

## Summary

Weeks 27-28: July 1-14, 2018

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

- **Influenza continues to circulate at low levels across the state.** While activity has remained low overall, it is important to note that influenza continues to circulate throughout the summer months in Florida and may cause outbreaks.
- No new outbreaks were reported over the last two weeks (27-28); 509 outbreaks of influenza and ILI have been reported since October 2017. Specimen collection for outbreaks reported throughout the summer is critical, as these outbreaks can serve as an early indicator for what is to come in the next influenza season.
- In weeks 27-28, the percent of emergency department (ED) and urgent care center (UCC) visits for ILI decreased and was similar to levels observed at this time in previous years.
- In week 27, the preliminary estimated number of deaths due to pneumonia and influenza decreased and was below levels observed in previous seasons at this time.
- **No new influenza-associated pediatric deaths were reported in weeks 27-28.** Eight influenza-associated pediatric deaths have been confirmed since the start of the 2017-18 influenza season. **Annual vaccination remains the best way to protect children against influenza.**
- In weeks 27-28, four (17%) of the 23 specimens submitted to the Bureau of Public Health Laboratories (BPHL) for influenza testing were positive by real-time reverse transcription polymerase chain reaction (RT-PCR) for influenza: two influenza A 2009 (H1N1), one influenza A unspecified, and one influenza B unspecified.
  - In recent weeks, the majority of influenza viruses identified at BPHL have been influenza A 2009 (H1N1) or influenza B Yamagata lineage viruses, but the total number of specimens testing positive for influenza at BPHL remained low.

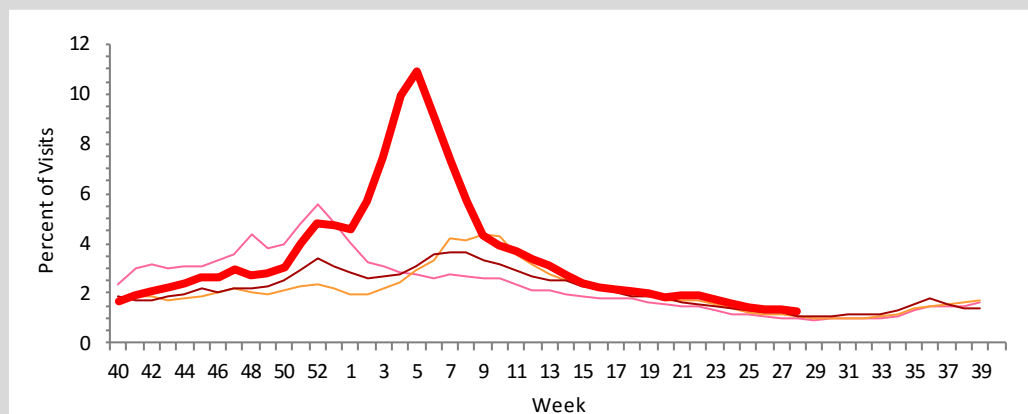
**National influenza activity:**

- Influenza viruses continue to circulate at low levels nationally.
- Consistent with trends observed in Florida, the Centers for Disease Control and Prevention (CDC) has observed the cocirculation of influenza A 2009 (H1N1) and influenza B Yamagata viruses in recent weeks. The total number of influenza-positive specimens reported to CDC by public health laboratories nationwide remained low.

## ED and UCC Visits for ILI by Flu Season

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

The figure below shows the percent of visits for ILI from ED and UCC chief complaint data for ESSENCE-FL participating facilities (n=325) from week 40, 2014 to week 28, 2018.



In week 28 (ending on July 14, 2018), the percent of visits to EDs and UCCs for ILI decreased and was similar to levels observed at this time in previous years.

— 2017-18      — 2015-16  
— 2016-17      — 2014-15

<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> In Florida, only influenza-associated pediatric deaths, cases of novel influenza infection, and outbreaks of influenza or ILI are reportable. The Florida Department of Health uses many different surveillance systems to measure influenza activity. A summary of all these systems can be found on our website: [www.floridahealth.gov/floridaflu](http://www.floridahealth.gov/floridaflu) and on page 4.

