

Summary

Weeks 29-30: July 15-28, 2018

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

- **Influenza continues to circulate at low levels across the state.** This low level of circulation can cause sporadic outbreaks.
- Two new outbreaks were reported over the last two weeks (29-30); 510 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 29-30, the percent of emergency department (ED) and urgent care center (UCC) visits for ILI remained the same and was similar to levels observed at this time in previous years.
- In week 29, 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 29-30.** 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 29-30, five (24%) of the 21 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: three influenza A 2009 (H1N1), one influenza A unspecified, and one influenza B Yamagata lineage.
 - 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.

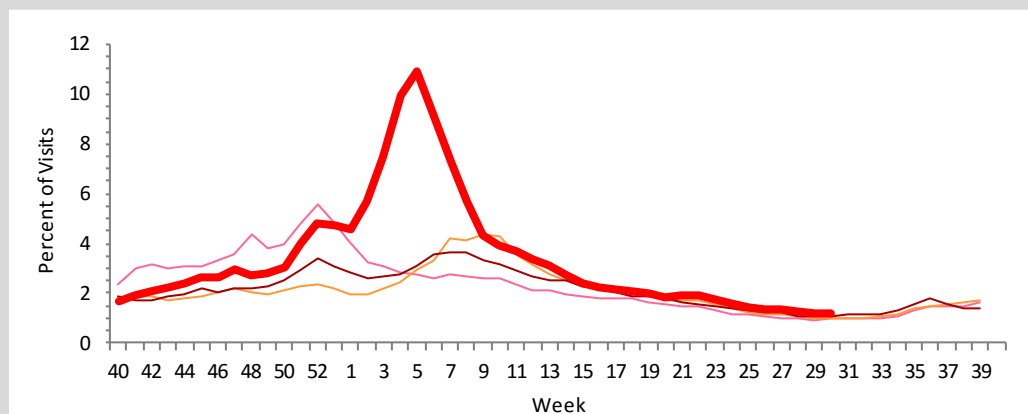
National influenza activity:

- 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=326) from week 40, 2014 to week 30, 2018.



In week 30 (ending July 28, 2018), the percent of visits to EDs and UCCs for ILI remained the same and was similar to levels observed at this time in previous years.

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

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 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 and on page 4.

Posted August 1, 2018 on the Bureau of Epidemiology website: www.floridahealth.gov/floridaflu

Produced by the Bureau of Epidemiology, Florida Department of Health

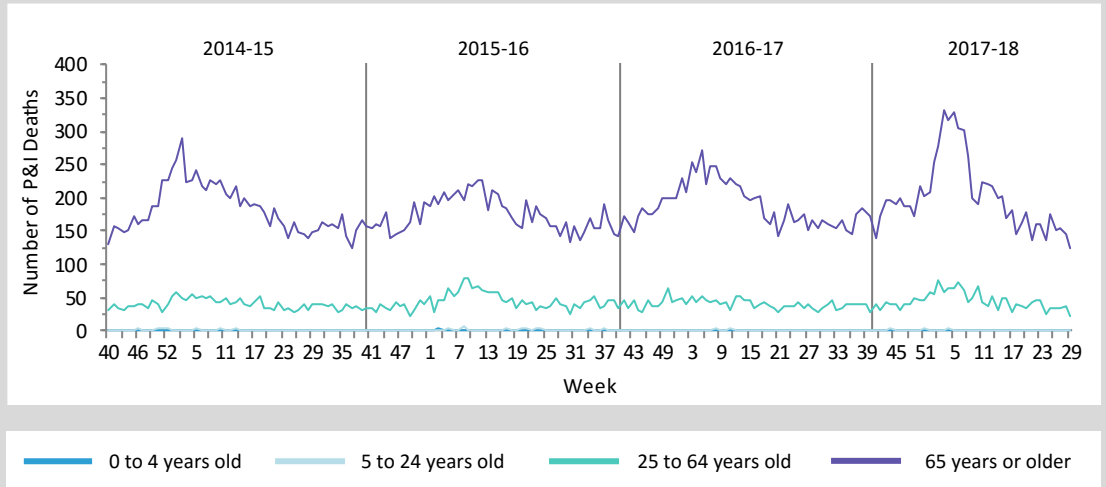
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P&I Deaths from Vital Statistics by Age Group

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, 2014) through week 29, 2018 (ending July 21, 2018) as identified in ESSENCE-FL. Vital statistics death records data are currently considered to be complete through week 29, 2018.

