# Florida FLU REVIEW

Season: 2021-22

Week 49: 12/5/21-12/11/21

Week 49 influenza & influenza-like illness (ILI) activity summary:

During week 49, influenza and ILI activity remained at low levels across the state.

Influenza seasons vary in timing, severity, and duration. It is not possible to predict what the 2021–22 influenza season will be like in Florida.

Annual vaccination is the best way to protect yourself and your loved ones from influenza and its potentially severe complications. Now is the perfect time to get vaccinated. The flu vaccine may be given at the same time as the COVID-19 vaccine (www.cdc.gov/vaccines/pandemic-quidance/index.html).

During the last four weeks, the percent of influenza-positive laboratory results remained low but is increasing. The predominant strain for the 2021–22 influenza season is influenza A (H3). There was no predominant strain detected in Florida for the 2020–21 influenza season.

The percent of emergency department and urgent care center visits with discharge diagnoses that indicate influenza infection remained low in recent weeks but are increasing for the first time since March 2020.

No new influenza-associated pediatric deaths were reported in week 49.

The Centers for Disease Control and Prevention recommends antiviral treatment be initiated as soon as possible for people with confirmed or suspected influenza who are at higher risk for complications (children <2 years, adults ≥65 years, pregnant people, and people with underlying medical condition). Treatment should be administered within 49 hours of illness onset. For more information, contact your health care provider.

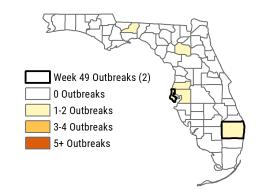
The COVID-19 pandemic is affecting health care seeking behavior, which may be impacting the ILI and influenza activity trends shown in this report. An overall reduction in the number of emergency department and urgent care center visits has been observed since March 2020, along with changes in the reasons for seeking care at these facilities.

The Florida Department of Health will continue to make updates and provide clarification on the trends presented in this report as needed.

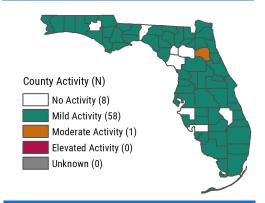




# Influenza or ILI Outbreaks Reported as of 12/15/21



#### **County Influenza Activity**



#### Flu Shot Locator





Your flu shot is the first and most important step to fight the flu.

To locate a vaccine near you, visit: VaccineFinder.org



### In This Issue

#### **Table of Contents:**

In This Issue.	<u>)</u>
County influenza and ILI Activity Maps2	2
Statewide Influenza Activity	3
Statewide Influenza and Influenza-like-Illness Activity	1
Influenza and ILI Outbreaks6	ó
Influenza Laboratory Surveillance	3
Regional ILI Activity9	)
At-Risk Populations: Children	)
Influenza-Associated Pediatric Deaths	)
At-Risk Populations: Pregnant Women	l
At-Risk Populations: Adults ≥ 65 Years Old	1
Respiratory Syncytial Virus (RSV) Surveillance	2
Other Respiratory Virus Surveillance	1
Summary of Notable Outbreaks	5
Florida ILI Surveillance System Summary	5

### **Background**

Influenza, or flu, is a respiratory infection caused by a variety of influenza viruses. Most experts believe influenza viruses spread primarily by droplets made when infected people cough, sneeze or talk. Less often, a person might become infected with influenza by touching a surface or object contaminated with influenza virus and then touching their own mouth, eyes or nose.

The best way to prevent influenza infection is to get vaccinated each year. Influenza vaccines protect against the three or four influenza viruses research suggests will be most common.

#### Influenza Surveillance

Individual cases of influenza are not reportable in Florida with the exception of novel influenza A (a new subtype of influenza A) and influenza-associated pediatric deaths. All outbreaks, including those due to influenza or influenza-like illness (ILI), are reportable in Florida.

Influenza surveillance is conducted to detect changes in the influenza virus. These data are used to help determine the annual northern

hemisphere vaccine composition and to prepare for potential pandemics.

Surveillance is also conducted to identify any unusually severe presentations of influenza, detect outbreaks and determine the onset, peak and wane of the influenza season to assist with influenza prevention, particularly in high-risk populations like the very young, adults aged ≥65 years and pregnant women.

The influenza reporting year is defined by standard reporting weeks outlined by the Centers for Disease Control and Prevention, where every year has 52 or 53 reporting weeks. Increased surveillance for influenza in Florida for the 2021–22 season began in week 40 (starting on October 3, 2021) and will extend through week 20 (ending May 21, 2022). This report is produced by the Florida Department of Health on a weekly basis during the regular influenza season and an abbreviated report is published on a biweekly basis during the summer months.

Surveillance case definitions for ILI vary slightly across surveillance systems. For more information on Florida's influenza surveillance systems and associated case definitions, see last two pages of the report.

### County Influenza Activity

Figure 1: Most counties reported no activity or **mild activity** for week 49. One county reported **moderate activity** and zero reported **elevated activity**.

