Florida FLU REVIEW

Season: 2018-19

Week 41: 10/7/18-10/13/18

Geographic Spread: **Sporadic**

Predominant Strain: **A 2009 (H1N1)**

ILI Activity Trend: **Increasing**

Influenza & influenza-like illness (ILI) activity summary:

In week 41, **influenza activity remained at low levels across the state.** Influenza activity is expected to increase in the coming weeks as we head into the fall and winter months.

Two new outbreaks were reported in week 41: one outbreak of influenza A unspecified in a school/camp and one outbreak of respiratory syncytial virus in a child daycare. For more information, see page 5.

The majority of counties reported no or mild activity in week 41.

No new influenza-associated pediatric deaths were reported in week 41. One influenza-associated pediatric death has been reported in Florida so far during the 2018-19 influenza season. For more information, see page 10.

Influenza seasons vary in timing, severity, and length. It is not possible to predict what the 2018-19 influenza season will be like in Florida.

Annual vaccination is the best way to protect yourself and your loved ones from influenza and its potentially severe complications. Now is the perfect time to get vaccinated.

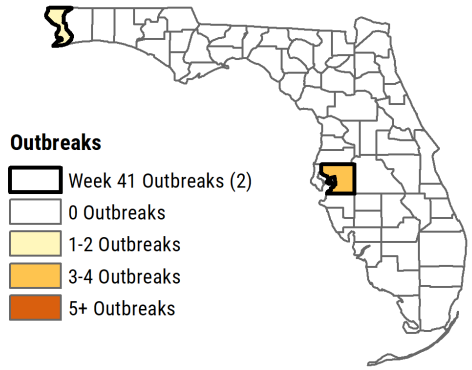
Since July, the most common influenza subtype detected at the Bureau of Public Health Laboratories has been influenza A 2009 (H1N1), however influenza A (H3) and influenza B Yamagata lineage viruses have also been detected in recent weeks. It is still too early to say if influenza A 2009 (H1N1) viruses will predominate throughout the season.

Influenza vaccines protect against the three or four strains research suggests will be most common. It is expected that influenza A 2009 (H1N1), influenza A (H3), and influenza B viruses will co-circulate throughout the season. **Influenza vaccines are designed to protect against all of these viruses.**

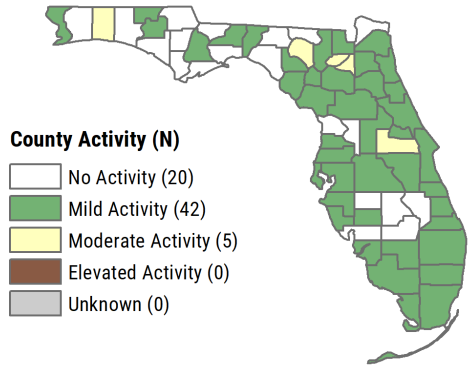
The Centers for Disease Control and prevention recommends antiviral treatment be initiated as soon as possible for persons with suspected or confirmed influenza who are at higher risk for complications: children <2 years, adults ≥65 years, pregnant women, and those with underlying medical conditions. Treatment should be administered within 48 hours of illness onset. For more information about antiviral treatment options, contact your health care provider.

Influenza and ILI Outbreaks

Reported as of 10/13/2018



County Influenza Activity



Flu Shot Locator

Your flu shot is the first and most important step to fight the flu. To locate a vaccine near you, visit: www.floridahealth.gov/findaflushot

Posted October 17, 2018 on the Bureau of Epidemiology (BOE) website: www.floridahealth.gov/floridaflu
Produced by the BOE, Florida Department of Health
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Background:

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

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

Influenza Surveillance:

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

Influenza surveillance is conducted to detect changes in the influenza virus. These data are used to help determine the annual northern hemisphere vaccine composition and to prepare for potential pandemics.

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

The influenza reporting year is defined by standard reporting weeks outlined by the Centers for Disease Control and Prevention, where every year has a minimum of 52 reporting weeks and some years have 53. Increased surveillance for influenza in Florida for the 2018-19 season began in week 40 (ending October 6, 2018) and will extend through week 20 (ending May 21, 2019). This report is produced by the Department on a weekly basis during the regular influenza season and an abbreviated report is published on a biweekly basis during the summer months.

Note: Surveillance case definitions for ILI vary slightly across surveillance systems. **For more information on Florida's influenza surveillance systems and associated case definitions, see page 17.**

Statewide Activity

Figure 1: In week 41, the percent of emergency department and urgent care center visits for ILI statewide **increased,** but remained similar to levels observed at this time in previous seasons.

