



Summary

Week 5: January 28 – February 3, 2018

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

- Flu activity increased sharply for the fourth week in a row and remained higher than any other recent flu season. In week 5, flu activity was above peak levels observed in past flu seasons.
- People at high-risk for complications from influenza infection, such as children, adults aged 65 years and older and pregnant women continued to be most impacted.
- **No new influenza-associated pediatric deaths were confirmed.** Five influenza-associated pediatric deaths have been confirmed in the 2017-18 influenza season.
- **Overall, deaths due to pneumonia and influenza were higher than expected and are expected to increase over the coming weeks.** Most deaths occurred in people aged 65 years and older. The majority of deaths in people aged 64 years and younger occurred in people with underlying health conditions (58%).
- Eighty-two outbreaks of influenza and ILI were reported: 37 with confirmation of influenza and 45 ILI. As of week 5 (ending February 3, 2018), 319 outbreaks of influenza and ILI have been reported since the start of the 2017-18 season.

Immunizations and prevention:

- The Florida Department of Health recommends that sick people stay home until fever-free for at least 24 hours (without the use of fever-reducing medication) and that all people use good handwashing practices.
- Those who have not been vaccinated should get vaccinated as soon as possible. Though flu vaccines can vary in effectiveness from season to season, flu vaccines are safe and are the best way to prevent influenza infection and serious influenza complications. To find a flu shot near you, please visit: www.floridahealth.gov/findaflushot.
- A recent study showed that flu vaccination can reduce a child's likelihood of dying from influenza by 50-60%. For more information, visit: <https://www.cdc.gov/media/releases/2017/p0403-flu-vaccine.html>.

Treatment:

- The Centers for Disease Control and Prevention (CDC) recommends the use of antiviral treatment as soon as possible for all hospitalized, severely ill, and people who are at higher risk for complications with suspect influenza: children <2 years old, adults ≥65 years old, pregnant women, and those with underlying medical conditions. Treatment should be administered within 48 hours of illness onset (but treatment administered after this period can still be beneficial). **A recent CDC health advisory stresses the importance of rapid and early antiviral treatment this season.** For more information, visit: http://www.floridahealth.gov/diseases-and-conditions/influenza/_documents/cdc-han-influenza-12-27-2017.pdf.
 - Clinicians should not wait for laboratory confirmation to administer antivirals to people with suspect influenza.

National influenza activity:

- Influenza activity continued to increase and was well above the national baseline. Most states are experiencing high levels of ILI activity.
- As in Florida, influenza A (H3) has been the most common strain of influenza identified.

Weekly State Influenza Activity

Widespread

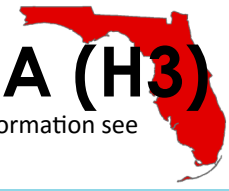
For more information see page 2 ▶



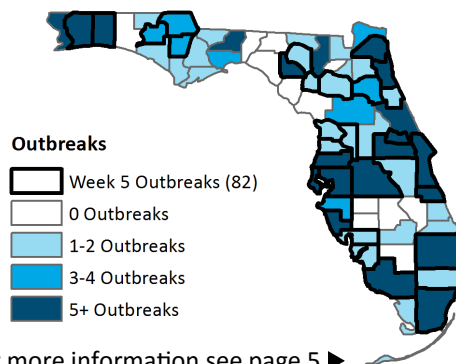
Predominately Circulating Strain

A (H3)

For more information see page 10 ▶

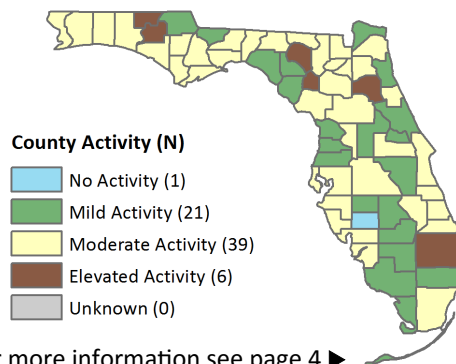


Influenza and ILI Outbreaks Reported as of 2/3/2018



For more information see page 5 ▶

County Influenza Activity



For more information see page 4 ▶

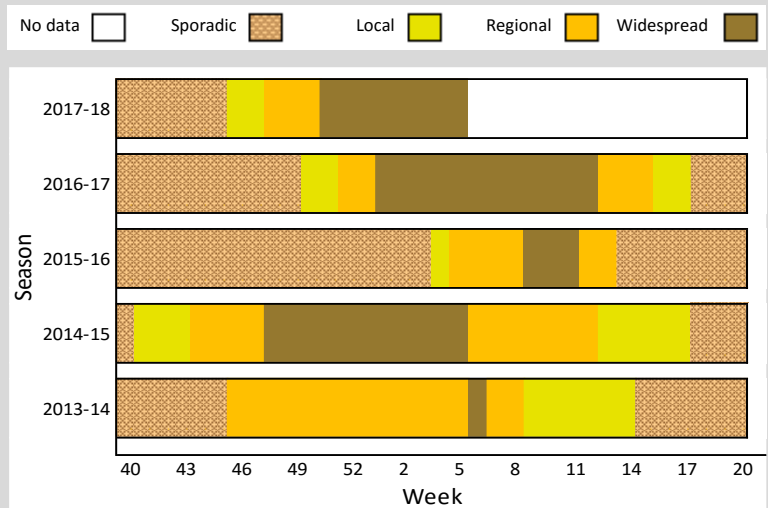
Table of Contents
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Table of Contents

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..... 6
 Regional ILI Visits 7
 Age Groups: ILI Visits and P&I Deaths..... 8
 At-Risk Populations: ILI Visits 9
 ILI Activity by Population and Setting Type 10
 Respiratory Syncytial Virus Surveillance 11
 Other Respiratory Virus Surveillance 12
 Outbreak Summaries 13
 Florida ILI Surveillance System Summary 19

Weekly State Influenza Activity Reporting

Below is the state influenza activity level reported to the Centers for Disease Control and Prevention each week since the 2013-14 influenza season. **Florida reported widespread influenza activity for week 5.**



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 vary across surveillance systems. For more information on influenza surveillance systems and associated case definitions used in Florida, see page 19 ►

Statewide ILI Visits

ED and UCC Visits for ILI by Flu Season

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

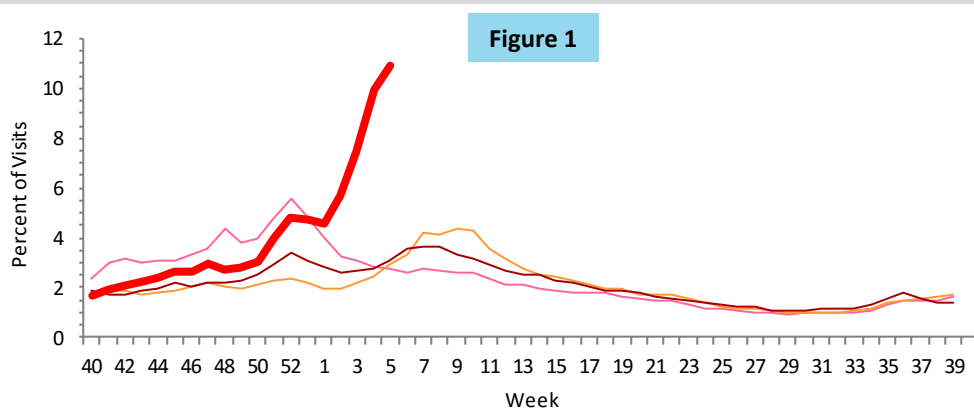


Figure 1 shows the percent of visits for ILI from ED and UCC chief complaint data for ESSENCE-FL participating facilities (n=309), week 40, 2014 to week 5, 2018.

In week 5, the percent of visits to EDs and UCCs increased and was well above peak levels observed during previous seasons.

An increase the percent of visits to EDs and UCCs for ILI during week 5 was observed in nearly all regions of the state (see page 7). Some regions of the state are experiencing 15% of ED visits due to ILI.

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 17.

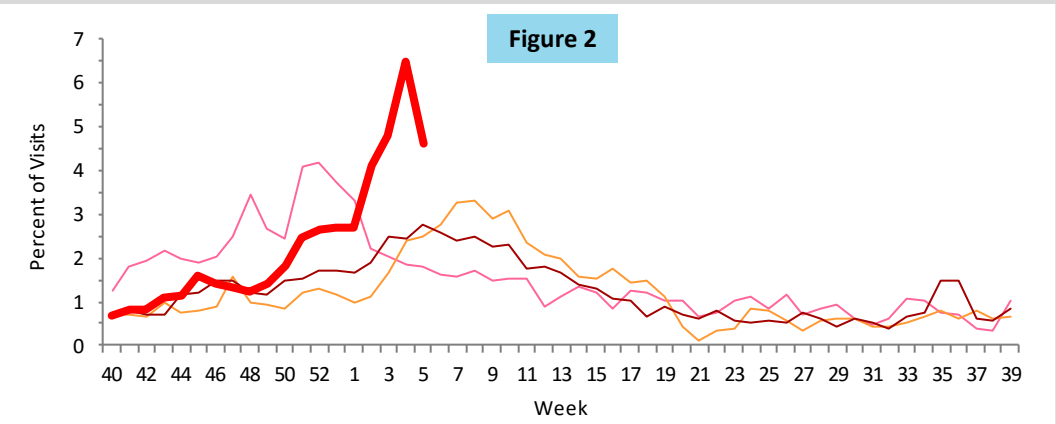


Visits for ILI to Outpatient Providers by Flu Season

ILI = influenza-like illness

Figure 2 shows the percent of visits for ILI reported by ILINet outpatient providers statewide (n=50), week 40, 2014 to week 5, 2018. For ILINet, 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 5, the percent of visits for ILI reported by ILINet outpatient providers decreased but remained above peak activity levels in previous seasons.