In week 29, the preliminary number of P&I deaths remained the same in the 0-4 and 5-24 year age groups and decreased in the 25-64 and ≥65 year age groups. In the 0-4 and 5-24 year age groups, the preliminary number of P&I deaths remained similar to levels observed during previous years at this time. In the 25-64 and ≥65 year age groups, levels were below those observed during previous years at this time.

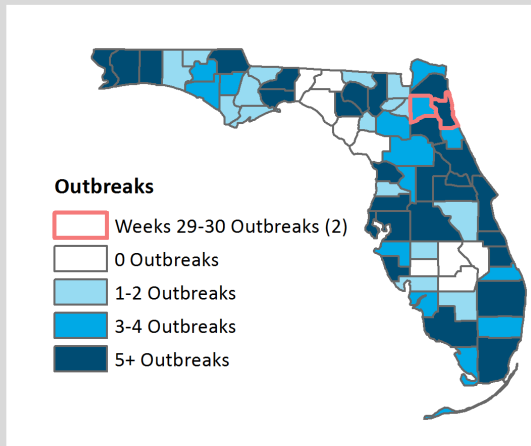


Influenza and ILI Outbreaks

ILI = influenza-like illness

Influenza and ILI Outbreaks by County Week 40, 2017 through Week 30, 2018

The map to the left shows influenza and ILI outbreaks by county from week 40, 2017 through week 30, 2018 (ending on July 28, 2018).



In weeks 29-30, two new outbreaks were reported: one outbreak of influenza B Yamagata lineage and one outbreak of ILI. A total of 510* 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: 66 (13%) in assisted living facilities, 85 (17%) in nursing facilities, 99 (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.

*One outbreak included in previous totals was removed after it was determined to be a duplicate report.

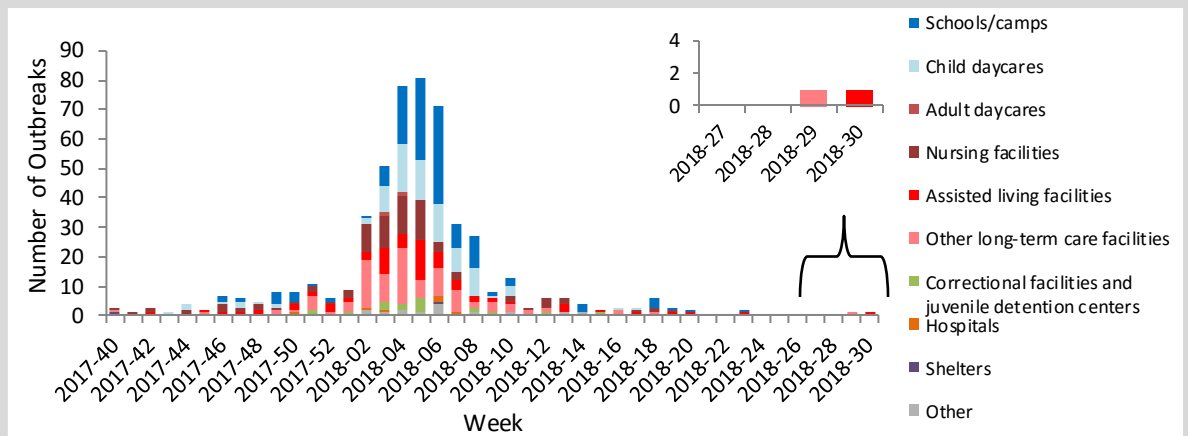
Influenza and ILI Outbreaks by Facility Type

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 30, 2018.

In weeks 29-30, two outbreaks were reported: one in a long-term care facility and one in an assisted living facility.

Of the 510 total outbreaks reported since the start of the 2017-18 season, 468 (92%) occurred facilities serving people at higher risk for complications due to influenza infection (children and adults ≥65 years).



RSV and Other Respiratory Virus Surveillance

RSV = respiratory syncytial virus

RSV activity:

- In week 30 (ending on July 28, 2018), the percent of children <5 years old diagnosed with RSV at EDs and UCCs increased slightly and remained above levels observed in previous seasons at this time.
- Florida's southeast region is currently in RSV season. RSV season in Florida's central region begins August 1, 2018.
- No new possible RSV-associated pediatric deaths were identified in week 30. One possible RSV-associated pediatric death has been identified so far this year. Investigation will occur to confirm this death meets case definition. 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.

