

A 2009 (H1N1)

### Week 4 influenza & influenza-like illness (ILI) activity summary:

Widespread

**Activity increased and remained elevated in week 4.** Elevated activity is still expected for several more weeks. It is too early to say if activity has peaked yet for the season.

**Eleven outbreaks were reported, down from 20 outbreaks in the previous week.** Of the 11 outbreaks reported, seven were influenza-associated and four were ILI.

One new influenza-associated pediatric death was reported in an unvaccinated child with an underlying medical condition. Five influenzaassociated pediatric deaths have been reported so far this season, all in unvaccinated children.

**Influenza A 2009 (H1N1) remained the predominant strain.** Earlier in the season, influenza B Victoria lineage viruses were predominant. Influenza B Victoria lineage viruses continue to circulate at lower levels.

The Centers for Disease Control and Prevention (CDC) continues to recommend that people who have not yet been vaccinated do so as soon as **possible.** Vaccination should continue as long as influenza viruses are circulating. It is especially important for people at higher risk for complications (children, adults ≥65 years, pregnant women, and people with underlying medical conditions).

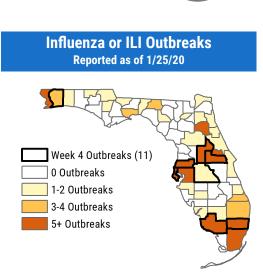
On January 10, 2020, CDC issued a health advisory reminding clinicians that influenza B viruses can cause severe illness in people of all ages and reiterating vaccination and antiviral treatment recommendations (emergency.cdc.gov/han/HAN00425.asp).

In addition to getting vaccinated, the Florida Department of Health recommends you take everyday precautions to prevent the spread of influenza and other respiratory viruses:

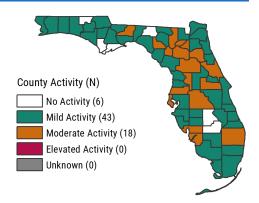
- Wash your hands often with soap and water (if soap is not available, use an alcohol-based sanitizer).
- Avoid touching your eyes, nose, and mouth.
- If you do get sick, stay home until fever-free for at least 24 hours (without the use of fever-reducing medication).

**Posted January 29, 2020** on the Bureau of Epidemiology (BOE) website: FloridaHealth.gov/FloridaFlu Produced by the BOE, Florida Department of Health

Contributors: Julia Munroe, MS; Katie Kendrick, MPH: Heather Rubino, PhD; Amy Bogucki, MPH; Casey McBride, MPH; Mwedu Mtenga, MPH; Samuel P. Prahlow, MPH; Lea Heberlein-Larson, DrPH, CPH, SM(ASCP)<sup>CM</sup>; Edgar Kopp, MS, MT(AAB); Valerie Mock, BS; Pam Colarusso, MSH; Leah Eisenstein, MPH.



Increasing



**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



### **Table of Contents:**

In This Issue2	)
Statewide ILI Activity2	)
Geographic Spread of Influenza in Florida	}
Statewide ILI Outpatient Visits and P&I Deaths	}
County influenza and ILI Activity Maps4	ŀ
Influenza and ILI Outbreaks5	; )
Influenza Laboratory Surveillance8	}
Regional ILI Activity9	)
At-Risk Populations: Children10	)
Influenza-Associated Pediatric Deaths10	)
At-Risk Populations: Pregnant Women11	
At-Risk Populations: Adults ≥ 65 Years Old11	
Respiratory Syncytial Virus (RSV) Surveillance12	)
Other Respiratory Virus Surveillance14	ŀ
Summary of Notable Outbreaks15	;
Florida ILI Surveillance System Summary16	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.

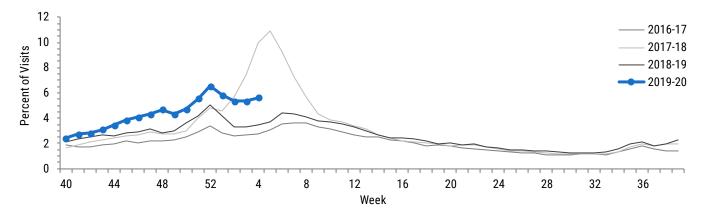
Surveillance is also conducted to identify any unusually severe presentations of influenza, detect outbreaks, and determine the onset, peak, and wane of the influenza season to assist with influenza prevention, particularly in high-risk populations like the very young, adults aged  $\geq$ 65 years, and 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 2019-20 season began in week 40 (starting on September 29, 2019) and will extend through week 20 (ending May 16, 2020). 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 page 16.

