

# Respiratory Syncytial Virus (RSV) & Other Respiratory Virus Surveillance

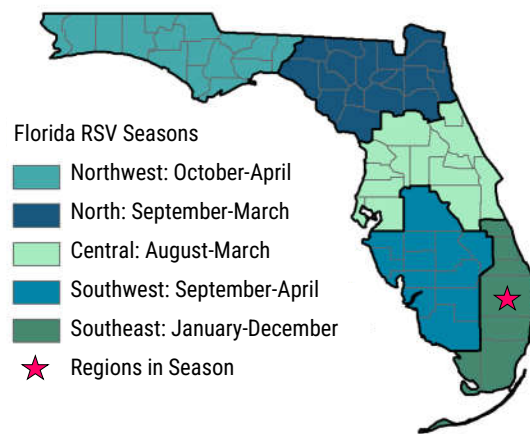
## Week 21 (May 22–May 28, 2022) RSV Activity Summary:

In week 21, RSV activity in children <5 years old increased. Levels were above those seen at this time in past years.

**Currently, one of Florida's five regions are in RSV season.**

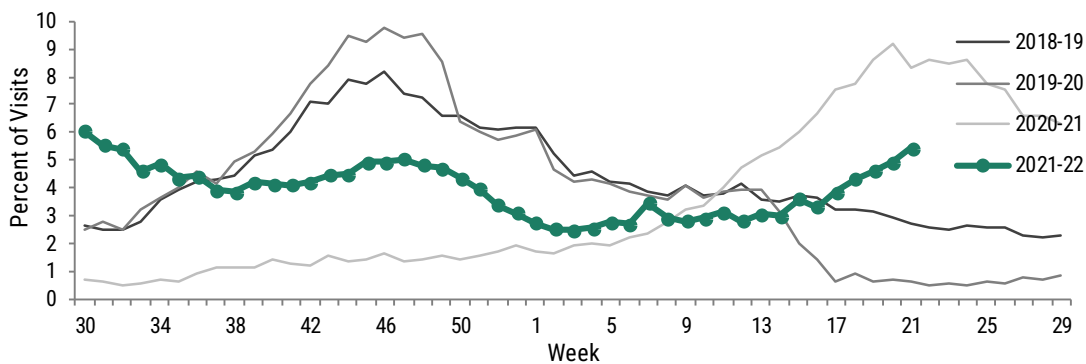
Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. The RSV seasons shown here are based on activity thresholds provided by the Centers for Disease Control and Prevention.

The determination of unique seasonal and geographic trends of RSV activity in Florida has important implications for prescribing patterns for initiating prophylaxis to children at high-risk for RSV infection complications. The American Academy of Pediatrics recommends preapproval for prophylactic treatment be made based on state surveillance data.



▲ The figure above shows Florida's RSV regional season breakdown. Regions that are currently in RSV season are marked with pink stars.

In week 21, **the percent of emergency department and urgent care center visits for RSV among children <5 years increased.** RSV activity in children <5 years was notably above levels observed at this time in typical years.

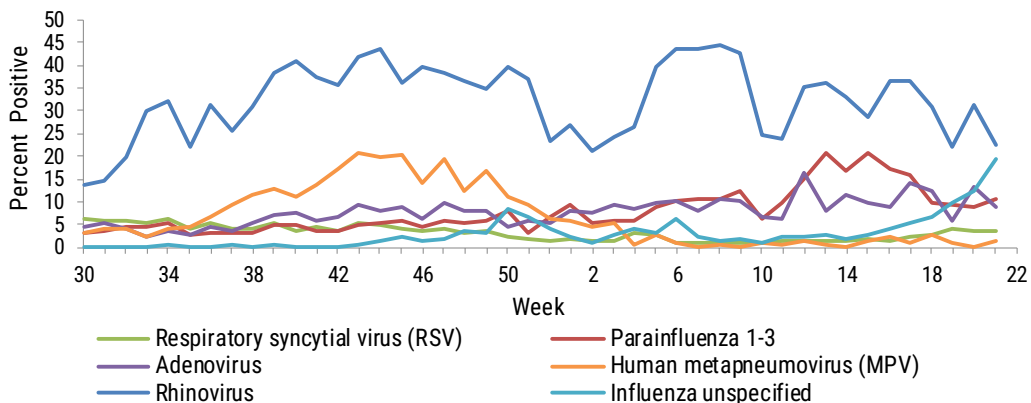


◀ The figure to the left shows the percent of emergency department and urgent care center visits with discharge diagnoses that include respiratory syncytial virus (RSV) or RSV-associated illness among children <5 years<sup>1</sup>, as reported in ESSENCE-FL, week 30, 2018 to week 21, 2022.