P&I Deaths* from Vital Statistics by Flu Season

P&I = pneumonia and influenza

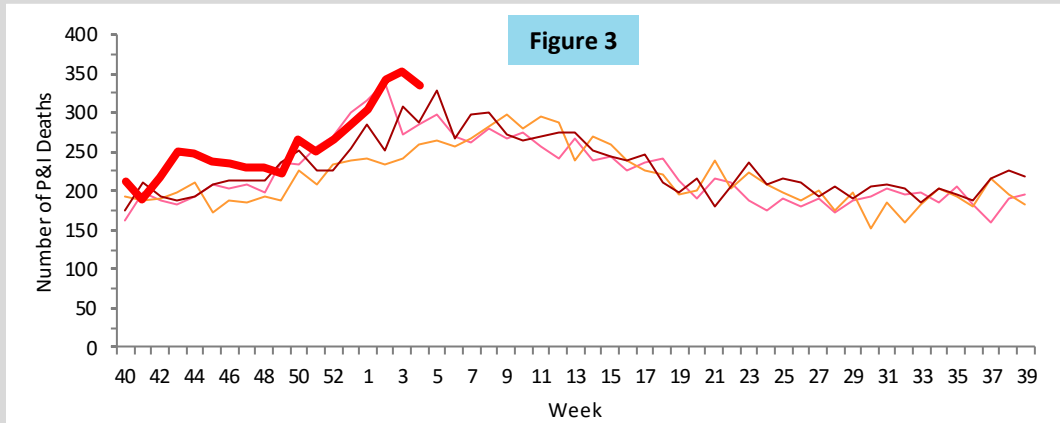


Figure 3 shows P&I deaths* for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2014 to week 4, 2018.

In week 4 (ending January 27, 2018), 335 P&I deaths were reported.

The preliminary number of P&I deaths remained slightly above levels observed in previous seasons.

P&I Deaths* Multi-Year Regression Model

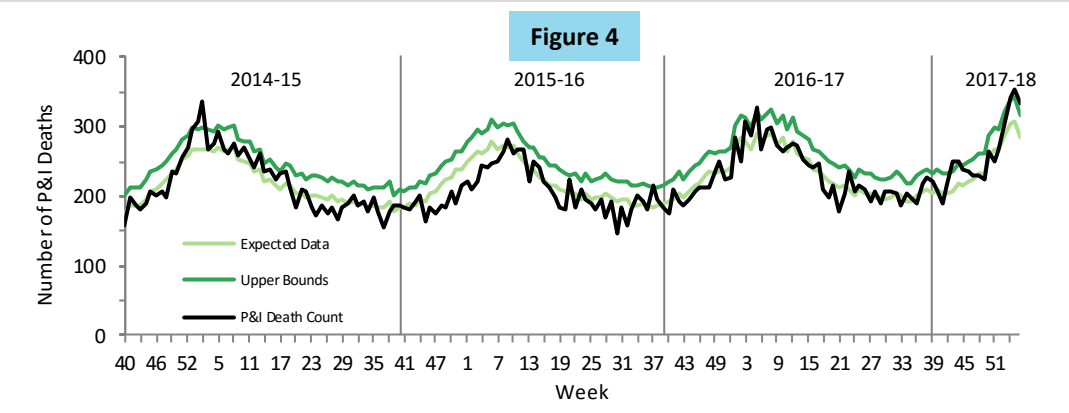
P&I = pneumonia and influenza

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 4 (ending January 27, 2018), 335 preliminary estimated P&I deaths were reported.

The upper bound of the 95% confidence interval for prediction is 316 deaths, with 19 excess deaths.

Due to the delay in death data, it is expected that the number of deaths reported will increase with additional excess deaths reported; this trend will be closely monitored.



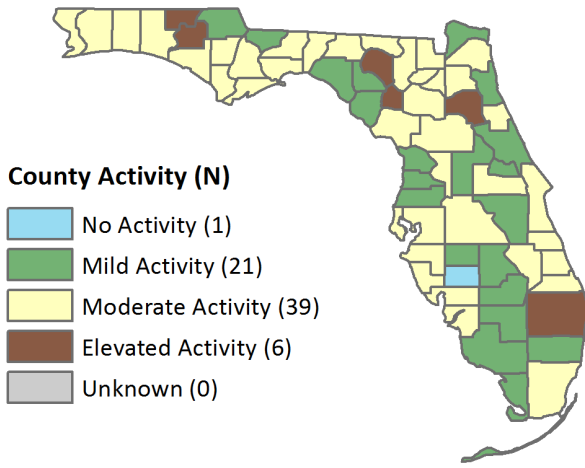
* Current season P&I death counts are preliminary estimates and may change as more data are received. The most recent data available are displayed here. Vital statistics death records received in ESSENCE-FL are considered to be complete through week 4, 2018.

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 5, 48 counties reported increasing activity, 15 counties reported activity at a plateau, and four counties reported decreasing activity.**

County Influenza Activity

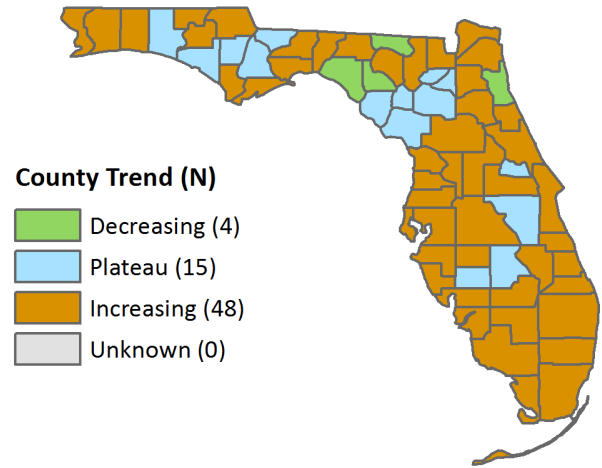
Map 1

County Influenza Activity Level for Week 5 Reported by 9:30 a.m. February 7, 2018



Map 2

County Influenza Activity Trend for Week 5 Reported by 9:30 a.m. February 7, 2018



As of 9:30 a.m. February 7, 2018, 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 5, 2018.

In week 5, no influenza-associated pediatric deaths were confirmed. A total of five influenza-associated pediatric deaths have been confirmed so far this season. All of the deaths confirmed so far this season have been in unvaccinated children.

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.

A recent study showed that flu vaccination can reduce a child's likelihood of dying from influenza by 50-60%. For more information, visit: <https://www.cdc.gov/media/releases/2017/p0403-flu-vaccine.html>.

Figure 5: Influenza-Associated Pediatric Deaths by Vaccination Status

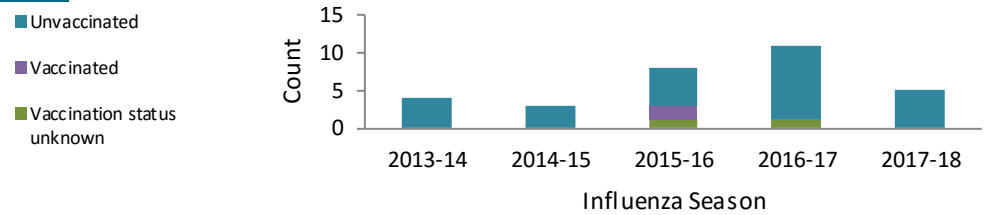


Figure 6: Influenza-Associated Pediatric Deaths by Medical History

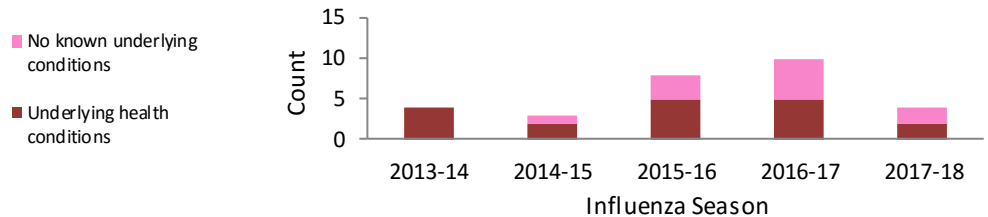
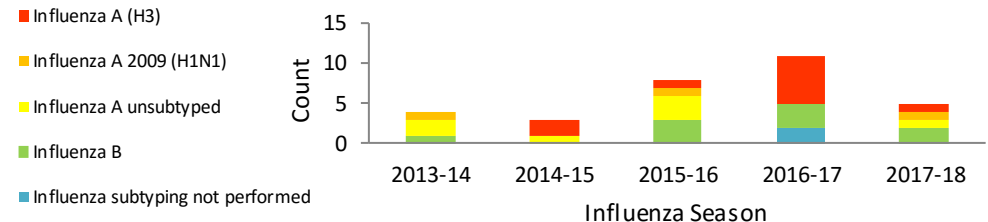


Figure 7: Influenza-Associated Pediatric Deaths by Strain Type



Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Map 3 shows influenza and ILI outbreaks by county for week 40, 2017 through week 5, 2018, as reported into Merlin.

Total Outbreaks:

- In week 5, 82 outbreaks were reported: 37 outbreaks with laboratory evidence of influenza and 45 outbreaks of ILI.
 - Influenza and ILI outbreaks were reported in 32 counties located in all regions of the state (see map 3). Of the 82 outbreaks reported, 77 (94%) have ongoing investigations.
- There has been a sharp increase in the number of outbreaks reported since week 1, 2018 (see figure 8).
 - Most outbreaks continue to be caused by influenza A, however, in week 5, there were also reports of outbreaks due to influenza B.
- A total of 319 outbreaks have been reported so far this season. Of the 319 outbreaks reported, 296 (93%) have been in facilities serving people at higher risk for complications due to influenza infection (children and adults aged ≥65 years).
 - More outbreaks have been reported this season than in any previous season on record.

Settings:

- In week 5, outbreaks occurred in the following settings: 13 (16%) in assisted living facilities, 13 (16%) in nursing facilities, seven (9%) in other long-term care facilities, 14 (17%) in daycares, 29 (35%) in schools and camps, five (6%) in correctional facilities, and one (1%) in other settings.
- In the 2017-18 season, outbreaks occurred in the following settings: 70 (22%) in schools and camps, 51 (16%) in daycares, 13 (4%) in correctional facilities, 32 (10%) in nursing facilities, 25 (8%) in assisted living facilities, 118 (37%) in other long-term care facilities, two (0.3%) in hospitals, one (0.3%) in shelters, one (0.3%) in restaurants, and six (2%) in other settings.

Laboratory Testing:

- Of the 82 outbreaks reported in week 5, specimens have been collected and submitted to the Bureau of Public Health Laboratories (BPHL) for testing for nine outbreaks so far (11%).