### Statewide Activity

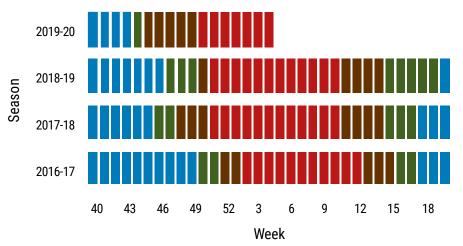
Figure 1: In week 4, **the percent of emergency department and urgent care center visits for ILI statewide increased** but remained within levels observed at this time in past seasons.



▲ Figure 1 shows the percent of visits for ILI for facilities participating in ESSENCE-FL (n=368) statewide for the current season (week 40, 2019 to week 4, 2020) and the last three seasons (2018-19, 2017-18, and 2016-17). The ESSENCE-FL ILI syndrome captures visits with chief complaints that include the words "influenza" or "flu," or chief complaints that include the words "fever" and "cough," or "fever" and "sore throat." For more information on the use of ESSENCE-FL for influenza and ILI surveillance, see page 16.

## **Statewide Activity**

Figure 2: In week 4, Florida reported **widespread geographic spread of influenza** to the Centers for Disease Control and Prevention.



◄ Figure 2 shows Florida's self-reported geographic spread of influenza as reported to the Centers for Disease Control and Prevention, week 40, 2016 to week 4, 2020.

#### Defining geographic spread of influenza:

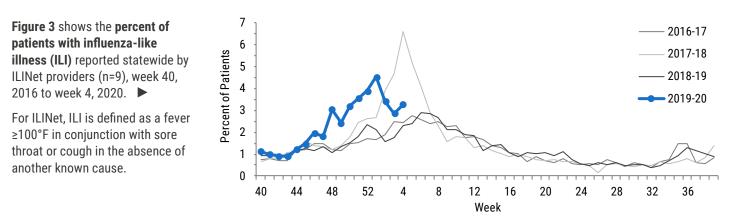
**Sporadic:** small numbers of laboratoryconfirmed influenza or a single laboratoryconfirmed influenza outbreak has been reported, but there is no increase in cases of ILI.

**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.

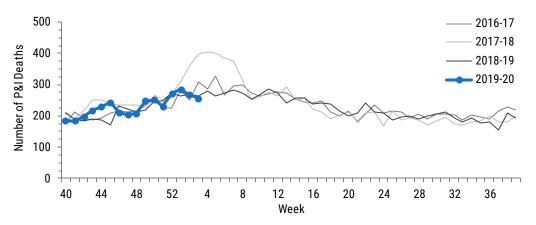
**Regional:** outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.

**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.

Figure 3: In week 4, **the percent of patients with ILI reported by ILINet providers statewide decreased** and was within levels observed at this time in previous seasons. Of note, the number of reporting providers remained low in recent weeks.







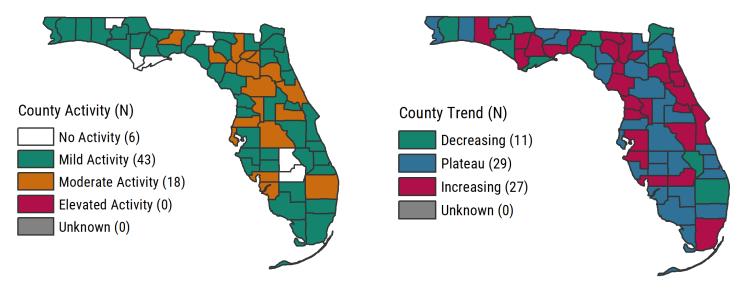
◄ Figure 4 shows pneumonia and influenza (P&I) deaths\* for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2016 to week 3, 2020.

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

## County Influenza Activity

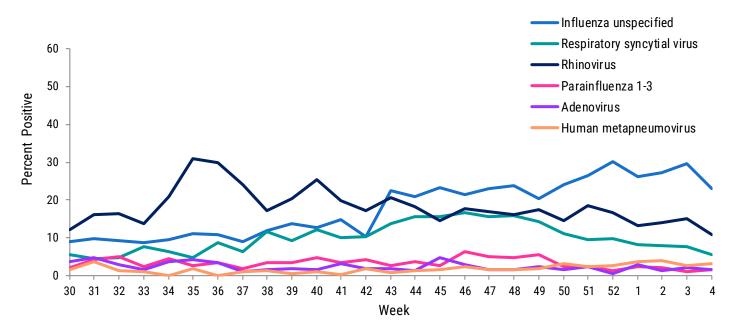
Figure 5: Most counties reported **mild activity** for week 4. Eighteen counties reported **moderate activity**.

