

Respiratory Syncytial Virus (RSV) & Other Respiratory Virus Surveillance

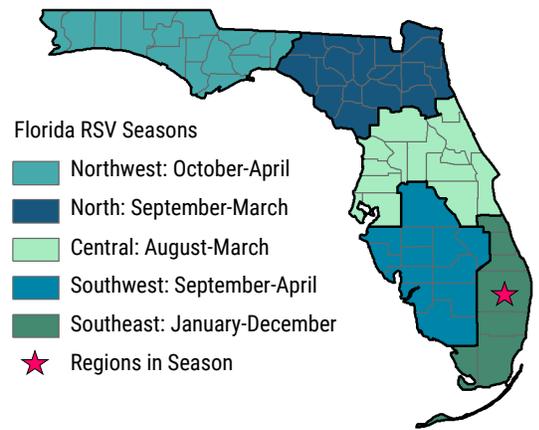
Weeks 27-28 (July 4–17, 2021) RSV Activity Summary:

In weeks 27-28, RSV activity in children <5 years old decreased. Levels were above those seen at this time in past years.

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

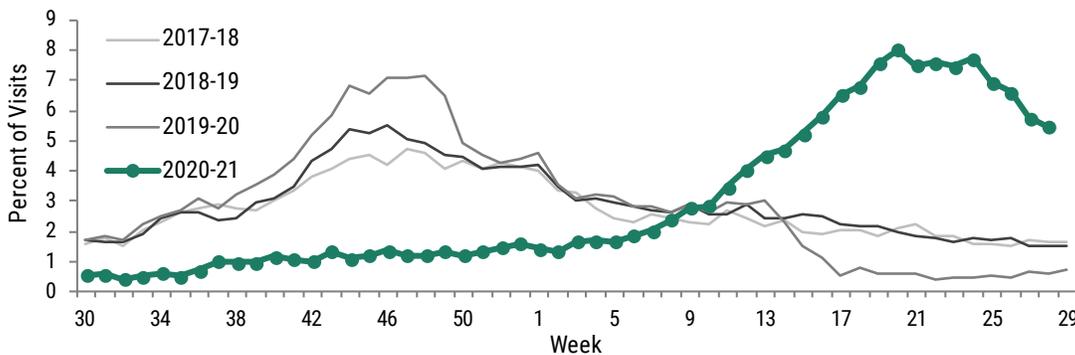
Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. The RSV seasons shown here are based on activity thresholds provided by the Centers for Disease Control and Prevention.

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 weeks 27-28, **the percent of emergency department and urgent care center visits for RSV among children <5 years decreased**. RSV activity in children <5 years was notably above levels observed at this time in previous years.

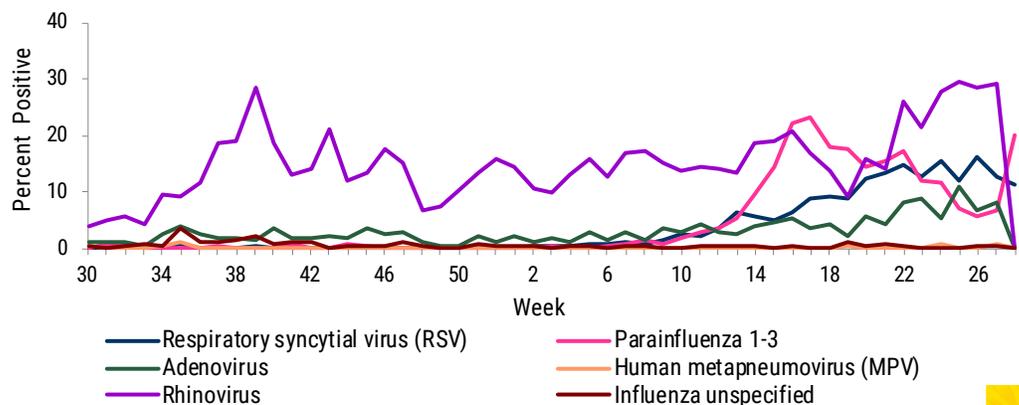


◀ The figure to the left shows **the percent of emergency department and urgent care center visits with discharge diagnoses that include respiratory syncytial virus (RSV) or RSV-associated illness among children <5 years¹**, as reported in ESSENCE-FL, week 30, 2017 to week 28, 2021.

¹ 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 weeks 27-28, **the percent of specimens testing positive for parainfluenza 1–3 increased and was higher** than other respiratory viruses under surveillance.

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=4), week 30, 2020 to week 28, 2021.