Posted July 18, 2018 on the Bureau of Epidemiology website: [www.floridahealth.gov/floridaflu](http://www.floridahealth.gov/floridaflu)

Produced by the Bureau of Epidemiology, Florida Department of Health

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

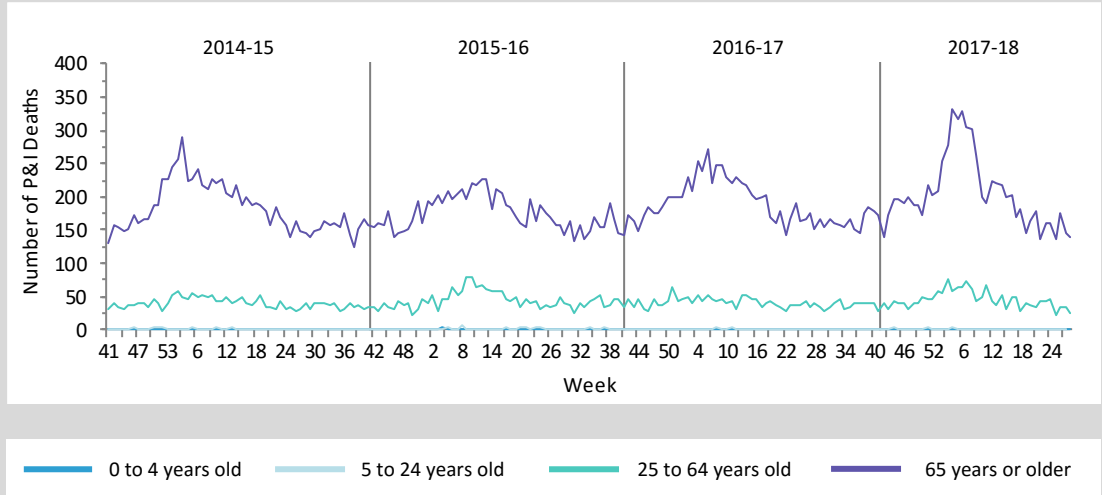
P&I = pneumonia and influenza

The figure below shows the number of preliminary P&I deaths by age group from week 40, 2014 (beginning on October 1, 2017) through week 27, 2018, as identified in ESSENCE-FL. Vital statistics death records data are currently considered to be complete through week 27, 2018 (ending on July 7, 2018).

The number of P&I deaths observed in week 27 was similar to or below levels seen at this time in previous years.

**A total of 166 preliminary P&I deaths were observed for week 27, 2018.**

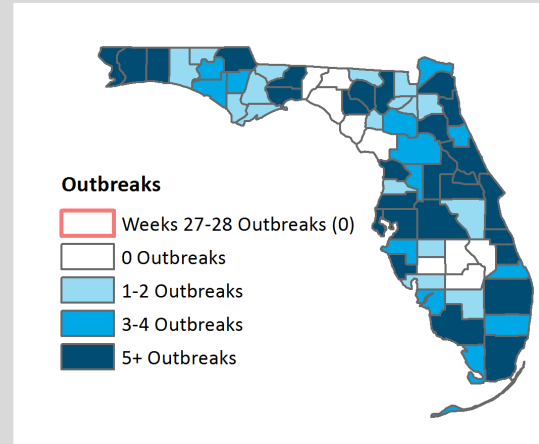
Based on a multi-year regression model to predict P&I death counts in the Florida population, no excess deaths were observed for week 27, 2018. The upper bound of the 95% confidence interval for prediction is 234 deaths.



## Influenza and ILI Outbreaks

ILI = influenza-like illness

### Influenza and ILI Outbreaks by County Week 40, 2017 through Week 28, 2018



The map to the left shows influenza and ILI outbreaks by county from week 40, 2017 through week 28, 2018 (ending on July 14, 2018).