Figure 6: Twenty-nine counties reported **activity at a plateau** for week 4. Twenty-seven reported **increasing activity.** 



▲ Figures 5-6 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 5). County health departments also report their weekly influenza activity trend (Figure 6).

Figure 7: In week 4, the **percent of specimens testing positive for influenza decreased** but remained higher than other respiratory viruses under surveillance.



▲ Figure 7 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 (NRVESS) and laboratories reporting validated respiratory virus data to the Florida Department of Health via electronic laboratory reporting (n=8), week 40, 2019 to week 4, 2020.

## Influenza and ILI Outbreaks

### Week 4 Outbreaks at a Glance:





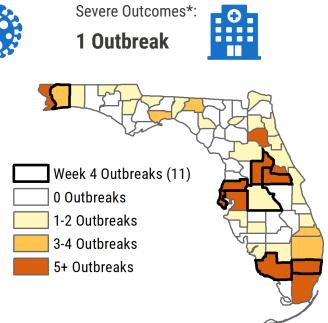


**Outbreak Summary:** 

In week 4, seven influenza-associated and four ILI outbreaks were reported, a decrease from the previous week.

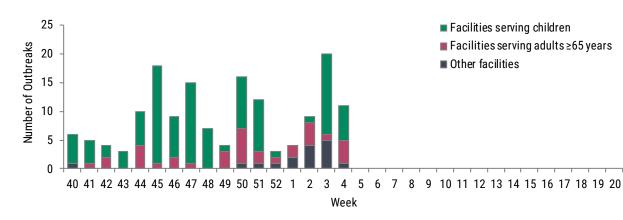
Severe outcomes\* were reported in one of 11 outbreaks. One hospitalization and one death was reported in this outbreak, which was reported in a nursing facility.

During the previous season, severe outcomes were most commonly reported in facilities serving adults aged ≥65 years (assisted living facilities, nursing facilities, and long-term care facilities).



▲ Figure 8 shows reported influenza or ILI outbreaks by county. Counties with outbreaks reported in week 4 are outlined in bold.

Figure 9: In week 4, **four outbreaks** were reported in **facilities serving adults aged ≥65 years**, **six outbreaks** were reported in **facilities serving children**, and **one outbreak** was reported in **other facilities**.



◄ Figure 9 shows the number of influenzaassociated or ILI outbreaks by week as reported in Merlin by county health departments, week 40, 2019 to week 4, 2020. More information on how these setting categories are defined is available on pages 6-7.

Figure 10: As of week 4, **58.0% of outbreaks** reported so far this season were **influenza-associated**.



◄ Figure 10 shows the total number of outbreaks and the number of influenza-associated outbreaks as reported in Merlin by county health departments for the 2019-20 season as of week 4, 2020. For more information on how ILI and influenzaassociated outbreaks are defined, see page 16.

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

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

## Influenza and ILI Outbreaks

Facilities Serving Children\*:

### **6 Outbreaks**

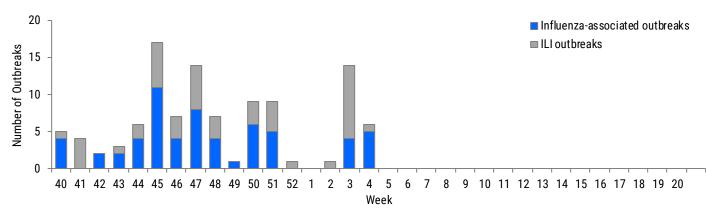


#### Summary of Outbreaks in Facilities Serving Children:

In week 4, six new outbreaks of influenza or ILI were reported in facilities serving children.

\*Facilities serving children include primary schools, secondary schools, and child daycares.

# Figure 11: In week 4, **five influenza-associated outbreaks** and **one ILI outbreak** were reported in **facilities serving children.**



▲ Figure 11 shows the number of influenza-associated or ILI outbreaks in facilities serving children by week as reported in Merlin by county health departments, week 40, 2019 to week 4, 2020.

