

## Summary

Weeks 35-36: August 28 - September 10, 2016

**State influenza and influenza-like illness (ILI)<sup>1</sup> activity<sup>2</sup>:**

- Influenza and ILI activity have increased slightly in Florida. We see these increases every year, at the beginning of the school year.
- **No influenza-associated pediatric deaths were reported in weeks 35-36.**
  - Eight influenza-associated pediatric deaths have been reported since the start of the 2015-2016 influenza season. While rare, Florida receives reports of influenza-associated pediatric deaths each season. **Annual vaccination remains the best way to protect children against influenza.**
- In weeks 35 and 36, 13 of the 42 (31%) specimens submitted to the Bureau of Public Health Laboratories (BPHL) for influenza testing were PCR positive for influenza: two influenza A 2009 (H1N1), one influenza A (H3), and six influenza B Yamagata lineage.

**Enterovirus D68 (EV-D68) activity:**

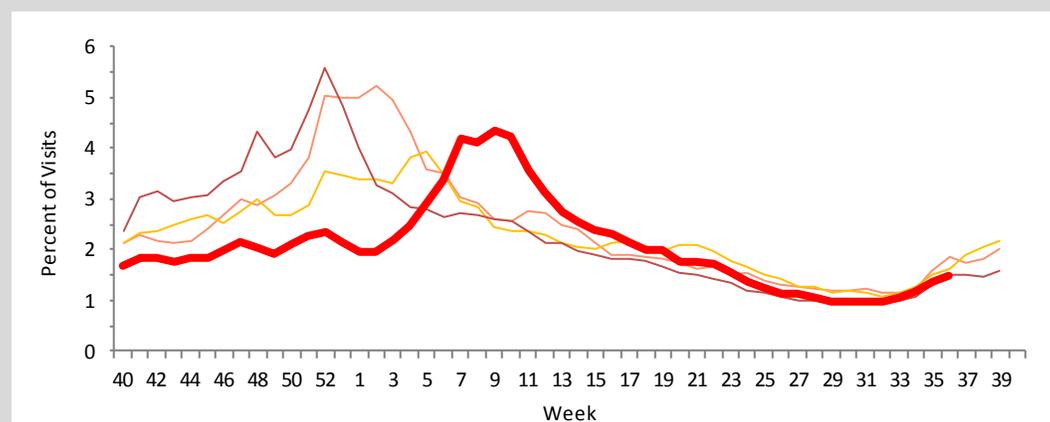
- **Eight cases of EV-D68 have now been identified in Florida since February 2016.** These eight cases were identified in different regions of the state and represent the full spectrum of disease. These are the first identifications of EV-D68 in the United States since the fall of 2014.
  - To learn more about EV-D68, please visit: <http://www.floridahealth.gov/diseases-and-conditions/d68>.

**National influenza activity:**

- Influenza viruses continue to circulate at low levels nationally.
- **On August 25, 2016, the 2016-2017 influenza vaccine recommendations were published in a Centers for Disease Control and Prevention (CDC) Morbidity and Mortality Weekly Report.** To learn more, please visit: [http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s\\_cid=rr6505a1\\_w](http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s_cid=rr6505a1_w).
  - For the 2016-2017 season, CDC recommends use of inactivated influenza vaccines (IIV) or recombinant influenza vaccines (RIV). **Live attenuated influenza vaccines (LAIV) should not be used during the 2016-2017 season.** This recommendation follows poor or relatively lower effectiveness of LAIV between 2013 and 2016.
- While highly pathogenic avian influenza (HPAI) H5 virus identification in birds are expected later this year, that risk is lower in the summer months. HPAI H5 has not been identified in Florida birds yet, but identifications are anticipated. No human HPAI infections have been identified in Florida or other states. To learn more about HPAI, please visit: [www.floridahealth.gov/novelflu](http://www.floridahealth.gov/novelflu).

ED and UCC Visits for ILI<sup>3</sup> by Flu Season

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness



The figure to the left shows the percent of visits for ILI from ED and UCC chief complaint data for ESSENCE-FL participating facilities (n=273) from week 40, 2012 through week 36, 2016.

**The percent of ILI visits to ESSENCE-FL participating facilities increased in recent weeks but remains similar to levels seen in previous years at this time.**

— 2015-2016      — 2013-2014  
— 2014-2015      — 2012-2013

<sup>1</sup> Influenza-like illness (ILI) is defined as a fever  $\geq 100^{\circ}\text{F}$  AND sore throat and/or cough *in the absence* of another known cause.

<sup>2</sup> 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: [www.floridahealth.gov/floridaflu](http://www.floridahealth.gov/floridaflu) and on page 3.

