

Summary

Weeks 31-32: July 29 – August 11, 2018

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

- **Influenza activity levels remained stable statewide.** While activity remains low overall, modest increases are expected over the next month, as the traditional influenza season draws near.
- No new outbreaks were reported over the last two weeks (31-32); 510 outbreaks of influenza and ILI have been reported since October 2017. Sporadic outbreaks are expected in the coming weeks.
- **No new influenza-associated pediatric deaths were reported in weeks 31-32.** 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 31-32, 1 (7.7%) of the 13 specimens submitted to the Bureau of Public Health Laboratories (BPHL) for influenza testing was positive by real-time reverse transcription polymerase chain reaction (RT-PCR) for influenza; it was influenza A unspecified.
- In week 31, the Florida Department of Health was notified by the Centers for Disease Control and Prevention (CDC) that an influenza B Victoria lineage virus submitted by BPHL for next-generation sequencing as part of routine surveillance was identified as being different to the influenza B Victoria lineage viruses currently circulating in the United States. After further investigation, it was determined that the specimen was collected from an individual with international travel. The number of specimens testing positive for influenza B Victoria lineage at BPHL remained low in recent weeks and no additional viruses like this have been identified in Florida to date.

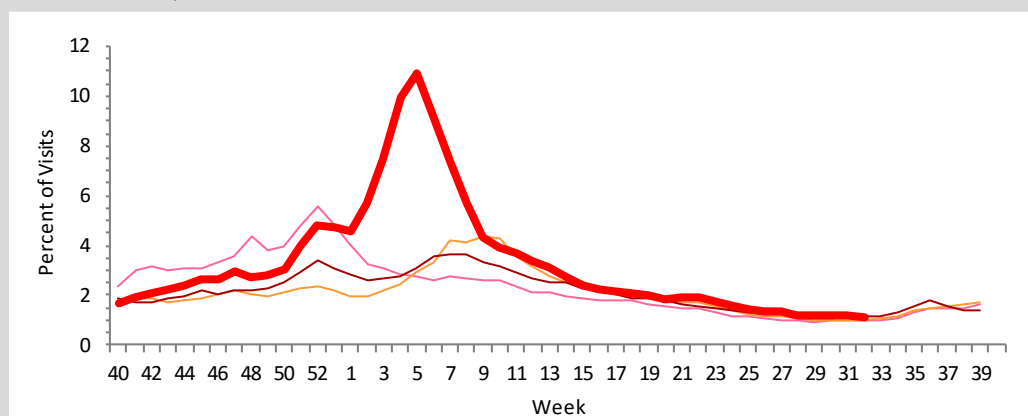
National influenza activity:

- Influenza viruses continue to circulate at low levels nationally.
- CDC observed an increase in the proportion of influenza viruses testing positive for influenza A in recent weeks, however, the total number of influenza-positive specimens reported to CDC by public health laboratories nationwide remained low. This transition to influenza A is expected for this time of the year.
- In week 31, CDC reported four human infections with influenza A (H1N2) variant viruses in people with direct exposure to swine at agricultural fairs. These cases were reported in California (two cases) and Michigan (two cases). **No influenza A (H1N2) variant virus cases in humans have been reported in Florida to date.**

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=327) from week 40, 2014 to week 32, 2018.



In week 32 (ending August 11, 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/floridafu and on page 4.

Posted August 15, 2018 on the Bureau of Epidemiology website: www.floridahealth.gov/floridafu

Produced by the Bureau of Epidemiology, Florida Department of Health

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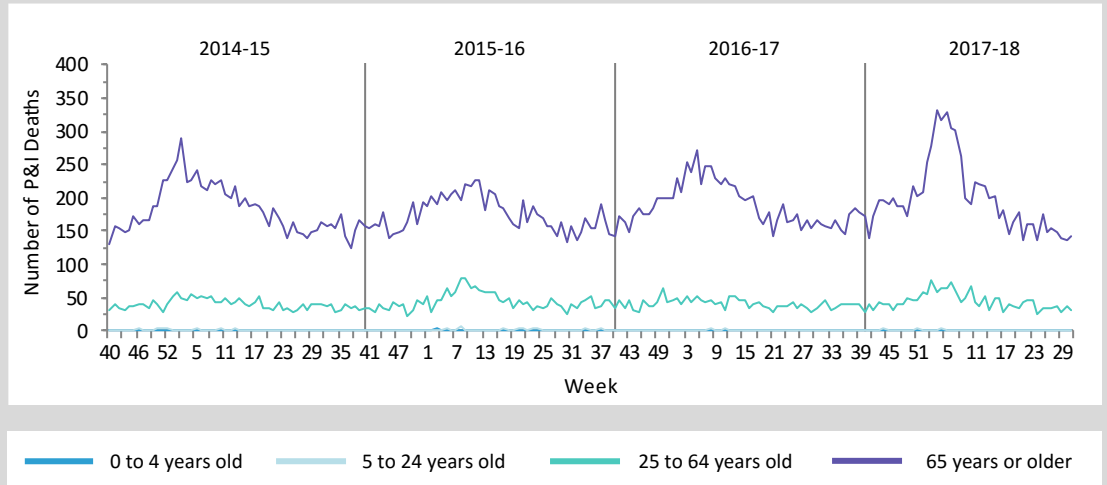
P&I Deaths from Vital Statistics by Age Group