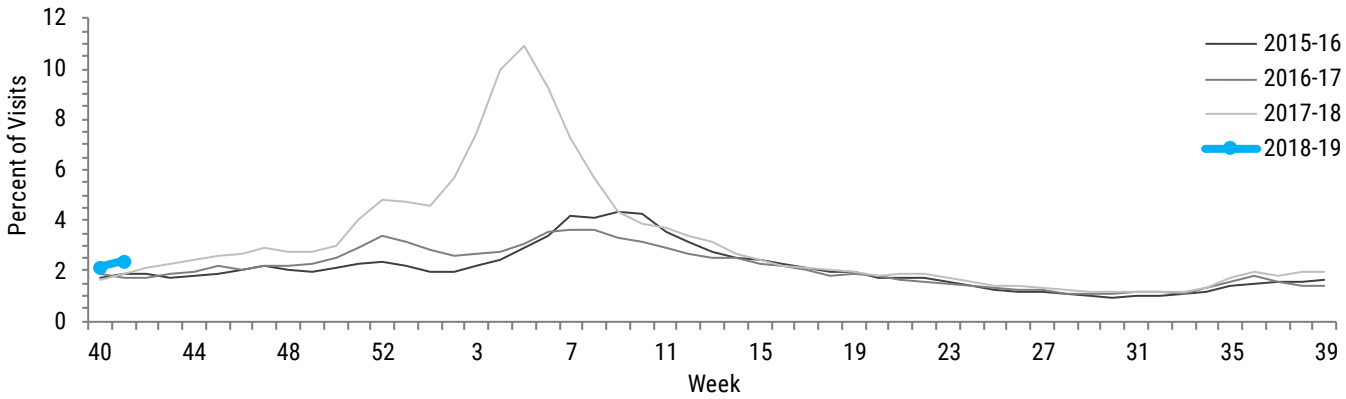


Figure 1 (above) shows **the percent of visits for influenza-like illness (ILI)** at ESSENCE-FL participating facilities (n=332) statewide for the current season (week 40, 2018 to week 41, 2018) and the last three seasons (2017-18, 2016-17, and 2015-16). The ESSENCE-FL ILI syndrome captures visits with chief complaints that include the words "influenza" or "flu," or chief complaints that include the words "fever" and "cough," or "fever" and "sore throat." For more information on the use of ESSENCE-FL for influenza and ILI surveillance, see page 16.

Figure 2: In week 41, Florida reported **sporadic geographic spread of influenza** to the Centers for Disease Control and Prevention.

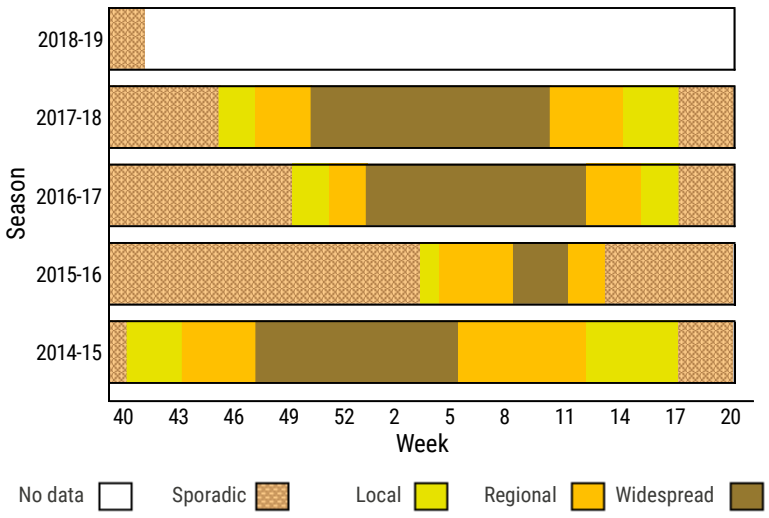


Figure 2 (above) shows Florida's self-reported **geographic spread of influenza** as reported to the Centers for Disease Control and Prevention, week 40, 2014 to week 41, 2018.

Defining geographic spread of influenza:

No activity: no laboratory-confirmed cases of influenza and no reported increase in the number of cases of influenza-like illness (ILI)

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

Local: outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state.

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

Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.

Figure 3: In week 41, the percent of patients with ILI reported by ILINet outpatient providers statewide **decreased** and remained similar to levels observed at this time in previous seasons.

Figure 3 (to the right) shows the **percent of patients with influenza-like illness (ILI)** reported by ILINet outpatient providers statewide (n=48), week 40, 2015 to week 41, 2018.

For ILINet, ILI is defined as a fever ≥100°F AND sore throat and/or cough in the absence of another known cause.

