



Summary

Week 6: February 4-10, 2018

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

- In week 6, despite small declines, influenza activity remained higher than 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.
- **One new influenza-associated pediatric deaths was confirmed.** Six influenza-associated pediatric deaths have been confirmed so far in the 2017-18 influenza season.
- **Overall, deaths due to pneumonia and influenza were higher than expected. Given the increase in emergency department visits for flu, excess deaths due to pneumonia and influenza are also 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 (64%).
- Seventy-one outbreaks of influenza and ILI were reported: 35 with confirmation of influenza and 36 ILI. As of week 6 (ending February 10, 2018), 388 outbreaks of influenza and ILI have been reported since the start of the 2017-18 season.
- The Florida Department of Health is conducting enhanced surveillance of intensive-care unit (ICU) patients aged <65 with laboratory-confirmed influenza. From February 1-10, 2018, 138 such cases were reported. The majority of these cases occurred in unvaccinated people with underlying health conditions.

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.**
- **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. Flu vaccines are also available at your local county health department.
- **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:

- In severe seasons like the one Florida is currently experiencing, the use of antivirals is especially important. There is no shortage of antivirals, however, some supply chain issues have been reported.
- **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.**
- **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 ►



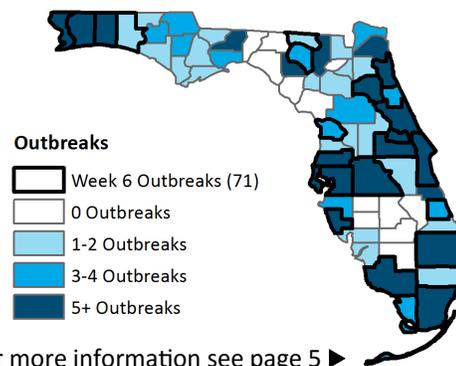
Predominately Circulating Strain

A (H3)

For more information see page 10 ►

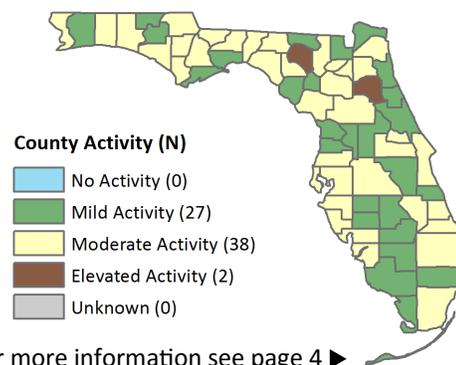


Influenza and ILI Outbreaks Reported as of 2/10/2018



For more information see page 5 ►

County Influenza Activity



For more information see page 4 ►

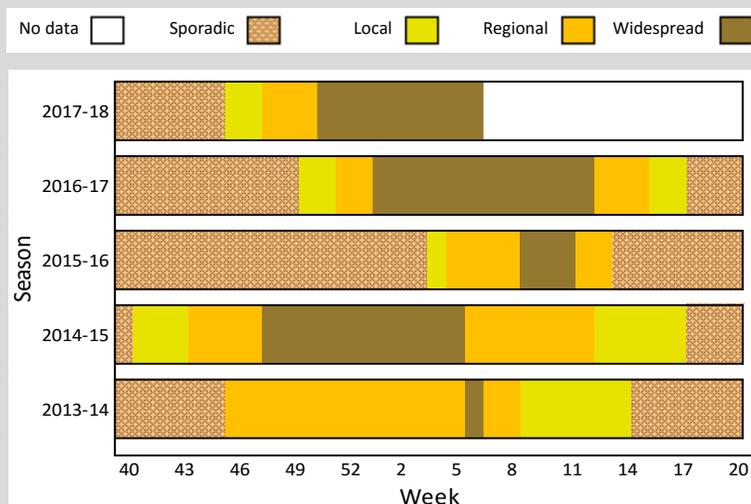
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Weekly State Influenza Activity Reporting

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 6.**



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 20 ►

Statewide ILI Visits

ED and UCC Visits for ILI by Flu Season

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

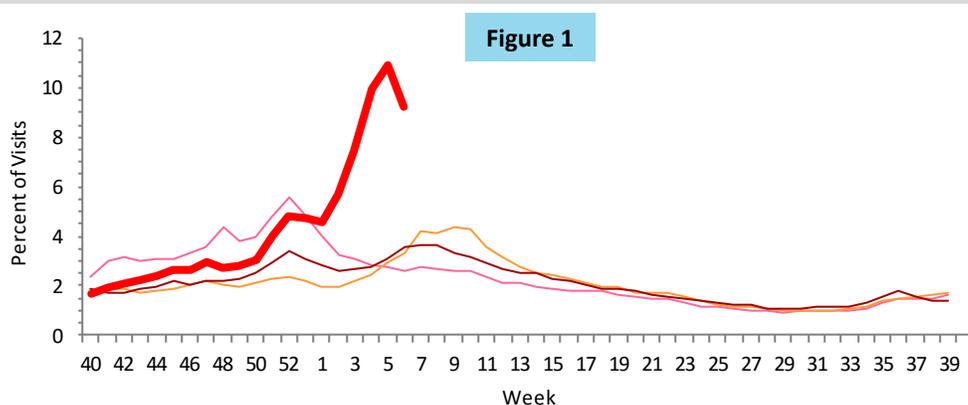


Figure 1 shows the percent of visits for ILI from ED and UCC chief complaint data for ESSENCE-FL participating facilities (n=309), week 40, 2014 to week 6, 2018.

In week 6, the percent of visits to EDs and UCCs decreased but remained well above peak levels observed during previous seasons.

A decrease in the percent of visits to EDs and UCCs for ILI during week 6 was observed in all regions of the state (see page 7), however, activity remains above peak levels observed in previous seasons in all regions.

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.

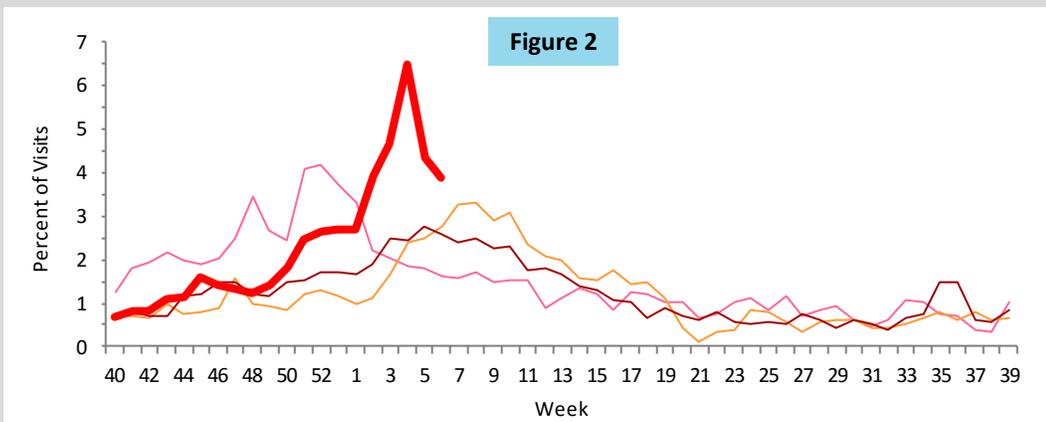


Visits for ILI to Outpatient Providers by Flu Season

ILI = influenza-like illness

Figure 2 shows the percent of visits for ILI reported by ILINet outpatient providers statewide (n=47), week 40, 2014 to week 6, 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 6, the percent of visits for ILI reported by ILINet outpatient providers decreased but remained elevated overall.



P&I Deaths* from Vital Statistics by Flu Season

P&I = pneumonia and influenza

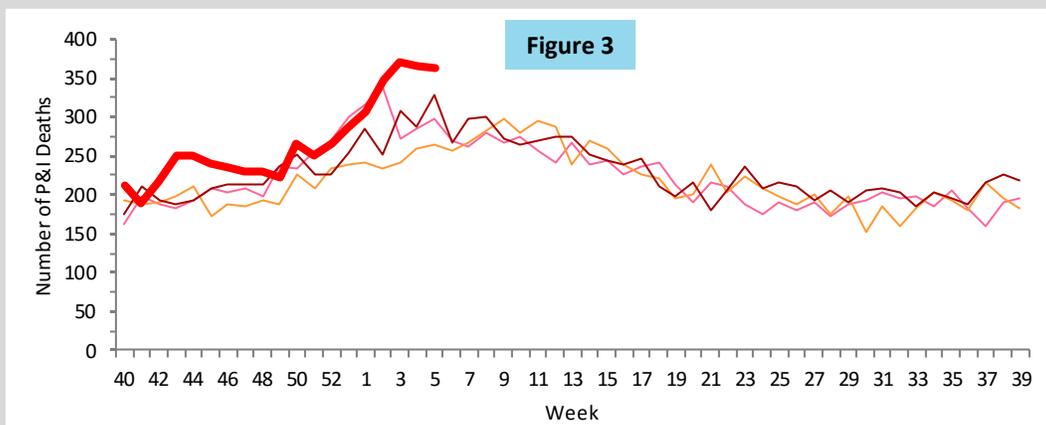


Figure 3 shows P&I deaths* for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2014 to week 5, 2018.

In week 5 (ending February 3, 2018), 362 P&I deaths were reported.