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 31, 2018 (ending August 4, 2018) as identified in ESSENCE-FL. Vital statistics death records data are currently considered to be complete through week 31, 2018.

In week 31, the preliminary number of P&I deaths increased slightly in the 5-24 and ≥65 year age groups and decreased in the 0-4 and 25-64 year age groups. In all age groups, levels were similar to or below those observed in previous years at this time.

In week 31, the total preliminary number of P&I deaths remained stable statewide and was similar to levels observed in previous years at this time.

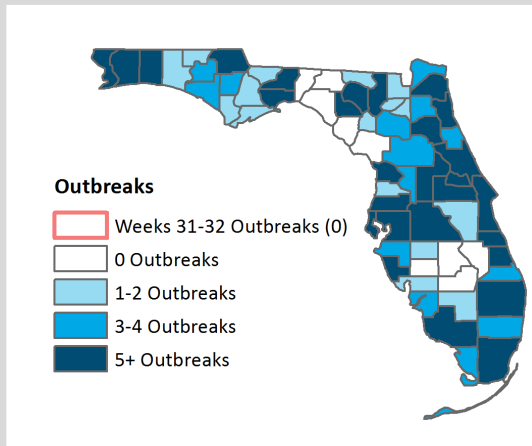


Influenza and ILI Outbreaks

ILI = influenza-like illness

Influenza and ILI Outbreaks by County Week 40, 2017 through Week 32, 2018

The map to the left shows influenza and ILI outbreaks by county from week 40, 2017 through week 32, 2018 (ending on August 11, 2018).



In weeks 31-32, no new outbreaks of influenza or ILI were reported. 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.

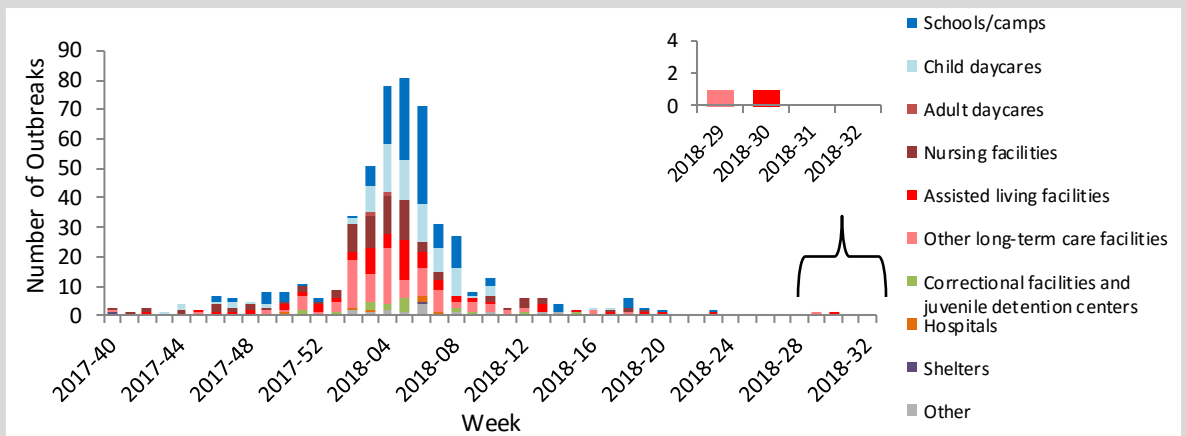
Influenza and ILI Outbreaks by Facility Type

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 32, 2018.

In weeks 31-32, no new outbreaks of influenza or ILI were reported.

Of the 510 total outbreaks reported since the start of the 2017-18 season, 468 (92%) occurred in 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 32 (ending August 11, 2018), the percent of children <5 years old diagnosed with RSV at EDs and UCCs statewide decreased and was within levels observed during previous years at this time.
- Florida's southeast and central regions are currently in RSV season.
- One new possible RSV-associated pediatric death was identified in week 31. Two possible RSV-associated pediatric deaths have been identified so far this year and one of those deaths was ruled out. Investigation will occur to confirm if this new 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 has been shown to reduce complications among high risk children and is available for those who qualify. For more information, contact your physician.**
- To learn more about RSV in Florida, please visit: www.floridahealth.gov/rsv.