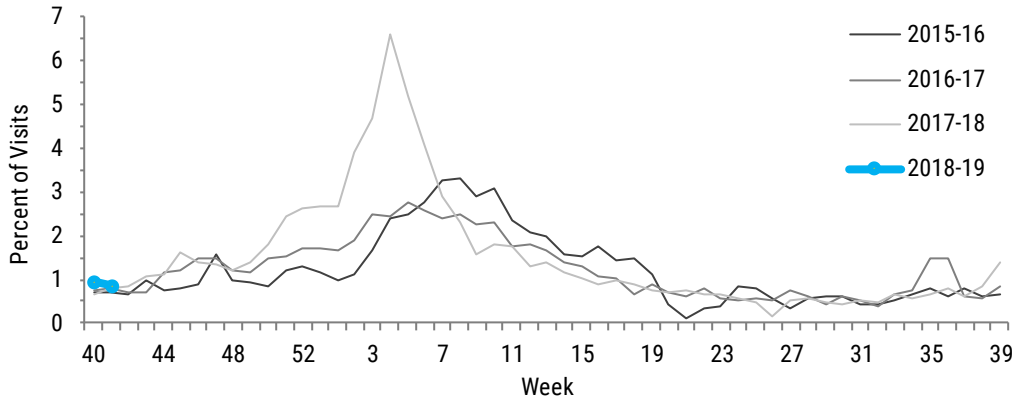


Figure 4: In week 40 (ending 10/6/18), the number of pneumonia and influenza deaths* identified statewide **decreased** and remained similar to levels observed at this time in previous seasons.

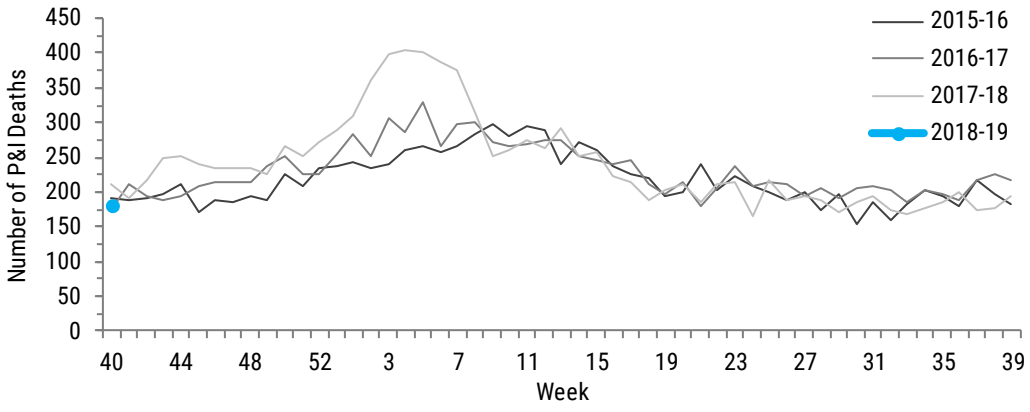
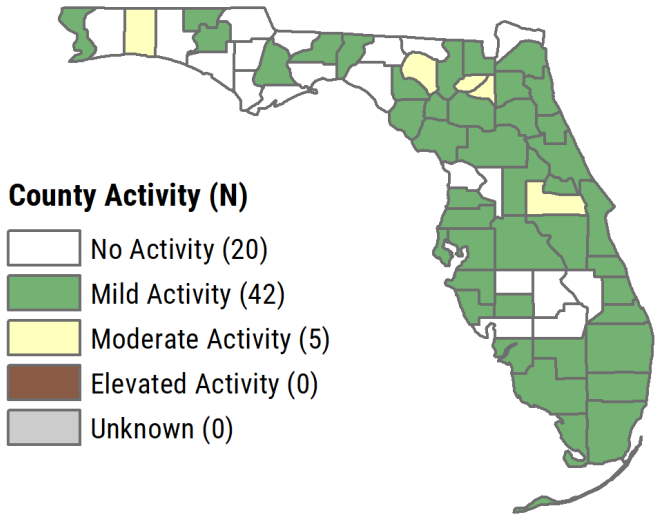


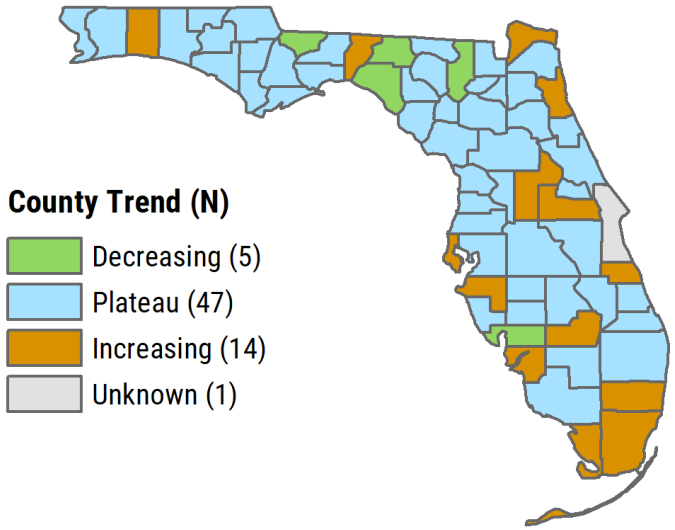
Figure 4 (to the left) shows **pneumonia and influenza (P&I) deaths*** for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2015 to week 40, 2018.