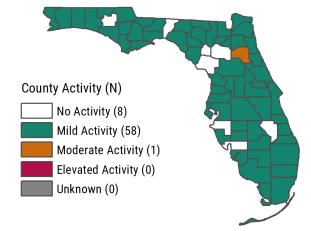
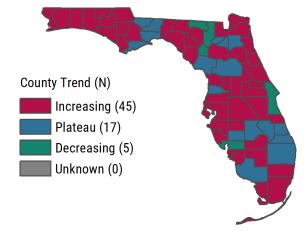


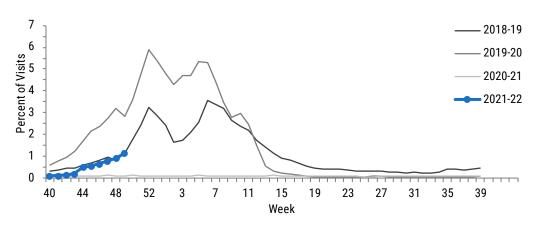
Figure 2: Most counties reported **increasing activity** for week 49. Seventeen counties reported **activity at a plateau**. Five counties reported **decreasing activity.** 



▲ Figures 1–2 show county influenza activity data as reported by county health departments in EpiGateway. These data are collected on a weekly basis and are used to determine influenza activity levels for each county (Figure 1). County health departments also report their weekly influenza activity trend (Figure 2).

### Statewide Activity: Influenza

Figure 3: In week 49, the percent of emergency department visits with a discharge diagnosis of influenza statewide increased but remained below the previous three-season activity for this time.

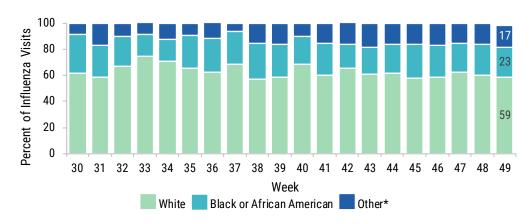


▼ Figure 3 shows the percent of visits with discharge diagnoses that indicate influenza infection for facilities participating in ESSENCE-FL (n=309) statewide for the current season (week 40, 2021 to week 49, 2021) and the previous three seasons (2020-21, 2019-20, and 2018-19).\*\*

Figure 4: In week 49, **59**% of emergency department with a discharge diagnosis of influenza statewide were in those who have a reported race of **black or African**American and **17**% were in an unknown or **other**\* racial category.

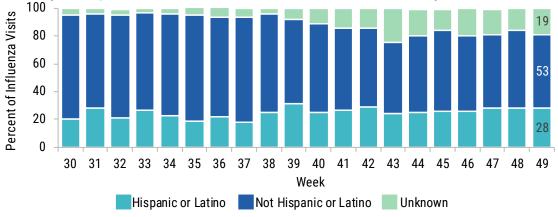
Figure 4 shows the statewide percent of visits with discharge diagnoses that indicate influenza infection by three racial categories for facilities participating in ESSENCE-FL (n=309) statewide for the current season (week 30, 2021 to week 49, 2021).\*\* ▶

\*Other race includes visits with the following reported races: Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, multiracial, other, and unknown.



Data quality must be improved for more accurate visualization of smaller minority groups.

Figure 5: In week 49, **53**% of emergency department visits with a discharge diagnosis of influenza statewide were in those who have a reported ethnicity<sup>+</sup> of **not Hispanic or Latino**, **28**% of visits were in those who have a reported ethnicity of **Hispanic or Latino**, and **19**% were in an **unknown** ethnicity.



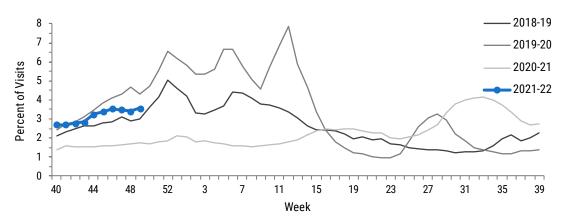
■ Figure 5 shows the statewide percent of visits with discharge diagnoses that indicate influenza infection by ethnicity categories for facilities participating in ESSENCE-FL (n=309) statewide for the current season (week 30, 2021 to week 49, 2021).\*\*

<sup>\*\*</sup>Of note, influenza may not be laboratory-confirmed for all the visits included in this query.

<sup>\*</sup>Race and ethnicity categories are mapped from data submitted by facilities participating in ESSENCE-FL. Individual facilities have varying practices for collecting and storing race and ethnicity values, which may impact the data displayed.

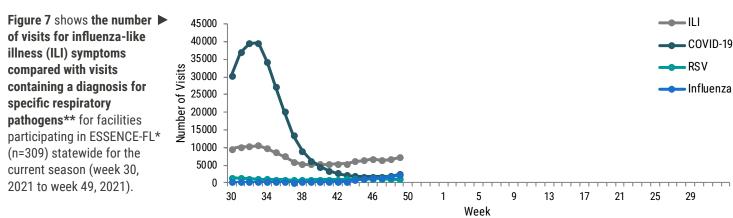
# Statewide Activity: Influenza and Influenza-like-illness

Figure 6: In week 49, the percent of emergency department and urgent care center visits for ILI statewide increased slightly. Levels were similar to those observed at this time in previous seasons.