Control Measures:

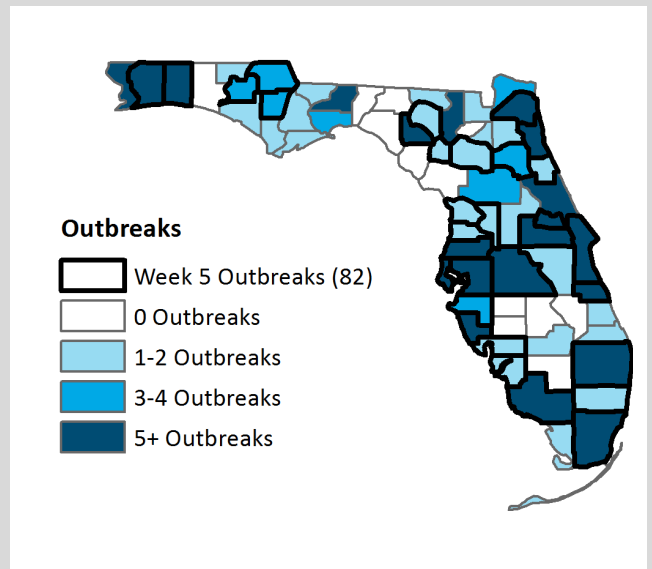
- Outbreak control measures were reviewed with facility leadership for 60 (73%) of the 82 reported outbreaks by county health departments (CHDs).
 - Facilities administered antiviral treatment for ill individuals in 16/25 outbreaks (64%) where CHDs recommended antiviral treatment.
 - Facilities administered antiviral chemoprophylaxis of at-risk individuals in 14/40 outbreaks (35%) where CHDs recommended antiviral chemoprophylaxis.

Hospitalizations and Deaths:

- Of the 82 outbreaks reported in week 5, people were hospitalized in six outbreaks (7%) and at least person died in one outbreak (1%).
- Of the 319 outbreaks reported so far this season, people were hospitalized in 69 outbreaks (22%) and people died in 14 outbreaks (4%).

For detailed information on select outbreaks reported during week 5, see page 14. For updates on select outbreaks reported in week 4 (ending January 27, 2018), see page 17.

Map 3 Influenza and ILI Outbreaks by County Week 40, 2017 through Week 5, 2018



Reported Influenza and ILI Outbreaks by Facility Type

ILI = influenza-like illness

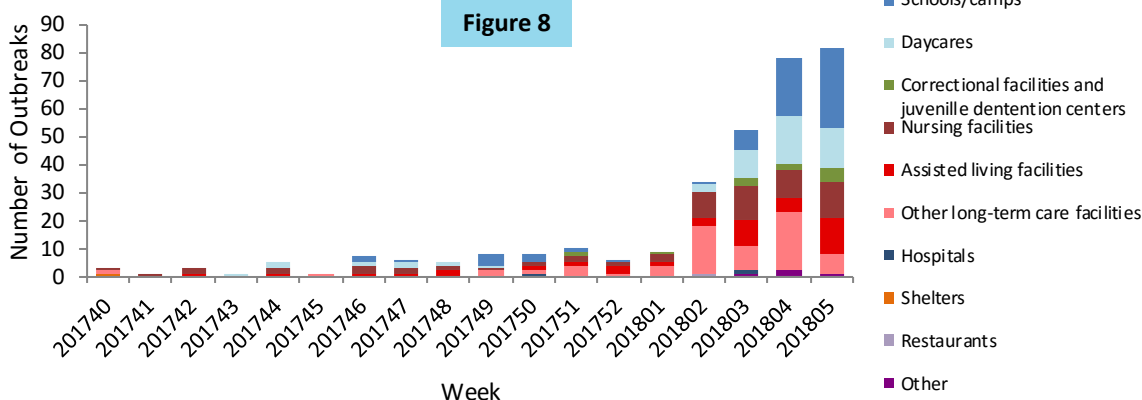


Figure 8 shows the distribution of outbreaks by facility as reported in Merlin, week 40, 2017-week 5, 2018.

In week 5, 82 outbreaks were reported. The number of influenza and ILI outbreaks reported increased sharply since week 1.

BPHL Viral Influenza Specimen Testing

BPHL = Bureau of Public Health Laboratories

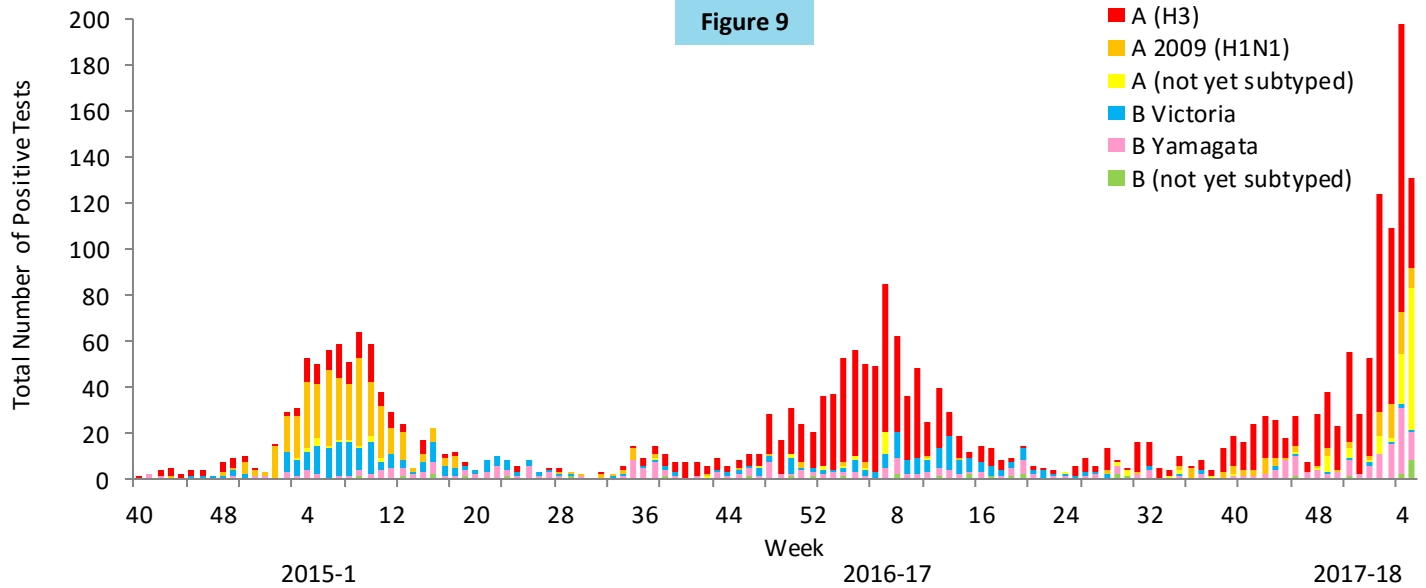


Figure 9 uses BPHL viral surveillance data.

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 2017-18 influenza season has been influenza A (H3). The Centers for Disease Control and Prevention (CDC) has continued to report extensive genetic diversity in the HA genes of influenza A (H3) viruses submitted to CDC for phylogenetic analysis. No significant antigenic drift has been reported. **Seasons in which A (H3) viruses predominate are associated with more severe illness in young children and adults ≥65 years old.** While statewide data indicate influenza A (H3) is the predominantly circulating strain, these data also indicate a substantial amount of influenza B viruses present and co-circulating.

**Table 1: Bureau of Public Health Laboratories (BPHL) Viral Surveillance by Lab Event Date*
Reported by 10:00 a.m. February 7, 2018**

Influenza Type	Current Week 5	Previous Week 4	Current 2017-18 Season
Total Specimens Tested	196	285	1549
Influenza positive specimens (% of total specimen tested)	131 (66.8%)	198 (69.5%)	951 (61.4%)
Influenza A 2009 (H1N1) (% of influenza positives)	9 (6.9%)	19 (9.6%)	86 (9.0%)
Influenza A (H3) (% of influenza positives)	39 (29.8%)	125 (63.1%)	615 (64.7%)
Influenza A not yet subtyped (% of influenza positives)	62 (47.3%)	21 (10.6%)	108 (11.4%)
Influenza B Yamagata (% of influenza positives)	12 (9.2%)	29 (14.7%)	120 (12.6%)
Influenza B Victoria (% of influenza positives)	1 (0.8%)	2 (1.0%)	10 (1.1%)
Influenza B not yet subtyped (% of influenza positives)	8 (6.1%)	2 (1.0%)	12 (1.3%)

*“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.

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:

