



## Summary

Week 40: October 1-7, 2017

### State influenza and influenza-like illness (ILI) activity:

- During the first week of the 2017-18 influenza season (week 40), influenza activity remained at low levels across the state. Influenza activity is expected to increase in the coming weeks as we head into the fall and winter months.
- Emergency department (ED) and urgent care center (UCC) visits for ILI remained low, however, the number of influenza A outbreaks reported in recent weeks increased. It is not unusual to detect sporadic outbreaks of influenza early in the season; it is not possible to make any predictions about the severity or timing of peak activity based on these outbreak reports.
- Florida reported sporadic activity to the Centers of Disease Control and Prevention (CDC) in week 40.
- Respiratory syncytial virus (RSV) activity in children <5 years decreased slightly but remained above levels observed in previous seasons at this time (see page 12).
- **No influenza-associated pediatric deaths were reported during the first week of the 2017-18 influenza season.**
  - During the 2016-17 influenza season, 11 influenza-associated pediatric deaths were reported. **Annual vaccination remains the best way to protect children against influenza. Now is the perfect time to get vaccinated.**
- The majority of counties reported mild influenza activity.
- Two outbreaks of influenza and one outbreak of ILI were reported.
- **Since July, the most common influenza subtype detected at the Bureau of Public Health Laboratories (BPHL) has been influenza A (H3).** It is still too early to say if influenza A (H3) will continue to predominate throughout the season.

### National influenza activity:

- Influenza activity remains at low levels nationally.
- **Consistent with the trend observed in Florida, influenza A (H3) has been the most common influenza subtype reported to the Centers for Disease Control and Prevention (CDC) by public health laboratories across the nation since July.**
- The CDC Advisory Committee on Immunization Practices (ACIP) voted in favor of the recommendation that **live attenuated influenza vaccine (LAIV) should not be used during the 2017-18 influenza season.** This recommendation follows concerns about lower effectiveness of LAIV during the 2013-14 and 2015-16 influenza seasons against influenza A 2009 (H1N1) viruses. **The ACIP continues to recommend annual influenza vaccination with either the inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV) for everyone aged six months and older.**
- In recent weeks, 32 human infections with novel influenza A viruses were reported. Reports were associated with residents in two states: Delaware (one case) and Maryland (31 cases). All cases reported exposure to swine at three agricultural fairs in Maryland during the week preceding illness onset. Specimens from 14 cases were characterized by CDC as influenza A variant (H3N2v) viruses. Specimens collected from 18 cases tested presumptive positive for influenza A (H3v) at the Maryland public health laboratory. Further confirmatory testing is being performed at CDC to characterize these viruses. One individual remains hospitalized but is improving; all others have fully recovered **No human-to-human transmission has been identified.**
- There is an increased risk for highly pathogenic avian influenza (HPAI) virus identification in birds as we enter the fall migratory season. HPAI has not been identified in Florida birds (and would be expected to be observed in northern states first), but identifications are possible. No human HPAI infections have been identified in Florida or any other states.
  - To learn more about HPAI, please visit: [www.floridahealth.gov/novelflu](http://www.floridahealth.gov/novelflu).

## Weekly State Influenza Activity

# Sporadic

For more information see page 2 ▶



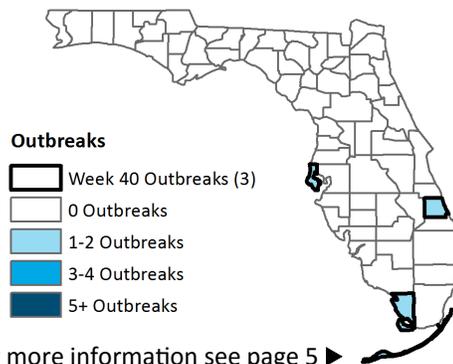
## Predominately Circulating Strain

# A (H3)

For more information see page 7 ▶

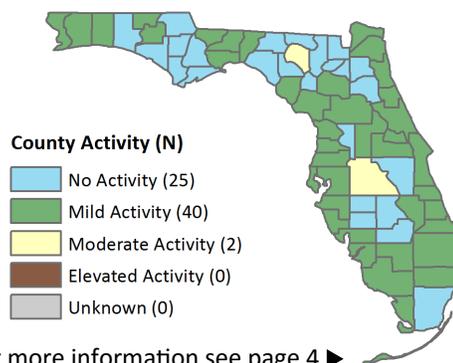


## Influenza and ILI Outbreaks Reported as of 10/7/2017



For more information see page 5 ▶

## County Influenza Activity



For more information see page 4 ▶

**Table of Contents**  
on the next page ▶

Table of Contents

In This Issue..... 2

Statewide ILI Visits ..... 2

Statewide ILI Outpatient Visits and P&I Deaths ..... 3

County influenza and ILI Activity Maps ..... 4

Influenza-Associated Pediatric Deaths ..... 4

ILI Activity and Outbreaks by Setting ..... 5

Influenza Laboratory Surveillance ..... 7

Regional ILI Visits ..... 8

Age Groups: ILI Visits and P&I Deaths ..... 9

At-Risk Populations: ILI Visits ..... 10

ILI Activity by Population and Setting Type ..... 11

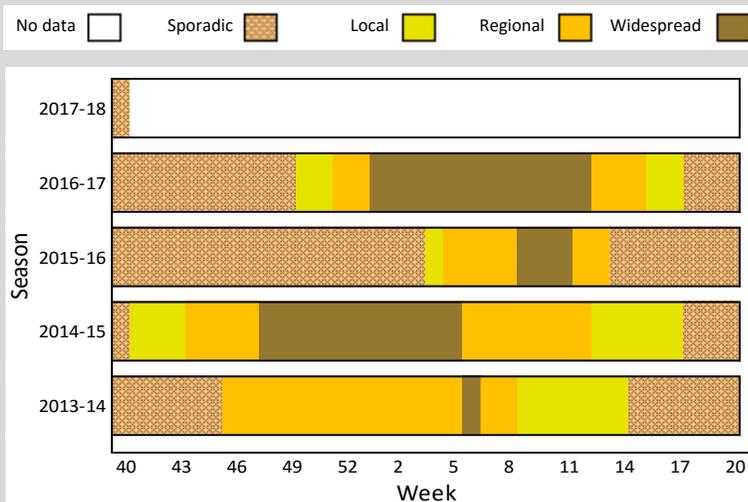
Respiratory Syncytial Virus Surveillance ..... 12

Other Respiratory Virus Surveillance ..... 13

Florida ILI Surveillance System Summary ..... 14

Weekly State Influenza Activity Reporting

Below is the state influenza activity level reported to CDC each week since the 2013-14 influenza season. **Florida reported sporadic influenza activity for week 40.**



Influenza activity in Florida can vary widely from season to season. This unpredictability underscores the importance of influenza surveillance in Florida.

Influenza surveillance goals:

- Influenza surveillance is conducted to detect changes in the influenza virus. These data are used to help determine the annual national vaccine composition and to prepare for potential epidemics or pandemics.
- Surveillance is also conducted to identify unusually severe presentations of influenza infection, detect outbreaks, and determine seasonal influenza trends in order to guide influenza prevention, particularly in high-risk populations like children, adults ≥65 years old, and pregnant women. These activities are particularly important at the start of flu season in order to identify potential changes in circulating influenza strains.

Note: Surveillance case definitions for influenza-like illness (ILI) vary across surveillance systems. For more information on influenza surveillance systems and associated case definitions used in Florida, see page 14 ►

Statewide ILI Visits

ED and UCC Visits for ILI by Flu Season

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness

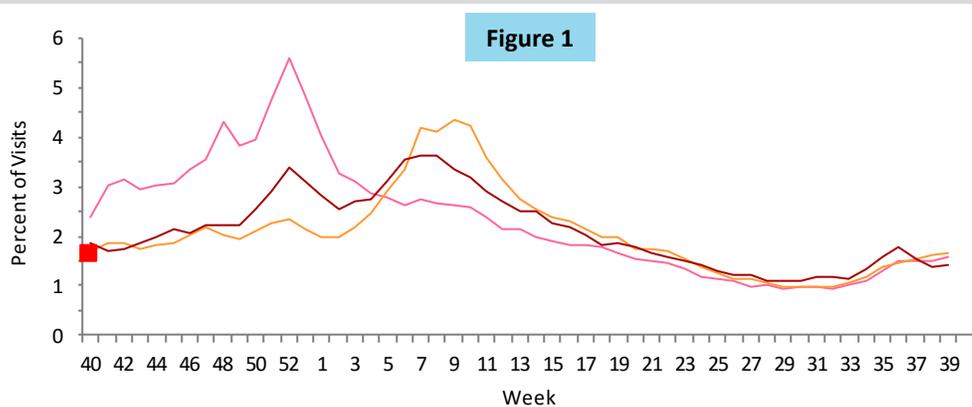


Figure 1 shows the percent of visits for ILI from ED and UCC chief complaint data for ESSENCE-FL participating facilities (n=307), week 40, 2014 to week 40, 2017.

In week 40, the percent of visits to EDs and UCCs for ILI increased but remained slightly below levels seen in previous seasons at this time.