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

Map 1: The majority of counties reported no activity or **mild activity** for week 41.



Map 2: The majority of counties reported **activity at a plateau** for week 41.



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

As of October 17, 2018, a total of 67 counties (100%) 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.

Figure 5: In week 41, the majority of counties reported **no or minimal influenza activity** across all settings.

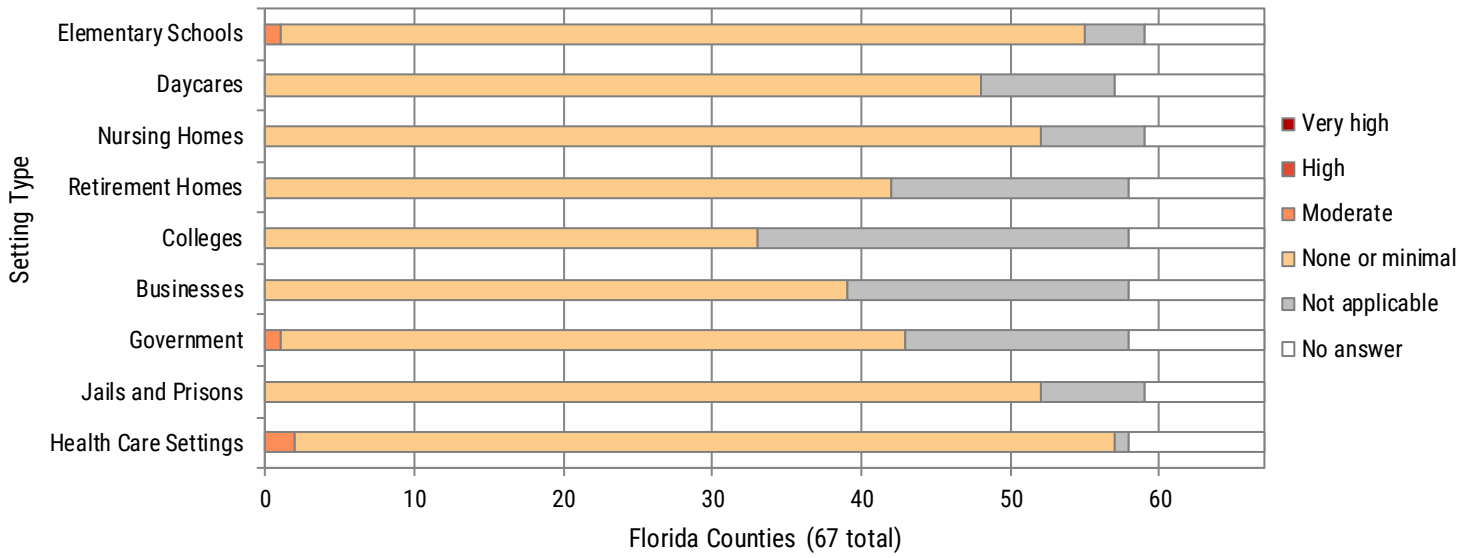


Figure 5 (above) shows the results of the influenza activity assessment completed by county health departments for week 41, 2018. As part of the assessment, county health departments are asked to evaluate influenza activity in certain settings within their county. The assessment scale for activity ranges from no or minimal activity to very high activity.

Note: As of October 17, 2018, a total of 67 counties (100%) 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 graph for this week.

Statewide Outbreaks

Outbreak summary:

In week 41, two new outbreaks of influenza or influenza-like illness (ILI) were reported: one outbreak of influenza A unspecified and one outbreak of respiratory syncytial virus. Additional outbreak reports are expected in the coming weeks as the influenza season progresses.

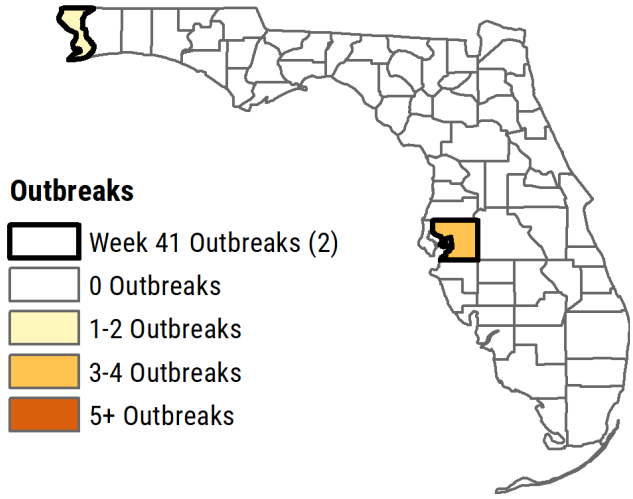
As of week 41, a total of four outbreaks of influenza or ILI have been reported for the 2018-19 season.

Settings:

In week 41, one outbreak was reported in an Escambia County child daycare and one outbreak was reported in a Hillsborough County school/camp.

