Florida FLU REVIEW

Summer 2022

Week 22, 2022: 5/29/22–6/4/22

State influenza and influenza-like illness (ILI) activity[1]:

In week 22, influenza and ILI activity decreased and was higher than expected levels for this time of year.

In week 22, Two new ILI or influenza outbreaks were reported. Eleven ILI or influenza outbreaks have been reported since May 21, 2022 (when the traditional influenza season ended).

In week 22, One RSV outbreak was reported. Since week 30, 2021, thirteen RSV-associated outbreaks have been reported.

No new influenza-associated pediatric deaths were reported in week 22. No influenza-associated pediatric deaths have been reported so far during the 2021-22 season.

Activity at a Glance:

Respiratory Outbreak Count:

3

Predominant Strain[2]:

Influenza A(H3)

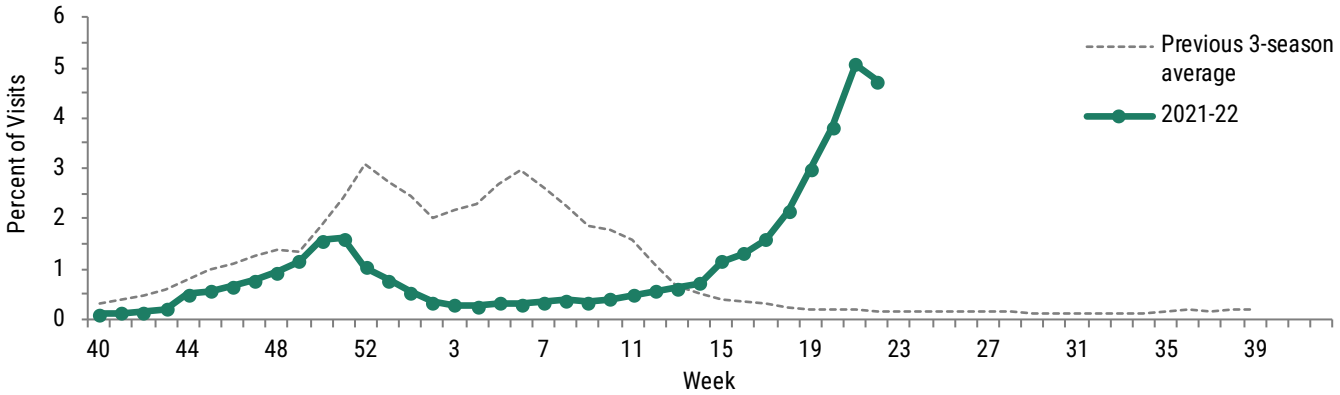
ILI Activity Trend:

Decreasing

In week 22, Thirty specimens tested positive for influenza at the Bureau of Public Health Laboratories (BPHL). Of note, the number of specimens that tested positive at BPHL remained low overall throughout the 2021-22 influenza season. The predominant strain during the 2021-2022 season has been Influenza A(H3).

In week 22, the percent of specimens testing positive for influenza unspecified remained higher than other respiratory viruses under surveillance. For more information, see page 4.

In week 22, **the percent of emergency department visits with a discharge diagnosis of influenza statewide decreased** and was above 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=310) statewide for the current year (week 40, 2021 to week 22, 2022) and the previous three season average (2018-19, 2019-20, and 2020-21). 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 6.

[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 6.

[2] Predominant strain in this context refers to the most common influenza subtype detected at the Bureau of Public Health Laboratories over the last four weeks. The strain reported here may be different to the strain reported as predominant overall during the traditional 2021-22 season (October 3, 2021 through May 21, 2022) in past reports.