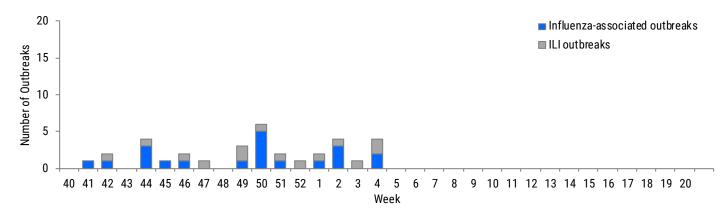


### Summary of Outbreaks in Facilities Serving Adults ≥65 years:

In week 4, four new outbreaks of influenza or ILI were reported in facilities serving adults aged  $\geq$ 65 years.

\*\*Facilities serving adults ≥65 years include assisted living facilities, nursing homes, and other long-term care facilities.





**Figure 12** shows the number of **influenza-associated or ILI outbreaks in facilities serving adults aged**  $\geq$ **65 years by week** as reported in Merlin by county health departments, week 40, 2019 to week 4, 2020.

## Influenza and ILI Outbreaks

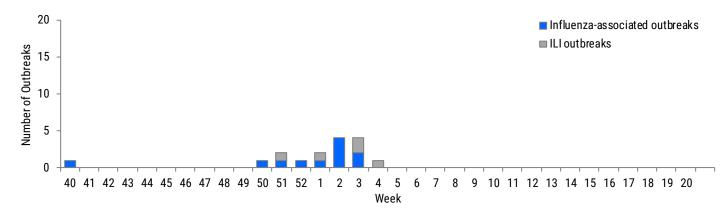


#### Summary of Outbreaks in Other Facilities:

In week 4, one new outbreak of influenza or ILI was reported in other facilities.

\*Other facilities include post-secondary schools, adult daycares, correctional facilities, hospitals, shelters, and workplaces.

#### Figure 13: In week 4, one ILI outbreak was reported in other facilities.

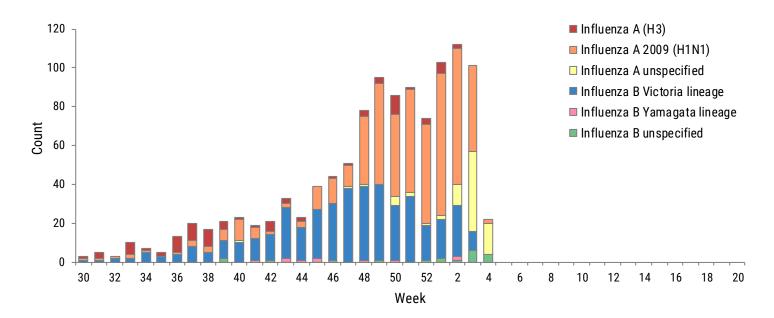


▲ Figure 13 shows the number of influenza-associated or ILI outbreaks in other facilities by week as reported in Merlin by county health departments, week 40, 2019 to week 4, 2020.

Table 1: Summary of Influenza or ILI Outbreaks Reported During the 2019-20 Season by Setting								
Setting	Number of Outbreaks (Percent of Outbreaks)	Number Influenza-Associated or ILI						
Primary or secondary schools	87 (55.8%)	51 influenza-associated outbreaks 36 ILI outbreaks						
Child daycares	19 (12.2%)	9 influenza-associated outbreaks 10 ILI outbreaks						
Camps	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks						
Assisted living facilities	11 (7.1%)	3 influenza-associated outbreaks 8 ILI outbreaks						
Nursing facilities	7 (4.5%)	5 influenza-associated outbreaks 2 ILI outbreaks						
Other long-term care facilities	16 (10.3%)	12 influenza-associated outbreaks 4 ILI outbreaks						
Adult daycares	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks						
Post-secondary schools	0 (0.0%)	0 influenza-associated outbreaks 0 ILI outbreaks						
Correctional facilities	13 (8.3%)	9 influenza-associated outbreaks 4 ILI outbreak						
Hospitals	1 (0.6%)	1 influenza-associated outbreak 0 ILI outbreaks						
Additional facility types	2 (1.3%)	1 influenza-associated outbreak 1 ILI outbreak						
Total	156 (100.0%)	93 influenza-associated outbreaks 63 ILI outbreaks						

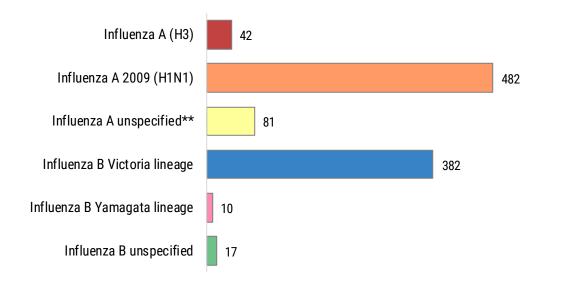
## Laboratory Surveillance

Figure 14: Influenza A 2009 (H1N1) continues to be the most common influenza virus identified at BPHL in recent weeks and influenza A 2009 (H1N1) is the most common influenza subtype detected so far this season. Influenza B Victoria lineage continues to be observed each week.