2017-18      2016-17      2015-16      2014-15

The ESSENCE-FL ILI syndrome is composed of 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 ESSENCE-FL, see page 10.

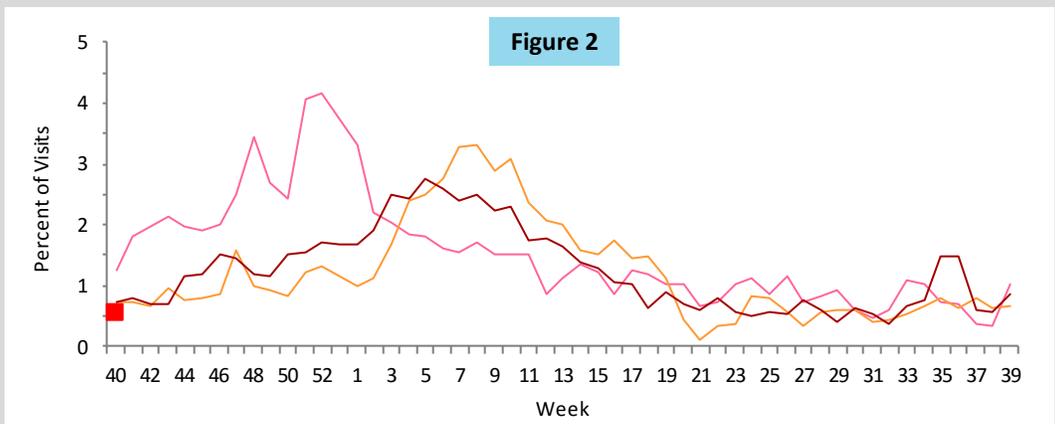


## Visits for ILI to Outpatient Providers by Flu Season

ILI = influenza-like illness

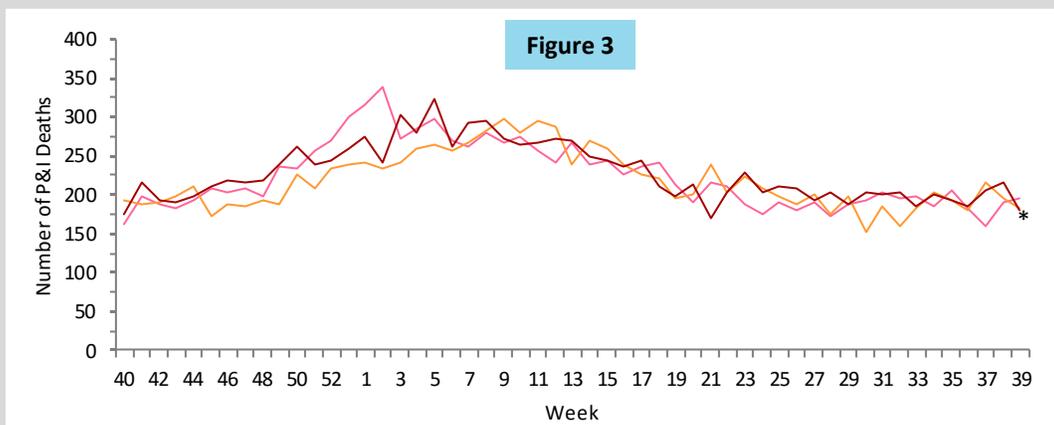
**Figure 2** shows the percent of visits for ILI reported by ILINet outpatient providers statewide (n=45), week 40, 2014 to week 40, 2017. For ILINet, influenza-like illness (ILI) is defined as a fever  $\geq 100^{\circ}\text{F}$  AND sore throat and/or cough in the absence of another known cause.

**In week 40, the percent of visits for ILI reported by ILINet outpatient providers decreased and was below levels seen in previous seasons at this time.**



## P&I Deaths\* from Vital Statistics by Flu Season

P&I = pneumonia and influenza



**Figure 3** shows P&I deaths\* for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2014 to week 39, 2017.

**\*As of week 39 (ending September 30, 2017), 11,816 P&I deaths were in the 2016-17 influenza season.**

**The preliminary number of P&I deaths decreased and was similar to levels seen in previous seasons at this time.**

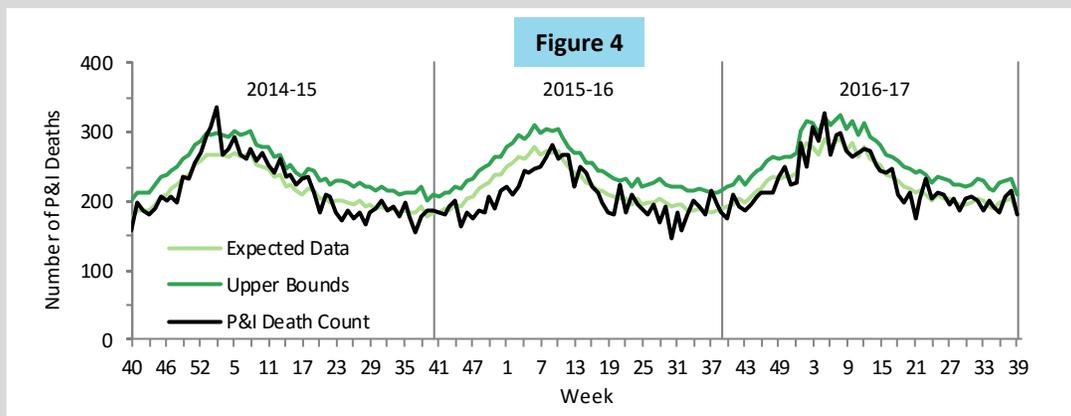
## P&I Deaths\*, Multi-Year Regression Model

P&I = pneumonia and influenza

**Figure 4** shows the number of preliminary estimated P&I deaths\* for all Florida counties, the number of deaths predicted using a multi-year regression model, and the upper bound of the 95% confidence interval for this prediction.

**For week 39 (ending September 30, 2017), 181 preliminary estimated P&I deaths were reported.**

**The upper bound of the 95% confidence interval for prediction was 209 deaths, with no excess deaths.**



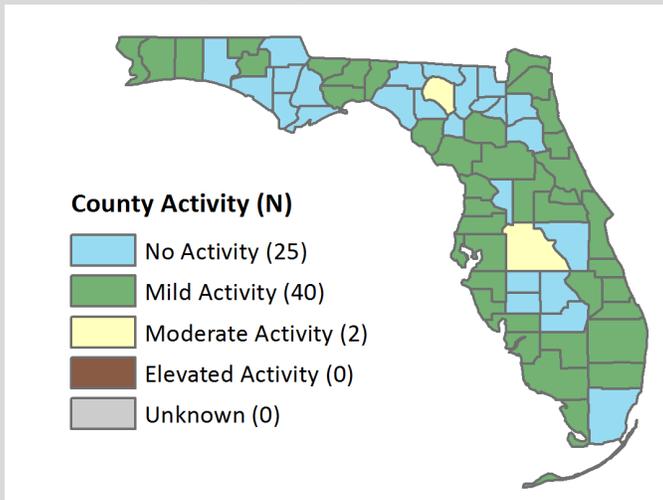
\* Current season P&I death counts are preliminary estimates and may change as more data are received. The most recent data available are displayed here. Vital statistics death records received in ESSENCE-FL are considered to be complete through week 39, 2017.

County influenza activity data are reported by county health departments through EpiGateway on a weekly basis. Information is used to determine county activity and includes laboratory results, outbreak reports, and ILI activity. **The figures below reflect a county health department's assessment of influenza activity within their county. For week 40, 15 counties reported increasing activity and 46 counties reported activity at a plateau.**

## County Influenza Activity

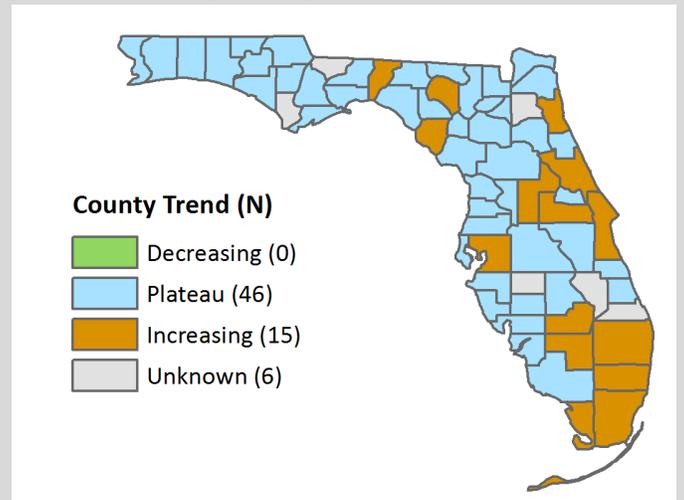
Map 1

County Influenza Activity Level for Week 40 Reported by 9:30 a.m. October 11, 2017



Map 2

County Influenza Activity Trend for Week 40 Reported by 9:30 a.m. October 11, 2017



As of 9:30 a.m. October 11, 2017, a total of 67 (100%) counties reported their weekly level of influenza activity. Please note that data reported after the deadline (Tuesday at 5 p.m.) are recorded but may not be included in the activity maps for this week.