**In weeks 27-28, no new outbreaks were reported. A total of 509 outbreaks have been reported since the start of the 2017-18 season.** More outbreaks were reported this season than in previous seasons on record. An average of 91 total influenza or ILI outbreaks were reported during the last five influenza seasons.

Since the start of the 2017-18 season, outbreaks occurred in the following settings: 65 (13%) in assisted living facilities, 86 (17%) in nursing facilities, 98 (19%) in other long-term care facilities, 2 (0.4%) in adult daycares, 85 (17%) in child daycares, 133 (26%) in schools/camps, 18 (4%) in correctional facilities/juvenile detention centers, 6 (1%) in hospitals, 2 (0.4%) in shelters, and 14 (3%) in other settings.

Specimen collection for outbreaks reported throughout the summer is critical, as these outbreaks can serve as an early indicator for what is to come in the next influenza season.

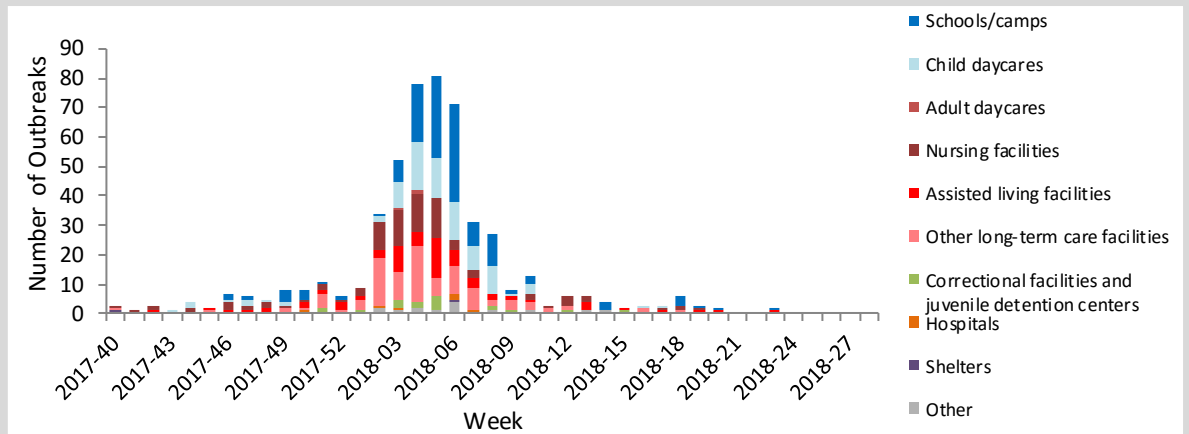
## Influenza and ILI Outbreaks by Facility Type

ILI = influenza-like illness

The figure below shows the distribution of influenza and ILI outbreaks by facility type as reported in Merlin, week 40, 2017 through week 28, 2018.

**No outbreaks of influenza or ILI were reported in weeks 27-28.**

Of the 509 total outbreaks reported since week the start of the 2017-18 season, 467 (92%) have been in facilities serving people at higher risk for complications due to influenza infection (children and adults  $\geq 65$  years).



## RSV and Other Respiratory Virus Surveillance

RSV = respiratory syncytial virus

### RSV activity:

- In week 28 (ending on July 14, 2018), the percent of children <5 years old diagnosed with RSV at EDs and UCCs decreased slightly, however, levels remained above those observed in previous seasons at this time.
- Florida's southeast region is currently in RSV season.
- No new RSV-associated pediatric deaths were identified in week 28. One RSV-associated pediatric death has been identified so far this year. Premature infants and children <2 years with certain underlying medical conditions are at higher risk for complications from RSV infection. Prophylaxis is available for children who qualify. For more information, contact your physician.
- To learn more about RSV in Florida, please visit: [www.floridahealth.gov/rsv](http://www.floridahealth.gov/rsv).