▲ Figure 14 shows the number of influenza-positive laboratory results at the Bureau of Public Health Laboratories (BPHL) by lab-event date,\* week 30, 2019 through week 4, 2020.

Figure 15: Influenza A 2009 (H1N1) makes up the largest number of influenza detections at BPHL since week 40. Earlier in the season, influenza B Victoria lineage was the most common strain.



◄ Figure 15 shows the number of influenza-positive laboratory results for specimens submitted to BPHL for the current 2019-20 influenza season, week 40, 2019 through week 4, 2020.

The results shown here are reflective of the influenza testing performed by BPHL thus far for specimens with lab event dates\* within this timeframe.

\*"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.

\*\*This number includes both influenza A specimens for which subtyping has not yet been performed as well as specimens that tested positive for influenza A but were unable to be subtyped due to low viral load.

### **Regional Activity**

Figures 16-22 show the percent of emergency department and urgent care center visits for influenza-like illness (ILI) at ESSENCE-FL participating facilities (n=368) from week 40, 2016 to week 4, 2020. Data are organized by region (see Figure 23).

2019-20	2018-19	2017-18	2016-17
---------	---------	---------	---------

Figure 16: In **region 1**, **ILI activity increased** during week 4 but remained within levels observed at this time in past seasons.

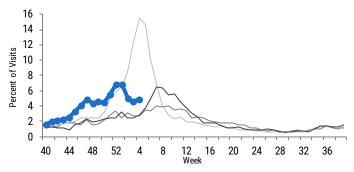


Figure 18: In **region 3**, **ILI activity increased** during week 4 but remained within levels observed at this time in past seasons.

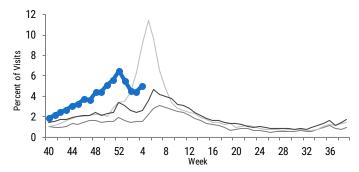


Figure 20: In **region 5, ILI activity increased** during week 4 but remained within levels observed at this time in past seasons.

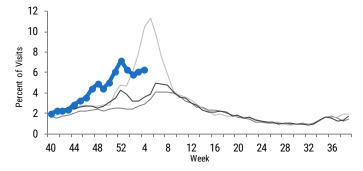


Figure 22: In **region 7**, **ILI activity increased** during week 4 but remained within levels observed at this time in past seasons.

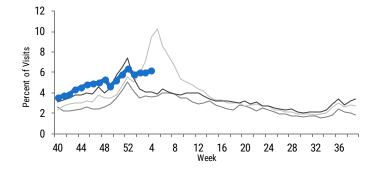


Figure 17: In **region 2, ILI activity increased** during week 4 but remained within levels observed at this time in past seasons.

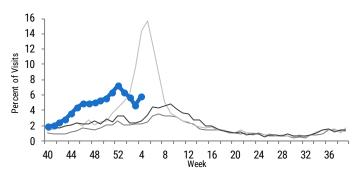


Figure 19: In **region 4**, **ILI** activity was stable during week 4 and remained within levels observed at this time in past seasons.

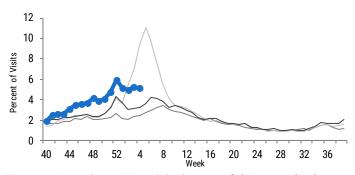
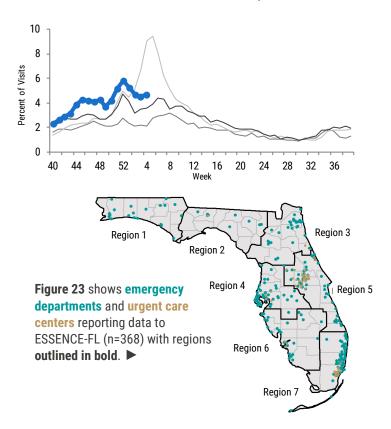


Figure 21: In **region 6, ILI activity increased** during week 4 but remained within levels observed at this time in past seasons.

