# Florida RSV Review

Week 45: November 5, 2023-November 11, 2023

Data are provisional and subject to change

# **RSV** season information

Respiratory syncytial virus (RSV) is a common respiratory virus that usually causes mild, cold-like symptoms. Young children and older adults, especially those with certain underlying health conditions, are at higher risk for severe illness from RSV.

Individual cases of RSV are not reportable in Florida. All outbreaks of RSV are reportable. The Florida Department of Health will continue to make updates on the trends presented in this report as needed.

# Season

Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. For this reason, the state is broken up into five RSV regions, each with their own RSV season. The Florida Department of Health established regional RSV seasons based on activity thresholds provided by the Centers for Disease Control and Prevention.

RSV emergency department visits

**Decreased** 

RSV positivity rate

**Decreased** 

RSV admissions

**Decreased** 

Outbreaks in the current week\*

3

\*Counties with outbreaks in current week: Escambia (1), Hendry (1), Leon (1)

# Florida RSV Regions

Northwest: October-April, North: September-March, Central: August-March,

Southeast: January-December, and Southwest: September-April

# Surveillance and investigation

Surveillance is conducted to support clinical decision-making for prophylaxis of premature infants. The determination of unique seasonal and geographic trends in RSV activity in Florida has important implications for prescribing patterns for initiating prophylaxis to children at high risk for complications from RSV infection. The American Academy of Pediatrics currently recommends pre-approval for prophylactic treatment be made based on state surveillance data.

In 2023, two vaccines (Arexvy and Abrysvo) and a monoclonal antibody (nirsevimab) were approved for the prevention of RSV related illness. For more information about these products, refer to the links below.

RSV vaccines: https://www.cdc.gov/mmwr/volumes/72/wr/mm7229a4.htm

RSV monoclonal antibody: https://www.cdc.gov/mmwr/volumes/72/wr/mm7234a4.htm

# County RSV activity trend In Season Out of Season

# Respiratory syncytial virus (RSV) surveillance

Figures below show RSV visit data from emergency departments (EDs) participating in ESSENCE-FL statewide for the current year and the previous 3 years. Timeseries begin on MMWR Week 40 to align with Florida's Flu Review report.

2020-21

2021-22

2022-23

2023-24

Figure 1: Percent of ED visits with discharge diagnoses of RSV decreased from previous 3-week average

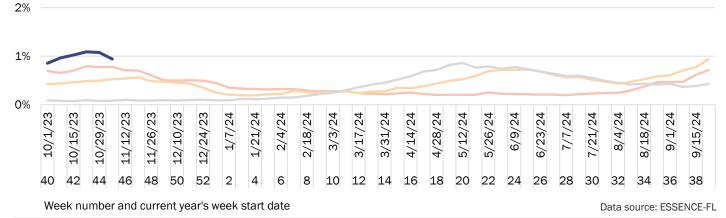


Figure 2: Percent of patients <5 years with discharge diagnoses of RSV decreased from previous 3-week average

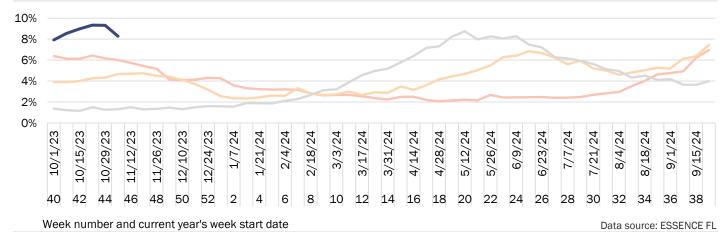
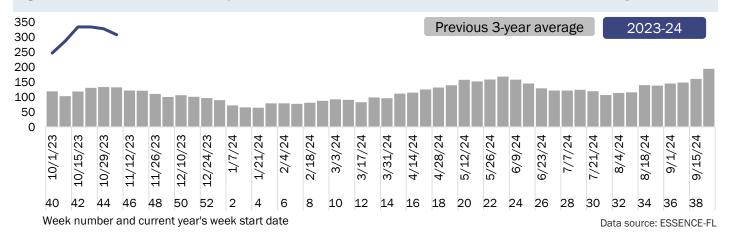


Figure 3: Percent of patients <5 years admitted with RSV decreased from previous 3-week average



# Respiratory syncytial virus (RSV) surveillance

Figure 4: Number of specimens tested and percent positive for RSV for the current RSV year

The most recent weeks may be incomplete since data are aggregated by the earliest date associated with the lab result.