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RSV-Associated Outbreaks in Weeks 27-28:

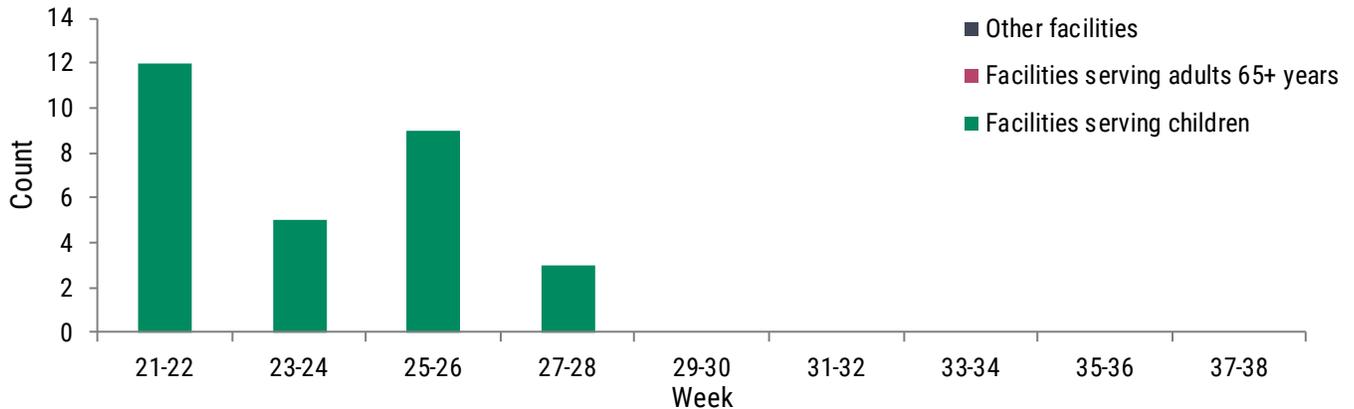


Summary of RSV-Associated Outbreaks:

In weeks 27-28, three new RSV-associated outbreaks were reported. Since week 30, 2020, fifty-four RSV-associated outbreaks have been reported.

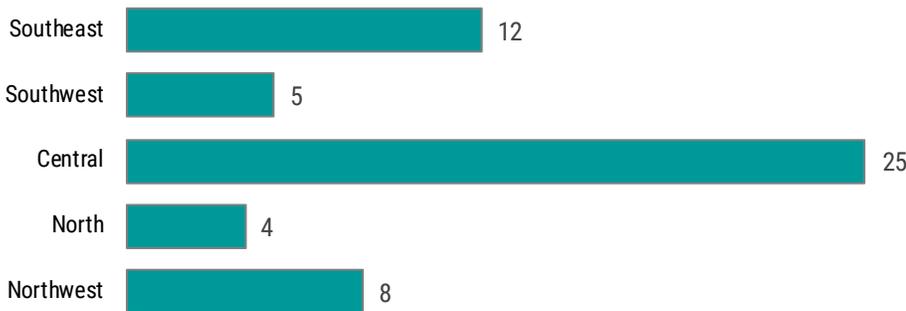
3 Outbreaks

In weeks 27-28, three new RSV-associated outbreaks were reported in **facilities serving children**.



▲ The figure above shows the number of RSV-associated outbreaks by setting and week as reported by county health departments in Merlin, week 21, 2021 to week 28, 2021.

In weeks 27-28, three RSV-associated outbreaks were reported. Since week 30, outbreaks have been reported in all 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, 2020 to week 28, 2021.

*Regions defined on page 3.

Since week 30, 2020, **parainfluenza virus 3** has been the most commonly identified pathogen 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, 2020 to week 28, 2021.



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=398) 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.

For RSV mortality surveillance, a free-text query searches for references to RSV in the causes of death on death certificates. Any mention of "RSV," "syncytial," or "bronchiolitis" in the literal causes of death (with certain exceptions) is counted as a possible RSV-associated death. Possible RSV-associated deaths in children <18 years old are investigated to ensure they meet the case definition outlined by the Council of State and Territorial Epidemiologists.

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

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.

Geographic Spread of Influenza

On a weekly basis, the Florida Department of Health evaluates influenza and ILI surveillance data to determine the geographic spread of influenza in Florida and report the weekly determination to CDC. Geographic spread is not an indication of influenza severity. Geographic spread can be reported as sporadic, local, regional, or widespread.

- Sporadic: small numbers of laboratory-confirmed influenza or a single laboratory-confirmed influenza outbreak has been reported but there is no increase in cases of ILI
- Local: outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state
- Regional: outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions
- Widespread: outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state