Laboratory testing:

Neither of these outbreaks had specimens collected and submitted to the Bureau of Public Health Laboratories for testing thus far.



Map 3 (above) shows **reported influenza and influenza-like illness (ILI) outbreaks by county**. Counties with outbreaks reported in week 41 are **outlined in bold.**

Hospitalizations and deaths:

One hospitalization was reported for one of these outbreaks. No deaths were reported for either outbreak.

For detailed information on notable outbreaks reported in week 40, see page 15.

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

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

Figure 6: In week 41, **two new outbreaks of influenza or ILI were reported**: one in a school/camp and one in a child daycare.

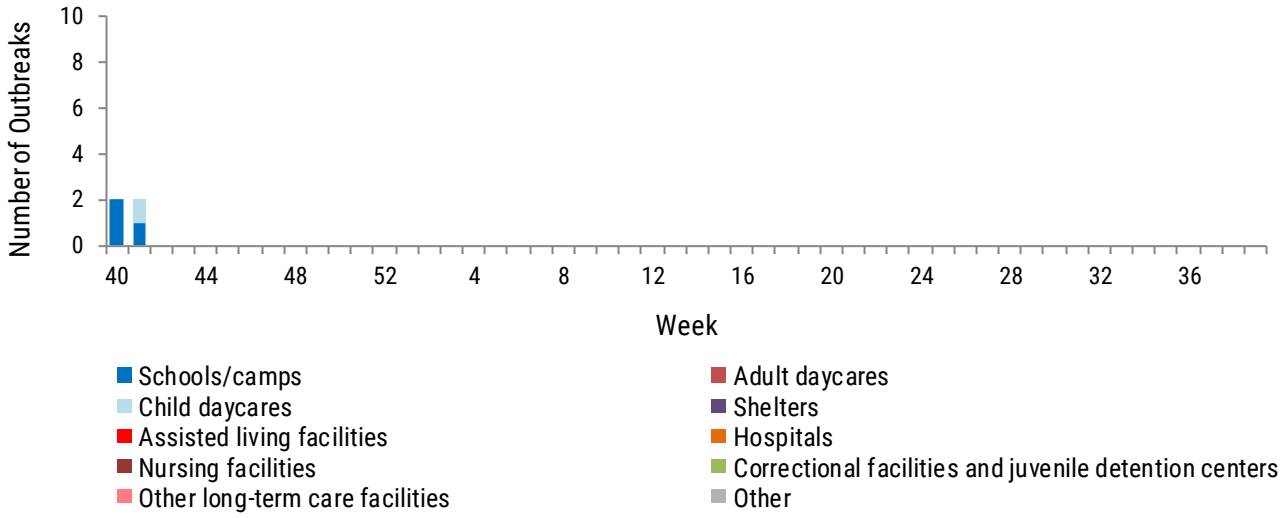


Figure 6 (above) shows the distribution of **influenza and influenza-like illness (ILI) outbreaks by facility** as reported in Merlin, week 40, 2018 to week 41, 2018.

Figure 7: In recent weeks, the majority of influenza-positive specimens at the Bureau of Public Health Laboratories have been influenza A 2009 (H1N1).

