

FLU REVIEW

Weeks 33-34, 2020:
8/9/20-8/22/20

State influenza and influenza-like illness (ILI) activity¹:

In weeks 33-34, influenza and ILI activity remained low overall and was within expected levels for this time of year.

In weeks 33-34, no new influenza or ILI outbreaks were reported. Four total influenza or ILI outbreaks have been reported since May 17, 2020 (when the traditional influenza season ended).

No new influenza-associated pediatric deaths were reported in weeks 33-34. Fourteen influenza-associated pediatric deaths have been reported since the beginning of the 2019-20 season.

In weeks 33-34, no specimens tested positive for influenza at the Bureau of Public Health Laboratories (BPHL). Of note, the number of specimens tested at BPHL remained low overall. During the 2019-20 season, influenza A 2009 (H1N1) has been the predominant strain detected.

In weeks 33-34, the percent of specimens testing positive for rhinovirus increased and was higher than other respiratory viruses under surveillance. For more information, see page 3.

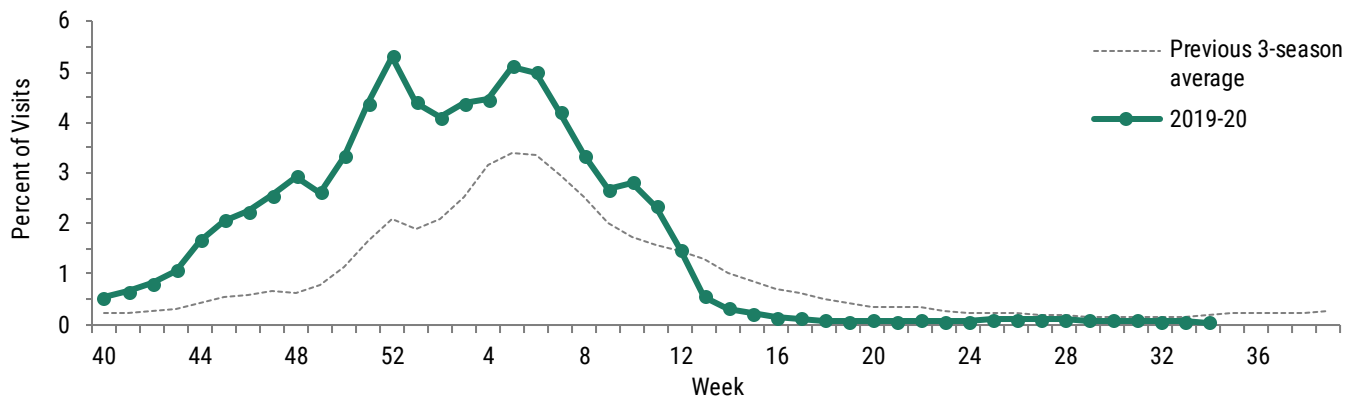
Activity at a Glance:

Geographic Spread:  **Sporadic**

Predominant Strain²:  **A 2009 (H1N1)**

ILI Activity Trend:  **Stable**

In weeks 33-34, **the percent of emergency department and urgent care center visits with a discharge diagnosis of influenza statewide stayed stable** and was below the previous three-season average for this time.



▲ The figure above shows **the percent of visits with discharge diagnoses that include influenza** (with certain exceptions) for facilities participating in ESSENCE-FL (n=385) statewide for the current year (week 40, 2019 to week 34, 2020) and the previous three season average (2018-19, 2017-18, and 2016-17). Of note, influenza may not be laboratory-confirmed for all the visits included in this query. For more information on the use of ESSENCE-FL for influenza and ILI surveillance, see page 4.

¹ In Florida, only influenza-associated pediatric deaths and human cases of novel influenza A infection (any age) are reportable. All outbreaks, including those due to influenza or other respiratory disease are reportable in Florida. The Florida Department of Health uses a variety of different surveillance systems to measure influenza and ILI activity. A summary of the systems used in this report can be found on our website: FloridaHealth.gov/FloridaFlu and on page 4.

² Predominant strain in this context refers to the most common influenza subtype detected at the Bureau of Public Health Laboratories over the 2019-20 season.

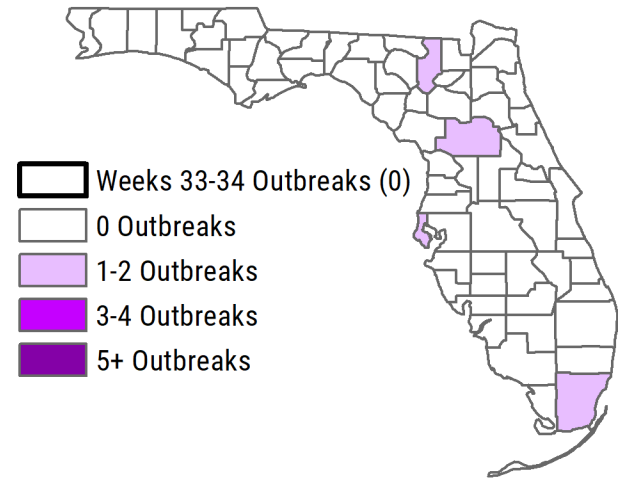


Statewide Off-Season Outbreaks:

In weeks 33-34, no new influenza or ILI outbreaks were reported.

