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), the Florida Pneumonia and Influenza Mortality Surveillance System (FPIMSS), 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.

State:
- Influenza-like illness (ILI) activity is low in many of our monitoring systems. Influenza activity levels seen in ESSENCE and ILINet are similar to previous non-pandemic years at this time.
- The Bureau of Laboratories (BOL) has seen an increase in influenza test submissions and positive results in recent weeks. In week 34, two specimens tested positive for 2009 H1N1 influenza A and one was positive for influenza A H3. In week 35, one specimen was positive for influenza A unspecified.
- RSV activity has been increasing in recent weeks, which corresponds with the beginning of the normal RSV season in Florida. RSV is a virus that causes mild respiratory illness in adults and children, and more severe illness in infants and young children. No other pathogens are currently causing significant levels of influenza-like illness in Florida.

TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 35

<table>
<thead>
<tr>
<th>Measure</th>
<th>Difference from previous week</th>
<th>Current week</th>
<th>Previous week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of visits to ILINet providers for ILI</td>
<td>▼ 0.3</td>
<td>0.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Percent of emergency department visits (from ESSENCE) due to ILI</td>
<td>▲ 0.2</td>
<td>1.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Percent of hospital admissions (from ESSENCE) due to ILI</td>
<td>No Change</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Number of laboratory specimens that were positive for influenza (out of total number tested)</td>
<td>▼ 2</td>
<td>1 (of 12)</td>
<td>3 (of 25)</td>
</tr>
<tr>
<td>Number of ILI outbreaks reported in Epi Com</td>
<td>No Change</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of Pediatric Influenza Deaths Reported</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 laboratory facilities around the country on a weekly basis. NREVSS monitors temporal and geographic patterns of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses and rotavirus. 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
**ESSENSE Syndromic Surveillance Summary-Statewide**

The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) currently collects data daily from 145 hospital emergency departments (ED). Data are processed into 11 different syndrome categories based on the patient’s chief complaint. One category is influenza-like illness (ILI), which comprises chief complaints that include "influenza" or "flu," or either fever and cough or sore throat.

**FIGURE 3** shows ESSENCE data on ILI visits to Emergency Departments as a percentage of all ED Visits.

*Overall activity for influenza-like illness reported in ESSENCE has risen to slightly higher than expected levels for this time of year.*

**Florida Pneumonia and Influenza Mortality Surveillance**

The Florida Department of Health started the Florida Pneumonia and Influenza Mortality Surveillance System (FPIMSS) in 2006 in order to more timely assess the number of pneumonia and influenza deaths occurring in the state. This system was modeled on the CDC’s 122 cities surveillance system. Each week, the vital statistics office in the 24 most populous counties in Florida manually reviews the death certificates received for the previous week. Any mention of pneumonia or influenza on the death certificate, with certain prescribed exceptions, is counted as a pneumonia or influenza death. These counts, by age group, are then reported to the state via the EpiGateway web-interface. We are now using a Serfling model to more accurately calculate our predicted values for weekly pneumonia and influenza mortality.


For week 33 (ending September 8, 2010) there were:
- 111 deaths reported
- Upper bound of 95% confidence interval for prediction: 148 deaths
- NO excess deaths

22 out of 24 participating counties reported their data for week 35.