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

P&I Deaths* Multi-Year Regression Model

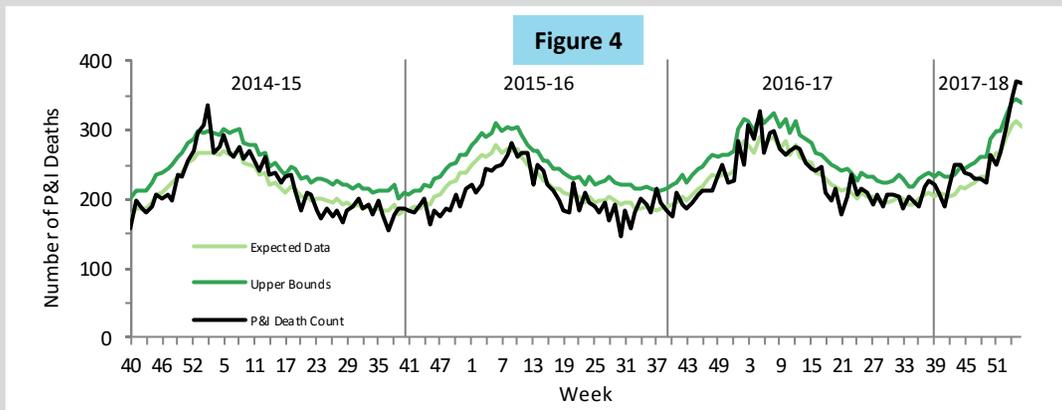
P&I = pneumonia and influenza

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 5 (ending February 3, 2018), 362 preliminary estimated P&I deaths were reported.

The upper bound of the 95% confidence interval for prediction is 325 deaths, with 37 excess deaths. The number of excess deaths reported increased over the last four weeks.

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.

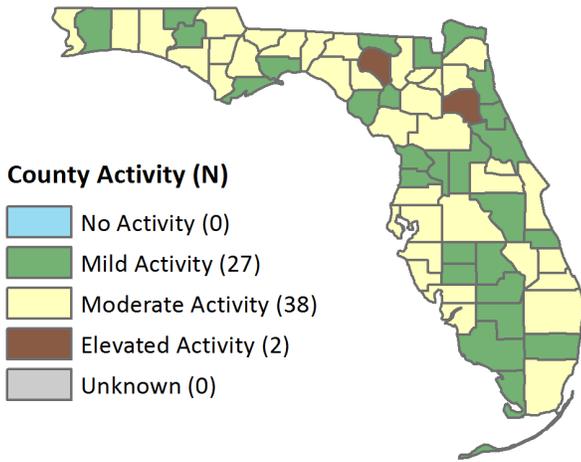


* Current season P&I death counts are preliminary estimates and may change as more data are received. The most recent data available are displayed here. Vital statistics death records received in ESSENCE-FL are considered to be complete through week 5, 2018.

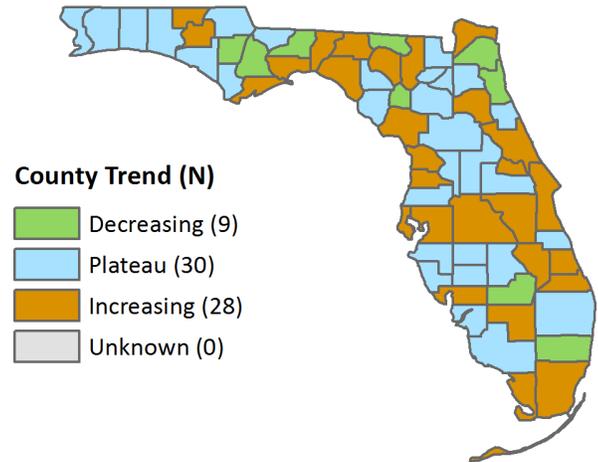
County influenza activity data are reported by county health departments through EpiGateway on a weekly basis. Information is used to determine county activity and includes laboratory results, outbreak reports, and ILI activity. **The figures below reflect a county health department's assessment of influenza activity within their county. For week 6, 28 counties reported increasing activity, 30 counties reported activity at a plateau, and nine counties reported decreasing activity.**

County Influenza Activity

Map 1 County Influenza Activity Level for Week 6 Reported by 9:30 a.m. February 14, 2018



Map 2 County Influenza Activity Trend for Week 6 Reported by 9:30 a.m. February 14, 2018



As of 9:30 a.m. February 14, 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.

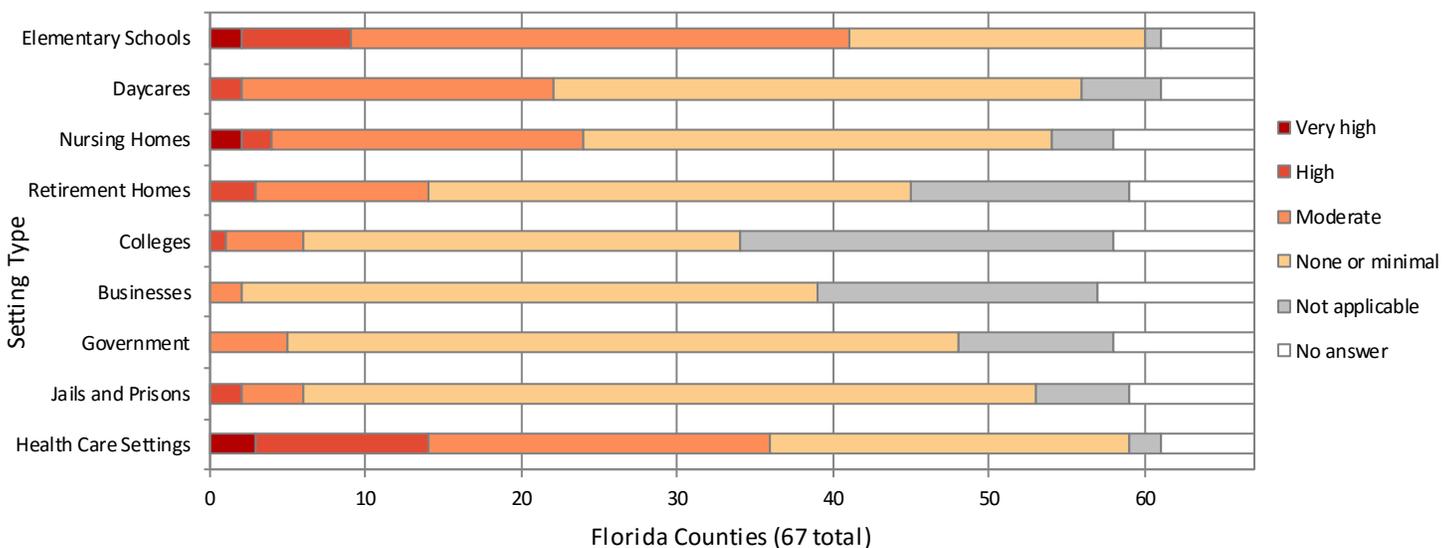
County ILI Activity by Setting Type

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 5 shows the results of the influenza activity assessment for week 6, 2018.

Figure 5



Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Map 3 shows influenza and ILI outbreaks by county for week 40, 2017 through week 6, 2018, as reported into Merlin.

Total Outbreaks:

- In week 6, 71 outbreaks were reported: 35 outbreaks with laboratory evidence of influenza and 36 outbreaks of ILI.
 - Influenza and ILI outbreaks were reported in 24 counties located in all regions of the state (see map 3). Of the 71 outbreaks reported, 64 (90%) have ongoing investigations.
- The number of outbreaks reported in week 6 decreased but remains elevated overall (see figure 6).
 - Most outbreaks continue to be caused by influenza A, however, in week 6, there were also reports of outbreaks due to influenza B and respiratory syncytial virus.
- A total of 388 outbreaks have been reported so far this season. Of the 388 outbreaks reported, 359 (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. An average of 91 outbreaks were reported during the last five seasons.

Settings:

- In week 6, outbreaks occurred in the following settings: six (8%) in assisted living facilities, four (6%) in nursing facilities, eight (11%) in other long-term care facilities, 13 (18%) in child daycares, 33 (46%) in schools/camps, two (3%) in hospitals, one (1%) in shelters, and four (6%) in other settings.

- In the 2017-18 season, outbreaks occurred in the following settings: 49 (13%) in assisted living facilities, 13 (3%) in correctional facilities/juvenile detention centers, two (1%) in adult daycares, 62 (16%) in child daycares, four (1%) in hospitals, 73 (19%) in other long-term care facilities, 72 (19%) in nursing facilities, 101 (26%) in schools/camps, two (1%) in shelters and 10 (3%) in other settings.

Laboratory Testing:

- Of the 71 outbreaks reported in week 6, specimens have been collected and submitted to the Bureau of Public Health Laboratories (BPHL) for testing for four outbreaks so far (1%).

Control Measures:

- Outbreak control measures were reviewed with facility leadership for 49 (69%) of the 71 reported outbreaks by county health departments (CHDs).
 - Facilities administered antiviral treatment for ill individuals in 9/13 outbreaks (69%) where CHDs recommended antiviral treatment.
 - Facilities administered antiviral chemoprophylaxis of at-risk individuals in 10/28 outbreaks (36%) where CHDs recommended antiviral chemoprophylaxis.