<sup>3</sup> As of April 30, 2015, "FLS" was added to the 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 queries. Historical records have been reprocessed to reflect this change.

Posted September 14, 2016 on the Bureau of Epidemiology (BOE) website: [www.floridahealth.gov/floridaflu](http://www.floridahealth.gov/floridaflu)

Produced by the BOE, Florida Department of Health

Contributors: Heather Rubino, PhD; Julia Munroe, MS; Brandon Ramsey, MS; Leah Eisenstein, MPH; Lea Heberlein-Larson, MPH; Valerie Mock, BS; Marshall Cone, MS; Pam Colarusso, MSH; Janet Hamilton, MPH.

## P&I Deaths from Vital Statistics by Age Group

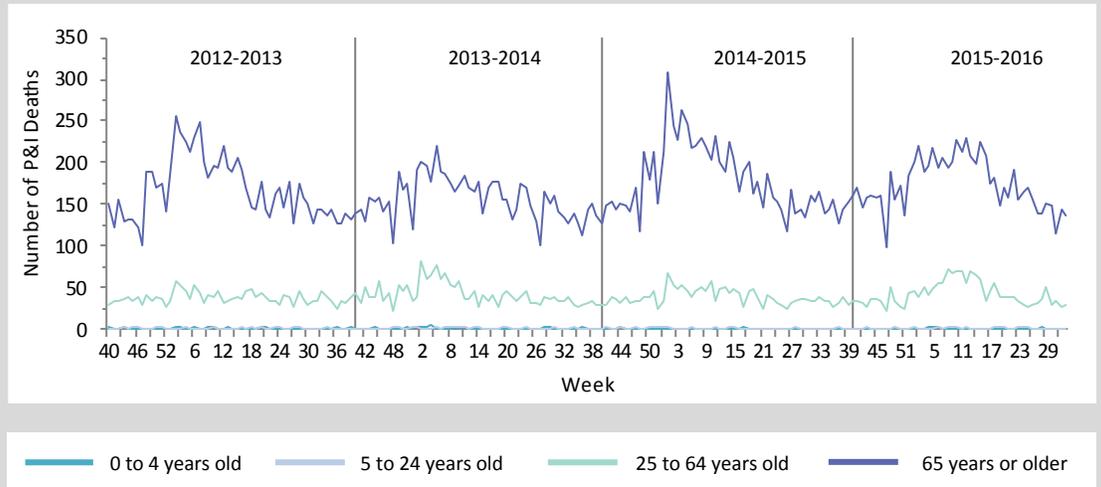
P&I = pneumonia and influenza

The figure below shows the number of preliminary P&I deaths by age group from week 40, 2012 through week 35, 2016, as reported into ESSENCE-FL. *Vital statistics death records data are currently considered to be complete through week 35, 2016.*

The total number of P&I deaths reported in week 35 for all age groups is similar to levels seen in previous years at this time.

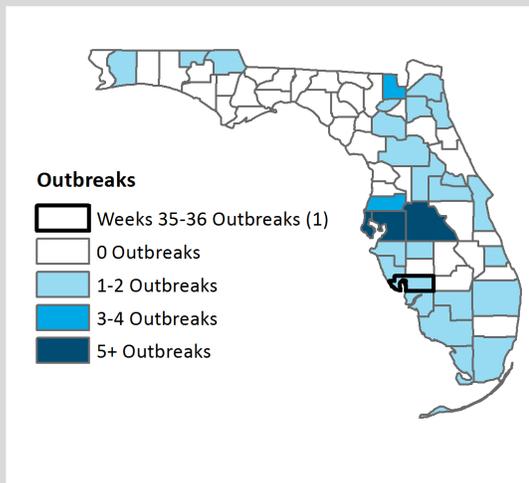
**165 preliminary estimated P&I deaths were reported for week 35, 2016.**

Based on a multi-year regression model to predict P&I death counts in the Florida population, no excess deaths were reported for week 35, 2016. The upper bound of the 95% confidence interval for prediction is 190 deaths.



## Influenza and ILI Outbreaks

ILI = influenza-like illness



The map to the left shows influenza and ILI outbreaks by county from week 40, 2015 (beginning on October 4, 2015) through week 36, 2016 (ending on September 10, 2016). **One outbreak of ILI was reported between weeks 35 and 36.** Sixty-four outbreaks of influenza and ILI have been reported into EpiCom so far in the 2015-2016 season.