# Influenza-Associated Pediatric Deaths

## Influenza-Associated Pediatric Deaths

Figures 5-7

Figures 5-7 show the number of pediatric deaths associated with influenza infection, week 40, 2013 to week 40, 2017.

During this first week of flu season, no influenza-associated pediatric deaths were reported. Eleven influenza-associated pediatric deaths were reported last season.

While rare, Florida receives reports of influenza-associated pediatric deaths each season. Most deaths occur in unvaccinated children with underlying health conditions. Children, especially those with underlying health conditions, are at higher risk of severe outcomes from influenza infection.

Annual vaccination remains the best way to protect against influenza. Now is the perfect time to get vaccinated. CDC recommends vaccination as long as influenza viruses are circulating. To learn more, please visit: [www.cdc.gov/flu/protect/whoshouldvax.htm#annual-vaccination](http://www.cdc.gov/flu/protect/whoshouldvax.htm#annual-vaccination).

Figure 5: Influenza-Associated Pediatric Deaths by Vaccination Status

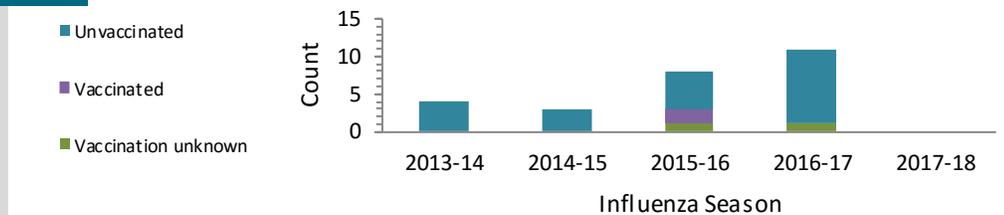


Figure 6: Influenza-Associated Pediatric Deaths by Medical History

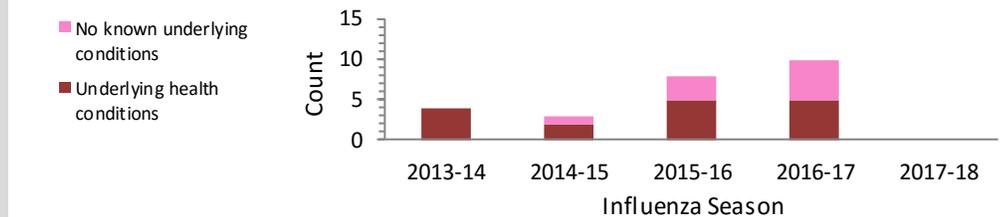
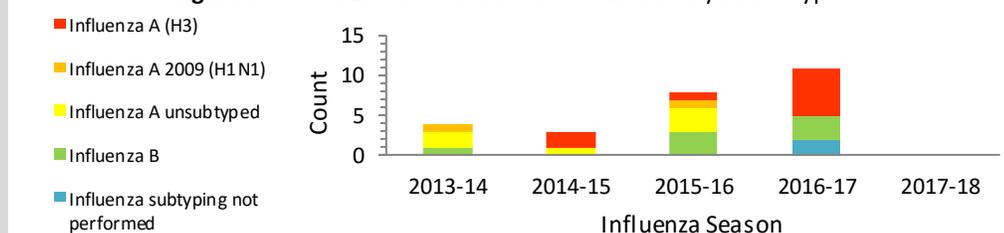


Figure 7: Influenza-Associated Pediatric Deaths by Strain Type



## Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

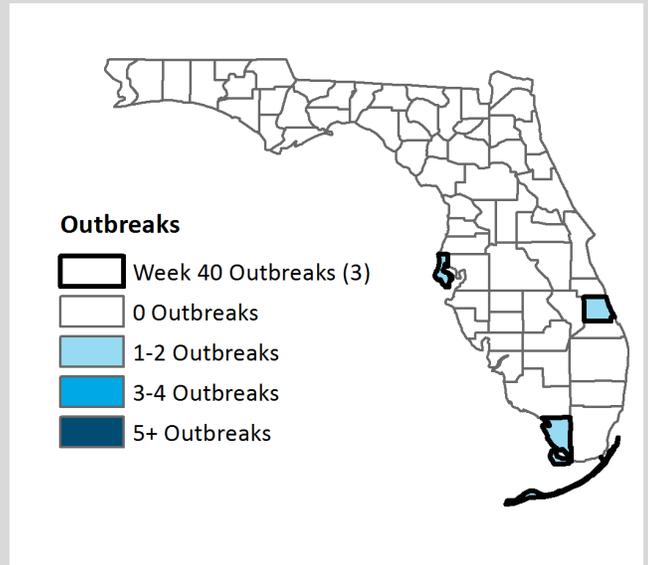
Map 3 shows influenza and ILI outbreaks by county for week 40, 2017.

In week 40, two outbreaks of influenza and one outbreak of ILI were reported in Merlin.

In recent weeks, the number of influenza A outbreaks reported in Merlin increased. During the summer months (weeks 21-39, 2017), a total of 27 influenza and ILI outbreaks were reported. This is the largest number of summer outbreaks reported in the past seven seasons. It is not possible to make any predictions about the severity or timing of peak influenza activity based on these early outbreak reports.

For more detailed information on influenza and ILI outbreaks reported in week 40, see page 6. **Data presented on outbreaks are preliminary and subject to change as outbreak investigations progress.**

**Map 3** Influenza and ILI Outbreaks by County Week 40, 2017



**Table 1: Summary of Florida Influenza and ILI Outbreaks by Setting, Week 40, 2017\***

Setting	Total	A (H3)	A 2009 (H1N1)	A Unsubtyped	A & B Unsubtyped	B Yamagata	B Victoria	B Unsubtyped	Influenza Unspecified	Other respiratory viruses	Currently unknown pathogen
Schools	-	-	-	-	-	-	-	-	-	-	-
Daycares	-	-	-	-	-	-	-	-	-	-	-
Jails & prisons	-	-	-	-	-	-	-	-	-	-	-
Mental health facilities	-	-	-	-	-	-	-	-	-	-	-
Nursing homes & long-term care facilities	2	-	-	-	-	-	-	-	1	-	1
Health care facilities	-	-	-	-	-	-	-	-	-	-	-
Other	1	-	-	1	-	-	-	-	-	-	-
<b>Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

\*Outbreak etiology is updated for two weeks after initial report.

## Reported Influenza and ILI Outbreaks by Facility Type

ILI = influenza-like illness

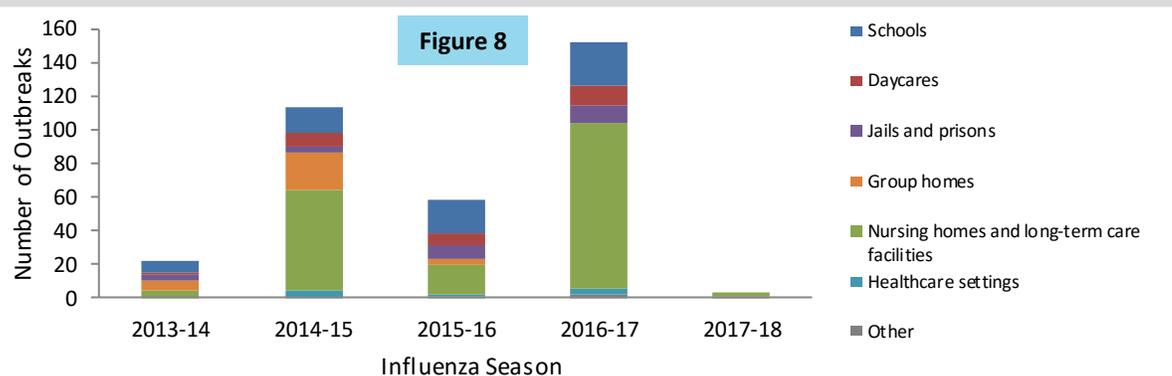


Figure 8 shows the distribution of outbreaks by facility type and season.

In week 40, two outbreaks of influenza and one outbreak of ILI were reported.

**Reported Influenza and ILI Outbreaks**

ILI = influenza-like illness

**In week 40, two outbreaks of influenza and one outbreak of ILI were reported into Merlin.**

**Monroe County:**

- **A shelter** for persons displaced by Hurricane Irma reported 15 residents with ILI. Four specimens were collected for testing at BPHL. Of those, two were positive for influenza A by PCR. Subtyping results are still pending. The shelter reported that six staff members and 20 residents were vaccinated for the 2017-18 influenza season. Infection control measures were reviewed with facility leadership. This investigation is closed.