Hospitalizations and Deaths:

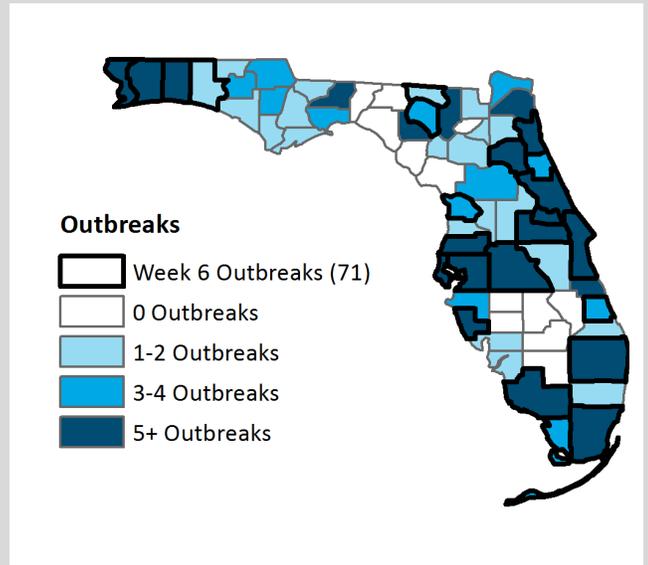
- Of the 71 outbreaks reported in week 6, people were hospitalized in six outbreaks (8%) and no deaths were reported.
- Of the 388 outbreaks reported so far this season, people were hospitalized in 82 outbreaks (21%) and people died in 17 outbreaks (4%).

For detailed information on select outbreaks reported during week 6, see page 16. For updates on select outbreaks reported in week 5 (ending February 3, 2018), see page 18.

For information on outbreaks reported in settings serving children, see page 9.

For information on outbreaks reported in settings serving adults aged ≥65 years, see page 11.

Map 3 Influenza and ILI Outbreaks by County Week 40, 2017 through Week 6, 2018



Reported Influenza and ILI Outbreaks by Facility Type

ILI = influenza-like illness

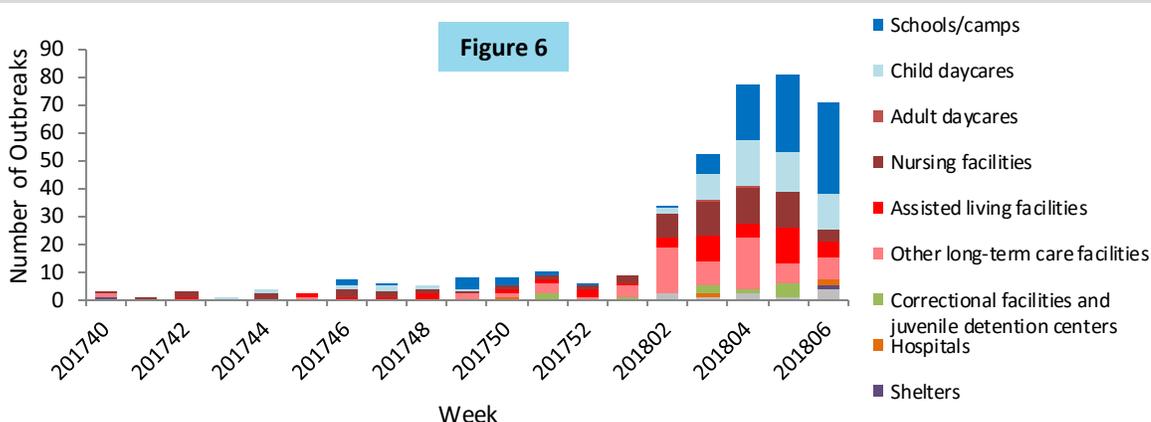


Figure 6 shows the distribution of outbreaks by facility as reported in Merlin, week 40, 2017-week 6, 2018 by facility type.

In week 6, 71 outbreaks were reported. The number of influenza and ILI outbreaks decreased slightly, but remains elevated overall.

BPHL Viral Influenza Specimen Testing

BPHL = Bureau of Public Health Laboratories

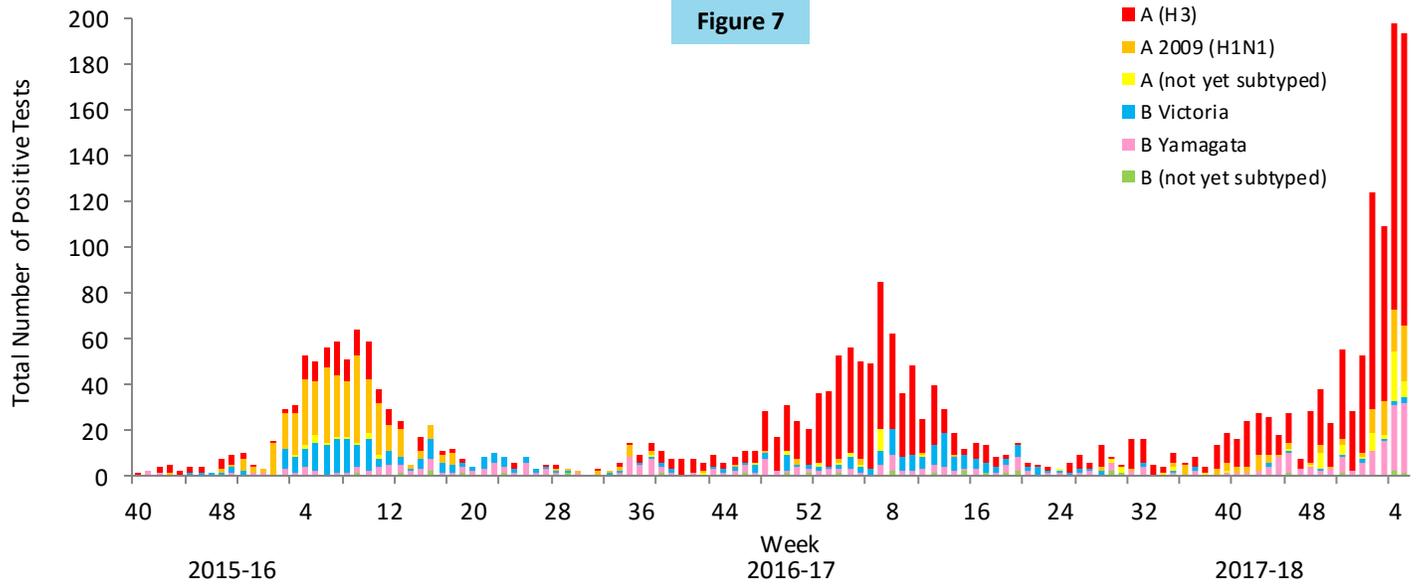


Figure 7 shows the number of influenza-positive specimens tested by subtype and lab event date.*

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 14, 2018

Influenza Type	Current Week 6	Previous Week 5	Current 2017-18 Season
Total Specimens Tested	173	266	1792
Influenza positive specimens (% of total specimen tested)	118 (68.2%)	194 (72.9%)	1132 (63.2%)
Influenza A 2009 (H1N1) (% of influenza positives)	10 (8.5%)	25 (12.9%)	112 (9.9%)
Influenza A (H3) (% of influenza positives)	61 (51.7%)	128 (66.0%)	765 (67.6%)
Influenza A not yet subtyped (% of influenza positives)	9 (7.6%)	7 (3.6%)	62 (5.5%)
Influenza B Yamagata (% of influenza positives)	31 (26.3%)	31 (16.0%)	170 (15.0%)
Influenza B Victoria (% of influenza positives)	-	2 (1.0%)	11 (1.0%)
Influenza B not yet subtyped (% of influenza positives)	7 (5.9%)	1 (0.5%)	12 (1.1%)

*“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.