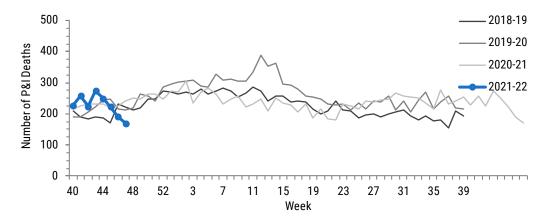
■ Figure 6 shows the percent of visits for influenza-like illness (ILI) for facilities participating in ESSENCE-FL\* (n=410) statewide for the current season (week 40, 2021 to week 49, 2021) and the previous three seasons (2020–21, 2019–20, and 2018–19).

Figure 7: ILI has previously been used to represent influenza activity, but now is important to view in the context of diagnoses for common viral respiratory pathogens. In week 49, **the number of visits with a discharge diagnosis of influenza increased** compared to visits with other viral respiratory related diagnoses (Coronavirus Disease 2019 (COVID-19), respiratory syncytial virus (RSV)).



Of note, these are not laboratory-confirmed disease visits and **do not equal laboratory-confirmed COVID-19 cases in Florida.** Data are incomplete and may change as additional data are received. Counts are not mutually exclusive, visits may be counted in one or more categories.

Figure 8: In week 47 (ending 11/27/21), the number of pneumonia and influenza deaths identified statewide decreased and was below levels observed at this time in previous seasons. Of note, the query used to capture these data excludes pneumonia associated with COVID-19 to better capture influenza death trends in Florida.



■ Figure 8 shows pneumonia and influenza (P&I) deaths\* for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2018 to week 47, 2021.

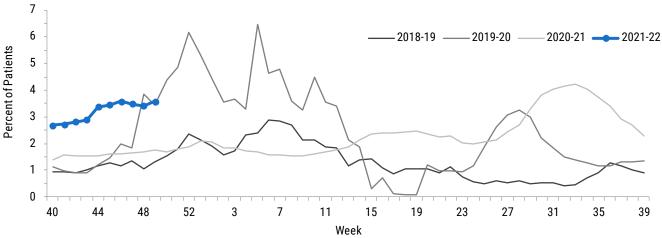
Recent P&I death counts are preliminary numbers that may change as more data are received. The most recent data available are displayed here.

<sup>\*</sup>For more information on the use of ESSENCE-FL for viral respiratory disease surveillance, see page 16.

<sup>\*\*</sup>For more information on RSV surveillance, see page 12.

# Statewide Activity: Influenza-like-illness

Figure 9: In week 49, the percent of patients with ILI reported by ILINet providers statewide increased slightly and was above levels observed during previous seasons and similar to below levels during the 2019-2020 flu season.

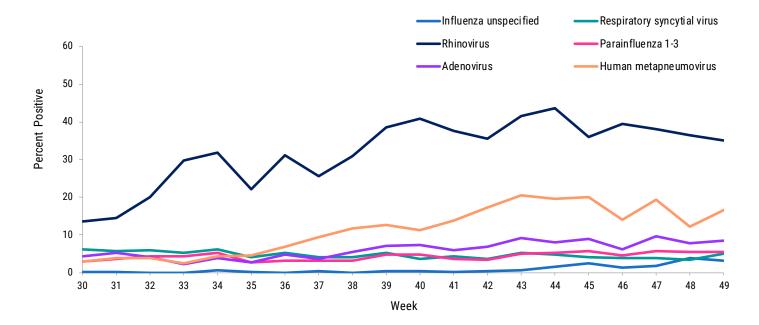


▲ Figure 9 shows the percent of patients with influenza-like illness (ILI) reported statewide by ILINet providers (n=353), week 40, 2018 to week 49, 2021.

For ILINet, ILI is defined as a fever ≥100°F in conjunction with sore throat or cough. This definition was updated starting with the 2021–22 season which impacts comparisons between season.

# Circulating Viral Respiratory Pathogens

Figure 10: In week 49, the percent of specimens testing positive for human metapneumovirus, RSV, and adenovirus increased while parainfluenza 1-3 remained consistent and rhinovirus and influenza unspecified decreased when compared with previous weeks. This information may change as additional data are received.



▲ Figure 10 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=4), week 30, 2021 to week 49, 2021.

### Influenza and Influenza-like-illness Outbreaks

#### Week 49 Outbreaks at a Glance:

Number Reported: \_\_\_\_

2 Outbreaks



Influenza-Associated:

2 Outbreaks



Severe Outcomes\*:

0 Outbreaks

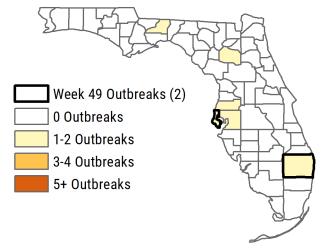


#### **Outbreak Summary:**

Zero ILI and two influenza-associated outbreaks were reported in week 49.

