Weeks 31-32: July 28 - August 10, 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:

- Illinois, Indiana and Ohio have reported 16 confirmed cases of influenza A H3N2v infection since January 1, 2013. Influenza A H3N2v infection in humans was first identified in the United States in 2011. Since then, CDC has reported 325 cases and one fatality.
- 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.
- The H3N2v strain originates from influenza that circulates in pigs. Nearly all people infected with H3N2v have reported direct or indirect contact with swine. No sustained human to human transmission has been identified.
- 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/arboviral/zoonoses/Zoonotic-avian.html.

State:

- Emergency department (ED) and urgent care center (UCC) influenza-like illness (ILI) visits remain low. In EDs and UCCs reporting to ESSENCE-FL, the statewide percent of ED 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 31 and 32, eight specimens tested positive for influenza the Bureau of Public Health Laboratories (BPHL). Seven specimens were PCR positive for influenza A 2009 H1N1 and one specimen was PCR positive for influenza A (not yet subtyped).
- Nationally (including Florida), almost all circulating influenza is a good match for the vaccine.
- The preliminary estimated number of Florida deaths due to pneumonia or influenza in week 31 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 ILI Activity for Week 32

<table>
<thead>
<tr>
<th>Measure</th>
<th>Difference from previous week</th>
<th>Current week 32</th>
<th>Previous week 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of total visits to participating outpatient ILINet providers for ILI</td>
<td>No Change</td>
<td>0.6%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Percent of emergency department and urgent care center visits (from ESSENCE-FL) due to ILI</td>
<td>No Change</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Number of laboratory specimens that were positive for influenza (out of total number tested)</td>
<td>No Change</td>
<td>4 (of 7)</td>
<td>4 (of 15)</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 six respiratory viruses reported by NREVSS-participating laboratories in Florida.

The six respiratory viruses summarized in Figure 1 are:
- RSV
- Parainfluenza 1-3
- Adenovirus
- Human Metapneumo Virus (HMPV)
- Rhinovirus
- Influenza
ESSENCE-FL Syndromic Surveillance Summary-Statewide

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 ILI reported in ESSENCE-FL is near expected levels for this time of year.

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 31, 2013.

**FIGURE 3** shows pneumonia and influenza deaths for all Florida counties by age group, Week 40, 2010 - Week 32, 2013, as reported into ESSENCE-FL.

For week 31 (ending August 3, 2013), there were:
- 159 preliminary estimated pneumonia and influenza deaths reported
- Upper bound of 95% confidence interval for prediction: 174 deaths
- No excess deaths

Influenza and ILI Outbreaks

**TABLE 2 : Summary of Florida ILI Outbreaks by Facility Type, Week 21, 2013-Week 31, 2013**

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number of Outbreaks</th>
<th>Implicated Viruses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correctional facility or jail</td>
<td>2</td>
<td>Two outbreaks were due to influenza A 2009 H1N1</td>
</tr>
<tr>
<td>Nursing home</td>
<td>1</td>
<td>One outbreak was due to influenza A H3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>Two outbreaks were due to influenza A 2009 H1N1&lt;br&gt;One outbreak was due to influenza A H3</td>
</tr>
</tbody>
</table>

Map 1: Influenza and ILI outbreaks by County, Week 21, 2012 - Week 32, 2013 as Reported by 9:00 a.m. August 14, 2013

Three influenza or ILI outbreaks have been reported into EpiCom since week 21, 2013.