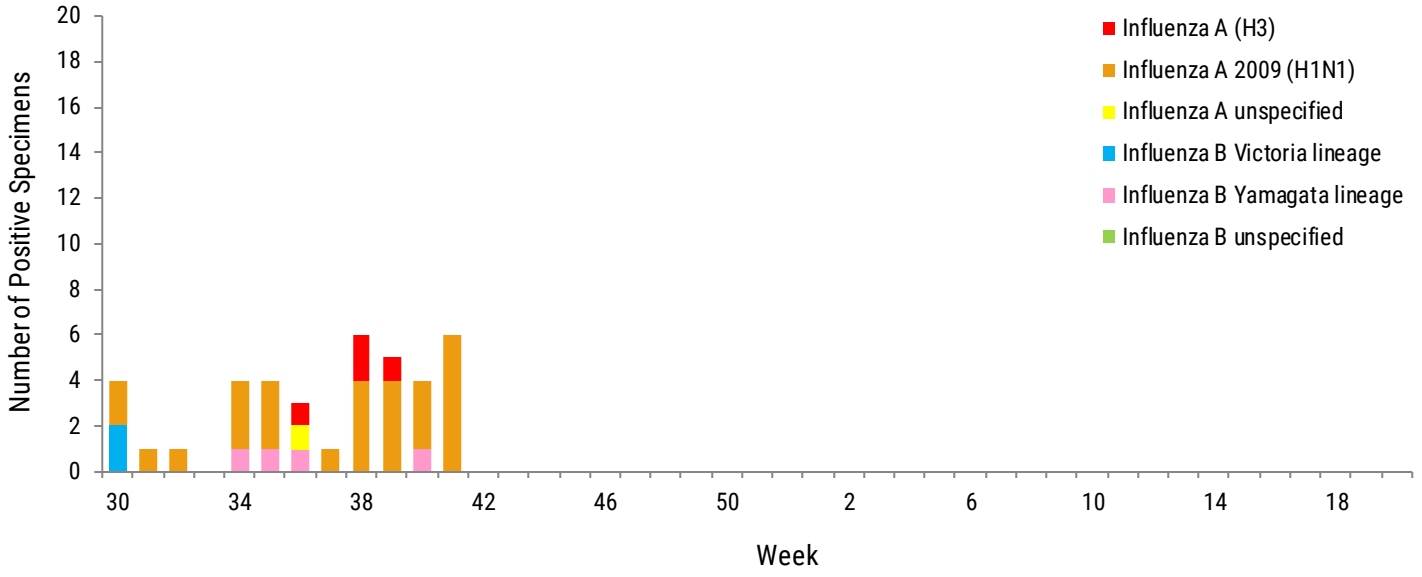


Figure 7 (above) shows the number of **influenza-positive specimens at the Bureau of Public Health Laboratories (BPHL)** by lab-event date,* week 30, 2018 (beginning July 22, 2018) through week 41, 2018.

While the most common influenza subtype detected at BPHL statewide in recent weeks has been influenza A 2009 (H1N1), the number of influenza-positive specimens submitted to BPHL has remained low overall. Consistent with the national trend, influenza A (H3) viruses have also been detected in recent weeks. **It is still too early to say what the predominantly circulating strain of influenza will be during the 2018-19 season.**

**Table 1: Bureau of Public Health Laboratories Viral Surveillance by Lab Event Date*
Reported by 10:00 a.m. October 17, 2018**

Influenza Type	Current Week 41	Previous Week 40	Current 2018-19 Season
Total Specimens Tested	**21**	**29**	**50**
Influenza positive specimens (% of total specimens tested)	**6 (28.6%)**	**4 (13.8%)**	**10 (20.0%)**
Influenza A 2009 (H1N1) (% of influenza positives)	6 (100.0%)	3 (75.0%)	5 (50.0%)
Influenza A (H3) (% of influenza positives)	-	-	-
Influenza A not yet subtyped (% of influenza positives)	-	-	4 (40.0%)
Influenza B Yamagata (% of influenza positives)	-	1 (25.0%)	1 (10.0%)
Influenza B Victoria (% of influenza positives)	-	-	-
Influenza B not yet subtyped (% of influenza positives)	-	-	-

*"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

Background:

The Bureau of Public Health Laboratories (BPHL) routinely submits influenza isolates to Centers for Disease Control and Prevention (CDC) for antigenic characterization. **The purpose of this testing is to monitor for changes in circulating influenza viruses and compare how similar currently circulating influenza viruses are to the reference viruses used for developing influenza vaccines.** While antigenic characterization can provide an indication of the influenza vaccine's ability to produce an immune response against circulating influenza viruses, **annual vaccine effectiveness estimates remain necessary to determine how much protection has been provided to the population by vaccination.**

BPHL submits two influenza A (H3) isolates, two influenza A 2009 (H1N1) isolates, and four influenza B virus isolates (two Victoria lineage and two Yamagata lineage) every two weeks to CDC (as available). CDC's most recent FluView (www.cdc.gov/flu/weekly/index.htm) offers national context for data displayed in Table 2 and Figure 8 (below).

The official recommendation is quadrivalent vaccines administered for the 2018-19 northern hemisphere influenza season contain the following: (1) an A/Michigan/45/2018 (H1N1)pdm09-like virus, (2) an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus, (3) a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage), and (4) a B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage). It is recommended that the influenza B component of trivalent vaccines administered for the 2018-19 northern hemisphere influenza season be a B/Colorado/06/2017-like virus. For more information, visit: www.who.int/influenza/vaccines/virus/recommendations/2018_19_north/en/.

Table 2: Antigenic Characterization Results for Influenza Isolates Submitted to CDC, Cumulative Totals for Week 30, 2018- Week 41, 2018

Antigenic Characterization	Number of Specimens
A/MICHIGAN/45/2015-LIKE (H1N1)pdm09	6
A/SINGAPORE/INFIMH-16-0019/2016-LIKE (H3N2)	0
B/COLORADO/06/2018-LIKE	0
B/PHUKET/3073/2013-LIKE	2

Table 2 (to the left) summarizes **available antigenic characterization results** received for specimens collected from week 30, 2018 (beginning July 22, 2018) through week 41, 2018, as reported by CDC. Results for submitted specimens that have not yet been tested will be included in future reports as those results are received.

According to CDC, a specimen is considered "reference-virus-like" if its hemagglutination inhibition (HI) or neutralization focus reduction assay (FRA) titer is within fourfold of the homologous HI/FRA titer of the reference strain; a specimen is considered as "low" to the reference virus if there is an eightfold or more reduction in the HI or FRA titer when compared with the homologous HI or FRA titer of the reference strain.