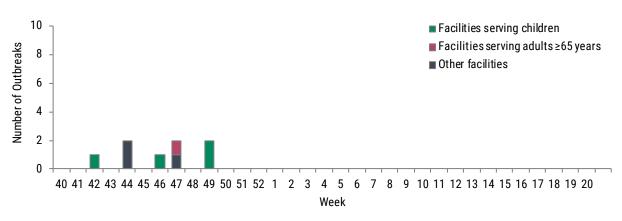
Severe outcomes\* (hospitalizations or deaths) were reported in one outbreak reported so far this season.

During the previous season, minimal outbreaks were reported overall.



▲ Figure 11 shows reported influenza or ILI outbreaks by county. Counties with outbreaks reported in week 49 are outlined in bold.

Figure 12: In week 49, **two outbreaks** were reported **in facilities serving children**.



◆ Figure 12 shows the number of influenza-associated or ILI outbreaks by week as reported in Merlin by county health departments, week 40, 2021 to week 49, 2021. More information on how these setting categories are defined is available on pages 6-7.

Figure 13: As of week 49, **75.0% of outbreaks** reported so far this season were **influenza-associated**.



**Figure 13** shows the total number of outbreaks and the number of influenza-associated outbreaks as reported in Merlin by county health departments for the 2021–22 season as of week 49, 2021. For more information on how ILI and influenza-associated outbreaks are defined, see page 16.

<sup>\*</sup>Severe outcomes are defined as hospitalization or death among one or more outbreak cases.

<sup>\*\*</sup>Total outbreaks includes the number of influenza-associated outbreaks in addition to outbreaks of ILI.

# Influenza and Influenza-like-illness Outbreaks

Outbreaks with COVID-19 identified:

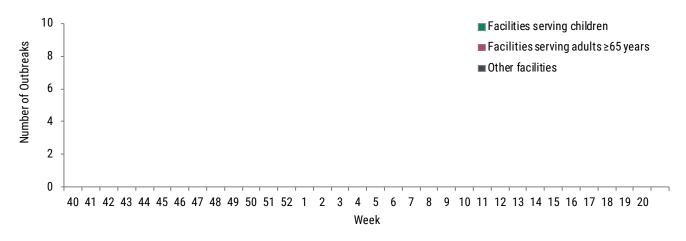
0 Outbreaks



#### Summary of Outbreaks with Influenza and COVID-19 identified:

\*Cocirculation is defined at the outbreak level. To meet criteria, during the outbreak period at least one person must test positive for influenza and at least one person must test positive for COVID-19, the disease caused by the virus SARS-CoV-2.

Figure 14: In week 49, **no outbreaks** were reported with influenza and SARS-CoV-2 cocirculating.



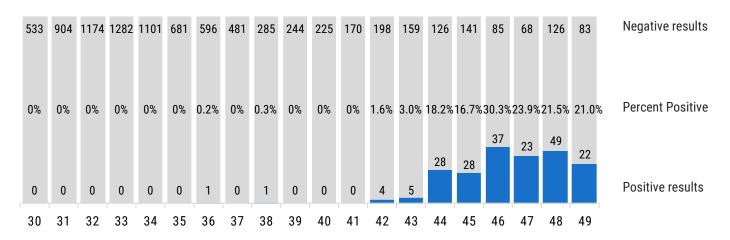
▲ Figure 14 shows the number of influenza and COVID-19 associated outbreaks by week as reported in Merlin by county health departments, week 40, 2021 to week 49, 2021.

### Table 1: Summary of Influenza or ILI Outbreaks Reported During the 2021-22 Season by Setting

Setting	Number of Outbreaks (Percent of Outbreaks)	Number ILI or Influenza-Associated
Primary or secondary schools	2 (25%)	1 influenza-associated outbreaks 1 ILI outbreak
Child daycares	2 (25%)	1 influenza-associated outbreaks 1 ILI outbreak
Camps	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks
Assisted living facilities	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks
Nursing facilities	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks
Other long-term care facilities	1 (13%)	1 influenza-associated outbreaks 0 ILI outbreaks
Post-secondary schools	2 (25%)	2 influenza-associated outbreaks 0 ILI outbreaks
Correctional facilities	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks
Additional facility types	1 (13%)	1 influenza-associated outbreaks 0 ILI outbreaks
Total	8 (100.0%)	2 influenza-associated outbreaks 4 ILI outbreaks

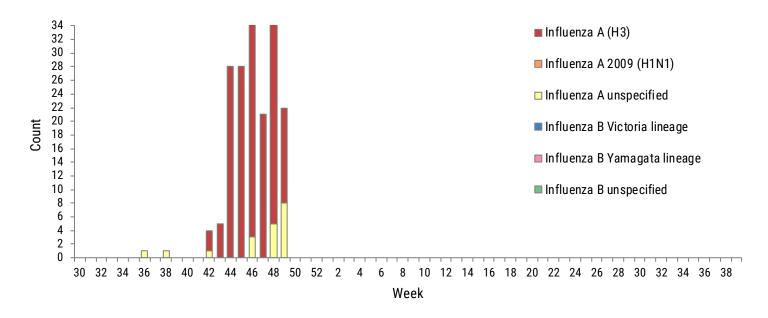
# Laboratory Surveillance

Figure 15: In week 49, 21.0% of specimens tested were positive for **influenza**.