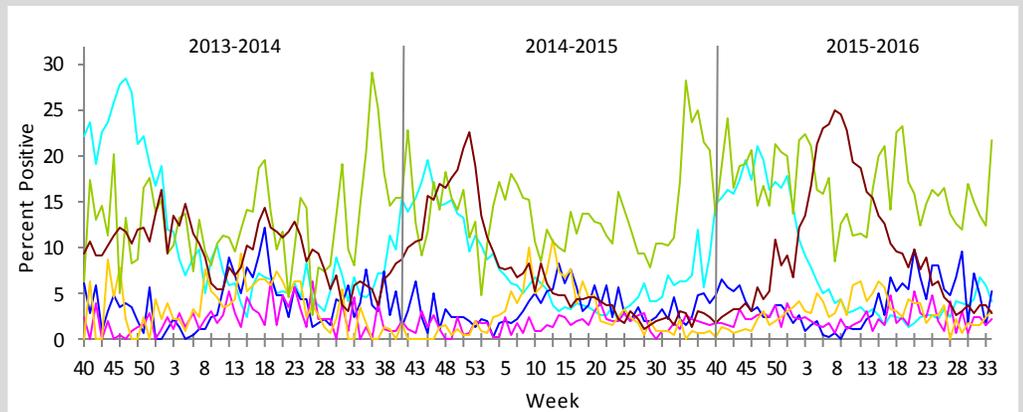
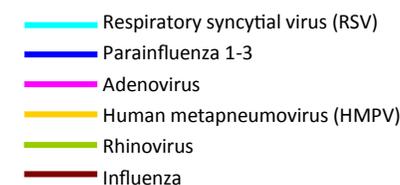
### Charlotte County:

A local childcare facility reported three infants diagnosed with respiratory syncytial virus (RSV) at local health care providers. No specimens were forwarded to BPHL for confirmatory testing. Infection control measures were reviewed with facility leadership. This investigation is ongoing.

## Laboratory Viral Respiratory Surveillance

The figure below shows the percentage of laboratory specimens testing positive for eight common respiratory viruses reported by the National Respiratory and Enteric Virus Surveillance System (NREVSS) and participating validated laboratories reporting results via electronic laboratory reporting (ELR) to the Florida Department of Health (DOH). Currently, 10 facilities are reporting data for the 2015-2016 season.

**In week 36, the percent of specimens testing positive for rhinovirus increased considerably. Similar increases in rhinovirus detection have been identified in previous years at this time.**



# Florida ILI Surveillance System Summary

## **ESSENCE-FL Syndromic Surveillance and Vital Statistics Portal**

- Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) measures trends in ILI visits from emergency departments (ED) and urgent care clinics (UCC) and influenza mortality using death certificates from the Bureau of Vital Statistics. Participating EDs and UCCs (n=273) electronically transmit ED and UCC visit data into ESSENCE-FL daily or hourly.
- For statewide and regional data on influenza-like illness, visits are counted as ED or UCC visits to participating facilities that include symptoms consistent with influenza-like illness in patient chief complaints.
- For pneumonia and influenza (P&I) surveillance, death record literals are queried using a free-text query that searches for references to P&I on death certificates. Any mention of P&I in the death certificate literals, with certain exceptions, is counted as a P&I death.

## **Bureau of Public Health Laboratories (BPHL)**

- BPHL performs confirmatory testing and subtyping on surveillance specimens from ILINet sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations, and medical examiners.
- For county-specific laboratory data, please refer to the Flu Lab Report in Merlin. For instructions on how to use the Flu Lab Report, please see the Guide to Flu Lab Report on the Bureau of Epidemiology website at [www.floridahealth.gov/diseases-and-conditions/influenza/\\_documents/flulabreportguide.pdf](http://www.floridahealth.gov/diseases-and-conditions/influenza/_documents/flulabreportguide.pdf).

## **Outbreak Reporting in EpiCom**

- EpiCom tracks influenza and ILI outbreak investigations by county health departments (CHDs). Reports by CHDs include the type of respiratory disease causing the outbreak and settings where outbreaks are occurring. CHD epidemiologists report outbreaks of influenza and ILI into EpiCom, Florida's online disease communication system.
- Outbreaks are defined as two or more cases of influenza or ILI in a specific setting.

## **Laboratory Viral Respiratory Surveillance**

- The National Respiratory and Enteric Virus Surveillance System (NREVSS) and Electronic Laboratory Reporting (ELR) collect data from laboratories in Florida on a weekly basis and monitor temporal and geographic patterns of six commonly circulating respiratory viruses. NREVSS data is collected by the Centers for Disease Control and Prevention (CDC) and ELR data is collected by the Florida Department of Health (DOH).

## **Case-Based Influenza Surveillance**

- Influenza-associated pediatric deaths (reported into Merlin, DOH's reportable disease surveillance system)
- Influenza due to novel or pandemic strains (reported into Merlin)