

Summary

Weeks 27-28: July 3-16, 2016

State influenza and influenza-like illness (ILI)¹ activity²:

- In recent weeks, emergency department (ED) and urgent care center (UCC) ILI visits reported into ESSENCE-FL² (Florida's syndromic surveillance system) decreased and remained similar to levels observed in previous seasons at this time.
- In recent weeks, the preliminary estimated number of deaths due to pneumonia and influenza in Florida decreased and is similar to levels observed in previous seasons at this time.
- **No influenza-associated pediatric deaths were reported in weeks 27-28.**
 - 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 27 and 28, three of five (38%) specimens submitted to the Bureau of Public Health Laboratories (BPHL²) for influenza testing were PCR positive for seasonal strains of influenza: two influenza B Yamagata lineage and one influenza B Victoria lineage.

Enterovirus D68 (EV-D68) activity:

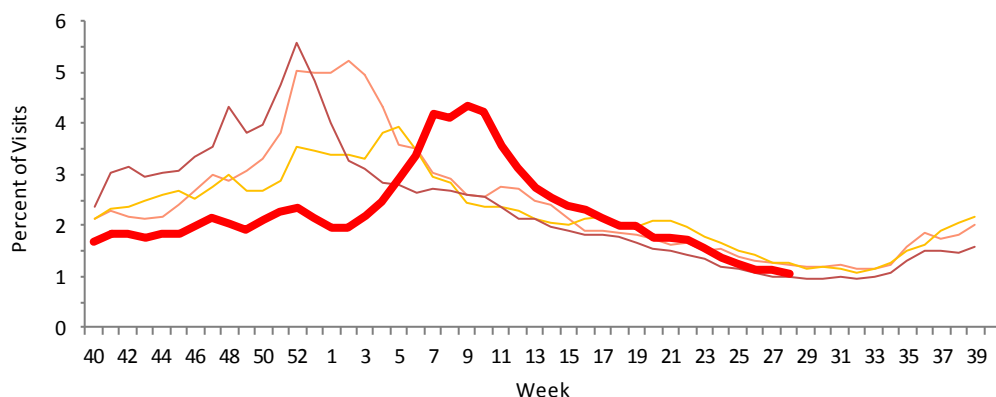
- **Four cases of EV-D68 have been identified in Florida since February 2016.** The four cases were identified in different regions of the state and represent the full spectrum of disease. These represent the first identifications of EV-D68 in the United States since the fall of 2014.
 - To learn more 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.
- **The Center for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) voted in favor of an interim recommendation that live attenuated influenza vaccine (LAIV) should not be used during the 2016-2017 influenza season.** This recommendation follows data indicating poor or relatively lower effectiveness of LAIV between 2013 and 2016. **ACIP continues to recommend annual influenza vaccination with either the inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV) for everyone aged six months and older.**
- While highly pathogenic avian influenza (HPAI) H5 virus identification in birds are expected later this year, that risk is lower in the summer months. Influenza (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.

ED and UCC Visits for ILI³ 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=265) from week 40, 2012 through week 28, 2016.

The percent of ILI visits to ESSENCE-FL participating facilities decreased in recent weeks and is similar to levels seen in previous seasons at this time.

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

¹ 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.

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: www.floridahealth.gov/floridaflu and on page 3.

³ 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 July 20, 2016 on the Bureau of Epidemiology (BOE) website: www.floridahealth.gov/floridaflu

Produced by the BOE, Florida Department of Health

Contributors: Heather Rubino, PhD; Julia Munroe, MS; Ellen Dugan, MPH; 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