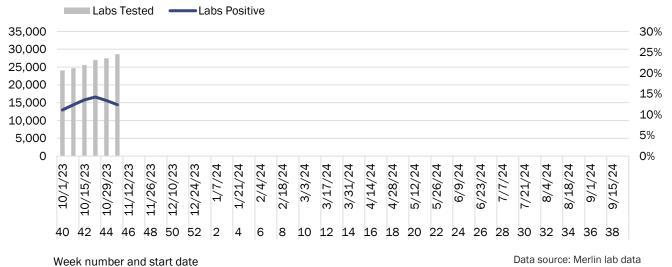
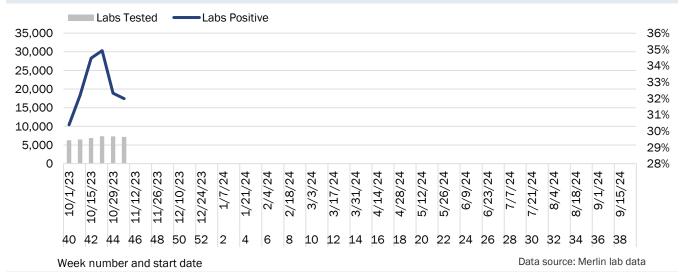


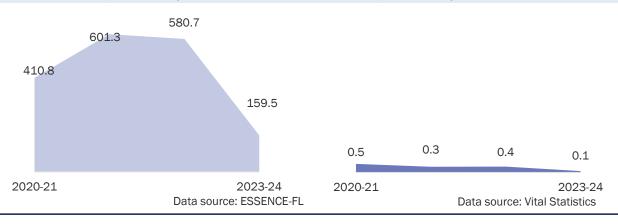
Figure 5: Number of specimens tested and percent positive for children <5 years for current year



Admissions with RSV per 100,000

Figure 6: population for children <5 years for current and previous 3 years

Deaths per 100,000 population for children <5 years for current and previous 3 years



# Respiratory syncytial virus (RSV) outbreak surveillance

The COVID pandemic impacted trends in RSV activity in previous years, including the number of outbreaks. Florida observed an unseasonably high number of RSV outbreaks during the summer of 2021. Outbreaks numbers during the 2021-22 and 2022-23 seasons have returned to a more typical seasonal trend.

Figure 8: RSV outbreaks during the current RSV year and previous 3 years

2020-21 2021-22 2022-23 2023-24

4/28/24

4/14/24

16 18 20

5/12/24

6/9/24

6/23/24

26

28

5/26/24

22 24

2/18/24 3/3/24 3/17/24 3/31/24

8

2/4/24

1/21/24

Week number and current year's week start date

50

52

10/15/23 10/29/23 11/12/23 11/26/23 12/10/23

42

44 46 48

40

Data source: Merlin outbreak data

30 32 34

9/15/24

Figure 9: There have been a total of 19 outbreaks of RSV in the current season with 3 new outbreaks in the current week

10 12

14

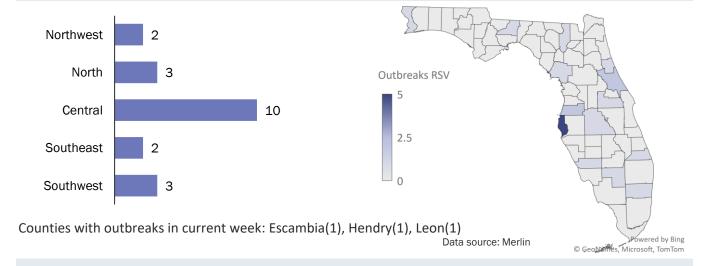
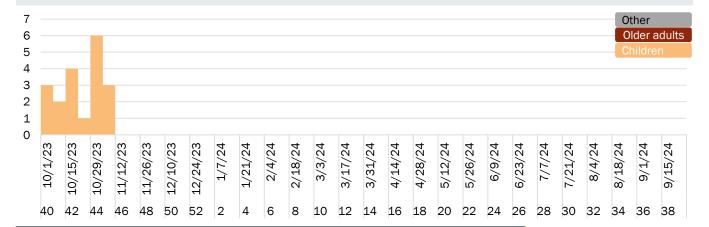


Figure 10: Number of RSV outbreaks by facility's primary age group served for the current RSV year



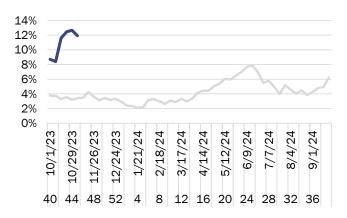
# Regional respiratory syncytial virus (RSV) activity <5 years

Figures below show the percent of emergency department (ED) visits with a discharge diagnosis of RSV for facilities participating in ESSENCE-FL by region for the current RSV year and the previous 3-year average.