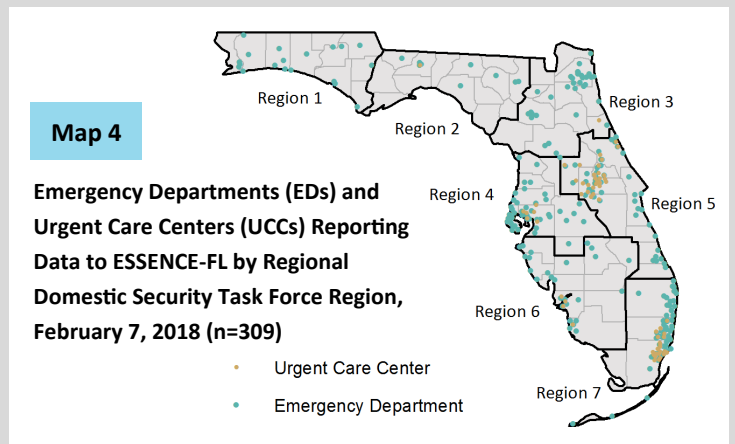
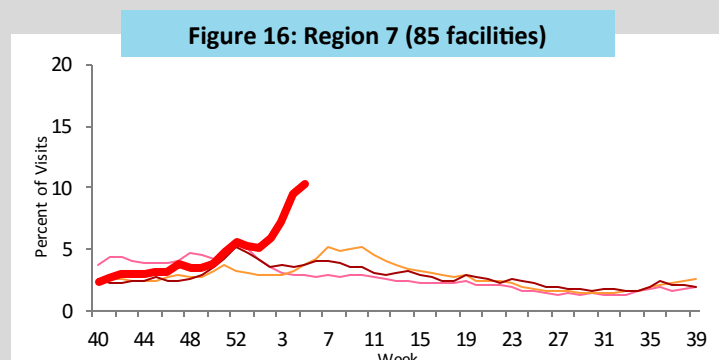
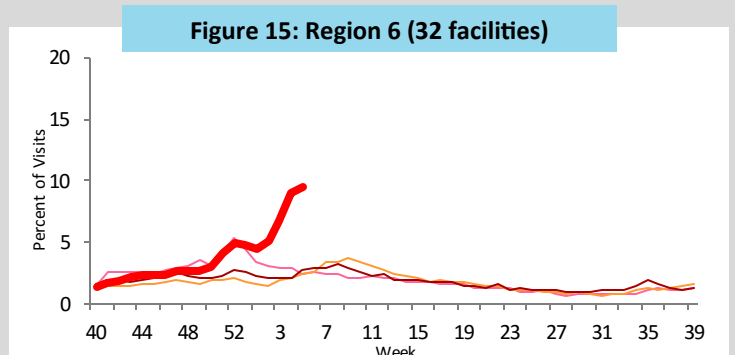
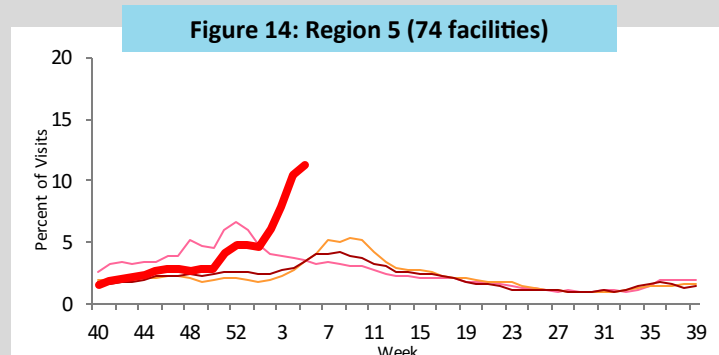
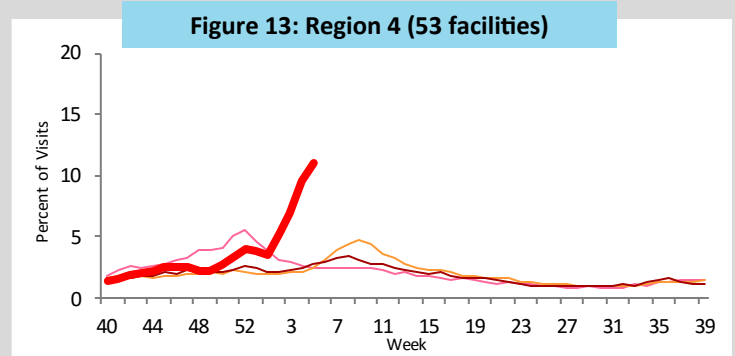
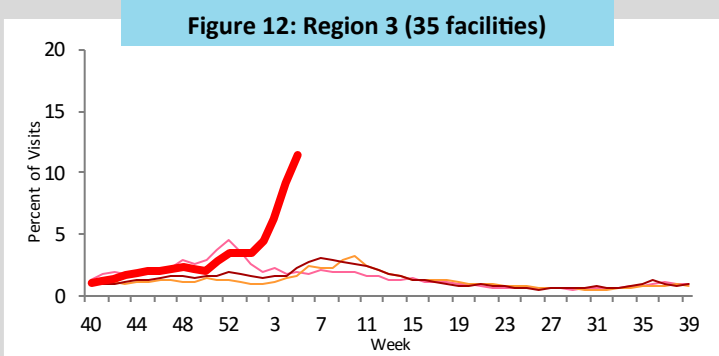
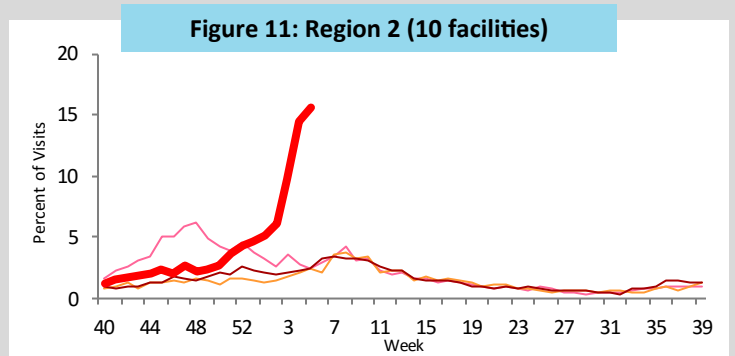
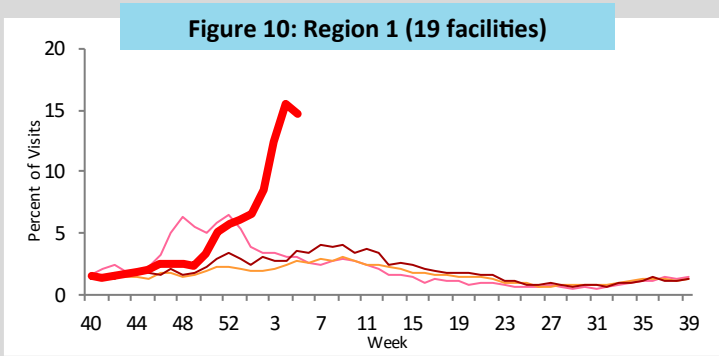
www.floridahealth.gov/diseases-and-conditions/influenza/_documents/flulabreportguide.pdf

ED and UCC Visits for ILI by Region

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

Figures 10-16 show the percent of visits for ILI from ED and UCC chief complaints for ESSENCE-FL participating facilities (n=309), by ESSENCE-FL Regional Domestic Security Task Force regions (see map 4) from week 40, 2014 to week 5, 2018.* In week 5, the percent of ED and UCC visits for ILI continued to increase sharply in all regions with the exception of region 1.

Despite a slight decrease, region 1 is still experiencing some of the highest activity, with nearly 15% of ED and UCC visits due to ILI. Region 2 is also similar. In all regions, activity levels were well above peak levels observed during previous seasons.



*There is no week 53 for the 2015-16, 2016-17, and 2017-18 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

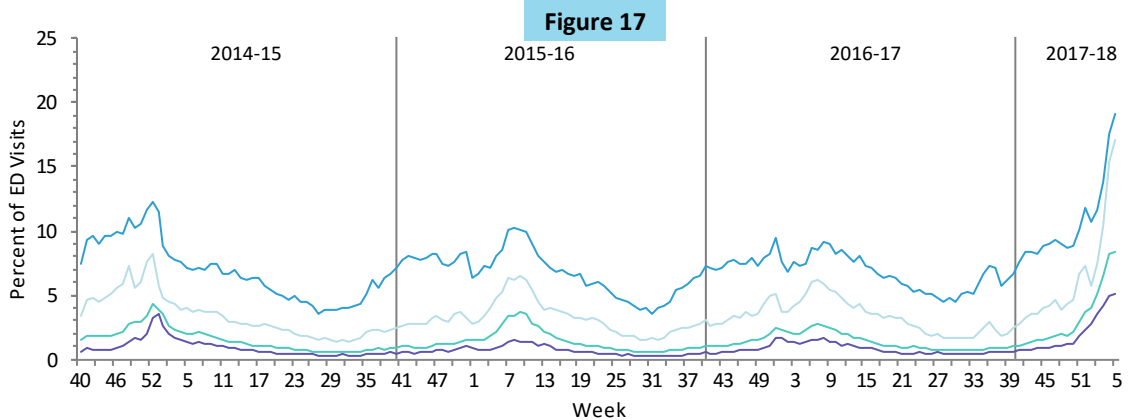
0 to 4 years old 5 to 24 years old 25 to 64 years old ≥65 years old

ED and UCC Visits for ILI by Age Group

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

Figure 17 shows the percent of visits for ILI from ED and UCC chief complaints by age group for ESSENCE-FL participating facilities (n=309), week 40, 2014 to week 5, 2018.

In week 5, ED and UCC visits for ILI increased sharply in all age groups. Levels were above peak activity levels observed in previous seasons in all age groups.



Visits to Outpatient Providers for ILI by Age Group*

ILI = influenza-like illness

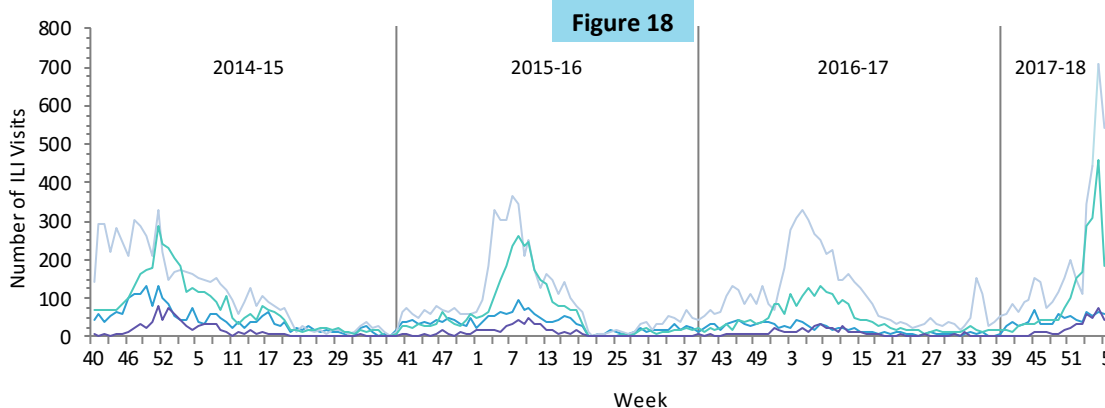


Figure 18 shows the number of visits for ILI reported by ILINet outpatient providers statewide (n=50) by age group, week 40, 2014 to week 5, 2018.

In week 5, the number of visits for ILI decreased in all age groups. Levels were similar to those observed in previous seasons at this time in the 0-4 age group. In all other age groups, levels were above those observed in previous seasons at this time.