Posted June 8, 2022 on the Bureau of Epidemiology (BOE) website: FloridaHealth.gov/FloridaFlu
Produced by the BOE, Florida Department of Health

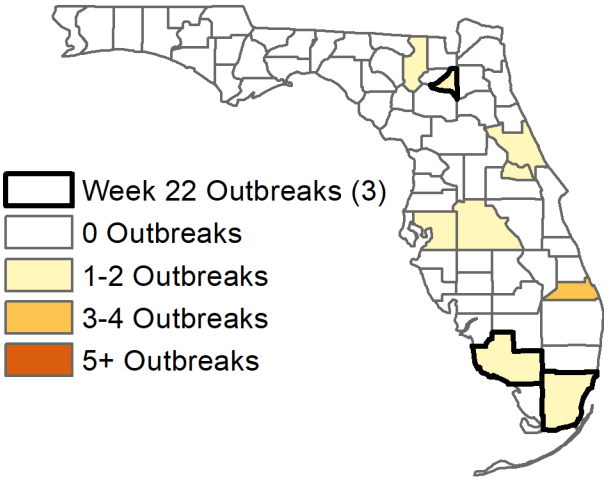
ILI and Influenza Surveillance

Statewide Off-Season Outbreaks:

In week 22, 3 new respiratory outbreaks were reported.

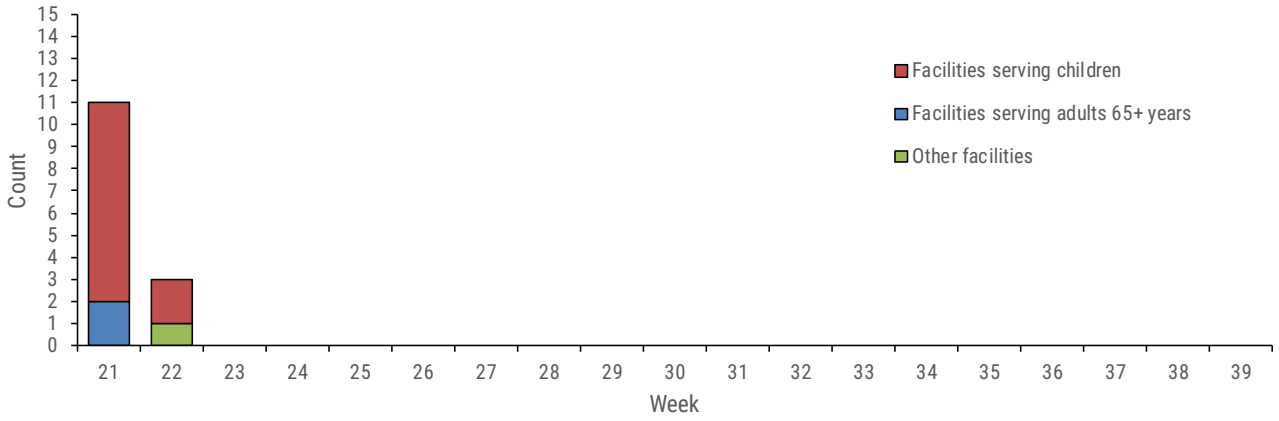
14 respiratory outbreaks have been reported since May 21, 2022.

Sporadic outbreak reports are expected during the summer months.



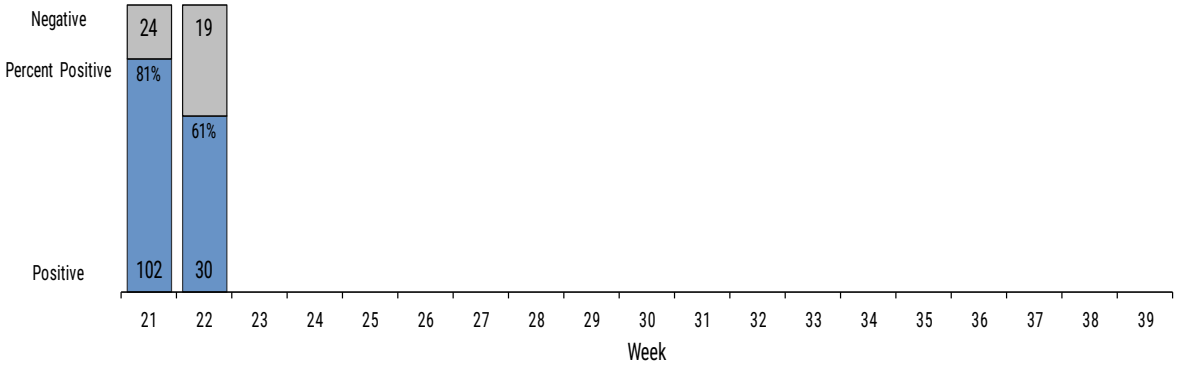
▲ The figure above shows **reported respiratory outbreaks by county since May 21, 2022**. Counties with outbreaks reported in week 22 are **outlined in bold.**

In week 22, **three respiratory outbreaks** were reported; **two** in **facilities serving children** and **one** in an **other facility**.



