Respiratory Syncytial Virus (RSV) & Other Respiratory Virus Surveillance

Weeks 25-26 (June 14-27, 2020) RSV Activity Summary:

In weeks 25-26, RSV activity in children <5 years old was stable. Levels were below those seen at this time in past years.

No new outbreaks of RSV were reported in weeks 25-26.

Currently, one of Florida's five regions is 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 complications for RSV infection. The American Academy of Pediatrics recommends preapproval

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

Florida RSV Seasons

Northwest: October-April North: September-March

Central: August-March

Regions in Season

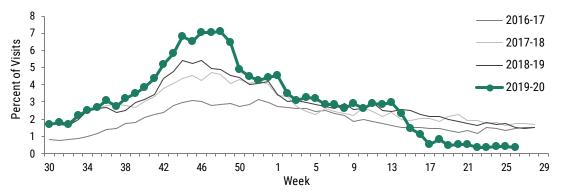
Southwest: September-April

Southeast: January-December

infection. The American Academy of Pediatrics recommends preapproval for prophylactic treatment be made based on state surveillance data.

To learn more about RSV in Florida, please visit: FloridaHealth.gov/RSV.

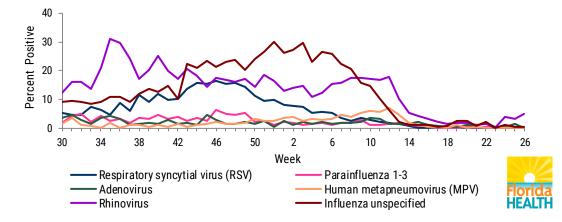
In weeks 25-26, the percent of emergency department and urgent care center visits for RSV among children <5 years was stable. RSV activity in children <5 years was below levels observed at this time in previous years.



■ 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, 2016 to week 26, 2020.

In weeks 25-26, **the percent of specimens testing positive for rhinovirus increased** and was higher than other respiratory viruses under surveillance. Of note, a significant decrease in the volume of testing was observed in previous weeks. This figure may change as additional data are received.

The figure to the right shows the ▶ percent of laboratory results testing positive 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=6), week 30, 2019 to week 26, 2020.



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.

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=378) electronically submit visit data into ESSENCE-FL daily or hourly.

For statewide figures, percentages are calculated as the proportion of 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. Outbreak reports include implicated viruses or bacteria, the outbreak setting, and recommendations made to mitigate the spread of disease (among other data elements). All outbreak data are considered preliminary and subject to change. As such, outbreak counts may increase or decrease as additional information is received.

- ILI outbreaks in facilities serving adults aged ≥65 years (assisted living facilities, nursing facilities, and long-term care facilities) are
 defined as two or more individuals with ILI (fever and cough or fever and sore throat in the absence of positive laboratory results). ILI
 outbreaks in facilities serving children (primary/secondary schools and child daycares) are defined as three or more epidemiologically
 linked individuals with ILI.
- Influenza-associated outbreaks in facilities serving adults aged ≥65 years are defined as two or more individuals with respiratory symptoms, where at least one individual tests positive for influenza. Influenza-associated outbreaks in facilities serving children are defined as three or more epidemiologically linked individuals with respiratory symptoms, where at least one individual tests positive for influenza. Testing may be conducted by the Bureau of Public Health Laboratories (BPHL), commercial laboratories, hospitals, or private health care providers.
- Household clusters are not counted as outbreaks.

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.

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 reports 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