Figure 8: As of week 41, **all of the influenza specimens** submitted to CDC for antigenic characterization were **antigenically similar** to their respective vaccine reference strain.

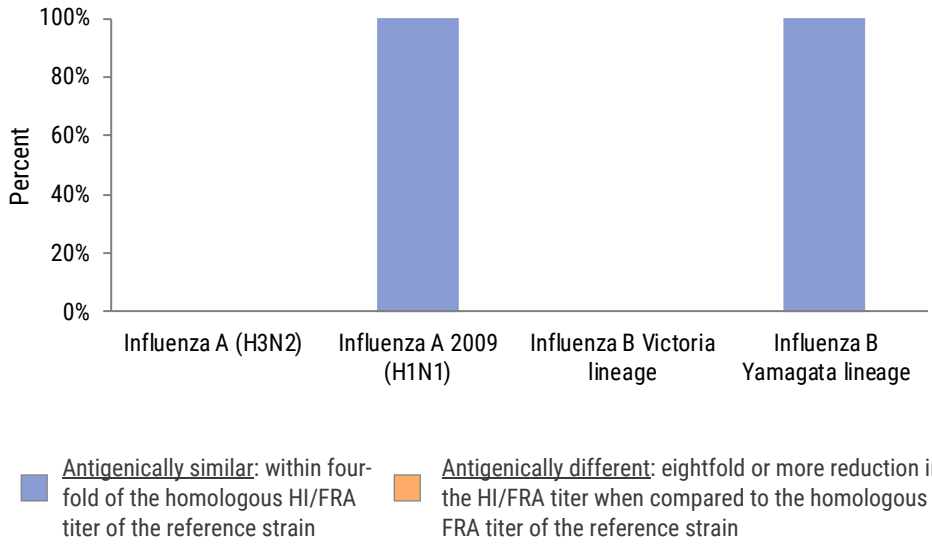


Figure 8 (to the left) shows **the percentage of specimens** submitted to CDC that are **antigenically similar to reference strains** representing the recommended vaccine components of the 2018-19 northern hemisphere vaccine, week 30, 2018 (beginning July 22, 2018) to week 41, 2018 by virus type.

As of week 41, 2018, antigenic characterizations results are still pending for one influenza A (H3N2) isolate submitted to CDC by BPHL during this timeframe.

Figures 9-15 (below) show **the percent of emergency department and urgent care center visits for influenza-like illness (ILI)** at ESSENCE-FL participating facilities (n=332) from week 40, 2015 to week 41, 2018. Data are organized by Regional Domestic Security Task Force Regions (see Map 4).

2018-19 2017-18 2016-17 2015-16

Figure 9: In **region 1**, ILI activity **increased** during week 41 but remained within levels observed at this time in past seasons.

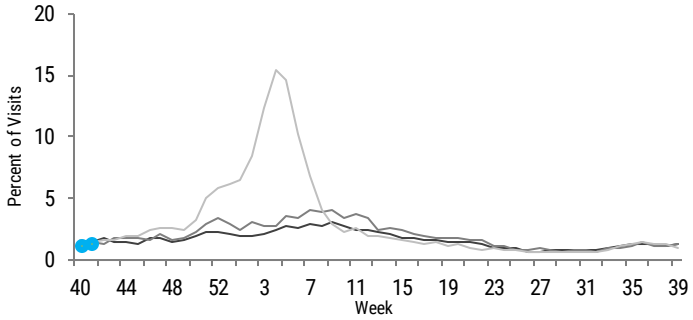


Figure 10: In **region 2**, ILI activity **increased** during week 41 and remained within levels observed at this time in past seasons.

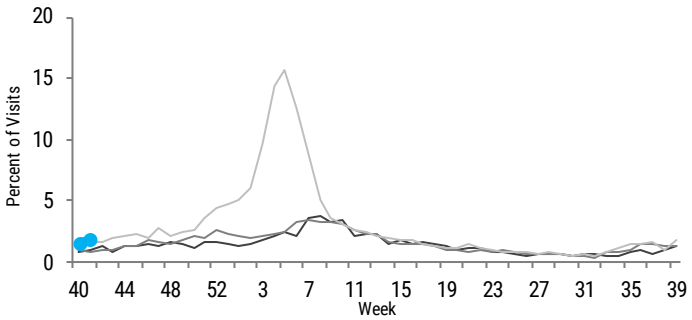


Figure 11: In **region 3**, ILI activity **increased** during week 41 but remained within levels observed at this time in past seasons.