**St. Lucie County:**

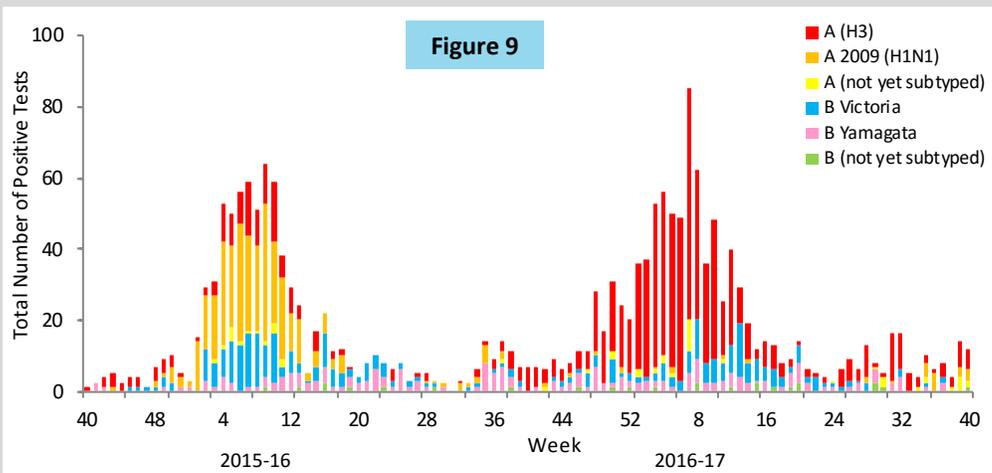
- **A long-term care facility** reported 42 residents and 14 staff members with ILI. Five individuals sought treatment at a local ED. Nineteen individuals tested positive for influenza (type unknown) by rapid antigen at local health care providers. No specimens have been available for testing at BPHL thus far. Vaccination status for the 2017-18 influenza season for all residents and staff members is currently unknown. Infection control measures were reviewed with facility leadership. This investigation is ongoing.

**Pinellas County:**

- **A skilled nursing facility** reported four residents and one staff member with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Vaccination status for the 2017-18 influenza season for all residents and staff members is currently unknown. Infection control measures were reviewed with facility leadership. This investigation is ongoing.

**BPHL Viral Influenza Specimen Testing**

BPHL = Bureau of Public Health Laboratories



Figures 9 and 10 use BPHL viral surveillance data.

Figure 9 shows the number of influenza-positive specimens tested by subtype and lab event date.\*

The most common influenza subtype detected at BPHL statewide for the 2016-17 influenza season has been influenza A (H3). Seasons in which A (H3) viruses predominate are associated with more severe illness in young children and adults ≥65 years old.

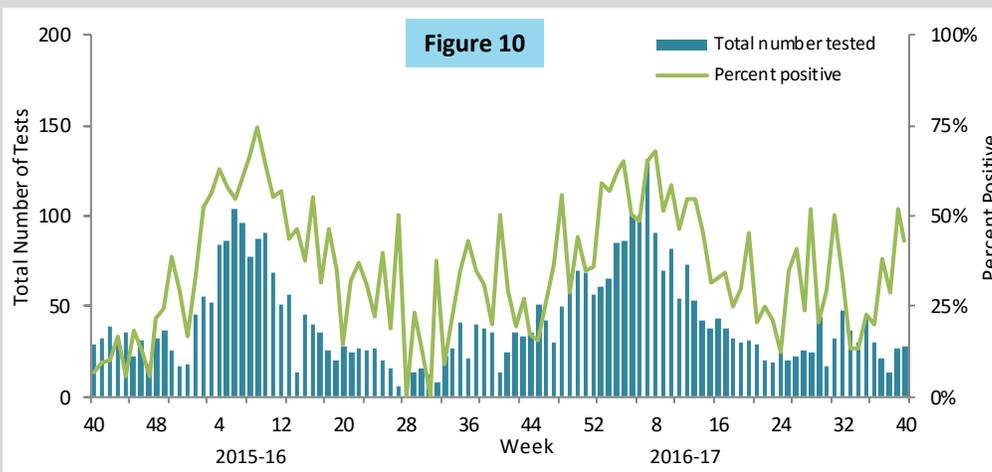


Figure 10 shows the number of specimens tested by BPHL and the percent that were positive for influenza by lab event date\*.

In week 40, the percent of specimens testing positive for influenza decreased and was similar to levels observed in the 2016-17 season at this time. Levels were above those observed during the 2015-16 season at this time.

**Table 2: Bureau of Public Health Laboratories (BPHL) Viral Surveillance by Lab Event Date\***  
Reported by 10:00 a.m. October 11, 2017

Influenza Type	Current Week 40	Previous Week 39**	Current 2017-18 Season
<b>Total Specimens Tested</b>	<b>28</b>	<b>27</b>	<b>28</b>
Influenza positive specimens (% of total specimen tested)	<b>12 (42.9%)</b>	<b>14 (51.9%)</b>	<b>12 (42.9%)</b>
Influenza A 2009 (H1N1) (% of influenza positives)	3 (25.0%)	3 (21.4%)	3 (25.0%)
Influenza A (H3) (% of influenza positives)	6 (50.0%)	7 (50.0%)	6 (50.0%)
Influenza A not yet subtyped (% of influenza positives)	2 (16.7%)	4 (28.6%)	2 (16.7%)
Influenza B Yamagata (% of influenza positives)	-	-	-
Influenza B Victoria (% of influenza positives)	-	-	-
Influenza B not yet subtyped (% of influenza positives)	1 (8.3%)	-	1 (8.3%)

\*"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.

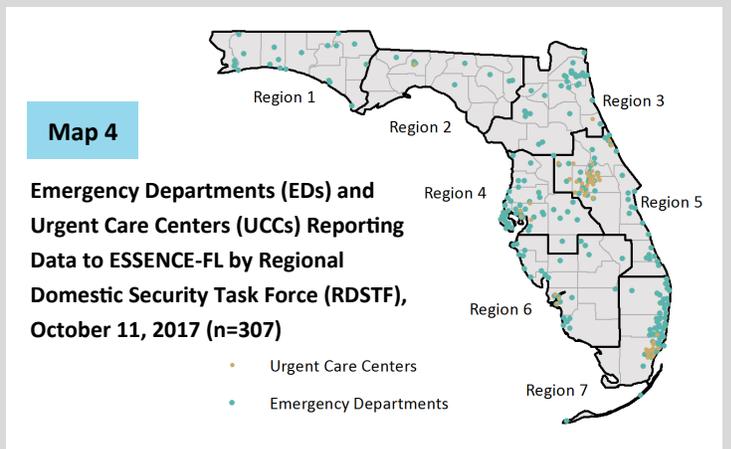
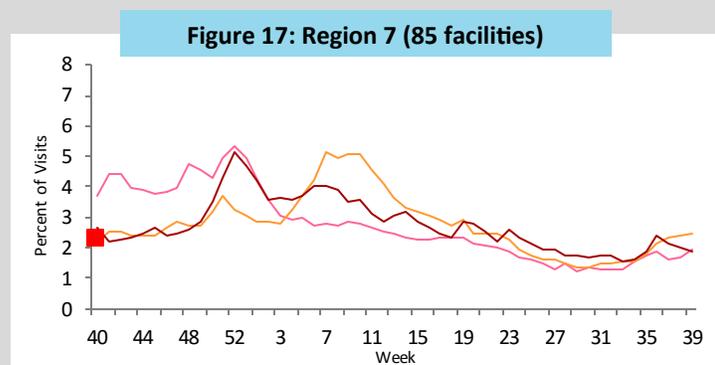
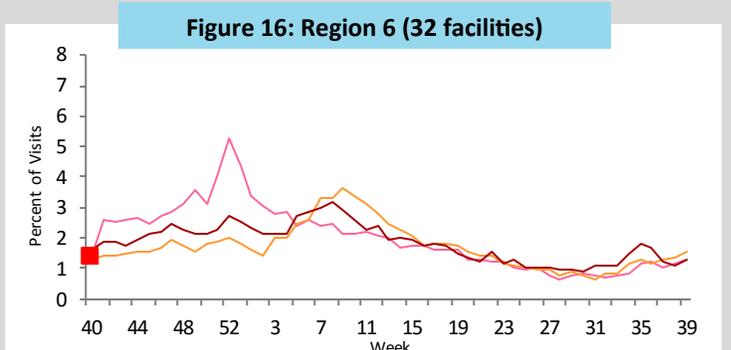
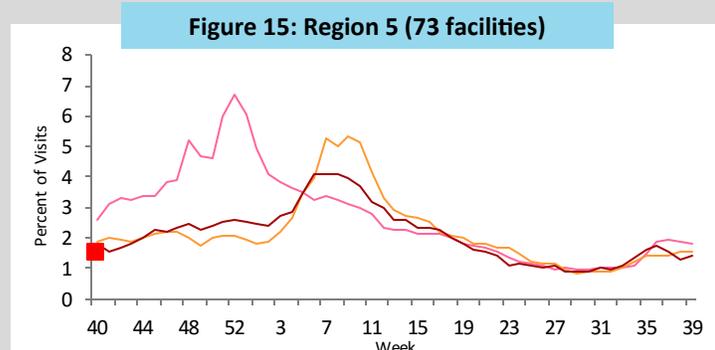
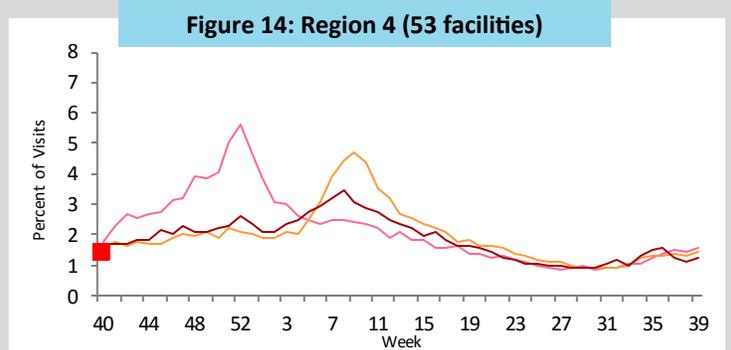
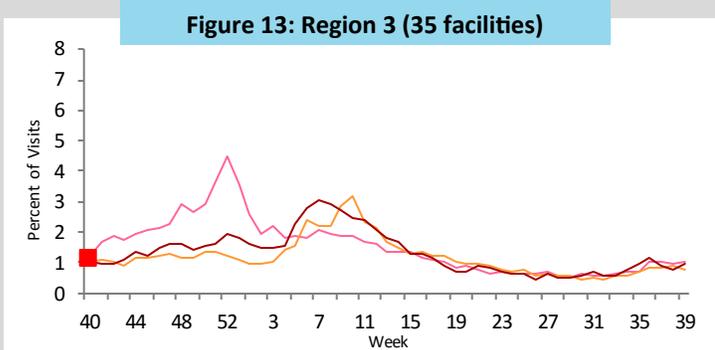
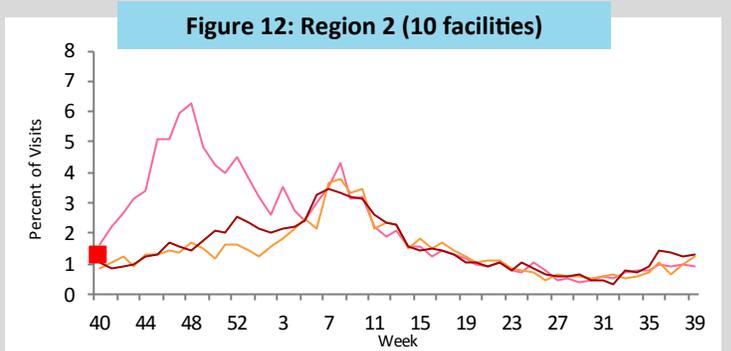
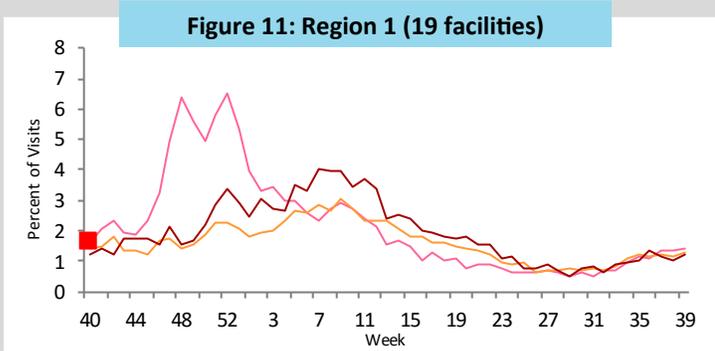
\*\*Week 39, 2017 is the last week of the 2016-17 influenza season. The 2017-18 season begins in week 40, 2017.