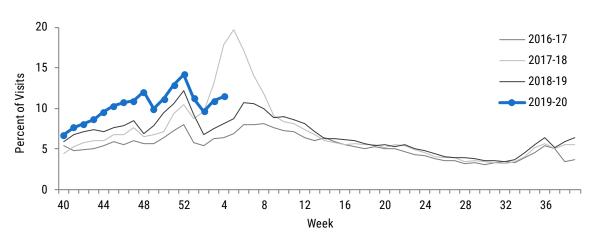


## **At-Risk Populations**

### **Background: At-Risk Populations, Children**

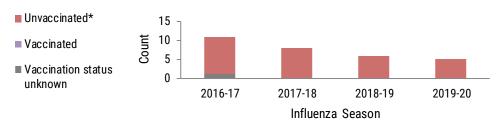
Children, especially those with underlying health conditions (like asthma or diabetes), are at higher risk for severe complications from influenza infection. **The single best way to protect children from influenza is to get them vaccinated every year.** The Centers for Disease Control and Prevention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

Figure 24: In week 4, the percent of emergency department and urgent care center visits for ILI in children <18 years increased and was within levels observed at this time in past seasons.

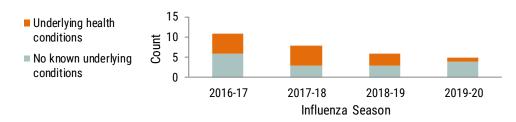


◄ Figure 24 shows the percent of influenza-like illness (ILI) visits among children <18 years at emergency department and urgent care centers, as reported into ESSENCE-FL, week 40, 2016 to week 4, 2020.

Figures 25-26: In week 4, **one new influenza-associated pediatric death was reported** in a child who was **not vaccinated for this 2019-20 season.** A total of four influenza-associated pediatric deaths have been reported so far this season.







pediatric deaths was reported. The death was associated with influenza B Victoria lineage and occurred in a child who was not vaccinated for the 2019-20 season. A total of five influenza-associated pediatric deaths have been reported so far this season. Parents who have not yet had their children vaccinated for the 2019-20 season should do so as soon as possible.

In week 4, one new influenza-associated

While rare, the Florida Department of Health receives reports of influenzaassociated pediatric deaths each season. These deaths are most often reported in unvaccinated children or children with underlying medical conditions.

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/ p0403-flu-vaccine.html.

▲ Figure 26 shows the number of influenza-associated pediatric deaths as reported in Merlin by medical history, week 40, 2016 to week 4, 2020.

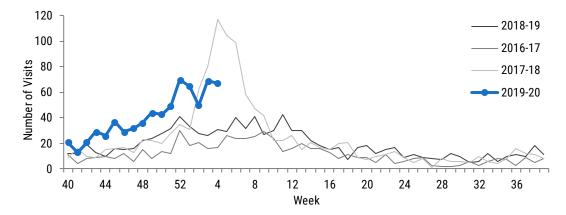
\*The Advisory Committee on Immunization Practices (ACIP) recommends children aged six months to eight years receive two doses of influenza vaccine administered a minimum of four weeks apart during their first season of vaccination for optimal protection. The Florida Department of Health includes children in this age group who did not receive a second influenza vaccine in this unvaccinated category. To learn more about the ACIP's 2019-20 recommendations, please visit: www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm.

## **At-Risk Populations Continued**

### **Background: At-Risk Populations, Pregnant Women**

Influenza is five times more likely to cause severe illness in pregnant women (even those who are generally healthy) compared to women who are not pregnant. Pregnant women 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 women and their babies, and are recommended at any time during pregnancy. Vaccination during pregnancy provides maternal antibody protection to infants too young to be vaccinated for influenza and has been shown to protect pregnant women from influenza-associated hospitalization and preterm birth. For more information, talk to your health care provider.

Figure 27: In week 4, the **number of emergency department and urgent care center visits for influenza among pregnant women decreased slightly** and was within levels observed at this time in past seasons.



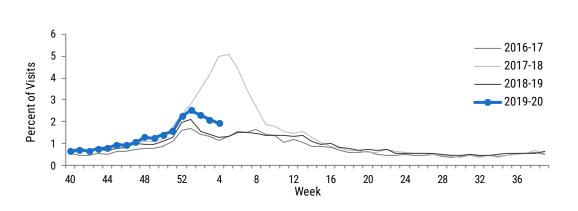
◄ Figure 27 shows the number of visits\* to emergency departments and urgent care centers with chief complaints of influenza and pregnancy, as reported in ESSENCE-FL, week 40, 2016 to week 4, 2020.

\*This count **underrepresents** the true number of pregnant women 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.

### Background: At-Risk Populations, 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 28: In week 4, the **percent of emergency department and urgent care center visits for ILI in adults ≥65** years decreased. Levels were within those observed at this time in previous seasons.