▲ The figure above shows the distribution of **respiratory disease outbreaks by facility type** as reported in Merlin by county health departments from week 22, 2022 to week 39, 2022.

In week 22, **thirty specimens** tested positive for **influenza at BPHL.**



▲ The figure above shows the number of **specimens tested for influenza at the Bureau of Public Health Laboratories (BPHL)** by lab-event date,[1] week 22, 2022 to week 39, 2022. 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 Illness Outbreak Surveillance

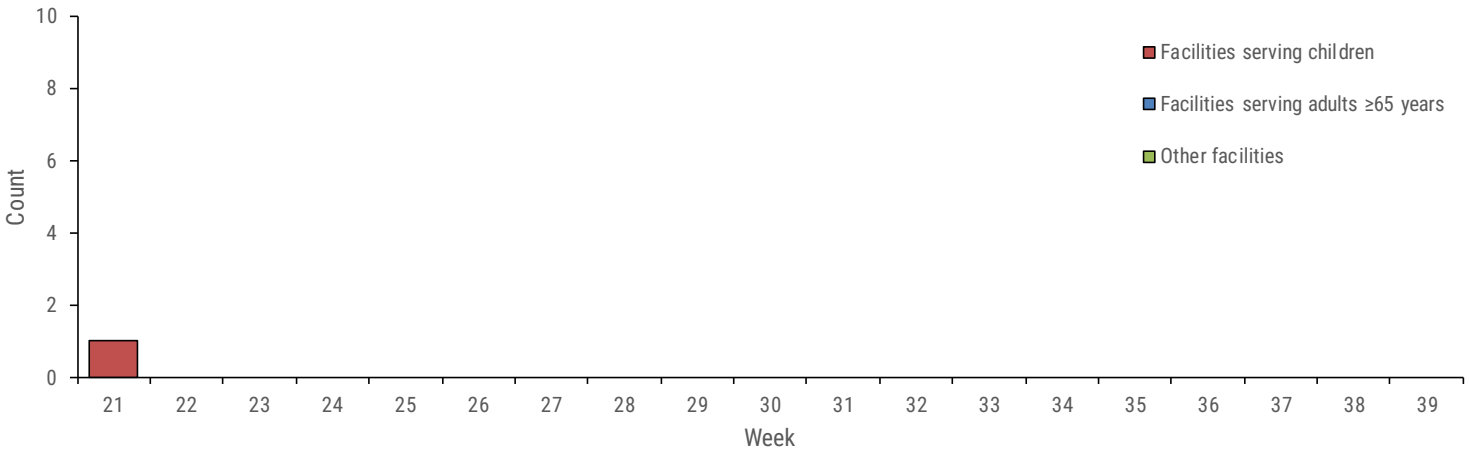
Co-infection Outbreaks:

In week 22, zero new co-infection outbreaks* were reported.

One co-infection outbreak has been reported since week 21, 2022.

*A co-infection outbreak is defined as an outbreak where ≥1 person tests positive for influenza, RSV, or other pathogen within 14 days of their SARS-CoV-2 PCR or antigen laboratory event date.