For county health departments seeking county-specific laboratory data, please refer to the Flu Lab Report in Merlin. For instructions on how to use the Flu Lab Report, please see the Guide to Flu Lab Report on the Bureau of Epidemiology website: [www.floridahealth.gov/diseases-and-conditions/influenza/\\_documents/flulabreportguide.pdf](http://www.floridahealth.gov/diseases-and-conditions/influenza/_documents/flulabreportguide.pdf)

## ED and UCC Visits for ILI by Region

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness

Figures 11-17 show the percent of visits for ILI from ED and UCC chief complaints for ESSENCE-FL participating facilities (n=307), by ESSENCE-FL Regional Domestic Security Task Force (RDSTF) regions (see map 4) from week 40, 2014 to week 40, 2017\*. In week 40, the percent of ED and UCC visits for ILI decreased slightly in region 2 and increased in all other regions. ILI activity in all regions was similar to or below levels observed in previous seasons at this time.



\*There is no week 53 for the 2013-14, 2015-16, and 2016-17 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

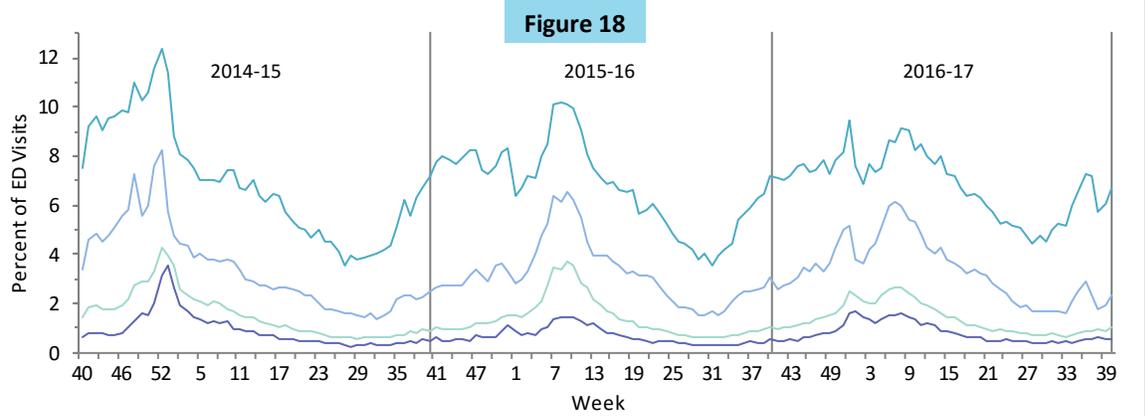
0 to 4 years old    5 to 24 years old    25 to 64 years old    ≥65 years old

## ED and UCC Visits for ILI by Age Group

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness

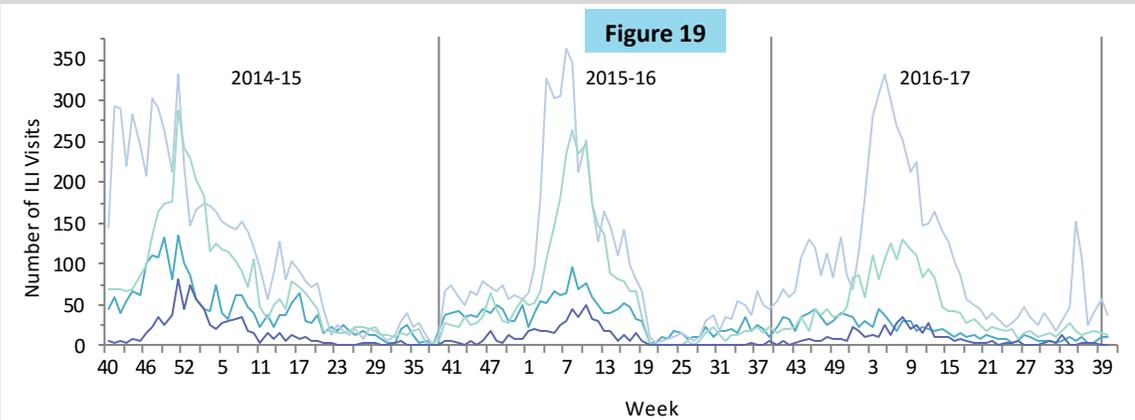
**Figure 18** shows the percent of visits for ILI from ED and UCC chief complaints by age group for ESSENCE-FL participating facilities (n=307), week 40, 2014 to week 40, 2017.

**In week 40, ED and UCC visits for ILI increased in all age groups. Levels were similar to or below those observed in previous seasons at this time in all age groups.**



## Visits to Outpatient Providers for ILI by Age Group\*

ILI = influenza-like illness



**Figure 19** shows the number of visits for ILI reported by ILINet outpatient providers statewide (n=45) by age group, week 40, 2014 to week 40, 2017.