<sup>1</sup> The overall trend displayed in this figure has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.

In week 21, the percent of specimens testing positive for **influenza unspecified**, **parainfluenza 1-3**, and **human metapneumovirus** increased while the percent of specimens testing positive for **RSV**, **adenovirus**, and **rhinovirus** decreased.

The figure to the right shows the **percent positive laboratory results for eight common respiratory viruses**, as reported by laboratories participating in the National Respiratory and Enteric Virus Surveillance System (NREVSS) and laboratories reporting validated respiratory virus data to the Florida Department of Health via electronic laboratory reporting (n=2), week 30, 2021 to week 21, 2022.



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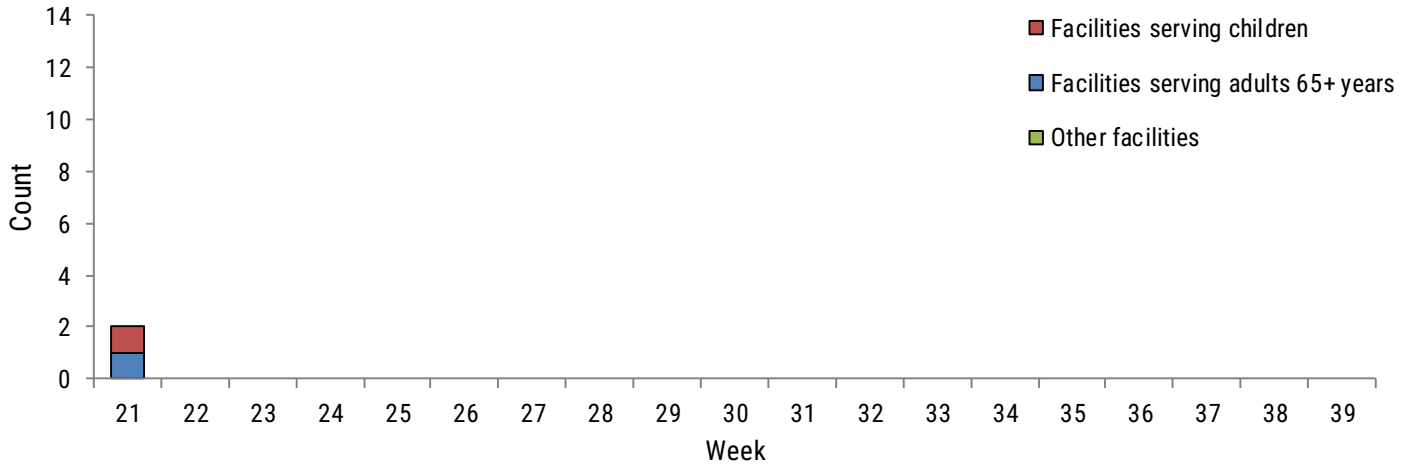
RSV-Associated Outbreaks in Week 21:



## Summary of RSV-Associated Outbreaks:

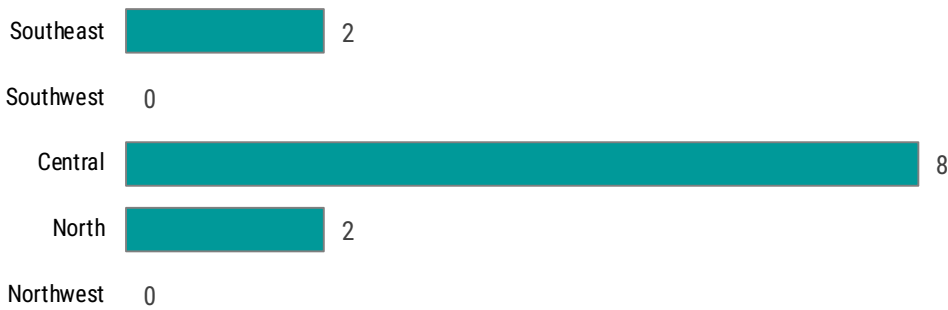
In week 21, **two new RSV-associated outbreaks** were reported. Since week 30, 2021, twelve RSV-associated outbreaks have been reported.