Previous 3-year average

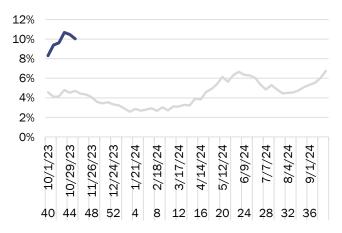
2023-24

Figure 11: ED visits in the northwest region decreased



Week number and current year's week start date

Figure 13: ED visits in the central region decreased



Week number and current year's week start date

Figure 15: ED visits in southwest region decreased

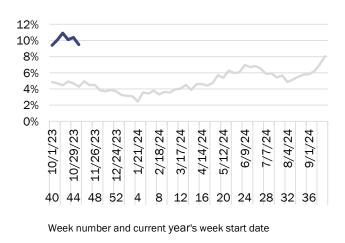
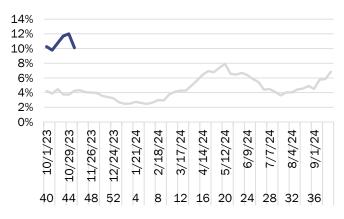
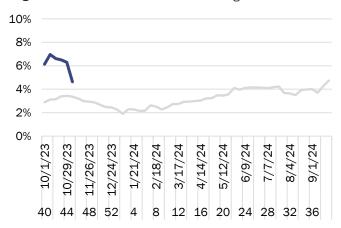


Figure 12: ED visits in the north region decreased



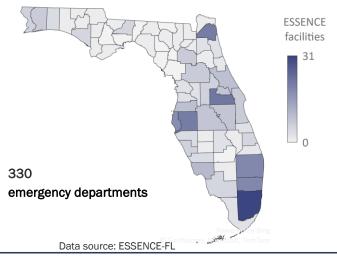
Week number and current year's week start date

Figure 14: ED visits in the southeast region decreased



Week number and current year's week start date

Figure 16: Facilities reporting data to ESSENCE-FL



# Data source notes

All data are preliminary and subject to change.

### **ESSENCE-FL**

Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) evaluates trends in RSV and RSV-related visits from emergency departments (EDs), free-standing emergency departments (FSEDs), and urgent care centers (UCCs). Facilities are continually onboarded in ESSENCE-FL, meaning the denominator updates with the most available data by calendar year. This report includes only patients residing in Florida.

**Discharge diagnoses of RSV:** people visiting participating EDs and FSEDs who have a discharge diagnosis of respiratory syncytial virus. Florida developed the query. This is presented in the report as a percentage of all visits to participating EDs and FSEDs for the week.

**Hospital admissions with RSV diagnoses:** people who were hospitalized with a discharge diagnosis of respiratory syncytial virus. Florida developed the query. Only data from EDs are included in these figures. Report figures use a rate per 100,000 population.

### Merlin lab data

All RSV results, including positive and negative, are reportable in Florida for all laboratories participating in electronic laboratory reporting. BPHL performs testing on surveillance specimens from sentinel providers, outbreak investigations, and medical examiners.

### Merlin outbreak data

RSV outbreaks are reportable in Florida. Reported outbreaks are investigated and documented in Merlin by local county health departments to track activity throughout the year compared to previous years.

**RSV outbreaks** are defined by setting type with at least one individual testing positive for RSV. Definitions by setting type include:

Facilities serving adults  $\geq$ 65 years (long-term care facilities, assisted living facilities, and nursing homes:  $\geq$ 2 ill individuals with symptoms within 72 hours, where  $\geq$ 1 individual tests positive for RSV. Facilities serving children (primary/secondary schools and daycares):  $\geq$ 3 ill individuals with symptoms within 72 hours who are epidemiologically linked (see below for definition), where  $\geq$ 1 individual tests positive for RSV.

**Other settings**:  $\geq 2$  ill individuals with symptoms within 72 hours, where  $\geq 1$  individual tests positive for RSV.

Household clusters are not counted as outbreaks.

**Epidemiological linkage:** individuals were present in the setting during the same time period (e.g., same classroom) and there is not a more likely source of exposure for identified cases (e.g., same household).

# Vital Statistics death certificate

Death certificate data are queried for the terms "respiratory syncytial", "RSV", and ICD9/ICD10 codes J12, J210. Deaths with any of these terms are excluded: "coronavirus", "COVID", "SARS", "aspir", "pneumonitis", "parainfluenza", "influenzae", "H1N1", "influenza", and ICD9/ICD10 codes "U07.1", "U071", "J09", "J10", "J11", "J219", "J212", "J213", "J128", "J123", "J120". Deaths are aggregated by date of death. Prior to the 2021-22 year, they were aggregated by date of notification of death. Report figures use a rate per 100,000 population.

### **RSV** activity trends

The following criteria are used to assess trend for RSV emergency department visits and lab positivity.

Increasing: current week is >0.001 higher than the previous 3-week average (i.e., 0.1%)

**Decreasing:** current week is >0.001 lower than the previous 3-week average

No change: current week is within +/-0.001 of the previous 3-week average