**In week 40, the number of visits for ILI increased in the 0-4 age group and decreased in all other age groups. Levels were below those observed in previous seasons at this time in all age groups.**

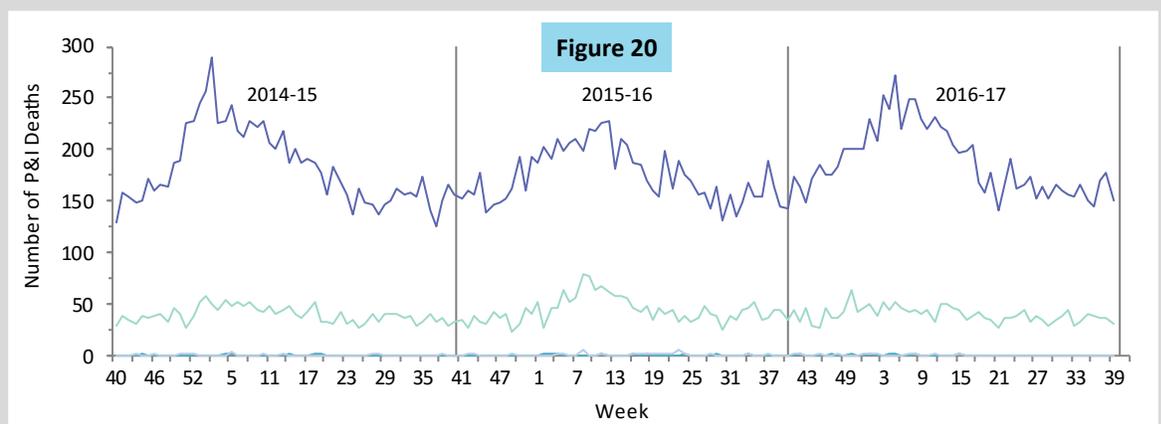
\*Data presented here are counts, not proportions. This is because age group denominator data is not available through ILINet.

## P&I Deaths\* from Vital Statistics by Age Group

P&I = pneumonia and influenza

**Figure 20** shows P&I deaths\* for all Florida counties by age group, as reported into ESSENCE-FL, week 40, 2014 to week 39, 2017.

**In week 39 (ending September 30, 2017), the number of P&I deaths remained the same in the 0-4 and 5-24 year age groups and decreased in the 25-64 and ≥65 year age groups. Levels were similar to those observed in previous seasons at this time in all age groups.**



\*Current season P&I death numbers are preliminary estimates and may change as more data are received. The most recent data available are displayed here. Vital statistics death records received in ESSENCE-FL are currently considered to be complete through week 39, 2017.

ESSENCE-FL collects data daily from 307 EDs and UCCs. Data are processed into 11 different syndrome categories based on the patient's chief complaint. One of the categories is ILI, which is composed of chief complaints that include the words "influenza" or "flu," or complaints that contain "fever" and "cough," or "fever" and "sore throat." The Florida Department of Health uses ED and UCC chief complaint data to monitor influenza and ILI activity in a timely manner in groups at higher risk of severe health outcomes (such as hospitalization and death) from influenza infection. These at-risk groups include pregnant women, children  $\leq 18$  years old, and adults  $\geq 65$  years old.

— 2017-18     
 — 2016-17     
 — 2015-16     
 — 2014-15

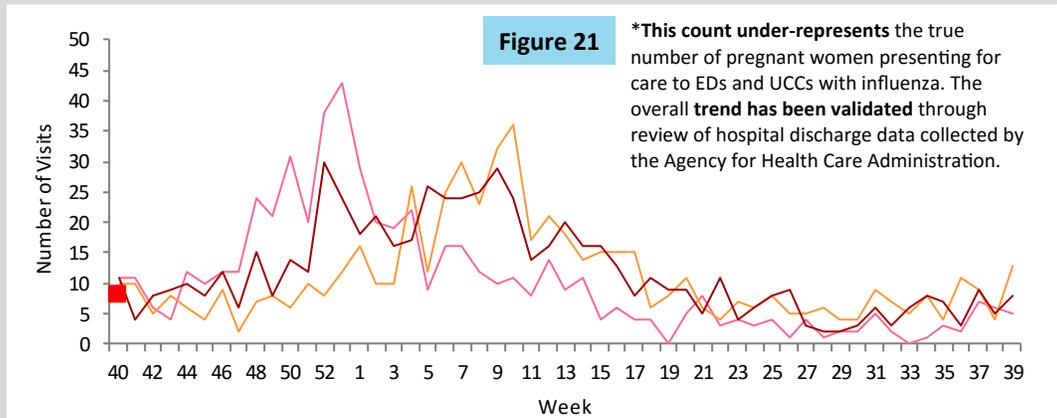
## ED and UCC Visits for ILI by Pregnant Women

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness

Pregnant women are at higher risk for severe complications due to influenza infection.

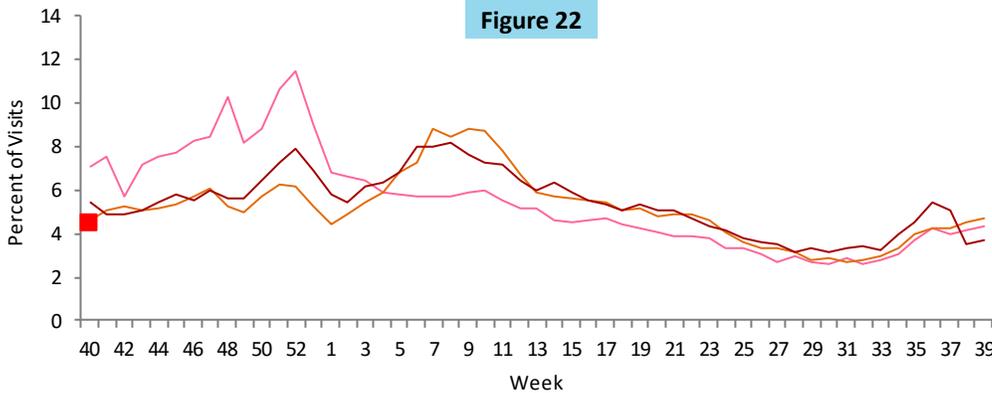
**Figure 21** shows the number of visits\* to EDs and UCCs with chief complaints of influenza infection and pregnancy, as reported into ESSENCE-FL, week 40, 2014 to week 40, 2017.

**In week 40, the number of visits to EDs and UCCs by pregnant women with mention of influenza remained the same. Levels were similar to those observed in previous seasons at this time.**



## ED and UCC Visits for ILI by Children $\leq 18$ Years Old

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness



**Figure 22** shows the percent of ILI visits among all ED and UCC visits for children  $\leq 18$  years old, as reported into ESSENCE-FL, week 40, 2014 to week 40, 2018.

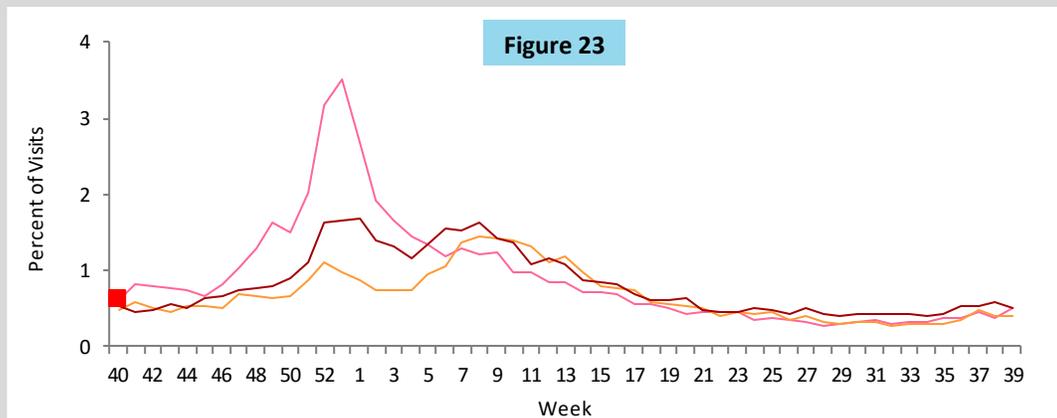
**In week 40, the percent of ILI visits among all ED and UCC visits for children  $\leq 18$  years old increased but remained below levels observed in previous seasons at this time.**

## ED and UCC Visits for ILI by Adults $\geq 65$ Years Old

ED = emergency department, UCC = urgent care center, ILI = influenza-like illness

**Figure 23** shows the percent of ILI visits among all ED and UCC visits for adults  $\geq 65$  years old, as reported into ESSENCE-FL, week 40, 2014 to week 40, 2017.

**In week 40, the percent of ILI visits among all ED and UCC visits for adults  $\geq 65$  years old increased. Levels were similar to those observed in previous seasons at this time.**



## ILI Activity by Setting Type

ILI = influenza-like illness

County health departments are asked to evaluate influenza activity in certain settings within their county. The assessment scale for activity ranges from no or minimal activity to very high activity.