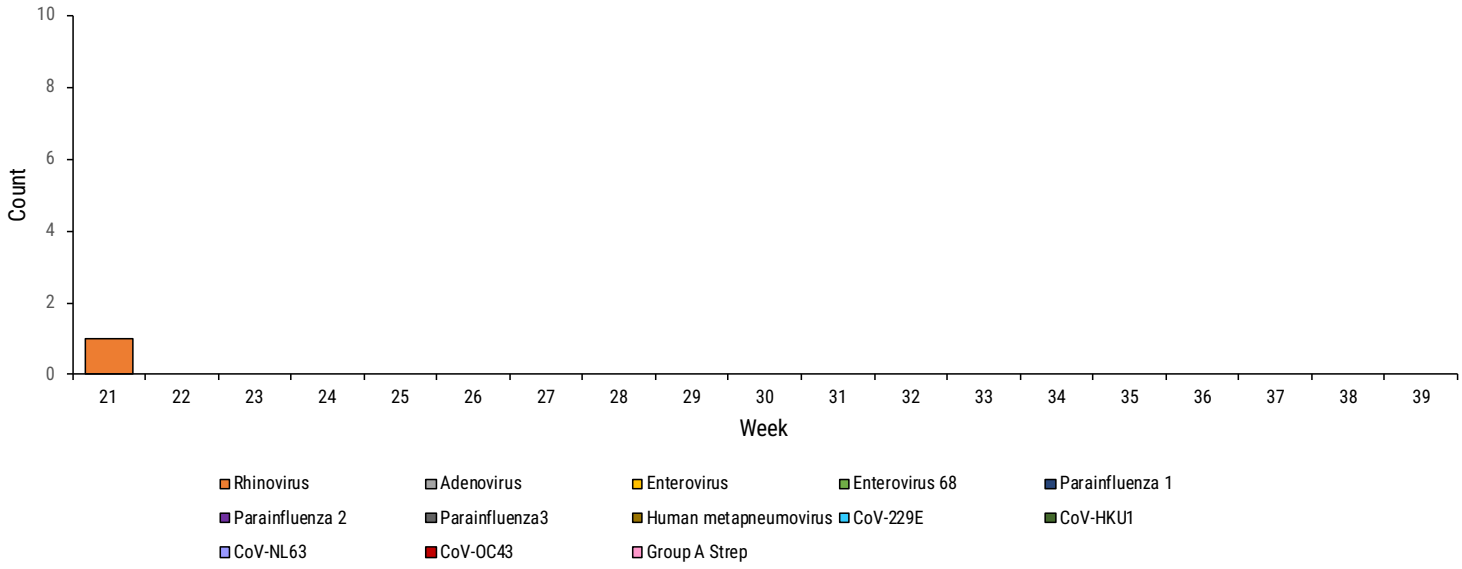
In week 22, **zero outbreaks were reported with influenza and SARS-CoV-2 cocirculating.**



▲ The figure above shows the number of **influenza and COVID-19 associated outbreaks by week** as reported in Merlin by county health departments from week 22, 2022 to week 39, 2022. Due to changes implemented to better characterize respiratory outbreaks and identify co-infection related outbreaks, historical outbreaks may be added to this report as of February 24, 2022.

Outbreaks With Other Respiratory Pathogens:

In week 22, **zero outbreaks with other respiratory pathogens** were reported.



▲ The figure above shows the number of respiratory outbreaks that included respiratory pathogens other than influenza, RSV, and COVID-19 as reported in Merlin by county health departments from week 22, 2022 to week 39, 2022.

Respiratory Syncytial Virus (RSV) & Other Respiratory Virus Surveillance

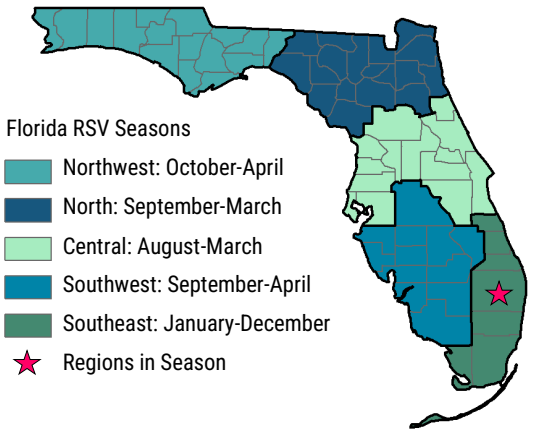
Week 22 (May 29–June 4, 2022) RSV Activity Summary:

In week 22, 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.