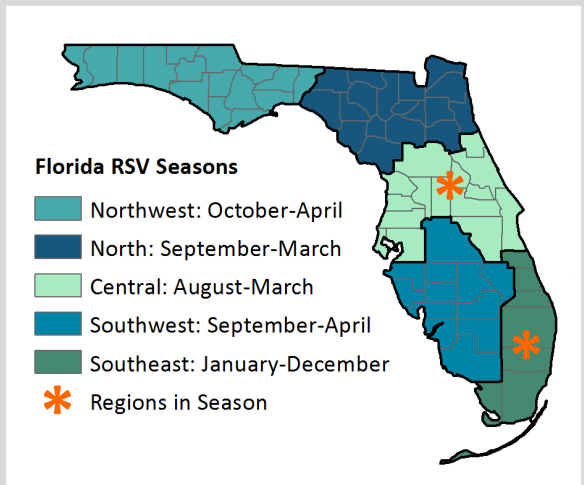
RSV seasonality:

- 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 31-32, the percent of specimens testing positive for rhinovirus remained higher than other respiratory viruses under surveillance.

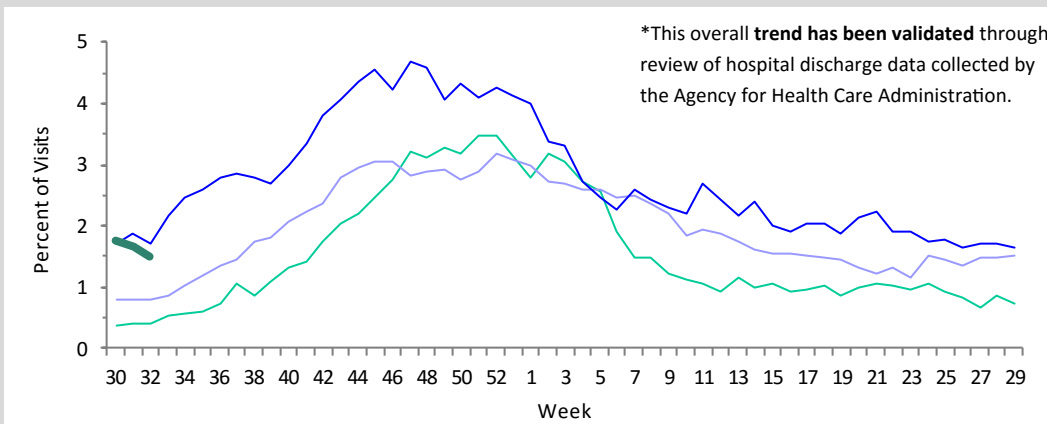
Florida Respiratory Syncytial Virus (RSV) Regional Season Breakdown



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=327), week 30, 2014 through week 32, 2018.



In week 32, the percent of children diagnosed with RSV at participating EDs and UCCs decreased and was within levels observed during previous years at this time.

Legend for ED and UCC Visits:

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

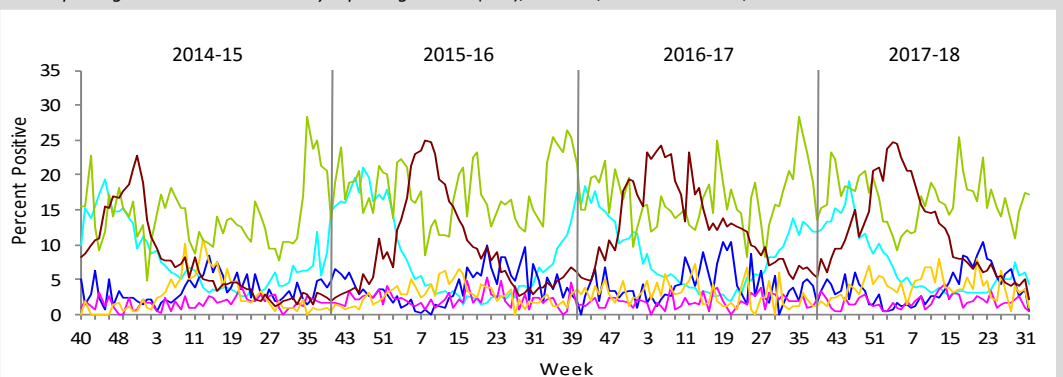
Laboratory Viral Respiratory Surveillance

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 32, 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=327) 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'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 the Florida Department of Health.

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.