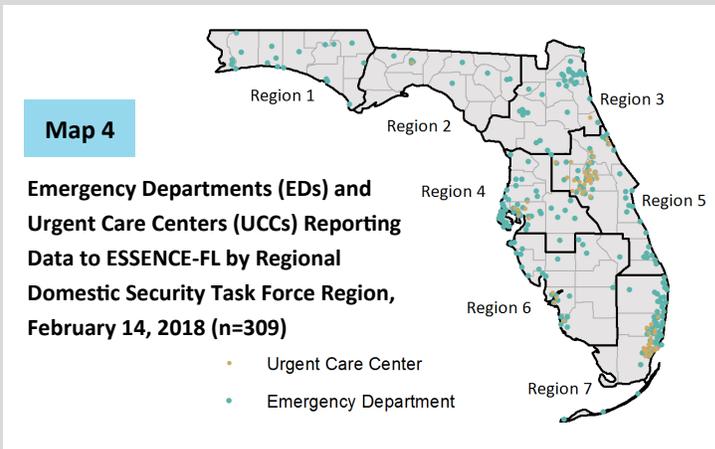
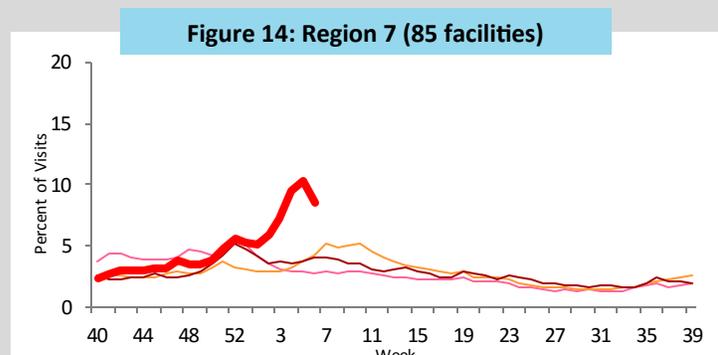
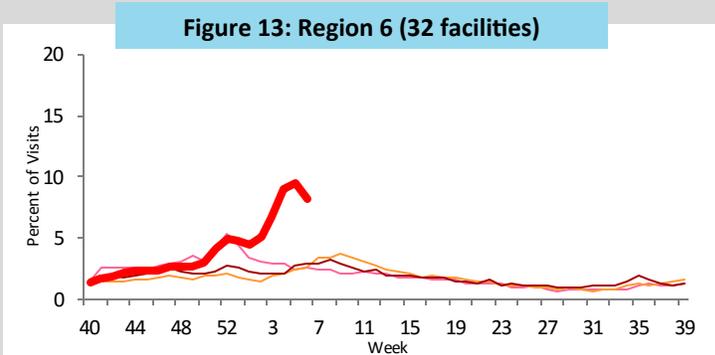
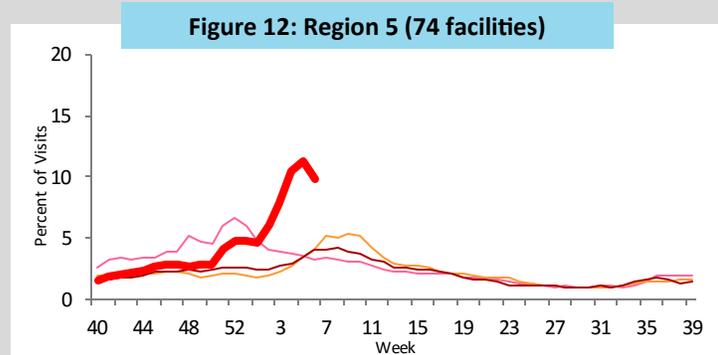
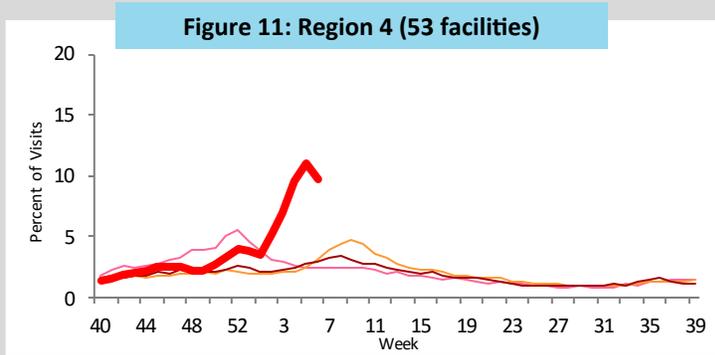
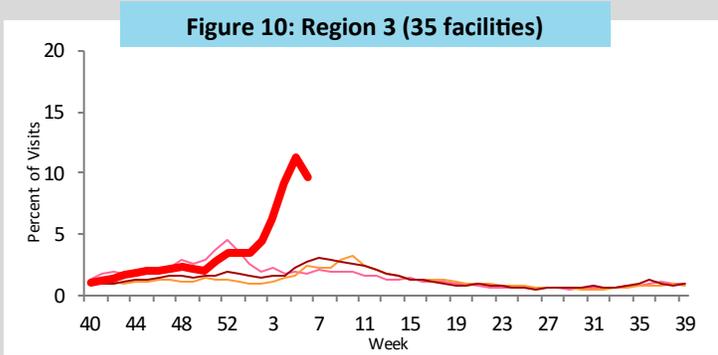
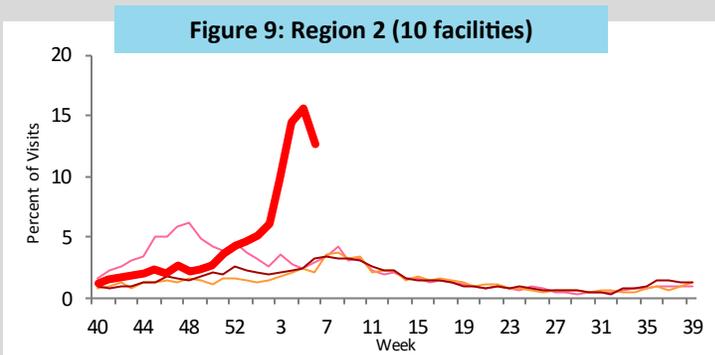
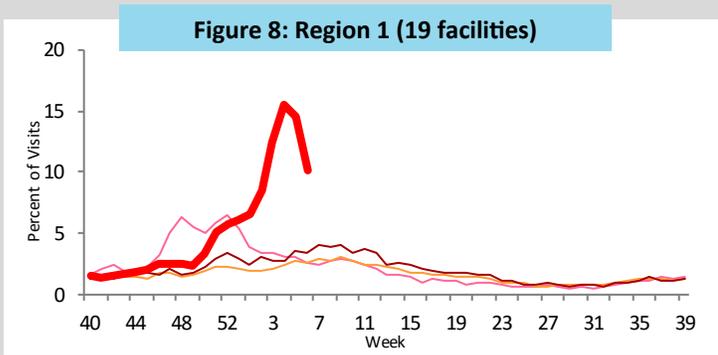
For county health departments seeking county-specific laboratory data, please refer to the Flu Lab Report in Merlin. For instructions on how to use the Flu Lab Report, please see the Guide to Flu Lab Report on the Bureau of Epidemiology website:

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 8 - 14 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 6, 2018.* In week 6, the percent of ED and UCC visits for ILI decreased in all regions. Despite this decrease, activity in all regions remained well above peak levels observed in 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.

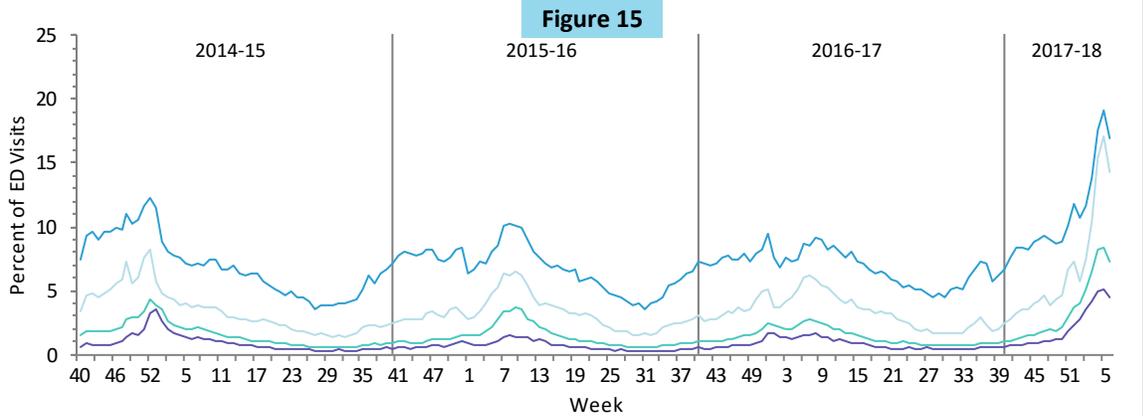
0 to 4 years old 5 to 24 years old 25 to 64 years old ≥65 years old

ED and UCC Visits for ILI by Age Group

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

Figure 15 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 6, 2018.

In week 6, ED and UCC visits for ILI decreased in all age groups. Despite this decrease in activity, ED and UCC visits for ILI remained above peak levels observed in previous seasons in all age groups.



Visits to Outpatient Providers for ILI by Age Group*

ILI = influenza-like illness

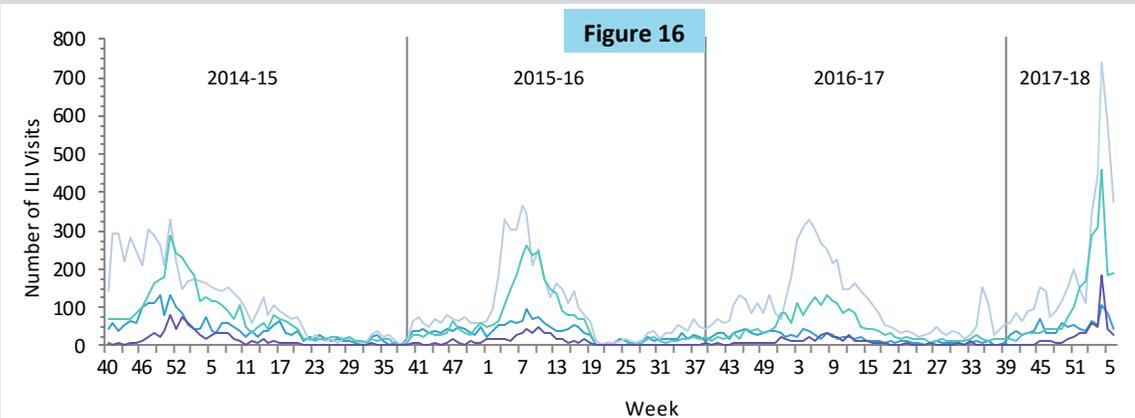


Figure 16 shows the number of visits for ILI reported by ILINet outpatient providers statewide (n=47) by age group, week 40, 2014 to week 6, 2018.

In week 6, the number of visits for ILI increased in the 25-64 age group and decreased in all other age groups. Levels were similar to those observed in previous seasons at this time in the 0-4 and ≥65 age groups. In the 5-24 and 25-64 age groups, levels were above those observed in previous seasons at this time.