▲ Figure 15 shows the number of specimens tested for influenza at the Bureau of Public Health Laboratories (BPHL) by lab-event date,\* week 30, 2021 through week 49, 2021. Specimens are organized by result and percent positivity of results was calculated by dividing positive results over total results.

Figure 16: Since week 30, 2021 the majority of specimens **tested positive for influenza A (H3).** This is the predominant strain identified so far this season. During the previous influenza season (2020-2021), no predominant influenza subtype was detected due to low volume of positive results.



▲ Figure 16 shows the number of influenza-positive laboratory results at the Bureau of Public Health Laboratories (BPHL) by lab-event date,\* week 30, 2021 through week 49, 2021.

\*"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.

# **Regional Activity**

Figures 17–23 show the percent of emergency department visits with discharge diagnoses that indicate influenza infection at ESSENCE-FL participating facilities (n=309) for the current season from week 40, 2021 and the previous three seasons (2020–21, 2019–20, and 2018–19). Data are organized by region (see Figure 24).

Figure 17: In **region 1, influenza activity increased** during week 49 and was within the previous three-seasons for this time.



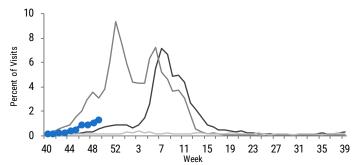


Figure 19: In **region 3, influenza activity increased slightly** during week 49 and was within the previous three-seasons for this time.

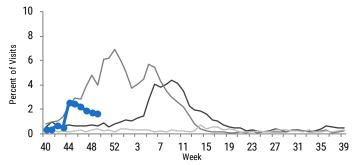


Figure 20: In **region 4, influenza activity increased** during week 49 and was within the previous three-seasons for this time.

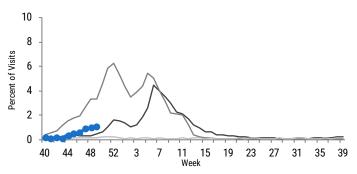


Figure 21: In **region 5, influenza activity increased** during week 49 and was within the previous three-seasons for this time.

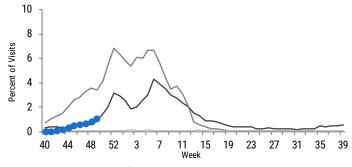


Figure 22: In **region 6, influenza activity increased slightly** during week 49 and was within the previous three-seasons for this time.

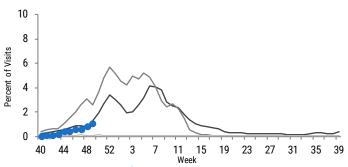
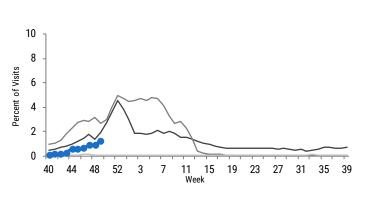
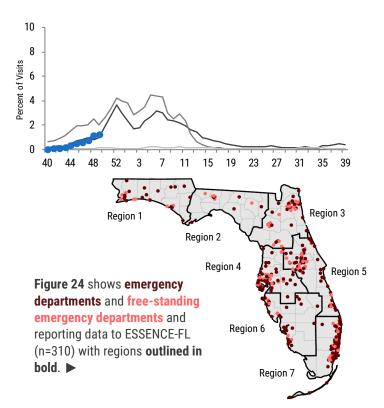


Figure 23: In **region 7, influenza activity increased** during week 49 and was within the previous three-seasons for this time.



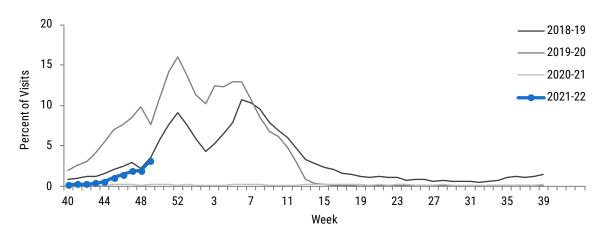


### **At-Risk Populations**

#### Children Aged <18 Years

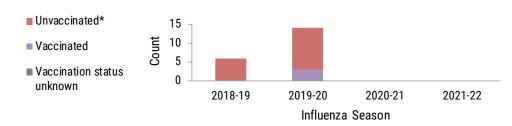
Children, especially those with underlying health conditions (like asthma or diabetes), are at higher risk for severe complications from influenza infection. The single best way to protect children from influenza is to get them vaccinated every year. The Centers for Disease Control and Prevention continues to recommend influenza vaccination as long as flu viruses are circulating. To find a flu shot near you, please visit: VaccineFinder.org.

Figure 25: In week 49, the percent of emergency department visits with a discharge diagnosis of influenza in children <18 years increased and was below the previous three-season average for this time.

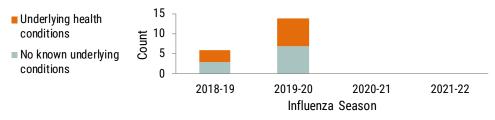


■ Figure 25 shows the percent visits with discharge diagnoses that indicate influenza infection among children <18 years at emergency departments, as reported into ESSENCE-FL, for the current season (week 40, 2021 to week 49, 2021) and the previous three seasons (2020–21, 2019–20, and 2018–19).