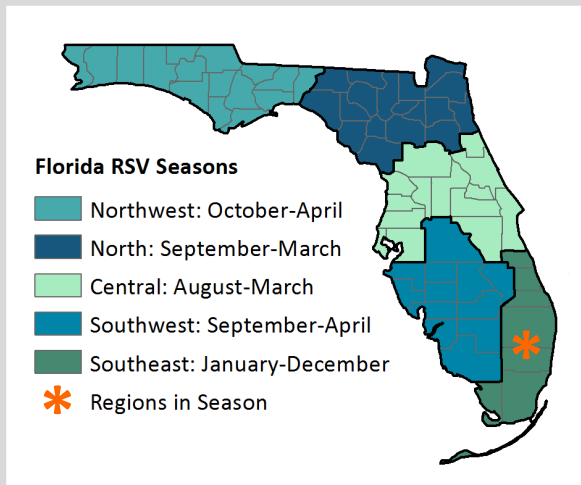
RSV seasonality:

- 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 state.
- 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 29-30, the percent of specimens testing positive for rhinovirus remained higher than other respiratory viruses under surveillance.

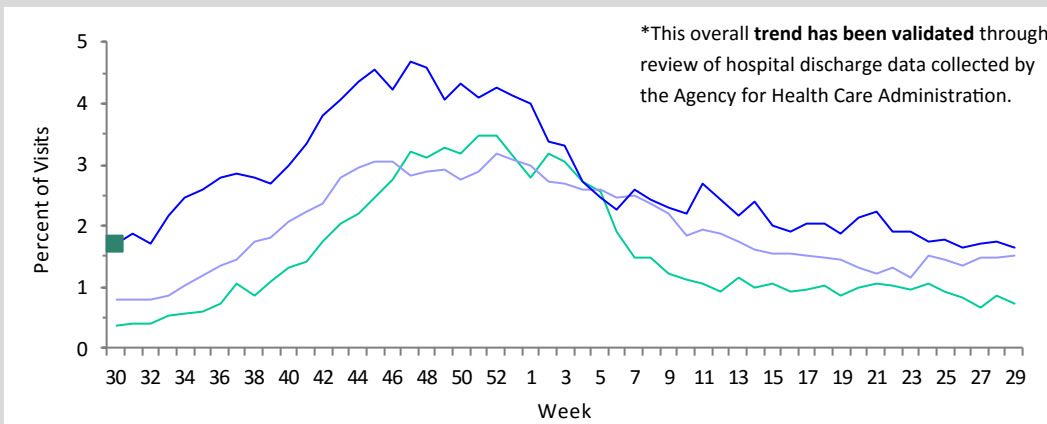
Florida Respiratory Syncytial Virus (RSV) Regional Season Breakdown



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=326), week 30, 2014 through week 30, 2018.



In week 30, the percent of children diagnosed with RSV at participating EDs and UCCs increased slightly and was similar to levels observed during the 2017-18 season at this time. Levels were above those observed during the 2016-17 and 2015-16 seasons at this time.

Legend for ED and UCC Visits:

- 2018-19 (dark green)
- 2017-18 (blue)
- 2016-17 (purple)
- 2015-16 (light green)

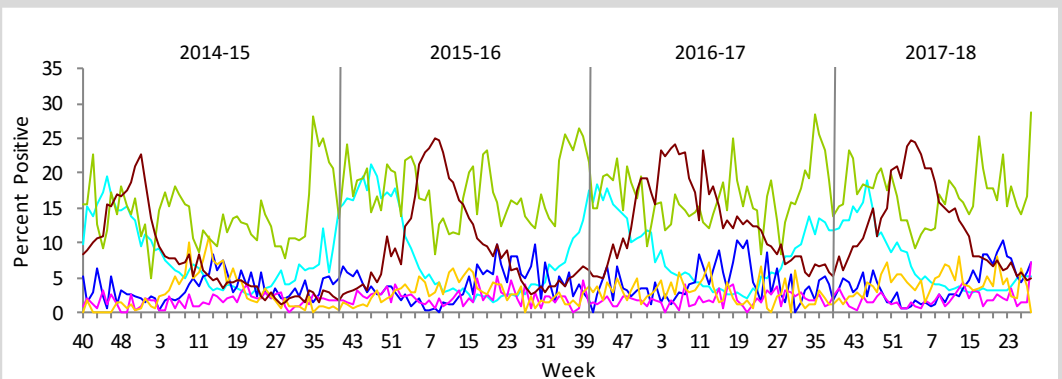
Laboratory Viral Respiratory Surveillance

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=7), week 40, 2014 to week 30, 2018.

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

Legend for Laboratory Viral Respiratory Surveillance:

- RSV (cyan)
- Parainfluenza 1-3 (blue)
- Adenovirus (magenta)
- Human metapneumovirus (yellow)
- Rhinovirus (green)
- Influenza (red)



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=326) 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.

Outbreak Reporting in Merlin

- Merlin, Florida Department of Health'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.