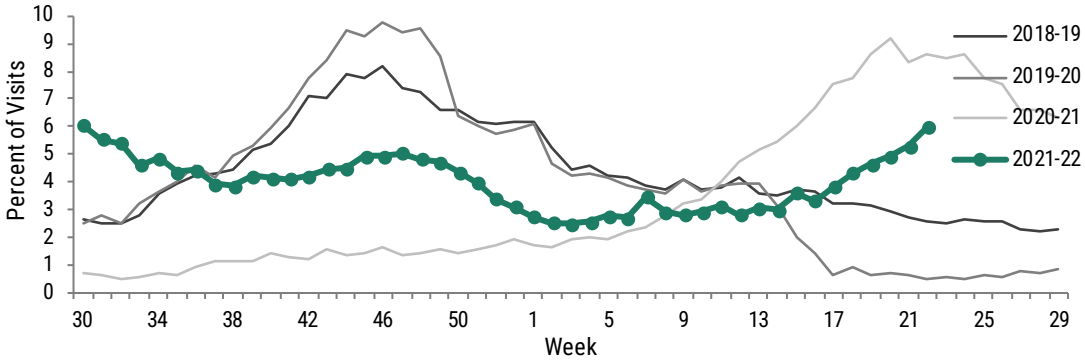
Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. The RSV seasons shown here are based on activity thresholds provided by the Centers for Disease Control and Prevention.

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 22, **the percent of emergency department 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.



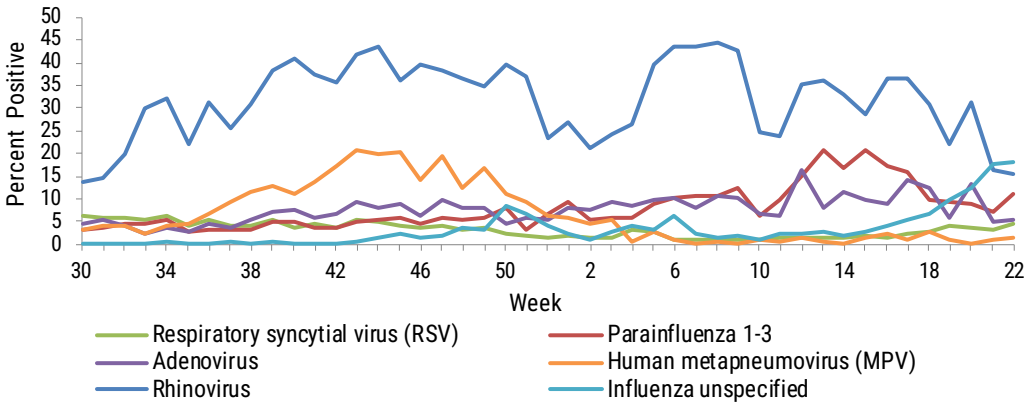
◀ The figure to the left shows **the percent of emergency department visits with discharge diagnoses that include respiratory syncytial virus (RSV) or RSV-associated illness among children <5 years**[1], as reported in ESSENCE-FL, week 30, 2018 to week 22, 2022.

[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 week 22, the percent of specimens testing positive for influenza unspecified, parainfluenza 1-3, RSV, adenovirus, and human metapneumovirus **increased** while the percent of specimens testing positive for 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=3), week 30, 2021 to week 22, 2022.

▶



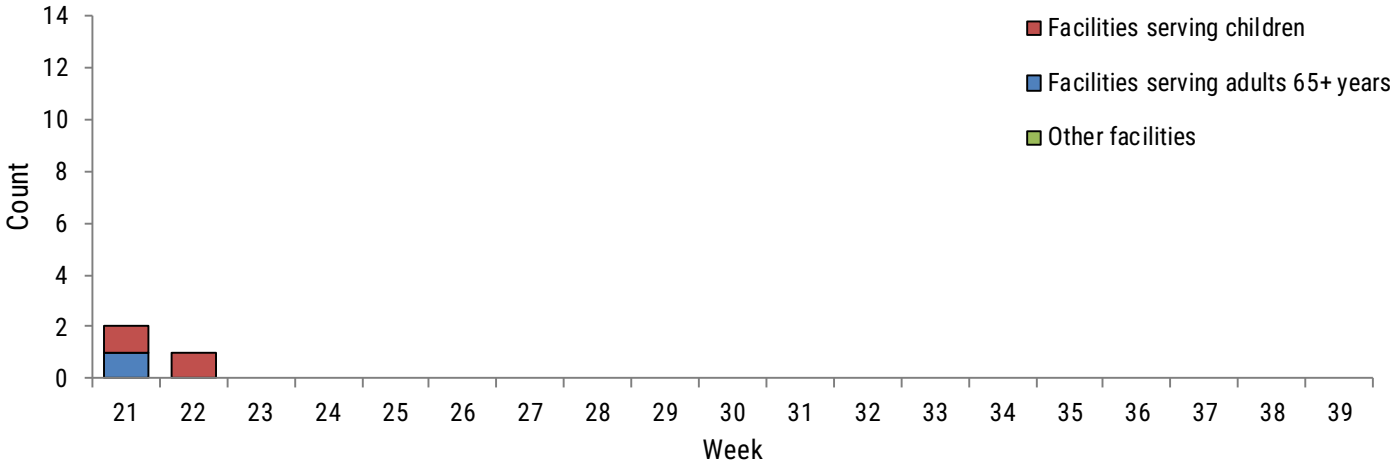
Respiratory Syncytial Virus (RSV) & Other Respiratory Virus Surveillance