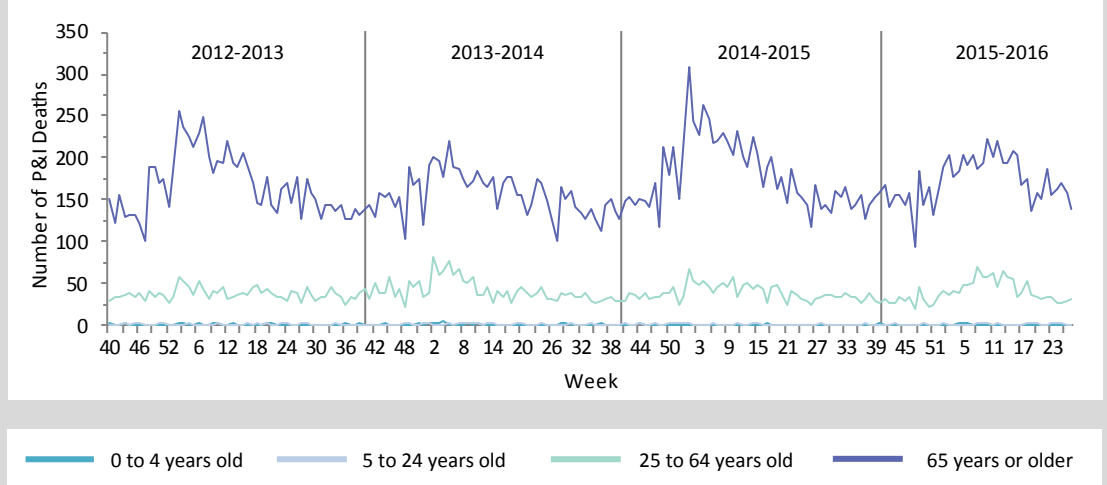
P&I = pneumonia and influenza

The figure below shows the number of preliminary P&I deaths by age group from week 40, 2012 through week 27, 2016, as reported into ESSENCE-FL. *Vital statistics death records data are currently considered to be complete through week 27, 2016.*

The total number of P&I deaths reported in week 27 for all age groups is similar to levels seen in previous seasons at this time.

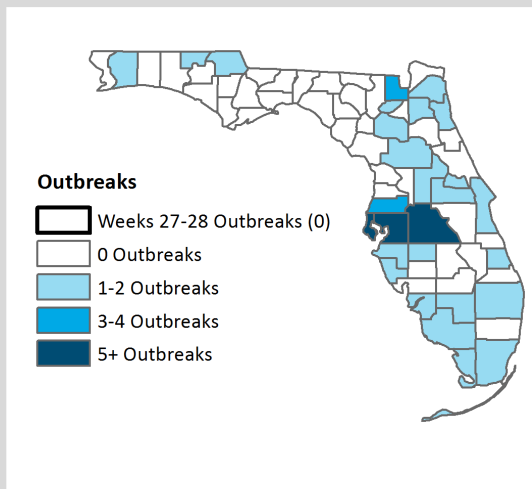
170 preliminary estimated P&I deaths were reported for week 27, 2016.

Based on a multi-year regression model to predict P&I death counts in the Florida population, no excess deaths were reported for week 27, 2016. The upper bound of the 95% confidence interval for prediction is 207 deaths.



Influenza and ILI Outbreaks

ILI = influenza-like illness

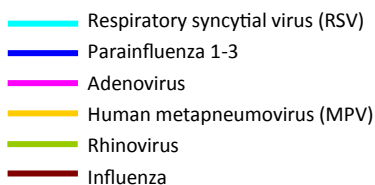
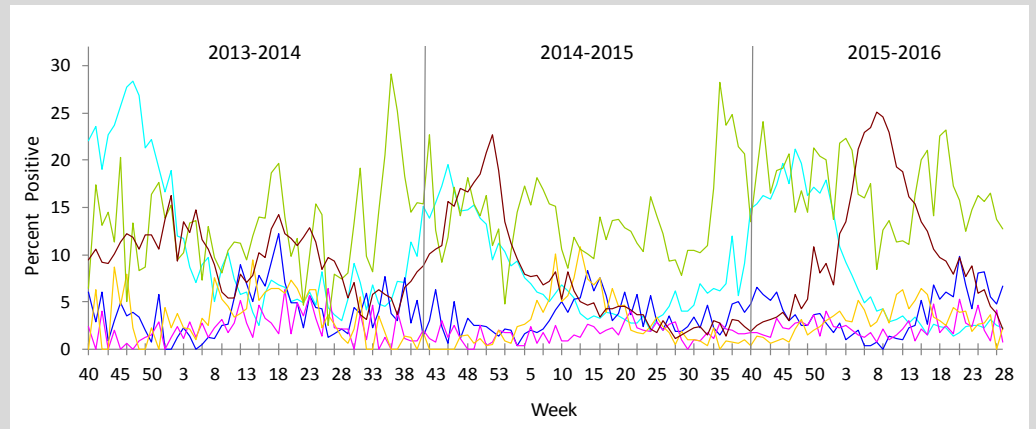


The map to the left shows influenza and ILI outbreaks by county from week 40, 2015 through week 26, 2016. **No outbreaks of influenza or ILI were reported in weeks 27-28;** 62 outbreaks of influenza and ILI have been reported into EpiCom² so far in the 2015-2016 season.

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 (NREVSS²) and participating validated laboratories reporting results via electronic laboratory reporting (ELR²) to DOH. Currently, 10 facilities are reporting data for the 2015-2016 season.

In week 28, the percent of specimens testing positive for MPV and parainfluenza 1-3 increased. These viruses circulate annually in Florida and fluctuate regularly between weeks.



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=265) 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.

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 (Merlin)
- Influenza due to Novel or Pandemic Strains (Merlin)