Figures 26–27: In week 49, **no new influenza-associated pediatric deaths were reported**. No influenza-associated pediatric deaths have been reported so far this season.



▲ Figure 26 shows the number of influenza-associated pediatric deaths as reported in Merlin by vaccination status, week 40, 2018 to week 49, 2021.



▲ Figure 27 shows the number of influenza-associated pediatric deaths as reported in Merlin by medical history, week 40, 2018 to week 49, 2021.

\*The Advisory Committee on Immunization Practices (ACIP) recommends children aged six months to eight years receive two doses of influenza vaccine administered a minimum of four weeks apart during their first season of vaccination for optimal protection. The Florida Department of Health includes children in this age group who did not receive a second influenza vaccine in this unvaccinated category. To learn more about the ACIP's 2021–22 recommendations, please visit: www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm

In week 49, no new influenza-associated pediatric deaths were reported.

No influenza-associated pediatric deaths have been reported so far this season. Influenza vaccination is recommended as long as influenza viruses are circulating, even in March or later.

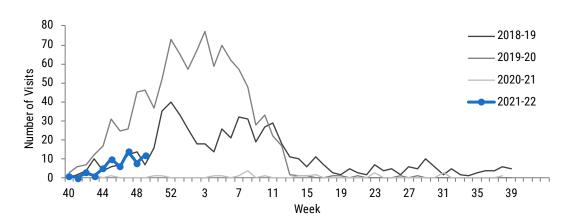
Children, especially those with certain health conditions are at increased risk of severe complications from influenza infection. Influenza vaccination has been shown to reduce a child's likelihood of dying from influenza by up to 60%. For more information, please visit: www.cdc.gov/media/releases/2017/p0413-flu-vaccine.html.

# At-Risk Populations Continued

#### **Pregnant People**

Influenza is five times more likely to cause severe illness in pregnant people (even those who are generally healthy) compared to those who are not pregnant. Pregnant people with certain underlying medical conditions (such as asthma or heart disease) are at even greater risk for severe complications from influenza. Inactivated influenza vaccines are safe, provide the best protection for pregnant people and their babies, and are recommended at any time during pregnancy. Vaccination during pregnancy provides antibody protection to infants too young to be vaccinated for influenza and has been shown to protect pregnant people from influenza-associated hospitalization and preterm birth. For more information, talk to your health care provider.

Figure 28: In week 49, the number of emergency department visits for influenza among pregnant people increased and was within levels observed at this time during previous seasons.

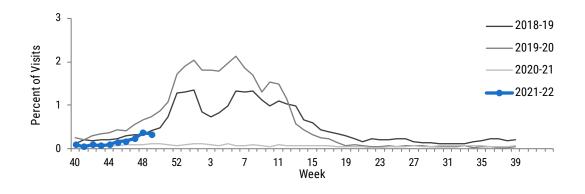


■ Figure 28 shows the number of visits\* to emergency departments with chief complaints of pregnancy and discharge diagnoses that indicate influenza infection, as reported in ESSENCE-FL, week 40, 2018 to week 49, 2021.

### Adults Aged ≥65 Years

Adults ≥65 years old are at higher risk for severe complications from influenza infection, including hospitalization and death. While influenza seasons vary in intensity, adults in this age group bear the greatest burden of severe influenza disease. In Florida, an average of 80% of seasonal pneumonia and influenza deaths occurred in adults aged ≥65 years over the last five influenza seasons. Annual vaccination is the best way to prevent influenza infection.

Figure 29: In week 49, the percent of emergency department visits with a discharge diagnosis of influenza in adults ≥65 years decreased slightly and was within the previous three-season average for this time.



▼ Figure 29 shows the percent of visits with discharge diagnoses that indicate influenza infection among adults ≥65 years at emergency departments, as reported into ESSENCE-FL, for the current season (week 40, 2021 to week 49, 2021) and the previous three seasons (2020–21, 2019–20, and 2018–19).

<sup>\*</sup>This count **underrepresents** the true number of pregnant people presenting for care to emergency departments and urgent care centers with influenza, however, **the overall trend** has been validated through review of discharge data collected by the Agency of Health Care Administration.

# Respiratory Syncytial Virus Surveillance

#### **Background**

**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. Prophylaxis is available for children who qualify. For more information, contact your health care provider.

#### **RSV Surveillance**

A statewide RSV surveillance system was implemented in Florida to support clinical decision-making for prophylaxis of premature infants.

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 from RSV infection. The American Academy of Pediatrics currently recommends pre-approval for prophylactic treatment be made based on

Florida RSV Regions and Seasons

Northwest: October-April

North: September-March

Central: August-March

Southwest: September-April

Southeast: January-December

Regions in Season

▲ Figure 30 shows Florida's RSV regional season breakdown. Regions that are currently in RSV season are marked with pink stars.

state surveillance data. For more information on RSV surveillance systems used in Florida, see the last page of this report.

Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. The Florida Department of Health established regional RSV seasons based on activity thresholds provided by the Centers for Disease Control and Prevention (see Figure 30). Currently, all of Florida's five regions are in RSV season.

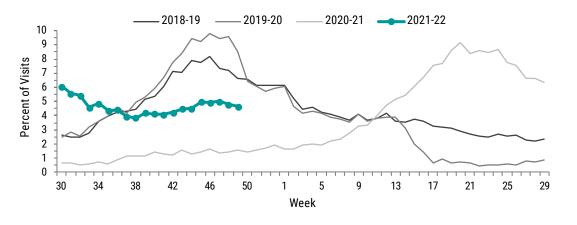
To learn more about RSV in Florida, please visit: FloridaHealth.gov/RSV.

#### Week 49 (December 5-December 11, 2021) Activity Summary

In week 49, RSV activity in children <5 years decreased slightly and was below levels observed at this time during typical seasonal activity.

No new RSV-associated outbreaks were reported in week 49. A total of 6 RSV-associated outbreaks have been reported since week 30, 2021 (beginning on July 25, 2021).

Figure 31: In week 49, the percent of emergency department visits for RSV among children <5 years decreased slightly and was below levels observed at this time during typical seasonal activity.



■ Figure 31 shows the percent of emergency department visits with discharge diagnoses that indicate RSV or RSV-associated illness among children <5 years\*, as reported in ESSENCE-FL, week 30, 2018 to week 49, 2021.

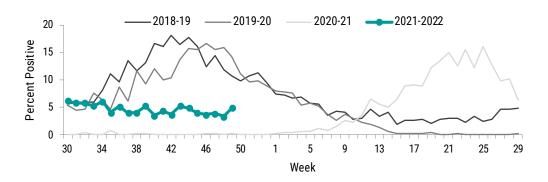


<sup>\*</sup>The overall trend displayed in Figure 31 has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.

### **RSV Surveillance**

Figure 32: In week 49, the percent of specimens testing positive for RSV increased slightly. Levels were below those observed at this time during typical seasonal activity.

Figure 32 shows the percent of specimens testing positive for respiratory syncytial virus (RSV), as reported by hospital laboratories (n=4), week 30, 2018 to week 49, 2021. ▶



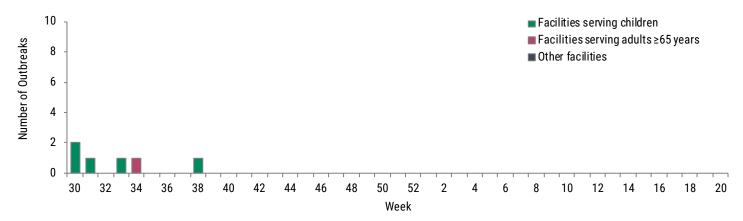
RSV-Associated Outbreaks in Week 49:

#### **Summary of RSV-Associated Outbreaks:**

Since week 30, 2021, 6 RSV-associated outbreaks have been reported. For RSV outbreak definitions, see page 16.

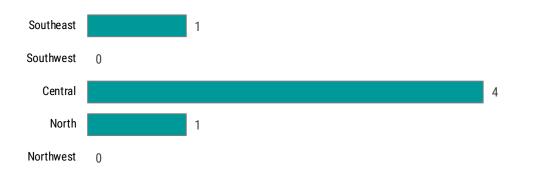
### 0 Outbreaks

Figure 33: In week 49, no new RSV-associated outbreaks were reported. The majority of outbreaks reported since week 30 have been reported in **facilities serving children**.



▲ Figure 33 shows the number of RSV-associated outbreaks by setting and week as reported by county health departments in Merlin, week 30, 2021 to week 49, 2021.

Figure 34: In week 49, no RSV-associated outbreaks were reported. Since week 30, 6 outbreaks have been reported in Florida's southeast, central, and north regions.\*



- ◆ Figure 34 shows a summary of RSV
  -associated outbreaks by region\* as
  reported by county health
  departments in Merlin, week 30, 2021
  to week 49, 2021.
- \*Regions defined in figure 30.

# Other Respiratory Virus Surveillance



<sup>\*</sup>Data shown in figures 36–39 include results for specimens submitted by Optional Influenza Surveillance Enhancements Program (OISE) providers (n=4) as reported by BPHL.

<sup>\*\*</sup>Results are organized by week based on "lab event date" (defined as the earliest of the following dates associated with testing at the laboratory; date specimen collected, date received by the laboratory, date reported or date inserted).

# **Summary of Notable Outbreaks**

Table 2: Summary of Notable\* Influenza-Associated, Respiratory Syncytial Virus (RSV)-Associated and Influenza-like Illness (ILI) Outbreaks Reported in Week 49, 2021

Setting	County	Number of Cases	Number of Cases Died	Number of Cases Hospitalized	Outbreak Etiology	Estimated Percent Vaccinated for Influenza	Investigation Status
School, Primary or Secondary	Palm Beach	130	0	0	Influenza Unspecified	Unknown	Open

<sup>\*</sup>For the purposes of this report, notable outbreaks are defined as influenza-associated, RSV-associated or ILI outbreaks with one or more deaths, or 30 or more cases. Outbreaks with COVID-19 identified as an additional etiology to influenza or RSV will also be included here. For more information on how outbreaks are defined, see page 16.

