The National Respiratory and Enteric Virus Surveillance System (NREVSS) collects data from laboratories around the country on a weekly basis. NREVSS monitors temporal and geographic patterns of six common respiratory viruses. Florida has over 45 participating laboratory facilities.

**FIGURE 1** shows the percentage of positive tests for multiple respiratory viruses reported by NREVSS-participating laboratories in Florida.

The six respiratory viruses summarized in Figure 1 are:

- RSV
- Parainfluenza 1-3 (HPIV)
- Adenovirus
- Human Metapneumo Virus
- Rhinovirus
- Influenza

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July 18, 2013

Posted on the Bureau of Epidemiology website: http://www.doh.state.fl.us/floridaflu/

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ESSENCE-FL collects data daily from 180 hospital emergency departments (ED) and urgent care centers (UCC). These data are processed into 11 different syndrome categories based on the patient’s chief complaint. One of the categories is ILI, which is composed of chief complaints that include the words “influenza” or “flu,” or complaints that contain fever plus cough or sore throat.

**FIGURE 2** shows ESSENCE-FL data on ILI visits to EDs and UCCs as a percentage of all visits.

Overall activity for influenza-like illness reported in ESSENCE is near expected levels for this time of year.

One hundred five ESSENCE-FL participating facilities are able to provide discharge disposition data for their ED visits going back to week 40, 2010. Using this information, the percent of ED visits for ILI that result in hospitalization can be calculated. The highest percentage of admissions is in the 55+ years old age group. The low number of visits in the 55+ age group causes variability in the ILI admission percentage from week to week.

**FIGURE 3** shows the percentage of ED and UCC visits for ILI that resulted in hospitalization, by age group.

Of persons 55 years and older that visited an emergency department with ILI complaints, between 30% and 35% were admitted.

**Florida Pneumonia and Influenza Mortality Surveillance**

ESSENCE-FL now displays electronic vital statistics death record data from all 67 Florida counties. For pneumonia and influenza surveillance, death record literals are queried in ESSENCE-FL using a free-text query that searches for references to pneumonia and influenza on death certificates. Any mention of pneumonia or influenza in the death certificate literals, with certain exceptions, is counted as a pneumonia and influenza death. Current season pneumonia and influenza death numbers are preliminary estimates, and may change as more data are received. The most recent data available are displayed here. ESSENCE-FL vital statistics death records data are currently considered to be complete through week 27, 2013.

**FIGURE 4** shows pneumonia and influenza deaths for all Florida counties by age group, Week 40, 2010 - Week 25, 2013, as reported into ESSENCE-FL.

For week 27 (ending July 6, 2013) there were:
- 173 preliminary estimated pneumonia and influenza deaths reported
- Upper bound of 95% confidence interval for prediction: 176 deaths
- **No excess deaths**.

Death records data reported into ESSENCE-FL are currently considered to be complete through week 27, 2013.