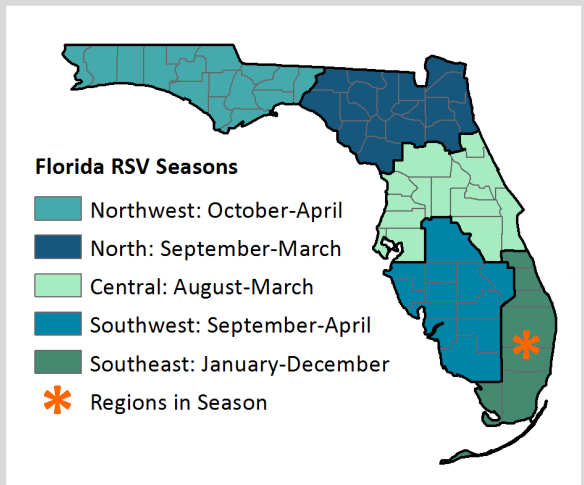
### RSV seasonality:

- RSV activity in Florida typically peaks between November and January, though activity can vary dramatically by region.
- Despite some regions being out of season, RSV continues to circulate at low levels throughout the states.
- Florida's RSV season is longer than the rest of the nation and has distinct regional seasonality. For more information on RSV seasonality in Florida, see the American Academy of Pediatrics' 2015 Red Book.

### Other respiratory virus surveillance:

- In weeks 27-28, the percent of specimens testing positive for rhinovirus remained higher than other respiratory viruses under surveillance.

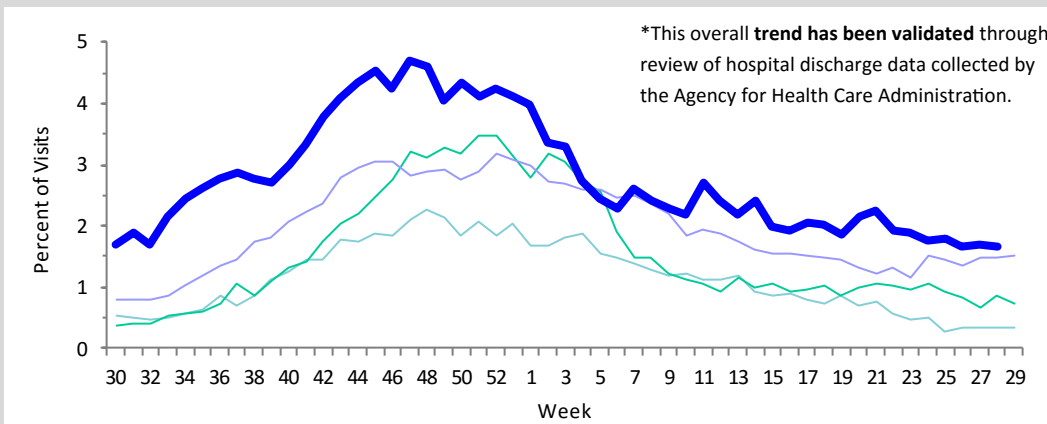
## Florida Respiratory Syncytial Virus (RSV) Regional Season Breakdown



## ED and UCC Visits for RSV by Children <5 Years Old

ED = emergency department, UCC = urgent care center, RSV = respiratory syncytial virus

The figure below shows the percent of visits to EDs and UCCs with discharge diagnoses that include RSV or RSV-associated illness, as reported by participating ESSENCE-FL facilities (n=325), week 30, 2014 through week 28, 2018.



In week 28, the percent of children diagnosed with RSV at participating EDs and UCCs decreased slightly. Levels remained above those observed in previous seasons at this time.