# Summary of Included Surveillance Systems

#### ESSENCE-FL Syndromic Surveillance and Vital Statistics Portal Data source for figures 3-8, 17-25, 28-29, 31

Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) is useful for measuring trends in influenza and flu-related visits from emergency departments (ED), free-standing emergency departments (FSEDs) and urgent care clinics (UC) and influenza mortality using death certificates from the Bureau of Vital Statistics. Participating EDs (n=214), FSEDs (n=96) and UCs (n=91) electronically transmit visit data into ESSENCE-FL daily or hourly.

Percentages are calculated as the proportion of ED and FSED visits to participating facilities that include the specific pathogen (see query descriptions below) over the total number visits with a discharge diagnosis available for that week. Facilities are continually onboarded in ESSENCE-FL meaning the denominator updates with the most available data by influenza season.

For pneumonia and influenza (P&I) mortality surveillance, death record literal cause of death is queried using a free-text query that searches for P&I deaths as listed on the death certificate. Deaths counts are aggregated and presented by date of death.

For RSV mortality surveillance, death record literals are queried using a free-text query that searches for indications of RSV on death certificates. Any mention of RSV, syncytial and bronchiolitis in the death certificate literals is counted as a RSV death. These deaths are also investigated to ensure they meet the case definition.

#### Query Descriptions:

ILI: Chief complaints that include the words "influenza" or "flu." Also searches for the words "fever" and ("cough" or "sore throat"). Defined syndrome within ESSENCE-FL.

Influenza: Discharge diagnosis history that includes "influenza" or influenza related ICD-10 codes (www.icd10data.com/). Includes exclusions for vaccination, parainfluenza, and haemophilus influenzae. Florida developed query.

RSV: Discharge diagnosis history that includes "RSV", "bronchiolitis" or "syncytial" or RSV related ICD-10 codes. Florida developed query. COVID-19: Discharge diagnosis that includes COVID-19 related ICD-10 codes. CDC developed query.

#### Florida ILINet Data source for figure 9

ILINet is a nationwide surveillance system composed of sentinel providers, predominately outpatient health care providers. Florida has 118 sentinel providers enrolled in ILINet who submit weekly influenza-like illness (ILI) and total visit counts, as well as submit ILI specimens to the Bureau of Public Health Laboratories for virologic surveillance. For health care providers interested in enrolling in ILINet, contact your local county health department.

#### County Influenza Activity in EpiGateway Data source for figure 1 and 2

County health department (CHD) epidemiologists report their county's influenza and ILI surveillance data weekly into The Florida Department of Health's EpiGateway website. Data from these reports is used to classify influenza activity as: no activity, mild, moderate or elevated. Setting-specific influenza activity and influenza trend information is also reported by CHDs as available. EpiGateway data provided by CHDs creates a county-by-county breakdown of influenza and ILI activity around the state.

#### Laboratory Viral Respiratory Surveillance Data source for figures 10 and 32

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a CDC surveillance system that captures on eight commonly circulating respiratory viruses as reported by participating laboratories in Florida. NREVSS data are combined with validated electronic laboratory data from Florida laboratories that submit RSV laboratory results via electronic laboratory reporting. Together, this information is used to monitor the temporal and geographic patterns of these viruses.

#### Outbreak Reporting in Merlin Data source for figures 11–14, 33–35; table 1 and 2

Outbreak investigations are tracked in Merlin (Florida's reportable disease surveillance system) by investigating CHDs. 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.
- RSV-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 RSV. RSV-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 RSV. Testing may be
  conducted by BPHL, commercial laboratories, hospitals or private health care providers.
- Notable outbreaks include influenza-associated, RSV-associated or ILI outbreaks in any setting with 30 or more cases, or one or more cases who died. Outbreaks with COVID-19 identified as an additional etiology to influenza or RSV are also included as notable.
- Household clusters are not counted as outbreaks.

# Summary of Included Surveillance Systems Continued

Bureau of Public Health Laboratories (BPHL) Data source for figures 15, 16, and 36-39.

BPHL performs testing and subtyping on surveillance specimens from sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations and medical examiners. Sentinel providers include both ILINet and Acute Respiratory Infection Epidemiology and Surveillance Program (ARIES) providers. Some laboratories also routinely submit pre-screened influenza-positive specimens for testing at BPHL for surveillance purposes.

Case-Based Influenza Surveillance Data source for figures 26 and 27

Death in a child whose laboratory-confirmed influenza infection has been identified as a contributing to the child's death is a reportable condition in Florida. Influenza-associated pediatric deaths are documented by CHDs in Merlin.

In addition, an individual of any age suspected as being infected with non-seasonal or pandemic influenza A is reportable condition in Florida. Such cases are referred to as cases of 'novel influenza A.' Novel influenza A cases are documented by CHDs in Merlin.

For more information about reportable diseases and conditions, please visit FloridaHealth.gov/DiseaseReporting.