Summary

Weeks 31-32: August 2 to August 15, 2015

National influenza activity:
- In Minnesota, the first case of human infection with influenza A H3N2 variant virus (H3N2v) in the US in 2015 (week 29) occurred after direct exposure to swine. No evidence of human-to-human transmission of H3N2v or any influenza-like illness among the case’s contacts was reported. Swine influenza viruses do not normally infect humans, although sporadic human infections with swine influenza viruses (e.g., H3N2v, H1N1v, H1N2v) have occurred. More information can be found here: [http://www.cdc.gov/flu/swineflu/](http://www.cdc.gov/flu/swineflu/).
- Highly pathogenic avian influenza (HPAI) H5 viruses have been identified in U.S. backyard and commercial flocks of birds during the spring and summer of 2015. HPAI H5 has not been identified in Florida birds, but identifications are anticipated. No humans have been identified with HPAI infection in Florida or the rest of the nation.

State influenza and influenza-like illness (ILI)$^1$ activity:
- Emergency department (ED) and urgent care center (UCC) ILI visits reported into ESSENCE-FL (Florida’s syndromic surveillance system) remain low, which is typical for this time of year.
- In week 31, the preliminary estimated number of deaths due to pneumonia and influenza in Florida is slightly higher than levels seen in previous years at this time.
- In weeks 31 and 32, 20 specimens were submitted to Bureau of Public Health Laboratories (BPHL) for influenza testing. Two specimens (19%) tested positive for influenza A (H3) by polymerase chain reaction (PCR).

### Table 1. Summary of Florida ILI Activity, Weeks 31 through 32, 2015

<table>
<thead>
<tr>
<th>Measure</th>
<th>Difference From Previous Week</th>
<th>Current Week 32</th>
<th>Previous Week 31</th>
<th>Data Source$^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of ED and UCC visits due to ILI</td>
<td>N/A</td>
<td>0.0%</td>
<td>1.0%</td>
<td>ESSENCE-FL</td>
</tr>
<tr>
<td>Percent of laboratory specimens positive for influenza</td>
<td>▲ 28.6%</td>
<td>28.6%</td>
<td>0.0%</td>
<td>Laboratory Surveillance</td>
</tr>
<tr>
<td>Number of reported ILI outbreaks</td>
<td>N/A</td>
<td>0.0%</td>
<td>0.0%</td>
<td>EpiCom</td>
</tr>
</tbody>
</table>

The percent of ILI visits to ESSENCE-FL participating facilities remains low and is slightly below levels seen in previous years at this time.

ED and UCC Visits for ILI$^3$ by Flu Season

The figure to the left shows the percent of visits to EDs and UCCs with chief complaints of ILI, as reported by participating ESSENCE-FL facilities (N=243) from week 40, 2011 through week 32, 2015, accessed August 19, 2015.

1 Influenza-like illness (ILI) is considered to be a fever >100°F AND sore throat and/or cough in the absence of another known cause.
2 The Florida Department of Health (DOH) uses many different surveillance systems to measure influenza activity. A summary of all these systems can be found on our website at: [floridahealth.gov/floridaflu](http://www.floridahealth.gov/floridaflu)
3 As of April 30, 2015, FLS was added to list of abbreviations in ESSENCE-FL and is now expanded to Flu Like Symptoms. As a result of this change, any visit with a chief complaint containing FLS will now code into the ILI syndrome and the Influenza subsyndrome. Historical records have been reprocessed to reflect this change.
The figure below shows P&I deaths for all Florida counties by age group from week 40, 2012 through week 32, 2015, as reported into ESSENCE-FL. Vital statistics death records data are currently considered to be complete through week 31, 2015.

The total number of P&I deaths reported in week 31 is slightly higher than levels seen in previous years at this time.

168 preliminary estimated P&I deaths have been reported for week 31, 2015.

Based on a multi-year regression model to predict P&I mortality in the Florida population, no excess deaths were reported for week 31, 2015. The upper bound of the 95% confidence interval for prediction is 202 deaths.

Three outbreaks of influenza or ILI have been reported since week 20, 2015.

The map to the left shows the number of outbreaks reported in each Florida county since week 20, 2015, as reported by 11 a.m. August 19, 2015. In the last 13 weeks, three outbreaks have been reported into EpiCom.

Influenza and ILI outbreaks during the summer months are particularly interesting as they may suggest unusual or severe influenza and ILI activity. This unusual activity might indicate or bring attention to a change in the virus or the introduction of a new virus. Florida’s age, ethnic, and socioeconomic demographics, as well as the large number of out-of-state and international visitors put our state at risk of novel virus introduction, underscoring the importance of surveillance for influenza and ILI outbreaks even during the summer months.

The figure below shows the percentage of positive tests for respiratory viruses reported by the National Respiratory and Enteric Viral Surveillance System (NREVSS) and participating and validated laboratories using electronic lab reporting (ELR) with FDOH. Currently, 11 facilities are reporting data for the 2014-2015 season; nine reporting through NREVSS and two reporting through ELR.

Rhinovirus and respiratory syncytial virus (RSV) are circulating at this time. RSV activity has increased notably in the last week. These viruses circulate annually in Florida and also regularly fluctuate between weeks, thus this trend is expected.