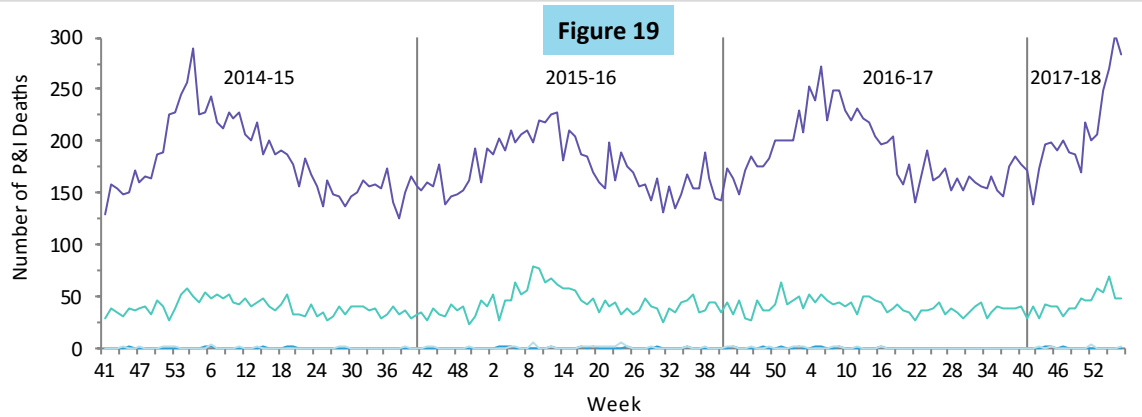
*Data presented here are counts, not proportions. This is because age group denominator data is not available through ILINet.

P&I Deaths* from Vital Statistics by Age Group

P&I = pneumonia and influenza

Figure 19 shows P&I deaths* for all Florida counties by age group, as reported into ESSENCE-FL, week 40, 2014 to week 4, 2018.

In week 4 (ending January 27, 2018), the number of P&I deaths decreased overall. Levels were above those observed in previous seasons at this time in the ≥65 age group. Levels were similar to levels observed in previous seasons at this time in all other 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 4, 2018.

ESSENCE-FL collects data daily from 309 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 ≤ 18 years old, and adults ≥ 65 years old.

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

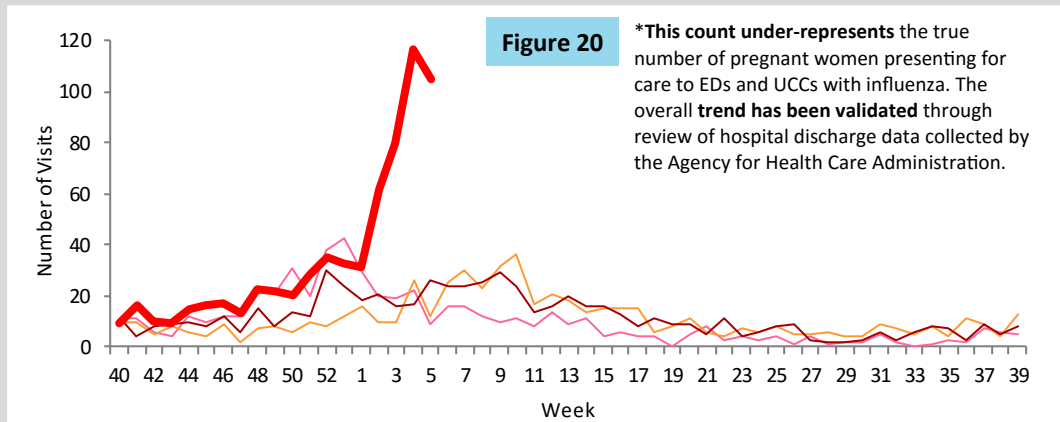
ED and UCC Visits for ILI by Pregnant Women

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

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

Figure 20 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 5, 2018.

In week 5, the number of visits to EDs and UCCs by pregnant women with mention of influenza decreased but remained well above peak levels observed during previous seasons. Pregnant women should get vaccinated as soon as possible.



ED and UCC Visits for ILI by Children ≤ 18 Years Old

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

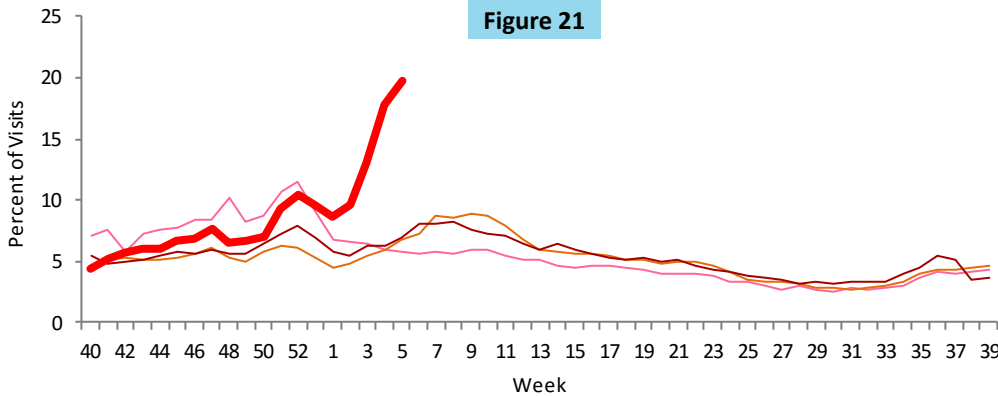


Figure 21 shows the percent of ILI visits among all ED and UCC visits for children ≤ 18 years old, as reported into ESSENCE-FL, week 40, 2014 to week 5, 2018.

In week 5, the percent of ILI visits among all ED and UCC visits for children ≤ 18 years old increased and remained well above peak activity levels in previous seasons.

Children are at higher risk for complications from influenza. Children who have not been vaccinated yet should get vaccinated as soon as possible. Influenza spreads easily among children. Sick children should be kept home.

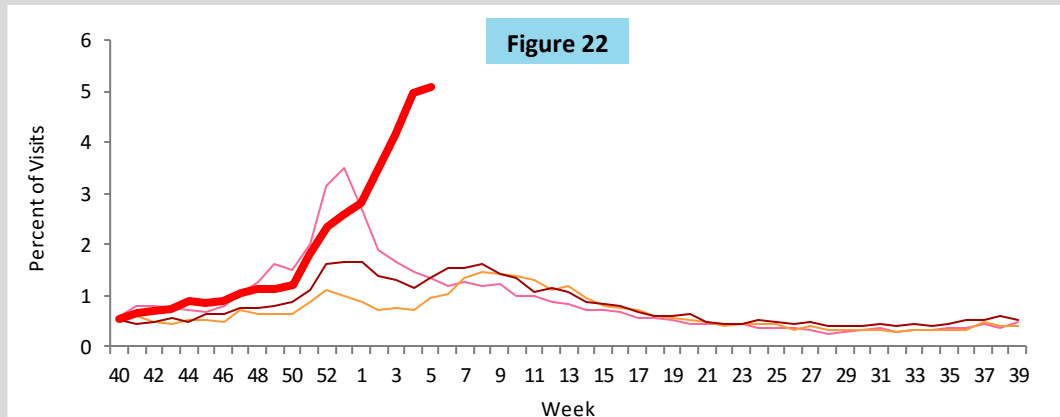
ED and UCC Visits for ILI by Adults ≥ 65 Years Old

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 adults ≥ 65 years old, as reported into ESSENCE-FL, week 40, 2014 to week 5, 2018.

In week 5, the percent of ILI visits among all ED and UCC visits for adults ≥ 65 years increased slightly and remained well above peak activity levels observed during previous seasons.

Adults aged ≥ 65 years are at high-risk for complications due to influenza infection. People in this age group who have not yet been vaccinated for the 2017-18 season should get vaccinated as soon as possible.



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.

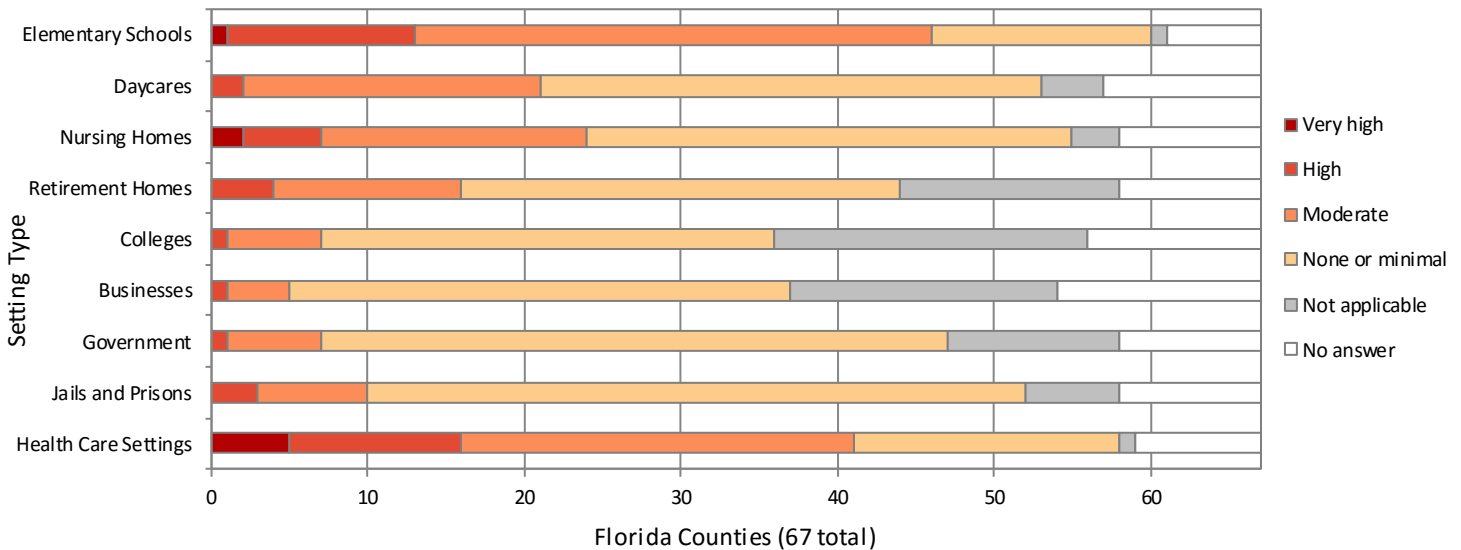
Figure 23 shows the results of the influenza activity assessment for week 5, 2018.

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 23



Settings for Children <18 Years Old

In elementary schools, one county (1.5%) reported very high influenza or ILI activity, 12 counties (18.2%) reported high influenza or ILI activity, 33 counties (50.0%) reported moderate influenza or ILI activity, and 14 counties (21.2%) reported no or minimal influenza or ILI activity.

In daycare settings, two counties (3.2%) reported high influenza or ILI activity, 19 counties (30.2%) reported moderate influenza or ILI activity, and 32 counties (50.8%) reported no or minimal influenza or ILI activity.