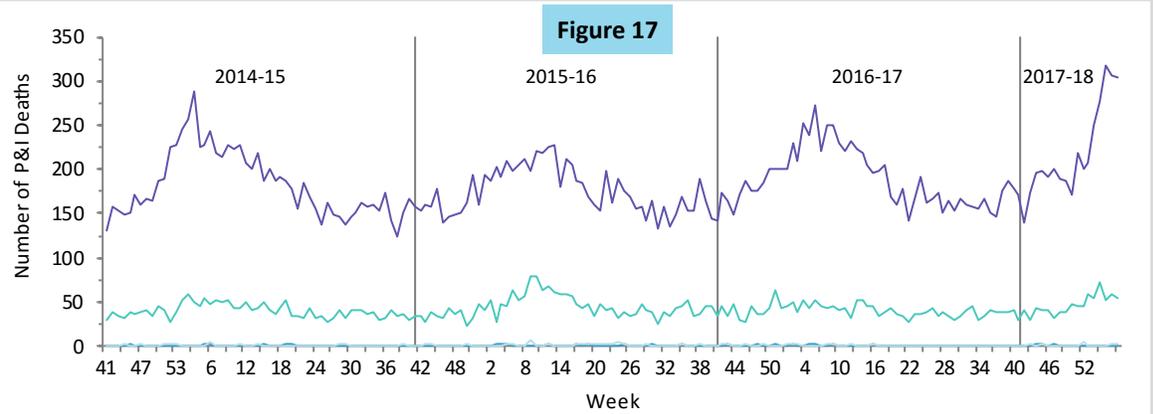
*Data presented here are counts, not proportions. This is because age group denominator data is not available through ILINet.

P&I Deaths* from Vital Statistics by Age Group

P&I = pneumonia and influenza

Figure 17 shows P&I deaths* for all Florida counties by age group, as reported into ESSENCE-FL, week 40, 2014 to week 5, 2018.

In week 5 (ending February 3, 2018), the preliminary 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 5, 2018.

Background: Children, especially those with underlying health conditions, are at higher risk for severe complications from influenza infection. The single best way to protect children from influenza is to get them vaccinated every year. The Centers for Disease Control and Prevention recommends vaccination as long as influenza viruses are circulating. To find a flu shot near you, please visit: www.floridahealth.gov/findaflushot.

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

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

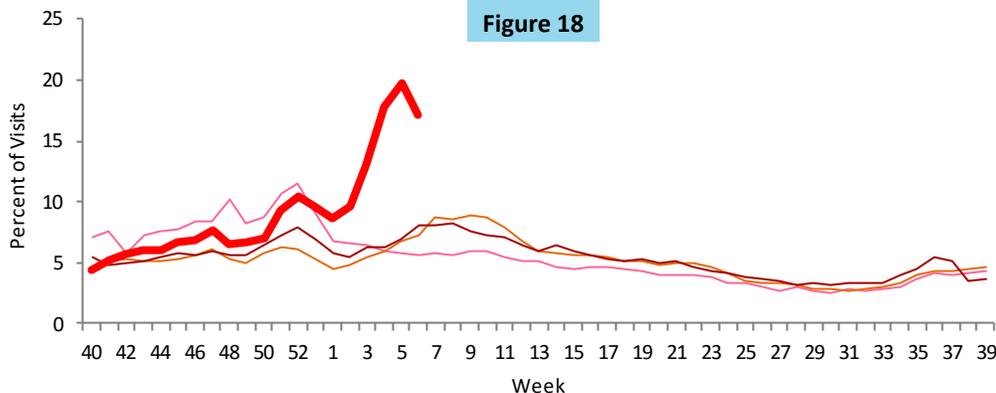


Figure 18 shows the percent of ILI visits among all ED and UCC visits for children ≤18 years old, as reported into ESSENCE-FL, week 40, 2014 to week 6, 2018.

In week 6, the percent of ILI visits among all ED and UCC visits for children ≤18 years old decreased but remained well above peak levels observed during 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.

Outbreaks in Facilities Serving Children

Total outbreaks in facilities serving children:

- In week 6, 46 outbreaks were reported in facilities serving children: 20 outbreaks with laboratory evidence of influenza and 26 outbreaks of ILI.
 - Influenza and ILI outbreaks in facilities serving children were reported in 17 counties located in all regions of the state. Of the 46 outbreaks reported, 45 (98%) have ongoing investigations.

Settings:

- In week 6, outbreaks occurred in the following settings: 13 (28%) in schools and 36 (72%) in daycares.

Laboratory testing:

- Of the 46 outbreaks reported in week 6, none have had specimens available for testing at the Bureau of Public Health Laboratories thus far.

Control measures:

- Outbreak control measures were reviewed with facility leadership for 32 (70%) of the 46 reported outbreaks by county health departments.

Hospitalizations and deaths:

- Of the 46 outbreaks reported in week 6, people were hospitalized in one outbreak (2%) and no deaths were reported.

Influenza-Associated Pediatric Deaths

Figures 19-21

Figures 20-22 show the number of pediatric deaths associated with influenza infection, week 40, 2013 to week 6, 2018.

In week 6, one new influenza-associated pediatric death was confirmed in an unvaccinated child with underlying health conditions. 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 19: Influenza-Associated Pediatric Deaths by Vaccination Status

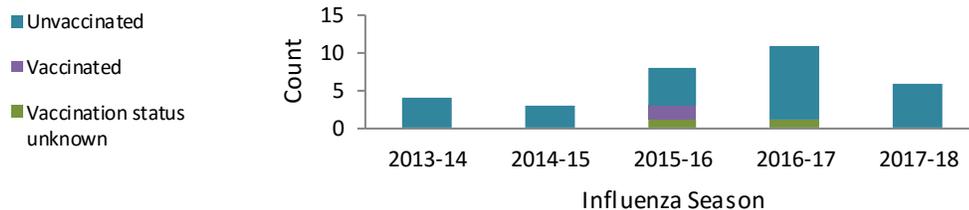


Figure 20: Influenza-Associated Pediatric Deaths by Medical History

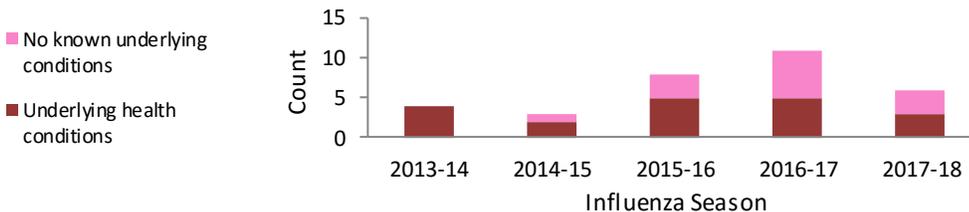
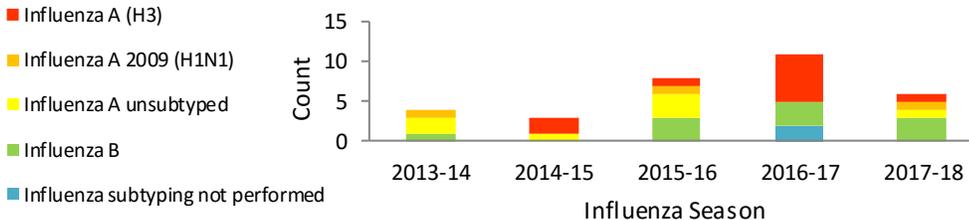


Figure 21: Influenza-Associated Pediatric Deaths by Strain Type



At-Risk Populations: Pregnant Women

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.

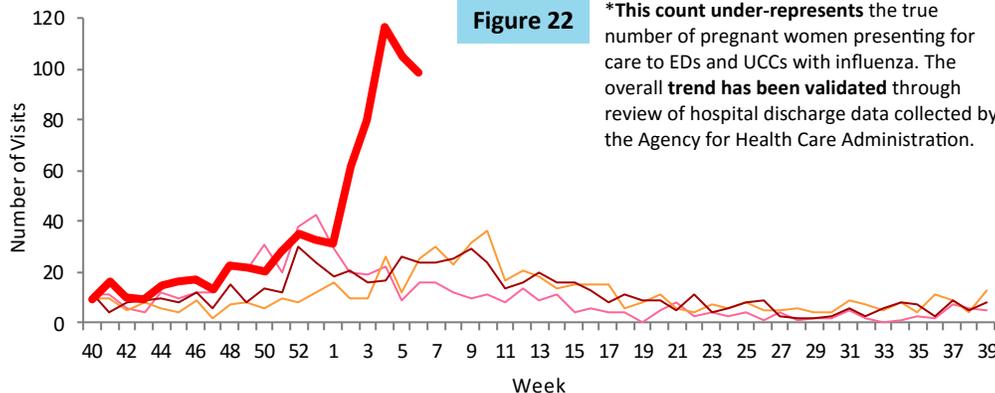
ED and UCC Visits for ILI by Pregnant Women

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 22 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 6, 2018.

In week 6, the number of visits to EDs and UCCs by pregnant women with mention of influenza decreased for the second consecutive week but remained well above peak levels observed during previous seasons. Pregnant women should get vaccinated as soon as possible.



Background: Adults ≥65 years old are at higher risk for severe complications from influenza infection, including hospitalization and death. While influenza seasons vary in intensity, adults in this age group bear the greatest burden of severe influenza disease. Annual vaccination is the best way to prevent influenza infection. The Centers for Disease Control and Prevention recommends vaccination as long as influenza viruses are circulating. To locate a flu shot near you, please visit: www.floridahealth.gov/findaflushot.