◄ Figure 28 shows the percent of influenza-like illness (ILI) visits among adults ≥65 years old at emergency departments and urgent care centers, as reported into ESSENCE-FL, week 40, 2016 to week 4, 2020.

## **Respiratory Syncytial Virus Surveillance**

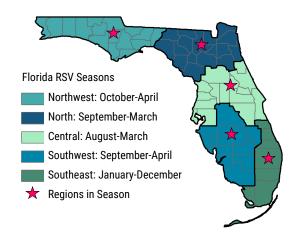
### Background

**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



▲ Figure 29 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 29). **Currently, all of Florida's regions are in RSV season.** 

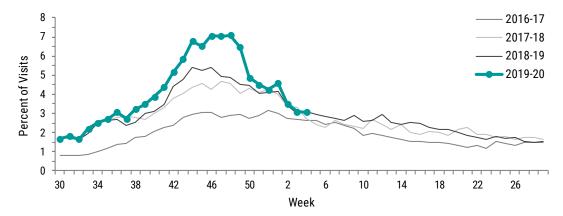
To learn more about RSV in Florida, please visit: FloridaHealth.gov/RSV.

### Week 4 (January 19-25, 2020) Activity Summary

### In week 4, RSV activity in children <5 years was stable and remained similar to levels observed at this time in past seasons.

No new RSV-associated outbreaks were reported. A total of eight RSV-associated outbreaks have been reported since week 30, 2019 (beginning on July 27, 2019).

Figure 30: In week 4, **the percent of emergency department and urgent care center visits for RSV among children <5 years was stable** and remained similar to levels observed at this time in previous seasons.



✓ Figure 30 shows the percent of emergency department and urgent care center visits with discharge diagnoses that include RSV or RSV-associated illness among children <5 years\*, as reported in ESSENCE-FL, week 30, 2016 to week 4, 2020.

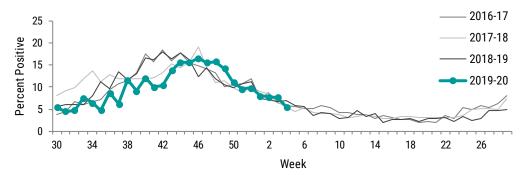
\*The overall trend displayed in Figure 30 has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.



## **RSV Surveillance**

Figure 31: In week 4, **the percent of specimens testing positive for RSV decreased.** Levels were similar to those observed at this time in previous seasons.

Figure 31 shows the percent of specimens testing positive for respiratory syncytial virus (RSV), as reported by hospital laboratories (n=8), week 30, 2016 to week 4, 2020. ►



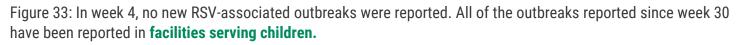
RSV-Associated Outbreaks in Week 4: 0 Outbreaks

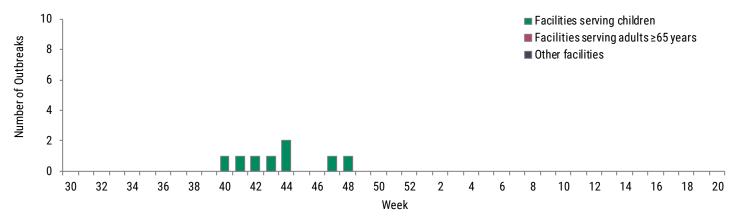
#### Summary of RSV-Associated Outbreaks:

In week 4, no new RSV-associated outbreaks were reported. Since week 30, 2019, eight RSV-associated outbreaks have been reported.

Figure 32: In week 4, no new RSV-associated outbreaks were reported. Since week 30, outbreaks have been reported in Florida's southeast, central, and northwest regions.