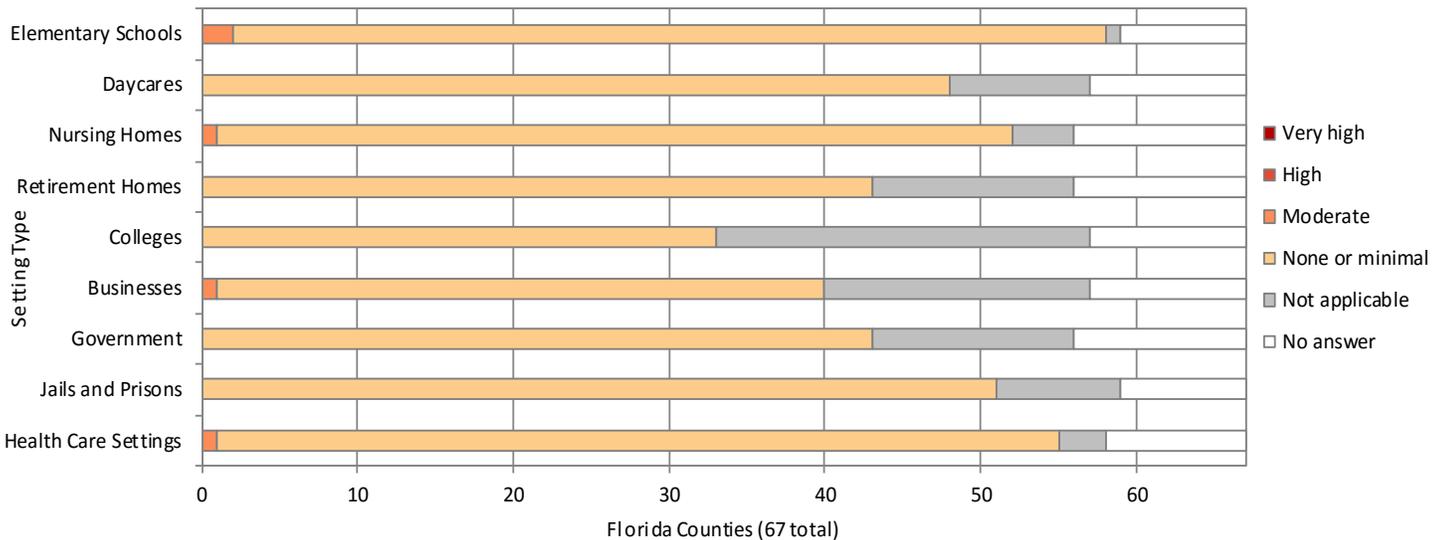
Figure 24 shows the results of the influenza activity assessment for week 40, 2017.

Counties that reported “not applicable” for the listed settings are excluded from the denominator in the calculations below.

### ILI Activity Levels:

- No or very minimal activity
- Moderate activity
- High activity
- Very high activity

Figure 24



### Settings for Children <18 Years Old

**In elementary schools**, 56 counties (84.8%) reported no or minimal influenza or ILI activity. Two counties (3.0%) reported moderate influenza or ILI activity.

**In daycare settings**, 48 counties (82.8%) reported no or minimal influenza or ILI activity.

### Settings for Adults >65 Years Old

**In nursing homes**, 51 counties (81.0%) reported no or minimal influenza or ILI activity. One county (1.6%) reported moderate influenza or ILI activity.

**In retirement homes**, 43 counties (79.6%) reported no or minimal influenza or ILI activity. One county reported moderate influenza or ILI activity.

### Settings for Adults 18 to 65 Years Old

**In colleges**, 33 of 43 counties (76.7%) reported no or minimal influenza or ILI activity.

**In businesses**, 39 counties (78.0%) reported no or minimal influenza or ILI activity. One county (2.0%) reported moderate influenza or ILI activity.

**In government offices**, 43 counties (79.6%) reported no or minimal influenza or ILI activity.

### Other Unique Settings

**In jails and prisons**, 51 counties (86.4%) reported no or minimal influenza or ILI activity.

**In health care settings**, including rehabilitation facilities and mental health facilities, 54 counties (84.4%) reported no or minimal influenza or ILI activity. One county (1.6%) reported moderate influenza or ILI activity.

## RSV Activity Summary and Seasonality

RSV = respiratory syncytial virus

### RSV activity:

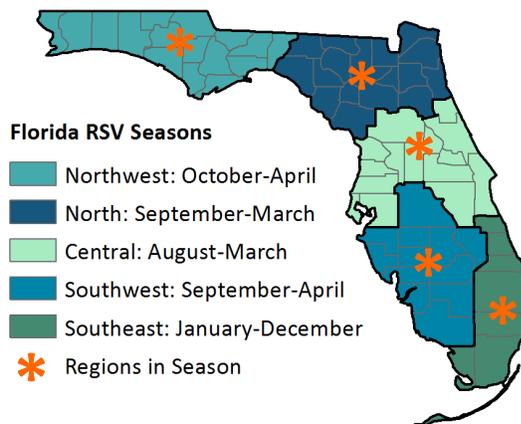
- In week 40, the percent of children <5 years old diagnosed with RSV at EDs and UCCs decreased slightly but was above levels observed in previous seasons at this time.
- The percent of specimens testing positive for RSV remained the same and was similar to levels observed in previous seasons at this time.
- To learn more about RSV in Florida, please visit: <http://www.floridahealth.gov/rsv>.

### RSV Seasonality:

- RSV activity in Florida typically peaks in November through January, though activity can vary dramatically by region. According to CDC, the start of RSV season is marked by the first two consecutive weeks during which the average percentage of specimens testing positive for RSV is  $\geq 10\%$ .
- Florida has established regular RSV seasons based on these thresholds. All regions are currently in RSV season.
- Florida's RSV season is longer than the rest of the nation and has distinct regional seasonality. For more information on RSV seasonality in Florida, see the American Academy of Pediatrics' (AAP) 2015 Red Book.

Map 5

Florida Respiratory Syncytial Virus (RSV) Regional Season Breakdown

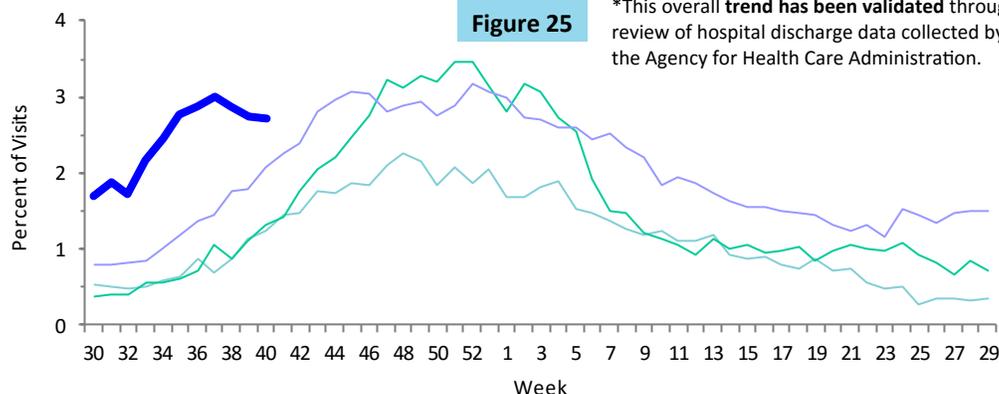


### RSV surveillance goals:

- 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 has important implications as it relates to prescribing patterns for initiating prophylaxis to children at high risk for RSV infection. The AAP currently recommends that preapproval for prophylactic treatment be made based on state surveillance data.
- See the back page of this report for more information on RSV surveillance systems used in Florida: page 14 ►

## ED and UCC Visits for RSV by Children <5 Years Old

ED = emergency department, UCC = urgent care center, RSV = respiratory syncytial virus



**Figure 25** shows the percent of visits to EDs and UCCs with discharge diagnoses that include RSV or RSV-associated illness, as reported by participating ESSENCE-FL facilities (n=297), week 30, 2014 to week 40, 2017.

In week 40, the percent of children presenting to participating EDs and UCCs for care with RSV decreased slightly. Levels were above those observed in previous seasons at this time.

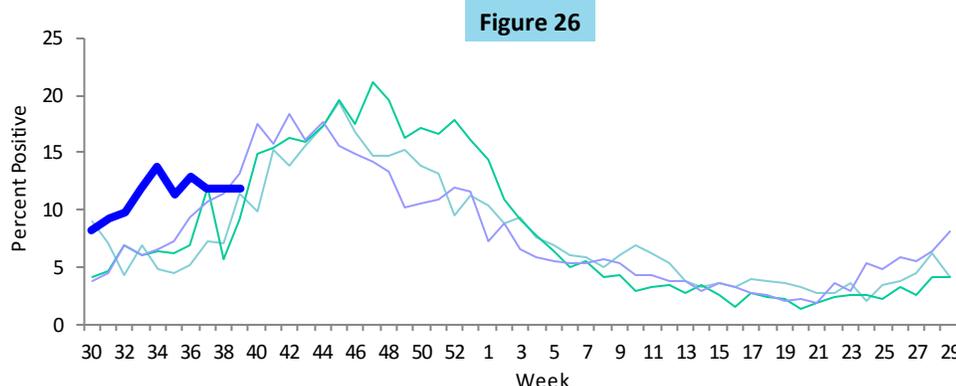
— 2017-18      — 2015-16  
— 2016-17      — 2014-15

## Laboratory RSV Surveillance

RSV = respiratory syncytial virus

**Figure 26** shows the percent of laboratory results testing positive for RSV, as reported by hospital laboratories (n=9), week 30, 2014 to week 40, 2017.

In week 40, the percent of specimens testing positive for RSV remained the same and was similar to levels observed in previous seasons at this time.



— 2017-18      — 2015-16  
— 2016-17      — 2014-15

## Other Respiratory Virus Surveillance

### Statewide activity:

- In week 40, the percent of specimens testing positive for influenza, rhinovirus, parainfluenza 1-3, and human metapneumovirus (MPV) increased and was similar to levels observed in previous seasons at this time. The percent of specimens testing positive for adenovirus increased and was above levels observed in previous seasons at this time.
- The percent of specimens testing positive for RSV remained the same and was similar to levels observed in previous seasons at this time.
- The percent of specimens testing positive for RSV and rhinovirus remained higher than other respiratory viruses under surveillance.