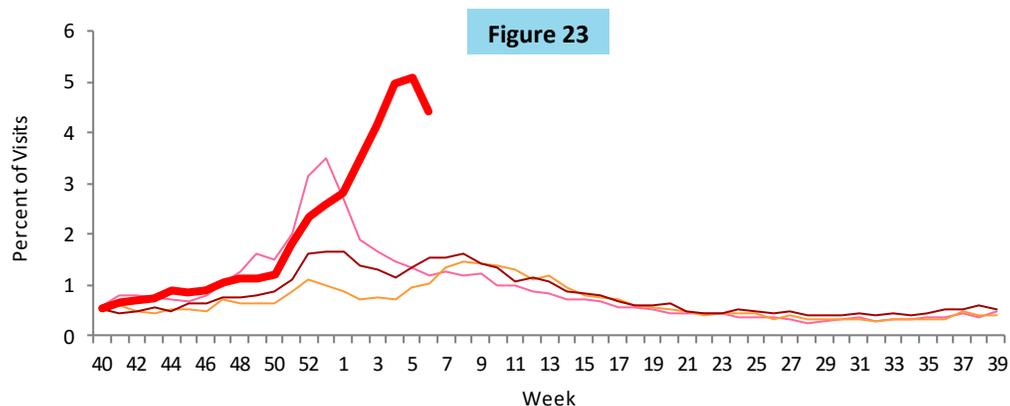
ED and UCC Visits for ILI by Adults ≥65 Years Old

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 ≥65 years old, as reported into ESSENCE-FL, week 40, 2014 to week 6, 2018.

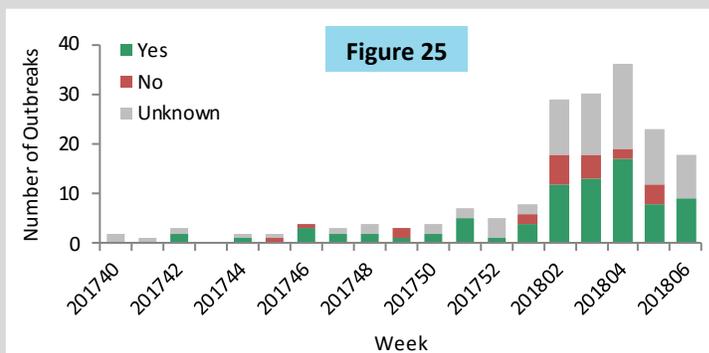
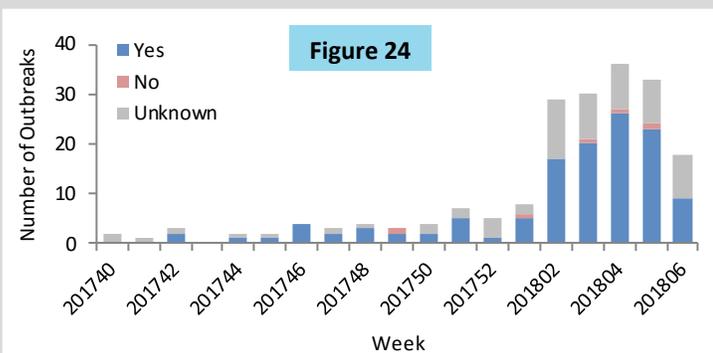
In week 6, the percent of ILI visits among all ED and UCC visits for adults ≥65 years old decreased but remained well above peak activity levels observed during previous seasons.

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.



Outbreaks in Facilities Serving Adults ≥65 Years Old

Figure 24 shows the number of outbreaks with antiviral treatment administered to ill individuals by week in facilities serving adults ≥65 years old (nursing homes, assisted living facilities, and other long-term care facilities). Figure 25 shows the number of outbreaks with antiviral chemoprophylaxis administered to at-risk individuals by week in facilities serving adults ≥65 years old.



Total outbreaks in facilities serving adults ≥65 years old:

- In week 6, 18 outbreaks were reported in facilities serving adults ≥65 years old : 10 outbreaks with laboratory evidence of influenza and eight outbreaks of ILI.
 - Influenza and ILI outbreaks in facilities serving children were reported in 13 counties located in all regions of the state. Of the 18 outbreaks reported, 14 (78%) have ongoing investigations.

Settings:

- In week 6, outbreaks occurred in the following settings: four (22%) in nursing facilities, six (33%) in assisted living facilities, and eight (44%) in other long-term care facilities.

Laboratory testing:

- Of the 18 outbreaks reported in week 6, specimens have been collected and submitted to the Bureau of Public Health Laboratories (BPHL) for testing for three outbreaks so far (17%).

Control measures:

- Outbreak control measures were reviewed with facility leadership for 14 (78%) of the 18 reported outbreaks by county health departments (CHDs).
 - Facilities administered antiviral treatment for ill individuals in 9/11 outbreaks (81%) where CHDs recommended antiviral treatment.
 - Facilities administered antiviral chemoprophylaxis of at-risk individuals in 9/11 outbreaks (81%) where CHDs recommended antiviral chemoprophylaxis.

Hospitalizations and deaths:

- Of the 18 outbreaks reported in week 6, people were hospitalized in four outbreaks (22%) and no deaths were reported.

Summary

Week 6: February 3-10, 2018

Respiratory syncytial virus (RSV) activity:

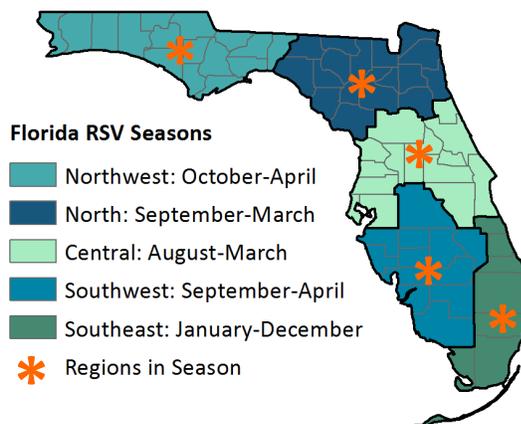
- In week 6, the percent of children <5 years old diagnosed with RSV at EDs and UCCs decreased and was within levels observed in previous seasons at this time. It is unclear how the influenza season is impacting RSV activity.
- All regions are currently in RSV season.
- No RSV-associated pediatric deaths were identified in week 6. 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 20 ►

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

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

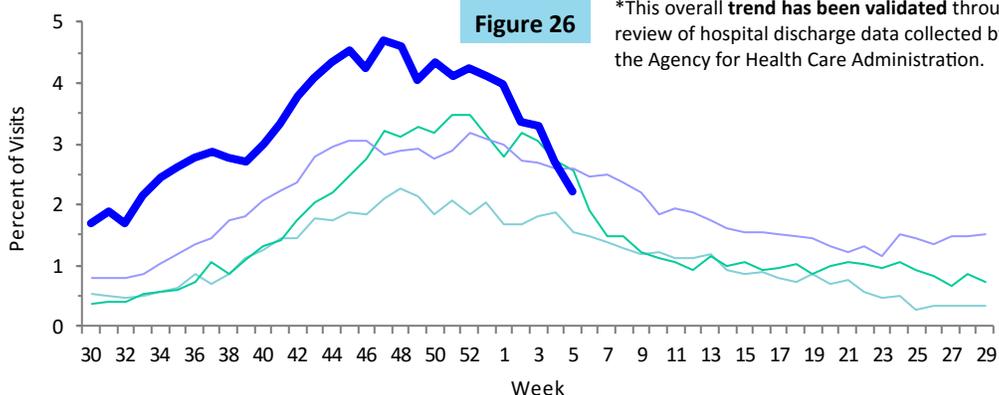


Figure 26

*This overall trend has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.

Figure 26 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 6, 2018.

In week 6, the percent of children presenting to participating EDs and UCCs for care with RSV decreased and has returned to levels observed in previous seasons at this time.

Legend for Figure 26:
 2017-18 (dark blue line)
 2016-17 (light purple line)
 2015-16 (green line)
 2014-15 (light blue line)

Laboratory RSV Surveillance

RSV = respiratory syncytial virus

Figure 27 shows the percent of specimens testing positive for RSV, as reported by hospital laboratories (n=8), week 30, 2014 to week 6, 2018.

In week 6, the percent of specimens RSV positive increased slightly and was similar to levels observed in previous seasons at this time.

Legend for Figure 27:
 2017-18 (dark blue line)
 2016-17 (light purple line)
 2015-16 (green line)
 2014-15 (light blue line)

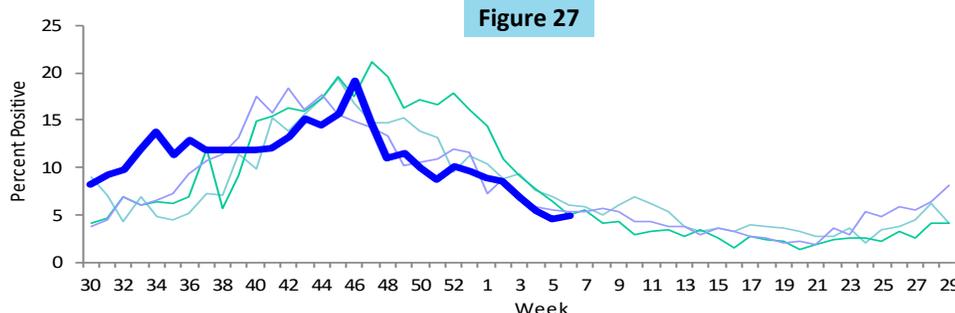


Figure 27

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 6, 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>.