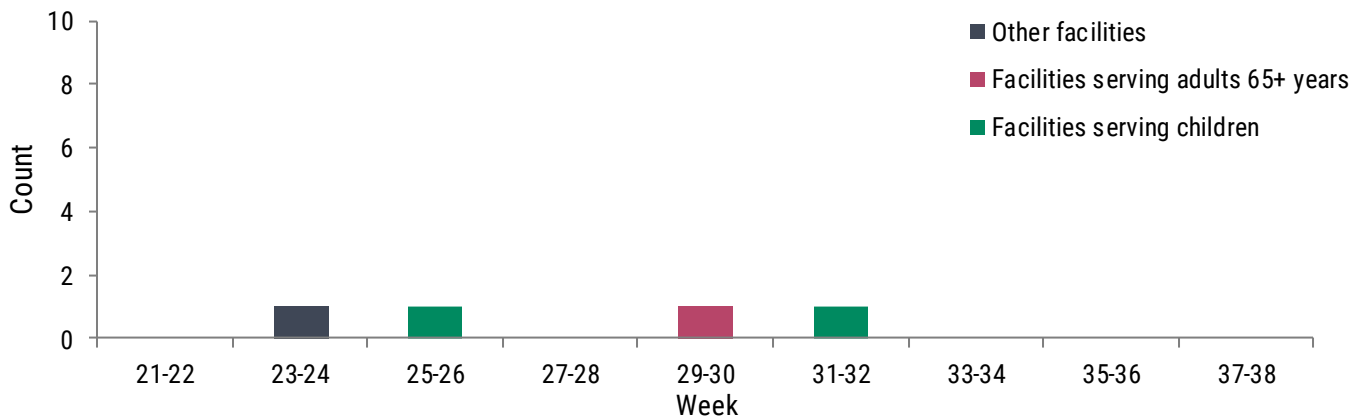
Four influenza or ILI outbreaks have been reported since May 17, 2020. There has been no laboratory evidence of influenza and no specimens have been collected to date for testing.

Sporadic outbreak reports are expected during the summer months. The number of reported outbreaks is expected to increase slightly as the traditional influenza season approaches. Outbreak data are preliminary and subject to change. If non-influenza etiologies are determined later in the investigation process, outbreaks are removed from the total count.



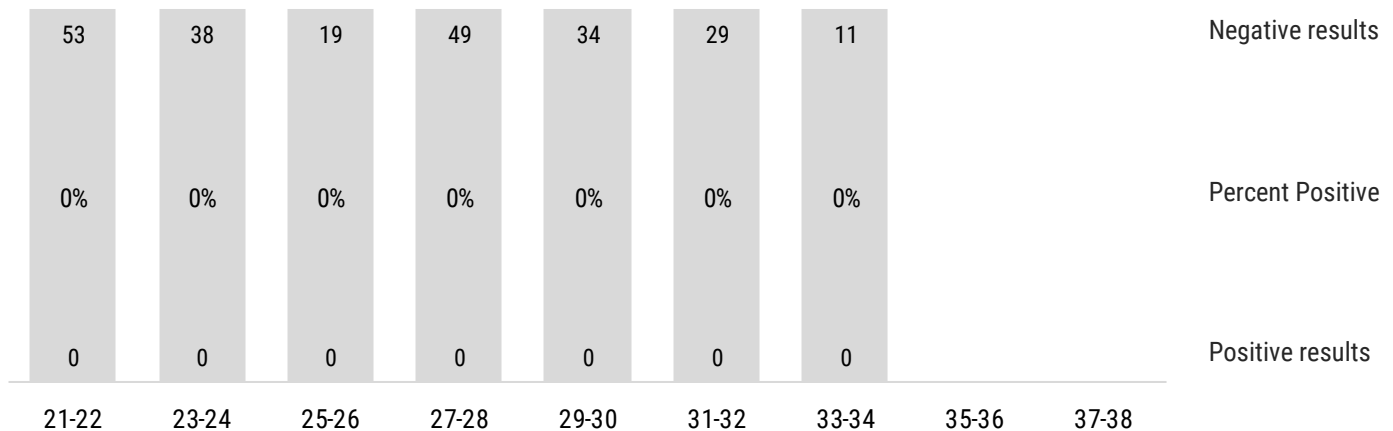
▲ The figure above shows **reported influenza and ILI outbreaks by county since May 17, 2020**. Counties with outbreaks reported in weeks 33-34 are **outlined in bold**.

In weeks 33-34, no new ILI outbreaks were reported.



▲ The figure above shows the distribution of **influenza and ILI outbreaks by facility type** as reported in Merlin, weeks 21-34, 2020.

In weeks 33-34, no specimens tested positive for **influenza at BPHL**. Of note, the number of specimens tested at BPHL remained low overall.