Settings for Adults >65 Years Old

In nursing homes, two counties (3.1%) reported very high influenza or ILI activity, five counties (7.8%) reported high influenza or ILI activity, 17 counties (22.6%) reported moderate influenza or ILI activity, and 31 counties (48.4%) reported no or minimal influenza or ILI activity.

In retirement homes, four counties (7.5%) reported high influenza or ILI activity, 12 counties (22.6%) reported moderate influenza or ILI activity, and 28 counties (52.8%) reported no or minimal influenza or ILI activity.

Settings for Adults 18 to 65 Years Old

In colleges, one of 47 counties (2.1%) reported high influenza or ILI activity, six counties (12.8%) reported moderate influenza or ILI activity, and 29 counties (61.7%) reported no or minimal influenza or ILI activity.

In businesses, one county (2.0%) reported high influenza or ILI activity, four counties (8.0%) reported moderate influenza or ILI activity, and 32 counties (64.0%) reported no or minimal influenza or ILI activity.

In government offices, one county (1.8%) reported high influenza or ILI activity, six counties (10.7%) reported moderate influenza or ILI activity, and 40 counties (71.4%) reported no or minimal influenza or ILI activity.

Other Unique Settings

In jails and prisons, three counties (4.9%) reported high influenza or ILI activity, seven counties (11.5%) reported moderate influenza or ILI activity, and 42 counties (68.9%) reported no or minimal influenza or ILI activity.

In health care settings, five counties (7.6%) reported very high influenza or ILI activity, 11 counties (16.7%) reported high influenza or ILI activity, 25 counties (37.9%) reported moderate influenza or ILI activity, and 17 counties (25.8%) reported no or minimal influenza or ILI activity.

Summary

Week 5: January 28 – February 2, 2018

Respiratory syncytial virus (RSV) activity:

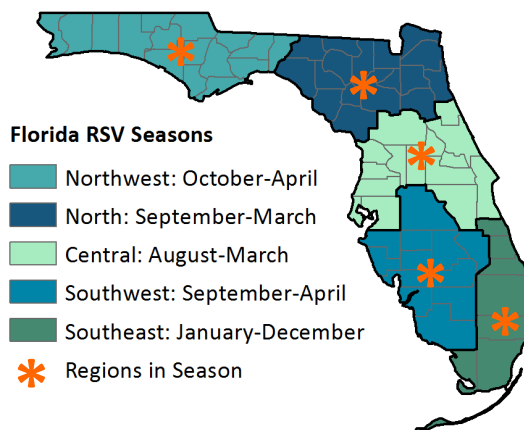
- In week 5, the percent of children <5 years old diagnosed with RSV at EDs and UCCs decreased and was within levels observed in previous seasons at this time. It is unclear how the influenza season is impacting RSV activity.
- All regions are currently in RSV season.
- No RSV-associated pediatric deaths were identified in week 5. One RSV-associated pediatric death has been identified so far this season. Premature infants and children <2 years with underlying medical conditions are at higher risk for severe complications from RSV infection. Prophylaxis is available for children who qualify. For more information, contact your physician.
- To learn more about RSV in Florida, please visit: 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.
- 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 for 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 19 ►

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

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

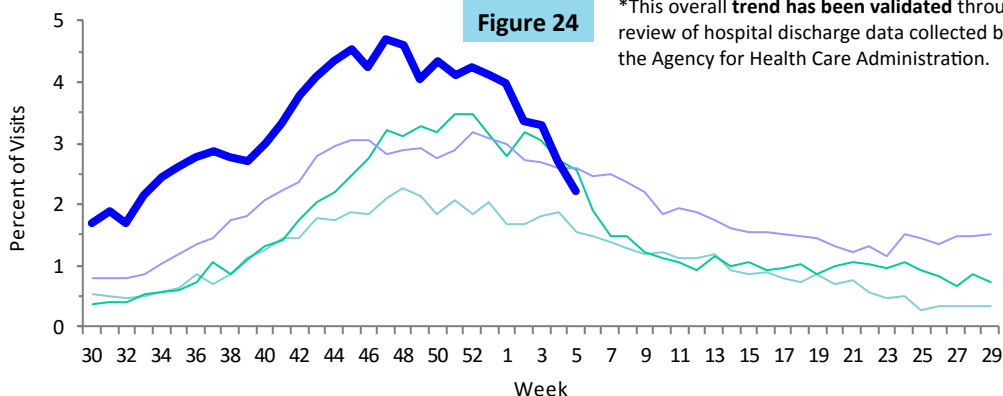


Figure 24 shows the percent of visits to EDs and UCCs with discharge diagnoses that include RSV or RSV-associated illness, as reported by participating ESSSENCE-FL facilities (n=309), week 30, 2014 to week 5, 2018.

In week 5, the percent of children presenting to participating EDs and UCCs for care with RSV decreased and was within levels observed in previous seasons at this time.

Legend for Figure 24:
 2017-18 (dark blue line)
 2016-17 (purple line)
 2015-16 (green line)
 2014-15 (light blue line)

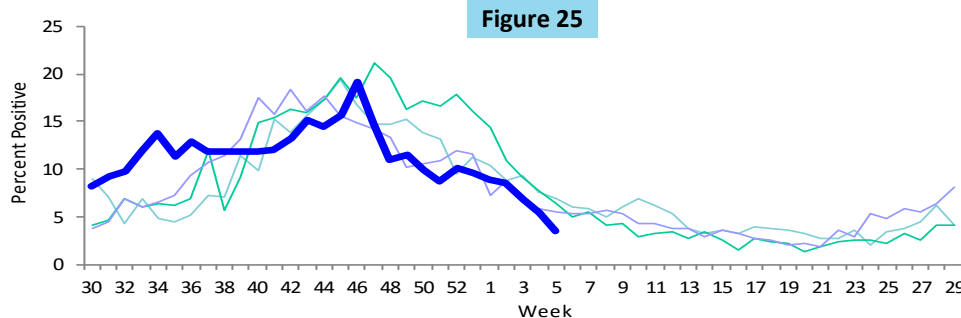
Laboratory RSV Surveillance

RSV = respiratory syncytial virus

Figure 25 shows the percent of specimens testing positive for RSV, as reported by hospital laboratories (n=8), week 30, 2014 to week 5, 2018.

In week 5, the percent of specimens RSV positive decreased and was slightly below levels observed in previous seasons at this time.

Legend for Figure 25:
 2017-18 (dark blue line)
 2016-17 (purple line)
 2015-16 (green line)
 2014-15 (light blue line)



Other Respiratory Virus Surveillance

Statewide activity:

- The percent of specimens testing positive for influenza decreased slightly but remained higher than other respiratory viruses under surveillance.

Enterovirus D68 (EV-D68) activity:

- In week 5, no new people tested positive for EV-D68 in Florida.
 - No people have tested positive for EV-D68 by PCR so far in 2018. In 2017, three people tested positive for EV-D68 by PCR in Florida. One person was identified in August 2017 during the investigation of an ILI outbreak. Two people were identified in October 2017 as part of routine outpatient surveillance as a result of Florida participating in the Acute Respiratory Infection Epidemiology and Surveillance (ARIES) Program.
- To learn more about EV-D68, please visit: <http://www.floridahealth.gov/diseases-and-conditions/d68>.

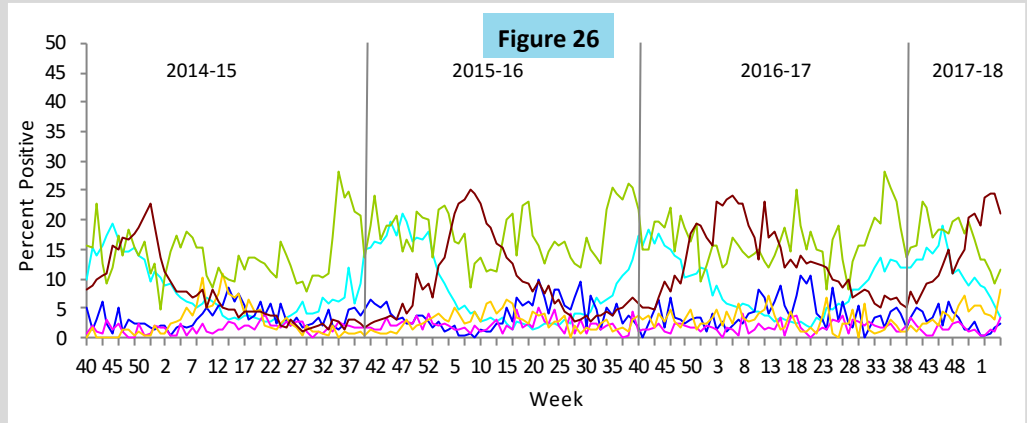
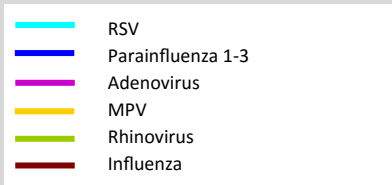
Outbreaks:

- In week 5, no outbreaks of respiratory syncytial virus (RSV), parainfluenza 1-3, adenovirus, human metapneumovirus (MPV), rhinovirus, enterovirus, or coronavirus were reported.

Laboratory Viral Respiratory Surveillance

Figure 26 shows the percent of laboratory results testing positive for eight common respiratory viruses, as reported by hospital laboratories (n=8), week 40, 2014 to week 5, 2018.

In recent weeks, the percent of specimens testing positive for influenza decreased slightly but remained higher than other respiratory viruses under surveillance.