In week 21, **two new RSV-associated outbreaks** were reported in a **facility serving children** and a **facility serving adults 65+ years**.



▲ The figure above shows the number of RSV-associated outbreaks by setting and week as reported by county health departments in Merlin from week 21, 2022 to week 39, 2022.

In week 21, **two RSV-associated outbreaks** were reported. Since week 30, outbreaks have been reported in three of Florida’s regions.\*



◀ The figure to the left shows a summary of RSV-associated outbreaks by region\* as reported by county health departments in Merlin, week 30, 2021 to week 21, 2022.

\*Regions defined on page 4.

Since week 30, 2021, **Rhinovirus** and **Human metapneumovirus** have been the most commonly identified pathogens in a respiratory outbreak apart from influenza or RSV.



- Rhinovirus
- Enterovirus unspecified
- Enterovirus D68
- Parainfluenza 1
- Parainfluenza 2
- Parainfluenza 3
- Coronavirus NL63
- Coronavirus HKU1
- Coronavirus OC43
- Coronavirus 229E
- Human metapneumovirus
- Adenovirus
- Group A Streptococcus
- Other

▲ The figure above shows the number of unique times a pathogen was associated with a respiratory outbreak for outbreaks reported from week 30, 2021 to week 21, 2022.

# Florida Influenza and 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) is used by the Florida Department of Health to monitor trends in influenza-like illness (ILI) visits at participating emergency departments (EDs) and urgent care centers (UCCs). Participating EDs and UCCs (n=310) electronically submit visit data into ESSENCE-FL daily or hourly.

For statewide and regional figures, percentages are calculated as the proportion of overall ED and UCC visits to participating facilities that include the words “influenza” or “flu” in the discharge diagnoses (with certain exceptions).

ED and UCC visits are counted as respiratory syncytial virus (RSV) if the discharge diagnoses include RSV or RSV-associated illness.

## Outbreak Reporting in Merlin

Outbreak investigations are tracked in Merlin (Florida’s reportable disease surveillance system) by investigating county health departments (CHDs). Outbreak reports include implicated viruses or bacteria, the outbreak setting, and recommendations made to mitigate the spread of disease.

- Outbreak definition for assisted living facilities, nursing facilities, and long-term care facilities: two or more cases of influenza, ILI, or acute respiratory illness (ARI)
- Outbreak definition for facilities serving children (primary/secondary schools and child daycares): three or more epidemiologically linked cases of influenza or ILI
- Household clusters are not counted as outbreaks.
- ILI: fever and cough or fever and sore throat in the absence of another known cause
- ARI: two or more respiratory symptoms in the absence of another known cause

## Co-infection Outbreaks

Due to the ongoing COVID-19 pandemic, outbreaks identified to have co-circulation of COVID-19 and influenza are being closely monitored. A co-infection outbreak is defined as  $\geq 1$  person who tests positive for influenza, RSV, or other pathogen within 14 days of their SARS-CoV-2 PCR or antigen laboratory event date.

## Laboratory Surveillance

The Florida Department of Health, Bureau of Public Health Laboratories (BPHL) performs real-time reverse transcription polymerase chain reaction (RT-PCR) influenza testing (including subtyping for influenza A viruses and lineage determination for influenza B viruses) for specimens submitted from sentinel providers, outbreak investigations, health care providers treating patients with severe or unusual influenza presentations, and medical examiners. BPHL also performs RT-PCR subtyping for influenza A-positive specimens and RT-PCR lineage determination for influenza B-positive specimens.

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a Centers for Disease Control and Prevention (CDC) surveillance system that captures data on eight commonly circulating respiratory viruses as reported by participating laboratories in Florida. Data collected in NREVSS are combined with data from Florida laboratories that submit validated electronic RSV laboratory results to the Florida Department of Health via electronic laboratory reporting. Together, these data are used to monitor the temporal and geographic patterns of these viruses.

## Case-Based Influenza Surveillance

Death in a child whose laboratory-confirmed influenza infection has been identified as contributing to the child’s death is a reportable condition in Florida. Influenza-associated pediatric deaths are investigated by CHDs and reported in Merlin. In turn, the Florida Department of Health reports these deaths to CDC.

In addition, an individual of any age with suspected or laboratory-confirmed novel or pandemic influenza A is reportable in Florida. Suspected or confirmed novel influenza A cases are investigated by CHDs in collaboration with state and national experts. CHDs report cases in Merlin and, in turn, the Florida Department of Health reports these cases to CDC.