### Enterovirus D68 (EV-D68) activity:

- In week 40, no new cases of EV-D68 were identified in Florida.
  - One case of EV-D68 has been identified in Florida in 2017. The case was retrospectively identified when a specimen collected from an outbreak reported in week 33 (ending August 19, 2017) tested positive for EV-D68 by PCR at BPHL. No additional specimens collected during this outbreak investigation were positive for EV-D68. This is the first identification of EV-D68 in Florida in 2017.
- To learn more about EV-D68, please visit: <http://www.floridahealth.gov/diseases-and-conditions/d68>.

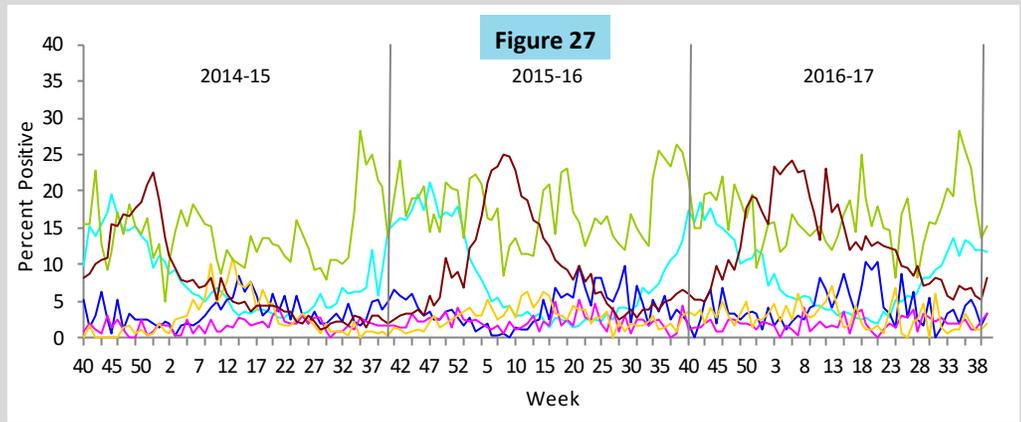
### Outbreaks:

- In week 40, no outbreaks of RSV, parainfluenza, adenovirus, MPV, rhinovirus, enterovirus, or coronavirus were reported.

## Laboratory Viral Respiratory Surveillance

Figure 27 shows the percent of laboratory results testing positive for eight common respiratory viruses, as reported by hospital laboratories (n=9), week 40, 2014 to week 40, 2017.

In week 40, the percent of specimens testing positive RSV and rhinovirus remained higher than other respiratory viruses under surveillance.



## Non-Influenza ARIES Laboratory Outpatient Surveillance\*

ARIES = Acute Respiratory Infection Epidemiology and Surveillance Program

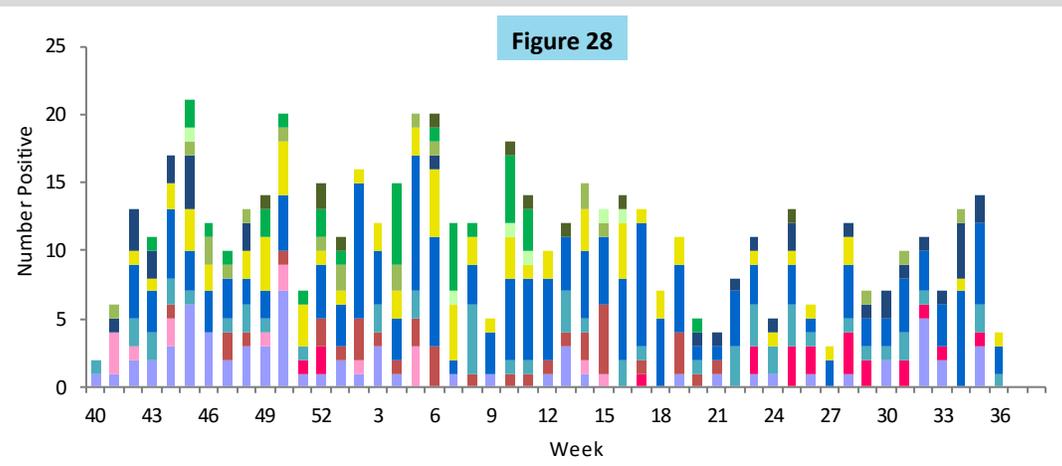
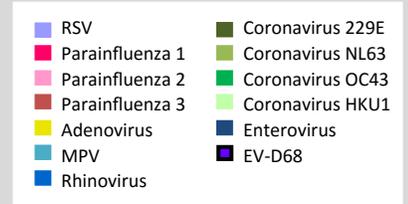


Figure 28 shows the number of specimens testing positive for 12 common respiratory viruses, as reported by BPHL and ARIES outpatient providers statewide (n=7), week 40, 2016 to week 39, 2017.

In week 39 (ending September 30, 2017), no specimens submitted by ARIES providers tested positive by extended respiratory panel testing.



\*Data presented here are counts, not proportions. The most recent data available are displayed here. ARIES laboratory data are currently considered to be complete through week 39, 2017. Laboratory results for specimens that have not yet been tested in full will be included in future reports.

**Florida ILINet** · Data source for figures 2 and 19

- ILINet is a nationwide surveillance system composed of sentinel providers, predominately outpatient health care providers. Florida has 88 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 (BPHL) for confirmatory testing.

**ESSENCE-FL Syndromic Surveillance and Vital Statistics Portal** · Data source for figures 1, 3-7, 11-18, 20-23, 25; map 4

- Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) measures trends in 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=307) 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) 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.
- For respiratory syncytial virus (RSV) surveillance, visits are counted as ED or UCC visits to participating facilities for which RSV or RSV-associated illness is included in the discharge diagnosis. Death record literals are also queried using a free-text query that searches for references to RSV on death certificates for children <18 years old. Any mention of RSV in the death certificate literals, with certain exceptions, is counted as an RSV-associated pediatric death.

**County Influenza Activity in EpiGateway** · Data source for figures 19, 24, and maps 1 and 2

- County health department (CHD) epidemiologists report their county’s influenza and ILI surveillance data weekly into the EpiGateway website. Influenza activity is classified as: no activity, mild, moderate, or elevated. Setting-specific influenza activity and influenza trend information is also reported. EpiGateway data provided by CHDs creates a county-by-county breakdown of influenza and ILI activity around the state.

**Outbreak Reporting in Merlin** · Data source for figure 8, map 3, and table 1

- Merlin tracks influenza and ILI outbreak investigations by CHDs. Reports by CHDs include the type of respiratory disease causing the outbreak and settings where outbreaks are occurring. CHD epidemiologists report outbreaks of influenza or ILI into Merlin, Florida’s reportable disease surveillance system.
- Outbreaks are defined as two or more cases of influenza or ILI in a specific setting.

**Bureau of Public Health Laboratories (BPHL)** · Data source for figures 9, 10 and table 2

- BPHL performs confirmatory testing and subtyping on surveillance specimens from sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations, and medical examiners.
- For county-specific laboratory data, please refer to the Flu Lab Report in Merlin. For instructions on how to use the Flu Lab Report, please see the Guide to Flu Lab Report on the Bureau of Epidemiology website at [www.floridahealth.gov/diseases-and-conditions/influenza/\\_documents/flulabreportguide.pdf](http://www.floridahealth.gov/diseases-and-conditions/influenza/_documents/flulabreportguide.pdf).

**Laboratory Viral Respiratory Surveillance** · Data sources for figures 26-27

- The National Respiratory and Enteric Virus Surveillance System (NREVSS) and Electronic Laboratory Reporting (ELR) collect data from laboratories in Florida on a weekly basis and monitor temporal and geographic patterns of eight commonly circulating respiratory viruses. NREVSS data is collected by the Centers for Disease Control and Prevention (CDC) and ELR data is collected by the Florida Department of Health (DOH).

**Acute Respiratory Infection Epidemiology and Surveillance (ARIES) Program** · Data source for figure 28

- Acute Respiratory Infection Epidemiology and Surveillance Program (ARIES) is a nationwide surveillance system composed of nine participating jurisdictions. Florida has seven sentinel providers enrolled in ARIES who submit weekly ILI and ARI (acute respiratory infection) counts, as well as submit ARI and ILI specimens to BPHL for testing.

**Case-Based Influenza Surveillance**

- Death in a child whose laboratory-confirmed influenza infection has been identified as a contributing to the child’s death is reportable in Florida. Influenza-associated pediatric deaths are documented by CHDs in Merlin.
- In addition, an individual of any age infected with novel or pandemic influenza strain(s) is reportable in Florida. Pandemic strain influenza cases are documented by CHDs in Merlin.
- For more information about reportable diseases, please visit [www.Floridahealth.gov/diseasereporting](http://www.Floridahealth.gov/diseasereporting).