Non-Influenza ARIES Laboratory Outpatient Surveillance*

ARIES = Acute Respiratory Infection Epidemiology and Surveillance Program
BPHL = Bureau of Public Health Laboratories

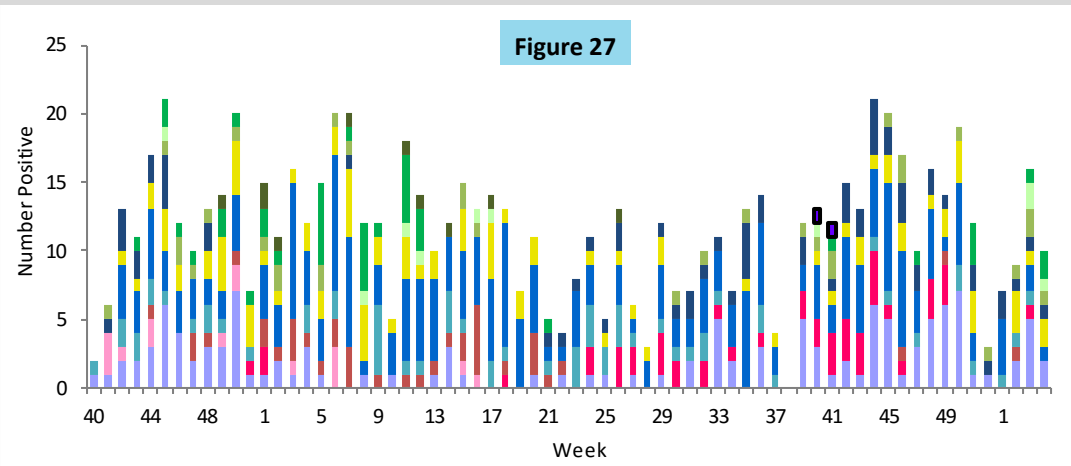
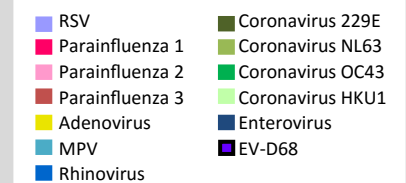


Figure 27 shows the number of specimens testing positive for 12 common respiratory viruses, as reported by BPHL and ARIES outpatient providers statewide (n=6), week 40, 2016 to week 4, 2018.

In week 4 (ending January 27, 2018), specimens submitted by ARIES provider tested positive for RSV, MPV, adenovirus, enterovirus, coronavirus NL63, coronavirus HKU1, and coronavirus OC43 by PCR.



*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 4, 2018. Laboratory results for specimens that have not yet been tested in full will be included in future reports.

Table 2: Week 5 Outbreaks: Summary of Florida Influenza and ILI Outbreaks by Setting

Setting	Number of outbreaks (percent of outbreaks)	Implicated viruses
Schools and camps	29 (35%)	<ul style="list-style-type: none"> 5 outbreaks of influenza A unspecified 2 outbreaks of influenza A unspecified and influenza B unspecified 2 outbreaks of influenza unspecified 20 outbreaks of unknown etiology
Daycares (includes adult daycares)	14 (17%)	<ul style="list-style-type: none"> 4 outbreaks of influenza A unspecified 1 outbreak of influenza unspecified 9 outbreaks of unknown etiology
Correctional facilities and juvenile detention centers	5 (6%)	<ul style="list-style-type: none"> 2 outbreaks of influenza A (H3) 3 outbreaks of unknown etiology
Nursing facilities	13 (16%)	<ul style="list-style-type: none"> 4 outbreaks of influenza A unspecified 1 outbreak of influenza unspecified 8 outbreaks of unknown etiology
Assisted living facilities	13 (16%)	<ul style="list-style-type: none"> 1 outbreak of A (H3) 6 outbreaks influenza A unspecified 1 outbreak of influenza A unspecified and influenza B unspecified 1 outbreak of influenza B unspecified 1 outbreak of influenza unspecified 3 outbreaks of unknown etiology
Other long-term care facilities	7 (9%)	<ul style="list-style-type: none"> 4 outbreaks of influenza A unspecified 1 outbreak of influenza A unspecified and influenza B unspecified 1 outbreak of influenza unspecified 1 outbreak of unknown etiology
Hospitals	0 (0%)	<ul style="list-style-type: none"> No outbreaks
Shelters	0 (0%)	<ul style="list-style-type: none"> No outbreaks
Restaurants	0 (0%)	<ul style="list-style-type: none"> No outbreaks
Other	1 (1%)	<ul style="list-style-type: none"> 1 outbreak of unknown etiology
Total	82 (100%)	<ul style="list-style-type: none"> 3 outbreaks of influenza A (H3) 23 outbreaks of influenza A unspecified 4 outbreaks of influenza A unspecified and influenza B unspecified 1 outbreak of influenza B unspecified 6 outbreaks of influenza unspecified 45 outbreaks of unknown etiology

Table 3: Season Total: Summary of Florida Influenza and ILI Outbreaks by Setting

Setting	Number of outbreaks (percent of outbreaks)	Implicated viruses
Schools and camps	70 (22%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3) and influenza B Yamagata lineage 1 outbreak of influenza A (H3) and influenza B unspecified 12 outbreaks of influenza A unspecified 6 outbreaks of influenza A unspecified and influenza B unspecified 1 outbreak of influenza A unspecified, influenza B unspecified, and human metapneumovirus (MPV) 1 outbreak of influenza B unspecified 2 outbreaks of influenza B Yamagata lineage 6 outbreaks of influenza unspecified 1 outbreak of respiratory syncytial virus (RSV) 39 outbreaks of unknown etiology
Daycares (includes adult daycares)	51 (16%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3) and influenza B unspecified 9 outbreaks of influenza A unspecified 3 outbreaks of influenza A unspecified and influenza B unspecified 2 outbreaks of influenza B unspecified 5 outbreaks of influenza unspecified 1 outbreak of influenza unspecified and RSV 9 outbreaks of RSV 21 outbreaks of unknown etiology
Correctional facilities and juvenile detention centers	13 (4%)	<ul style="list-style-type: none"> 5 outbreaks of influenza A (H3) 2 outbreaks of influenza A (H3) and influenza A 2009 (H1N1) 1 outbreak of influenza A (H3) and influenza B Yamagata lineage 1 outbreak of influenza A unspecified 1 outbreak of influenza B Yamagata lineage 3 outbreaks of unknown etiology
Nursing facilities	32 (10%)	<ul style="list-style-type: none"> 2 outbreaks of influenza A (H3) 1 outbreak of influenza A (H3) and influenza A 2009 (H1N1) 11 outbreaks of influenza A unspecified 1 outbreak of influenza A unspecified and influenza B unspecified 2 outbreaks of influenza B unspecified 1 outbreak of influenza B Yamagata lineage 2 outbreaks of influenza unspecified 1 outbreak of RSV and rhinovirus 11 outbreaks of unknown etiology

Table 2 continued on page 14.

Table 3: Season Total: Summary of Florida Influenza and ILI Outbreaks by Setting, Cont.

Setting	Number of outbreaks (percent of outbreaks)	Implicated viruses
Assisted living facilities	25 (8%)	<ul style="list-style-type: none"> • 2 outbreaks of influenza A (H3) • 1 outbreak of influenza A (H3) and influenza A 2009 (H1N1) • 11 outbreaks of influenza A unspecified • 2 outbreaks of influenza A unspecified and influenza B unspecified • 1 outbreak of influenza B unspecified • 2 outbreaks of influenza unspecified • 1 outbreak of RSV • 5 outbreaks of unknown etiology
Other long-term care facilities	118 (37%)	<ul style="list-style-type: none"> • 22 outbreaks of influenza A (H3) • 1 outbreak of influenza A (H3) and coronavirus HKU1 • 1 outbreak of influenza A (H3) and coronavirus NL63 • 1 outbreak of influenza A (H3), influenza A 2009 (H1N1), and influenza B Yamagata lineage • 2 outbreaks of influenza A (H3) and influenza B unspecified • 1 outbreak of influenza A (H3), influenza B unspecified, parainfluenza 1, and MPV • 1 outbreak of influenza A (H3) and rhinovirus • 34 outbreaks of influenza A unspecified • 12 outbreaks of influenza A unspecified and influenza B unspecified • 4 outbreaks of influenza B unspecified • 1 outbreak of influenza B unspecified and coronavirus HKU1 • 1 outbreak of influenza B Yamagata lineage • 3 outbreak of influenza unspecified • 1 outbreak of RSV • 1 outbreak of rhinovirus • 32 outbreaks of unknown etiology
Hospitals	2 (0.6%)	<ul style="list-style-type: none"> • 1 outbreak of influenza B unspecified • 1 outbreak of RSV
Shelters	1 (0.3%)	<ul style="list-style-type: none"> • 1 outbreak of influenza A (H3) and rhinovirus
Restaurants	1 (0.3%)	<ul style="list-style-type: none"> • 1 outbreak of influenza unspecified
Other	6 (2%)	<ul style="list-style-type: none"> • 1 outbreak of influenza A unspecified • 1 outbreak of influenza unspecified • 4 outbreaks of unknown etiology
Total	319 (100%)	<ul style="list-style-type: none"> • 31 outbreaks of influenza A (H3) • 1 outbreak of influenza A (H3) and coronavirus HKU1 • 1 outbreak of influenza A (H3) and coronavirus NL63 • 4 outbreaks of influenza A (H3) and influenza A 2009 (H1N1) • 1 outbreak of influenza A (H3), influenza A 2009 (H1N1), and influenza B Yamagata lineage • 2 outbreaks of influenza A (H3) and influenza B Yamagata lineage • 4 outbreaks of influenza A (H3) and influenza B unspecified • 1 outbreak of influenza A (H3), influenza B unspecified, parainfluenza 1, and MPV • 2 outbreaks of influenza A (H3) and rhinovirus • 79 outbreaks of influenza A unspecified • 24 outbreaks of influenza A unspecified and influenza B unspecified • 1 outbreak of influenza A unspecified, influenza B unspecified, and MPV • 11 outbreaks of influenza B unspecified • 1 outbreak of influenza B unspecified and coronavirus HKU1 • 5 outbreaks of influenza B Yamagata lineage • 20 outbreaks of influenza unspecified • 1 outbreak of influenza unspecified and RSV • 13 outbreaks of RSV • 1 outbreak of RSV and rhinovirus • 1 outbreak of rhinovirus • 115 outbreaks of unknown etiology

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

In week 5, 82 outbreaks were reported in Merlin: 37 outbreaks with laboratory evidence of influenza and 45 outbreaks of ILI. Of the 82 outbreaks reported during week 5 (ending February 3, 2018), 31 select outbreaks are summarized below.

Lafayette County

- **An assisted living facility** reported two residents and three staff members with ILI. One individual was hospitalized as a result of their illness. One individuals tested positive for influenza A unspecified by rapid antigen testing at local health care providers. No specimens have been available for testing at the Bureau of Public Health Laboratories thus far. The facility reported 1 of 26 residents have been vaccinated for the 2017-18 influenza season. Vaccination status for the 2017-18 season for staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Continued on page 15.