▲ The figure above shows the number of **specimens tested for influenza at the Bureau of Public Health Laboratories (BPHL)** by lab-event date,¹ weeks 21-34, 2020. Specimens are organized by result and percent positivity of results was calculated by dividing positive results over total results.

¹"Lab event date" is defined as the earliest of the following dates associated with influenza testing at the laboratory: date specimen collected, date received by the laboratory, date reported, or date inserted.

Respiratory Syncytial Virus (RSV) & Other Respiratory Virus Surveillance

Weeks 33-34 (August 8-22, 2020) RSV Activity Summary:

In weeks 33-34, RSV activity in children <5 years old increased. Levels were below those seen at this time in past years.

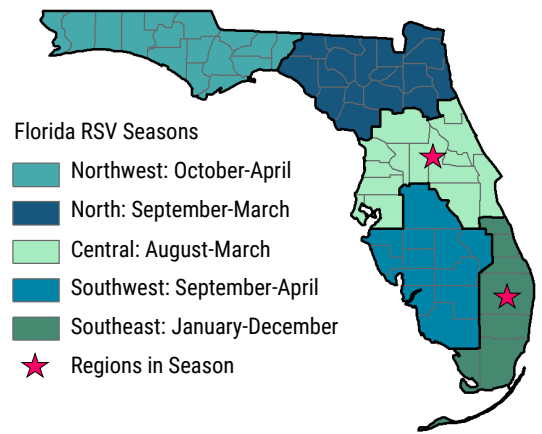
No new outbreaks of RSV were reported in weeks 33-34.

Currently, two 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.

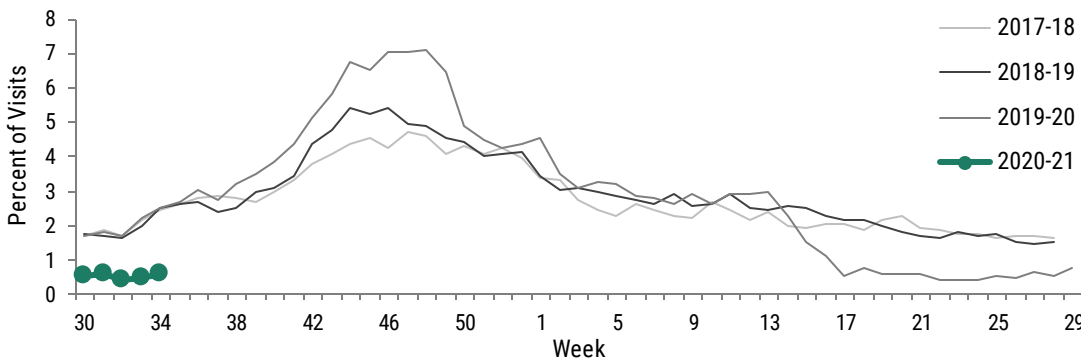
The determination of unique seasonal and geographic trends of RSV activity in Florida has important implications for prescribing patterns for initiating prophylaxis to children at high-risk for complications for RSV infection. The American Academy of Pediatrics recommends preapproval for prophylactic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

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



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

In weeks 33-34, **the percent of emergency department and urgent care center visits for RSV among children <5 years increased**. RSV activity in children <5 years was below levels observed at this time in previous years.

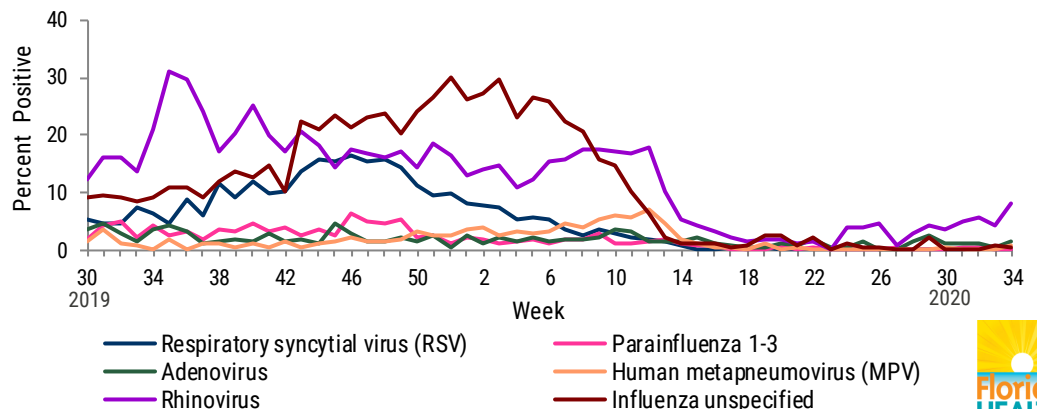


◀ The figure to the left shows **the percent of emergency department and urgent care center visits with discharge diagnoses that include respiratory syncytial virus (RSV) or RSV-associated illness among children <5 years¹**, as reported in ESSENCE-FL, week 30, 2016 to week 34, 2020.

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.

In weeks 33-34, **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 has been 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=7), week 30, 2019 to week 34, 2020.



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=385) 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