RSV-Associated Outbreaks in Week 22: 1

Summary of RSV-Associated Outbreaks:

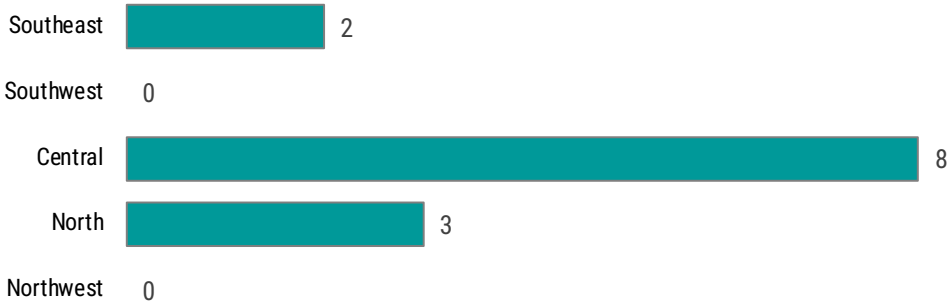
In week 22, **one new RSV-associated outbreak** was reported. Since week 30, 2021, thirteen RSV-associated outbreaks have been reported.

In week 22, **one new RSV-associated outbreak** was reported in a **facility serving children**.



▲ The figure above shows **the number of RSV-associated outbreaks by setting and week** as reported by county health departments in Merlin from week 22, 2022 to week 39, 2022.

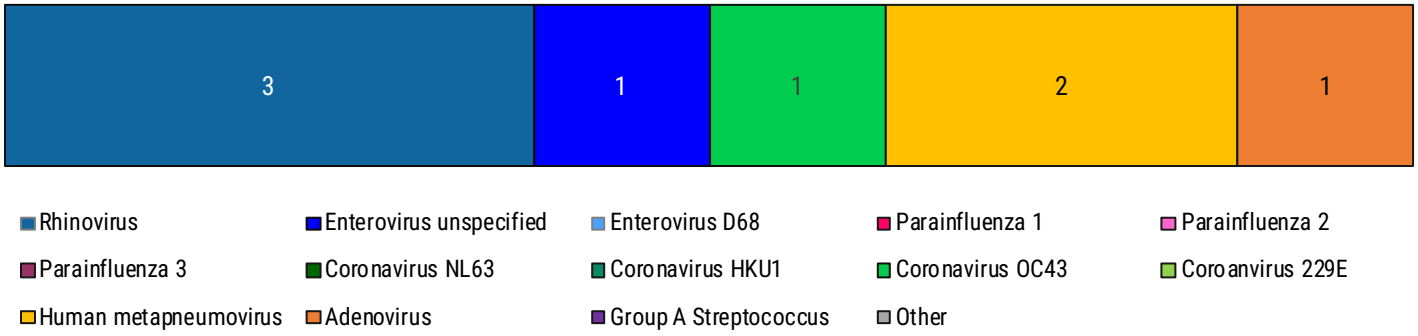
In week 22, **one RSV-associated outbreak** was reported. Since week 30, outbreaks have been reported in three of Florida's regions.*



◀ 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 22, 2022.

*Regions defined on page 4.

Since week 30, 2021, **Rhinovirus** has been the most commonly identified pathogen in a respiratory outbreak apart from influenza or RSV.



▲ 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 22, 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 ≥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.

Florida HEALTH