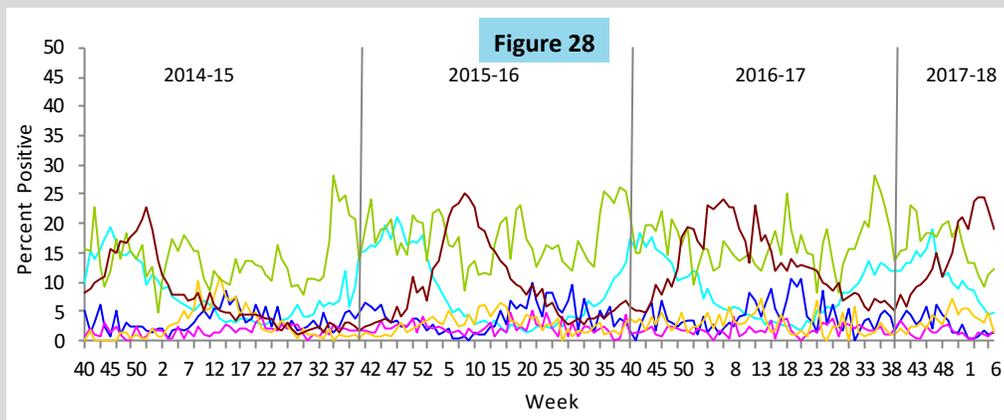
Outbreaks:

- In week 6, two outbreaks of with laboratory evidence of respiratory syncytial virus (RSV) were reported. No outbreaks of parainfluenza 1-3, adenovirus, human metapneumovirus (MPV), rhinovirus, enterovirus, or coronavirus were reported in week 6.

Laboratory Viral Respiratory Surveillance

Figure 28 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 6, 2018.

In recent weeks, the percent of specimens testing positive for influenza decreased 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

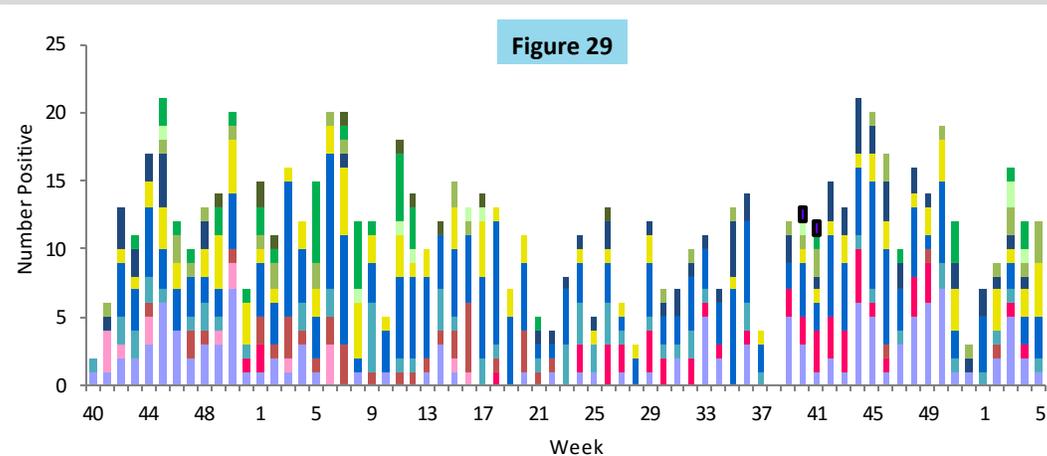
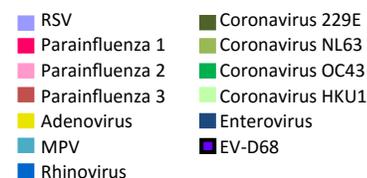


Figure 29 shows the number of specimens testing positive for 12 common respiratory viruses, as reported by BPHL and ARIES outpatient providers statewide (n=6), week 40, 2016 to week 5, 2018.

In week 5 (ending February 3, 2018), specimens submitted by ARIES providers tested positive for RSV, MPV, rhinovirus, adenovirus, and coronavirus NL63 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 5, 2018. Laboratory results for specimens that have not yet been tested in full will be included in future reports.

Table 2: Week 6 Outbreaks: Summary of Florida Influenza and ILI Outbreaks by Setting

Setting	Number of outbreaks (percent of outbreaks)	Implicated viruses
Schools and camps	33 (47%)	<ul style="list-style-type: none"> 1 outbreak of influenza A 2009 (H1N1) 8 outbreaks of influenza A unspecified 1 outbreak of influenza A unspecified and influenza B unspecified 2 outbreaks of influenza B unspecified 2 outbreaks of influenza unspecified 1 outbreak of influenza unspecified and respiratory syncytial virus (RSV) 17 outbreaks of unknown etiology
Child daycares	13 (18%)	<ul style="list-style-type: none"> 1 outbreak of influenza A unspecified 3 outbreaks of influenza unspecified 9 outbreaks of unknown etiology
Adult daycares	0 (0%)	<ul style="list-style-type: none"> No outbreaks
Correctional facilities and juvenile detention centers	0 (0%)	<ul style="list-style-type: none"> No outbreaks
Nursing facilities	4 (6%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3), influenza B unspecified, and RSV 3 outbreaks of unknown etiology
Assisted living facilities	6 (8%)	<ul style="list-style-type: none"> 2 outbreaks of influenza A unspecified 1 outbreak of influenza A unspecified and influenza B unspecified 3 outbreaks of unknown etiology
Other long-term care facilities	8 (11%)	<ul style="list-style-type: none"> 5 outbreaks of influenza A unspecified 1 outbreak of influenza B unspecified 2 outbreaks of unknown etiology
Hospitals	2 (3%)	<ul style="list-style-type: none"> 1 outbreak of influenza A 2009 (H1N1) 1 outbreak of influenza A unspecified
Shelters	1 (1%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3)
Other	4 (6%)	<ul style="list-style-type: none"> 1 outbreak of influenza A unspecified 1 outbreak of influenza unspecified 2 outbreaks of unknown etiology
Total	71 (100%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3) 1 outbreak of influenza A (H3), influenza B unspecified, and RSV 2 outbreaks of influenza A 2009 (H1N1) 18 outbreaks of influenza A unspecified 2 outbreaks of influenza A unspecified and influenza B unspecified 3 outbreaks of influenza B unspecified 7 outbreaks of influenza unspecified 1 outbreak of influenza unspecified and RSV 36 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	101 (26%)	<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 1 outbreak of influenza A 2009 (H1N1) 20 outbreaks of influenza A unspecified 9 outbreaks of influenza A unspecified and influenza B unspecified 1 outbreak of influenza A unspecified, influenza B unspecified, and human metapneumovirus 3 outbreaks of influenza B unspecified 2 outbreaks of influenza B Yamagata lineage 9 outbreaks of influenza unspecified 1 outbreak of influenza unspecified and respiratory syncytial virus (RSV) 1 outbreak of RSV 52 outbreaks of unknown etiology
Child daycares	62 (16%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3) 10 outbreaks of influenza A unspecified 3 outbreaks of influenza A unspecified and influenza B unspecified 1 outbreak of influenza A unspecified and RSV 1 outbreak of influenza B unspecified 9 outbreaks of influenza unspecified 1 outbreak of influenza unspecified and RSV 8 outbreaks of RSV 1 outbreak of rhinovirus 27 outbreaks of unknown etiology
Adult daycares	2 (0.5%)	<ul style="list-style-type: none"> 1 outbreak of influenza A (H3) 1 outbreak of influenza B unspecified
Correctional facilities and juvenile detention centers	13 (3%)	<ul style="list-style-type: none"> 6 outbreaks of influenza A (H3) 2 outbreaks of influenza A (H3) and influenza A 2009 (H1N1) 2 outbreaks of influenza A (H3) and influenza B Yamagata lineage 1 outbreak of influenza A unspecified 1 outbreak of influenza B Yamagata lineage 1 outbreak of unknown etiology

Table 3 continued on page 15.