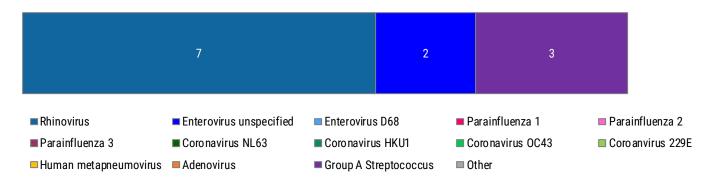




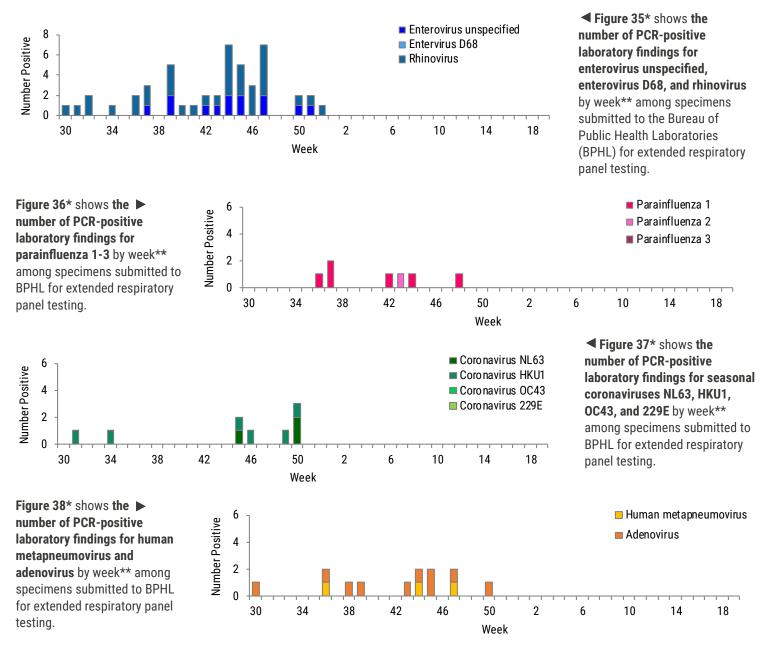


▲ Figure 33 shows the number of RSV-associated outbreaks by setting and week as reported by county health departments in Merlin, week 30, 2019 to week 4, 2020.

## Other Respiratory Virus Surveillance



▲ Figure 34 shows the number of unique times a pathogen was associated with a respiratory outbreak for outbreaks reported from week 30, 2019 to week 4, 2020.



\*Data shown in figures 34-38 include results for specimens submitted by Acute Respiratory Infection Epidemiology and Surveillance Program (ARIES) providers (n=4) as reported by BPHL.

\*\*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 4, 2020

Setting	County	Number of Cases	Number of Cases Hospitalized	Number of Cases Died	Outbreak Etiology	Control Measures Recommended to Facility Leadership	Investigation Status
Nursing facility	Pasco	67	0	0	Influenza A 2009 (H1N1)	Yes	Open
Nursing facility	Polk	9	1	1	Influenza A unspecified and influenza B unspecified	Yes	Open

\*For the purposes of this report, notable outbreaks are defined as influenza-associated, RSV-associated, or ILI outbreaks with two or more hospitalizations, one or more deaths, or 30 or more cases. 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 1, 4, 16-24, 27, 28, 30

Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) measures trends in influenza-like illness (ILI) visits from emergency departments (ED) and urgent care clinics (UCC) and influenza mortality by using death certificates from the Bureau of Vital Statistics. Participating EDs and UCCs (n=368) electronically transmit visit data into ESSENCE-FL daily or hourly.

For statewide and regional data on ILI, visits are counted as ED or UCC visits to participating facilities that include the words "influenza" or "flu" in patient chief complaints. Chief complaints with the words "fever" and "cough," or "fever" and "sore throat" are also counted as ILI.

For pneumonia and influenza (P&I) mortality surveillance, death record literals are queried using a free-text query that searches for references to P&I on death certificates. Any mention of P&I in the death certificate literals, with certain exceptions, is counted as a P&I death. Deaths counts are aggregated and presented by date of death.

For respiratory syncytial virus (RSV) surveillance, visits are counted as ED or UCC visits to participating facilities for which RSV or RSVassociated illness is included in the discharge diagnosis.

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

#### Florida ILINet Data source for figures 2 and 3

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 ILI and total visit counts, as well as submit ILI specimens to the Bureau of Public Health Laboratories for virologic surveillance. For healthcare providers interested in enrolling in ILINet, contact your local county health department.

ILINet is also used as a portal in which the Florida Department of Health reports Florida's geographic spread of influenza each week to the Centers for Disease Control and Prevention (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 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.

#### County Influenza Activity in EpiGateway Data source for figure 5 and 6

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 7 and 31

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 8-13, 32-34; tables 1 and 2

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.

Continued on next page.

## Summary of Included Surveillance Systems Continued

- 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, two or more hospitalized cases, or one or more cases who died.
- Household clusters are not counted as outbreaks.

#### Bureau of Public Health Laboratories (BPHL) Data source for figures 14, 15, and 35-38.

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 25 and 26

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 county health departments 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 county health departments in Merlin.

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