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Hernando County

- **A nursing facility** reported 23 individuals with ILI. Two specimens collected from ill individuals tested positive for influenza A by rapid antigen testing at local health care providers. No specimens have been available for testing at the Bureau of Public Health Laboratories (BPHL) thus far. The facility reported 9% of staff members were vaccinated for the 2017-18 influenza season. The facility was unable to provide influenza vaccination status for the 2017-18 season for residents. Control measures were discussed with facility leadership. This investigation is ongoing.

Sumter County

- **A correctional facility** reported eight individuals with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for inmates and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.

Hillsborough County

- **A school** reported 25 individuals with ILI. At least one individual tested positive for influenza A (test type unknown) at a local health care provider. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.
- **A second school** reported 15 individuals with ILI. At least four students tested positive for influenza A (test type unknown) and one student tested positive for influenza B (test type unknown) at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.
- **A third school** reported 43 individuals with ILI. At least one individual tested positive for influenza A by rapid antigen testing at local health care providers and at least one individual tested positive for influenza B by PCR at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing.
- **A fourth school** reported 23 individuals with ILI. At least one individual tested positive for influenza A by PCR at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.
- **A fifth school** reported 26 individuals with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.
- **A daycare** reported 16 individuals with ILI. At least seven individuals tested positive for influenza A (test type unknown) at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for children and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.

Orange County

- **A nursing facility** reported 15 individuals with ILI. Three individuals sought treatment at local emergency departments and three individuals were hospitalized as a result of their illness. At least one individual tested positive for influenza A (test type unknown) at local health care providers. The facility reported 70% of residents and 31% of staff were vaccinated for the 2017-18 influenza season. Control measures were reviewed with facility leadership. This investigation is closed.

Broward County

- **A daycare** reported 20 students and two staff members with ILI. At least one individual tested positive for influenza A by rapid antigen testing at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for children and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Miami-Dade County

- **A school** reported 11 students with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Continued on page 16.

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Palm Beach County

- **A school** reported 28 students and six staff members with ILI. No specimens have been available for testing at the Bureau of Public Health Laboratories (BPHL) thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A second school** reported 18 individuals with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A third school** reported 21 individuals with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A fourth school** reported 14 individuals with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. The school reported some of their students and staff were vaccinated for the 2017-18 influenza season. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **An assisted living facility** reported 20 residents and nine staff members with ILI. Four individuals tested positive for influenza A by unknown test type at local health care providers. No specimens have been available for testing at BPHL thus far. The facility reported 50% of residents and 20% of staff were vaccinated for the 2017-18 influenza season. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A second assisted living facility** reported three residents with ILI. One resident was hospitalized as a result of their illness. Both influenza A and influenza B were identified by rapid antigen testing at local health care providers. No specimens have been available for testing at BPHL thus far. The facility reported 67% of residents and 30% of staff were vaccinated for the 2017-18 influenza season. Infection control measures were reviewed with facility leadership. This investigation is ongoing.

Santa Rosa County

- **A school** reported 13 students and one staff member with ILI. At least one individual tested positive for influenza (type unknown) by rapid antigen testing at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **An assisted living facility** reported two residents with ILI. Both residents were hospitalized as a result of their illness. At least one resident tested positive for influenza B (test type unknown) at local healthcare providers. No specimens have been available for testing at BPHL thus far. The facility reported that an estimated 33% of staff and 49% of residents were vaccinated for the 2017-18 influenza season. Control measures were reviewed with facility leadership. This investigation is ongoing.

Jackson County

- **A school** reported 53 students with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A correctional facility** reported 22 inmates with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for inmates and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.

Suwannee County

- **A daycare** reported 11 attendees and one staff member with ILI. Three specimens collected from ill individuals tested positive for influenza A (test type unknown) at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for daycare attendees and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Putnam County

- **A school** reported 25 students and four staff members with ILI. Seven individuals sought treatment at local emergency departments. Specimens collected from 22 ill individuals tested positive for influenza A by PCR at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Continued on page 17.

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Polk County

- **An assisted living facility** reported eight residents and three staff members with ILI. Three individuals sought treatment at local emergency departments and three individuals were hospitalized as a result of their illness. Specimens collected from all ill residents and staff members tested positive for influenza A by rapid antigen testing at a private laboratory. No specimens were available for testing at the Bureau of Public Health Laboratories (BPHL). The facility estimated 58% of residents were vaccinated for the 2017-18 influenza season. Influenza vaccination status for the 2017-18 season for staff is unknown. Control measures were reviewed with facility leadership. This investigation is closed.
- **A long-term care facility** reported 13 residents with ILI. Two residents sought treatment at local emergency departments, two residents were hospitalized, and two residents expired. Eleven specimens collected from ill residents tested positive for influenza A by PCR at a private laboratory. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for residents and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Calhoun County

- **A correctional facility** reported seven residents and five staff members with ILI. Three specimens were collected for testing at BPHL. All three specimens tested positive for Influenza A (H3) by PCR. Influenza vaccination status for the 2017-18 season for residents and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Duval County

- **A school** reported 16 students and one staff member with ILI. Five specimens collected from ill individuals tested positive for influenza A (test type unknown) at local healthcare providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for students and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A daycare** reported 25 individuals with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for daycare attendees and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing.

In week 4 (ending January 27, 2018), 78 outbreaks were reported into Merlin (after review, four additional outbreaks later determined to either not be outbreaks or to be duplicate reports were ruled out). Updates were made to 11 select outbreaks during week 5.

Washington County

- **An assisted living facility** reported three residents and three staff members with ILI. One individual sought treatment at a local emergency department and another was hospitalized as a result of their illness. Specimens collected from three ill residents tested positive for influenza A by rapid antigen testing at local health care providers. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for residents and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing. **Update: Three specimens were collected for testing at BPHL. Of those, two specimens tested positive for influenza A 2009 (H1N1) and one specimen tested positive for influenza A (H3) by PCR. The facility estimated 92% of staff and 91% of residents were vaccinated for the 2017-18 influenza season. This investigation is still ongoing.**

Jackson County

- **A long-term care facility** reported 25 residents with ILI. Two residents sought treatment at a local emergency department and were hospitalized as a result of their illness. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for the 2017-18 season for residents and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing. **Update: Influenza A and B were both identified (test type unknown) at local health care providers. This investigation is still ongoing.**

Hillsborough County

- **A daycare** reported 11 individuals with ILI. A specimen collected from an ill child tested positive for influenza A and influenza B (test type unknown) 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 children and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing. **Update: A specimen collected from one ill child tested positive for both influenza A and B (test type unknown) at a local health care provider. This investigation is still ongoing.**

Continued on page 18.

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Orange County

- **A school** reported seven students and four staff members with ILI. One individual sought treatment at a local emergency department as a result of their illness. One specimen collected from an ill individual tested positive for influenza A (test type unknown) at a local health care provider. No specimens have been available for testing at the Bureau of Public Health Laboratories (BPHL) thus far. Vaccination status for the 2017-18 influenza season for students and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing. **Update: The facility reported three additional individuals with ILI. The facility was unable to provide influenza vaccination status for the 2017-18 season for students and staff. This investigation is still ongoing.**
- **A second school** reported 14 individuals with ILI. One individual sought treatment at a local emergency department. 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 students and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing. **Update: The facility reported 11 additional individuals with ILI. Specimens collected from two individuals tested positive for influenza A by rapid antigen testing at local health care providers. The facility reported 19% of staff were vaccinated for the 2017-18 influenza season. The facility was unable to provide influenza vaccination status for the 2017-18 season for students. This investigation is still ongoing.**

Pinellas County

- **A nursing facility** reported 21 individuals with ILI. At least one individual tested positive for influenza A (H3) by PCR 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 residents and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing. **Update: Three specimens collected from ill individuals tested positive for influenza A (H3) by PCR at local health care providers. This investigation is still ongoing.**

Volusia County

- **An assisted living facility** reported 12 residents and eight staff members with ILI. One individual sought treatment at a local emergency department and two individuals were hospitalized as a result of their illness. Specimens collected from three individuals tested positive for influenza A (test type unknown) at local health care providers. No specimens have been available for testing at BPHL this far. Influenza vaccination status for residents and staff for the 2017-18 season is currently unknown. Control measures were reviewed with facility leadership. The investigation is ongoing. **Update: Three specimens collected from ill individuals for testing at BPHL tested positive for influenza A (H3) by PCR. The facility reported 86% of residents and 90% of staff were vaccinated for the 2017-18 influenza season. This investigation is closed.**

Columbia County

- **A daycare** reported 26 children and nine staff members with ILI. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for children and staff for the 2017-18 season is currently unknown. Control measures were reviewed with facility leadership. The investigation is ongoing. **Update: The facility reported five additional individuals with ILI. Specimens collected from 27 ill individuals tested positive for influenza (type unknown) by rapid antigen testing at local health care providers. This investigation is still ongoing.**
- **A second daycare** reported eight children and two staff members with ILI. One individual sought treatment at a local emergency department as a result of their illness. No specimens have been available for testing at BPHL thus far. The etiology of this outbreak is not yet known. Influenza vaccination status for children and staff for the 2017-18 season is currently unknown. Control measures were reviewed with facility leadership. The investigation is ongoing. **Update: The facility reported five additional children with ILI. Specimens collected from 10 ill individuals tested positive for influenza (type unknown) by rapid antigen testing at local health care providers. This investigation is closed.**

Sumter County

- **A school** reported 24 individuals with ILI. No specimens have been available for testing at the Bureau of Public Health Laboratories (BPHL) thus far. The etiology of this outbreak is not yet known. Vaccination status for the 2017-18 influenza season for students and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing. **Update: The facility reported 33 additional individuals with ILI. This investigation is still ongoing.**

Pasco County

- **A daycare** reported 10 children 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 children and staff is not yet known. Information regarding control measures is not yet available. This investigation is ongoing. **Update: The facility was unable to provide influenza vaccination status for the 2017-18 season for children and staff. Control measures were reviewed with facility leadership. This investigation is closed.**

Florida ILINet · Data source for figures 2 and 18

- 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, 20-22, 24; 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=309) 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 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 figure 23, 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 tables 2 and 3

- 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 figure 9 and table 1

- 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.

Laboratory Viral Respiratory Surveillance · Data sources for figures 25-26

- 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 27

- 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 counts, as well as submit 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.
- 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.