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

Setting	Number of outbreaks (percent of outbreaks)	Implicated viruses
Nursing facilities	72 (19%)	<ul style="list-style-type: none"> • 15 outbreaks of influenza A (H3) • 1 outbreak of influenza A (H3) and influenza A 2009 (H1N1) • 1 outbreak of influenza A (H3), influenza B unspecified, and respiratory syncytial virus (RSV) • 19 outbreaks of influenza A unspecified • 2 outbreaks of influenza A unspecified and influenza B unspecified • 5 outbreaks of influenza B unspecified • 1 outbreak of influenza B unspecified and coronavirus HKU1 • 1 outbreak of influenza B unspecified and RSV • 2 outbreaks of influenza B Yamagata lineage • 2 outbreaks of influenza unspecified • 1 outbreak of RSV and rhinovirus • 22 outbreaks of unknown etiology
Assisted living facilities	49 (13%)	<ul style="list-style-type: none"> • 6 outbreaks of influenza A (H3) • 1 outbreak of influenza A (H3), influenza B unspecified, parainfluenza 1, and human metapneumovirus (MPV) • 1 outbreak of influenza A (H3) and influenza A 2009 (H1N1) • 19 outbreaks of influenza A unspecified • 4 outbreaks of influenza A unspecified and influenza B unspecified • 1 outbreak of influenza B unspecified • 3 outbreaks of influenza unspecified • 2 outbreaks of respiratory syncytial virus (RSV) • 12 outbreaks of unknown etiology
Other long-term care facilities	73 (19%)	<ul style="list-style-type: none"> • 9 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) and rhinovirus • 1 outbreak of influenza A 2009 (H1N1) • 24 outbreaks of influenza A unspecified • 10 outbreaks 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 rhinovirus • 17 outbreaks of unknown etiology
Hospitals	4 (1%)	<ul style="list-style-type: none"> • 1 outbreak of influenza A 2009 (H1N1) • 1 outbreak of influenza A unspecified • 1 outbreak of influenza B unspecified • 1 outbreak of RSV
Shelters	2 (0.5%)	<ul style="list-style-type: none"> • 1 outbreak of influenza A (H3) • 1 outbreak of influenza A (H3) and rhinovirus
Other	10 (3%)	<ul style="list-style-type: none"> • 2 outbreaks of influenza A unspecified • 1 outbreak of influenza unspecified • 7 outbreaks of unknown etiology
Total	388 (100%)	<ul style="list-style-type: none"> • 38 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 • 4 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), influenza B unspecified, and RSV • 3 outbreaks of influenza A (H3) and influenza B Yamagata lineage • 2 outbreaks of influenza A (H3) and rhinovirus • 3 outbreaks of influenza A 2009 (H1N1) • 96 outbreaks of influenza A unspecified • 1 outbreak of influenza A unspecified and RSV • 28 outbreaks of influenza A unspecified and influenza B unspecified • 1 outbreak of influenza A unspecified, influenza B unspecified and MPV • 14 outbreaks of influenza B unspecified • 1 outbreak of influenza B unspecified and coronavirus HKU1 • 1 outbreak of influenza B unspecified and RSV • 6 outbreaks of influenza B Yamagata lineage • 26 outbreaks of influenza unspecified • 2 outbreaks of influenza unspecified and RSV • 12 outbreaks of RSV • 1 outbreak of RSV and rhinovirus • 2 outbreaks of rhinovirus • 138 outbreaks of unknown etiology

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

In week 6, 71 outbreaks were reported in Merlin: 35 outbreaks with laboratory evidence of influenza and 36 outbreaks of ILI. Of the 71 outbreaks reported during week 6 (ending February 10, 2018), 32 select outbreaks are summarized below.

Hillsborough County

- **A school** reported 21 individuals with ILI. At least one specimen collected from an ill individual tested positive for influenza B by rapid antigen testing 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 14 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 third school** reported 47 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 fourth school** reported 17 students and three staff members with ILI. At least one individual tested positive for influenza (test type unknown) at a local health care provider. No specimens have been available for testing at BPHL thus far. The facility was unable to provide influenza vaccination status for the 2017-18 season for students or staff. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A fifth school** reported 23 individuals with ILI. At least one individual tested positive for influenza (test type unknown) at a local health care provider. No specimens have been available for testing at BPHL thus far. The facility was unable to provide influenza vaccination status for the 2017-18 season for students and staff. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A child daycare** reported 11 individuals with ILI. No specimens were available for testing at BPHL. The etiology of this outbreak is not yet known. 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.
- **A hospital** reported three individuals with ILI. At least one individual tested positive for influenza A 2009 (H1N1) by PCR at the hospital. No specimens have been available for testing at BPHL thus far. Influenza vaccination status for the 2017-18 season for staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Pasco County

- **An assisted living facility** reported four residents with ILI. One resident sought treatment at a local emergency department and one resident was hospitalized as a result of their illness. At least one resident tested positive for influenza A by rapid antigen testing at a local health care provider. No specimens have been available for testing at BPHL thus far. The facility reported 38% of all residents were vaccinated for the 2017-18 influenza season. The facility was unable to provide influenza vaccination status for the 2017-18 season for staff. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A second assisted living facility** reported 16 residents and six staff members with ILI. Influenza A and influenza B were identified at local health care providers (test type unknown). 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.

Seminole County

- **A school** reported 31 individuals with ILI. No specimens were available for testing at BPHL. 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.

Orange County

- **A school** reported 25 individuals with ILI. At least one individual tested positive for influenza A by rapid antigen testing at a local health care provider. No specimens have been available for testing at BPHL thus far. The facility was unable to provide vaccination status for the 2017-18 influenza season for students. Influenza vaccination status for the 2017-18 season for staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing.

Continued on page 17

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Polk County

- **A school** reported six students with ILI. One student sought treatment at a local emergency department and one student was hospitalized as a result of their illness. A specimen collected from the hospitalized student tested positive for respiratory syncytial virus at the hospital. Specimens collected from other ill students tested positive for influenza (test type unknown) at local health care providers. No specimens have been available for testing at BPHL thus far. The facility was unable to provide influenza vaccination status for the 2017-18 season for students and staff. Control measures were discussed with facility leadership. This investigation is ongoing.
- **A second school** reported 10 students and six 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 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 10 students and one staff member with ILI. Specimens collected from two students and one staff member tested positive for influenza B by rapid antigen testing at local health care providers. No specimens have been available for testing at BPHL thus far. The facility was unable to provide influenza vaccination status for the 2017-18 season for students and staff. Control measures were discussed with facility leadership. This investigation is ongoing.
- **A fourth school** reported 11 students with ILI. No specimens have been available for testing at BPHL. The etiology of this outbreak is not yet known. The facility was unable to provide influenza vaccination status for the 2017-18 season for students and staff. Control measures were reviewed with facility leadership. This investigation is ongoing.

Pinellas County

- **A school** reported 20 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 discussed with facility leadership. This investigation is ongoing.

Citrus County

- **A child daycare** reported 20 children 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 children and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing.

Putnam County

- **A school** reported 20 students and one staff member with ILI. One individual sought treatment at a local emergency department. At least one individual tested positive for influenza A by rapid antigen testing 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. Control measures were discussed with facility leadership. This investigation is ongoing.
- **A second school** reported 10 students and two staff members with ILI. Two individuals sought treatment at local emergency departments. Specimens collected from all 12 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 students and staff is not yet known. Control measures were discussed with facility leadership. This investigation is ongoing.
- **A facility** reported nine individuals with ILI. Four individuals sought treatment at local emergency departments and four individuals were hospitalized as a result of their illness. Specimens collected from all nine individuals 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. The facility reported 42% of workshop attendees and 30% of staff were vaccinated for the 2017-18 influenza season. Control measures were discussed with facility leadership. This investigation is ongoing.

Suwannee County

- **A long-term care facility** reported 20 individuals with ILI. Specimens collected from four 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. The facility reported 92% of residents were vaccinated for the 2017-18 influenza season. The facility was unable to provide vaccination status for the 2017-18 influenza season for staff. Control measures were discussed with facility leadership. This investigation is ongoing.

St. Lucie County

- **A child daycare** reported nine attendees and two 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 the 2017-18 season for children and staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.

Continued on page 18

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Escambia County

- **A hospital** reported two patients with ILI. Specimens collected from both patients tested positive for Influenza A by PCR at BPHL. Subtyping results are still pending. Influenza vaccination status for the 2017-18 season for staff is not yet known. Control measures were reviewed with facility leadership. This investigation is ongoing.
- **A child 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. 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.

Santa Rosa County

- **A school** reported 13 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 second school** reported 14 students 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. 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 29 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.

Miami-Dade County

- **A long-term care facility** reported two residents with ILI. One resident was hospitalized as a result of their illness. No specimens were available for testing at BPHL. The etiology of this outbreak is unknown. Influenza vaccination status for the 2017-18 season for residents and staff is unknown. Control measures were reviewed with facility leadership. This investigation is closed.
- **A second long-term care facility** reported two residents and one staff member with ILI. 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 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.

Monroe County

- **A school** reported 15 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.

Palm Beach County

- **A school** reported 10 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 second school** reported 50 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.

In week 5 (ending February 3, 2018), 81 outbreaks were reported into Merlin (after review, one outbreak later determined to be a duplicate report). Updates were made to four select outbreaks during week 6.

Jackson County

- **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. **Update: Four specimens were collected for testing at BPHL. Of those, two specimens tested positive for influenza A (H3), one specimen tested positive for influenza A, and one specimen tested positive for influenza B by PCR. Subtyping results are still pending for two specimens. Control measures were discussed with facility leadership. This investigation is still ongoing.**

Reported Influenza and ILI Outbreaks

ILI = influenza-like illness

Broward County

- **A child daycare** reported 20 children 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. **Update: An additional 25 children with ILI were reported. One individual sought treatment at a local emergency department. This investigation is still ongoing.**

Palm Beach County

- **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. **Update: Three specimens were collected for testing at BPHL. All three specimens tested positive for influenza A (H3) by PCR. This investigation is still 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. **Update: Five specimens were collected for testing at BPHL. One specimen tested positive for influenza A (H3) by PCR. Results are still pending for the four remaining specimens. The facility was unable to provide influenza vaccination status for the 2017-18 season for students and staff. This investigation is still ongoing.**

Florida ILINet · Data source for figures 2 and 16

- 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, 3-4, 8-15, 17-18, 22-23, 26; 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 5, 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 figures 6, 24, and 25, 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 7 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 27-28

- 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 29

- 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.