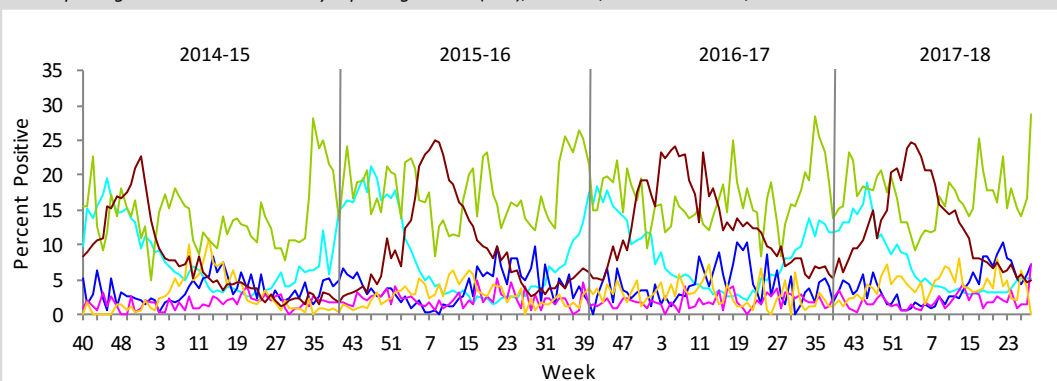
— 2017-18      — 2015-16  
— 2016-17      — 2014-15

## Laboratory Viral Respiratory Surveillance

The figure below shows the percent of laboratory results testing positive for eight common respiratory viruses, as reported by the National Respiratory and Enteric Virus Surveillance System (NREVSS) and participating validated laboratories reporting via electronic laboratory reporting to DOH (n=9), week 40, 2014 to week 28, 2018.

In recent weeks, the percent of specimens testing positive for rhinovirus increased and remained higher than other respiratory viruses under surveillance.

— RSV  
— Parainfluenza 1-3  
— Adenovirus  
— Human metapneumovirus  
— Rhinovirus  
— Influenza



# 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), Florida's statewide syndromic surveillance system, is used to measure trends in influenza-like illness (ILI) visits from emergency departments (EDs) and urgent care clinics (UCCs). Participating EDs and UCCs (n=325) electronically transmit visit data into ESSENCE-FL daily or hourly.
- For statewide and regional data on ILI, ED and UCC visits with chief complaints that include the words "influenza" or "flu" are counted along with chief complaints that include the word "fever" and one or both of the following: "cough" or "sore throat."
- For pneumonia and influenza (P&I) surveillance, death record literal causes of death are examined using a free-text query that searches for references to P&I on death certificates from the Bureau of Vital Statistics. Any mention of P&I in the death certificate literals, with certain exceptions, is counted as a P&I death.
- For respiratory syncytial virus (RSV) surveillance, ED and UCC visits with RSV or RSV-associated illness included in discharge diagnoses are counted. Death record literals are also queried using a free-text query that searches for references to RSV on death certificates for children <18 years old. Any mention of RSV in the death certificate literals, with certain exceptions, is counted as an RSV-associated pediatric death.

## Bureau of Public Health Laboratories (BPHL)

- BPHL performs confirmatory testing and subtyping on surveillance specimens from sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations, and medical examiners.
- For county health departments (CHDs) seeking 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 Merlin

- Merlin, Florida Department of Health (DOH)'s reportable disease surveillance system, is used to track influenza and ILI outbreak investigations by CHDs. CHD epidemiologists document outbreaks of influenza and ILI in Merlin, including type of respiratory disease causing the outbreak and settings where outbreaks occurred.
- Outbreaks are defined as two or more cases of influenza or ILI in a specific setting.

## Laboratory Viral Respiratory Surveillance

- National Respiratory and Enteric Virus Surveillance System (NREVSS) and electronic laboratory reporting (ELR) data from Florida laboratories are used to monitor temporal and geographic patterns of six commonly circulating respiratory viruses on a weekly basis. NREVSS data are collected by the Centers for Disease Control and Prevention and ELR data are collected by DOH.

## Case-Based Influenza Surveillance

- Death in a child whose laboratory-confirmed influenza infection has been identified as contributing to the child's death is reportable in Florida. Influenza-associated pediatric deaths are documented by CHDs in Merlin.
- In addition, an individual of any age infected with a novel or pandemic influenza strain(s) is reportable in Florida. Pandemic strain influenza cases are documented by CHDs in Merlin.
- For more information about reportable diseases, please visit [www.Floridahealth.gov/diseasereporting](http://www.Floridahealth.gov/diseasereporting).