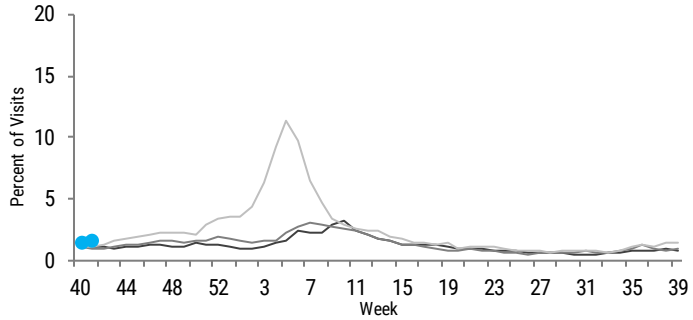


Figure 12: In **region 4**, ILI activity **increased** during week 41 but remained within levels observed at this time in past seasons.

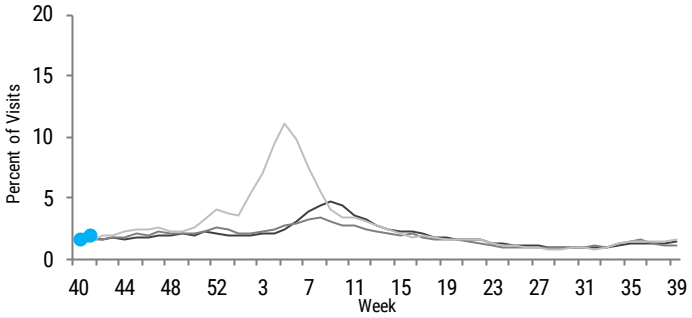


Figure 13: In **region 5**, ILI activity **increased** during week 41 but remained within levels observed at this time in past seasons.

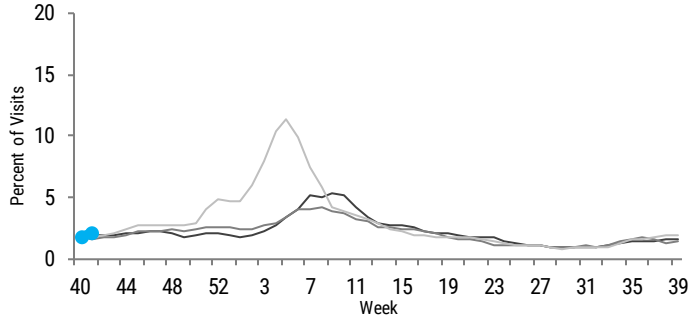


Figure 14: In **region 6**, ILI activity **increased** during week 41 but remained within levels observed at this time in past seasons.

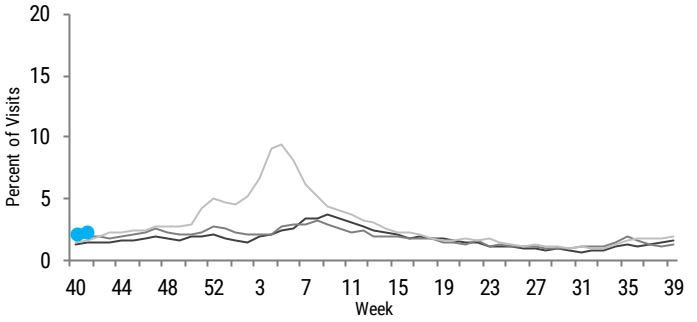
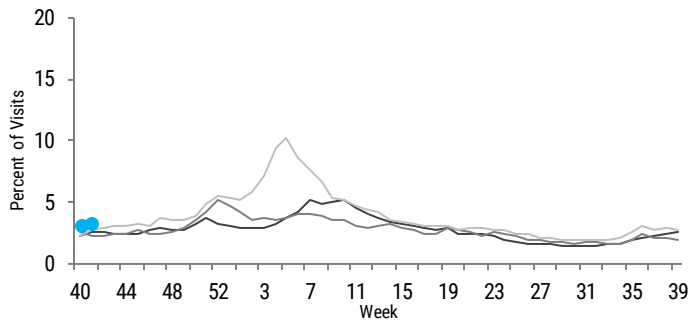
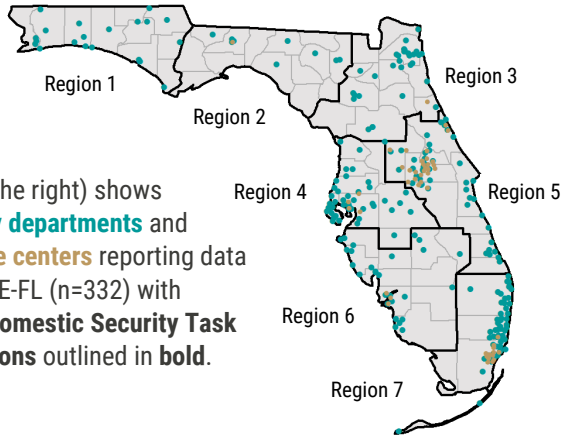


Figure 15: In **region 7**, ILI activity **increased** during week 41 but remained within levels observed at this time in past seasons.





Map 4 (to the right) shows **emergency departments** and **urgent care centers** reporting data to ESSENCE-FL (n=332) with **Regional Domestic Security Task Force Regions** outlined in **bold**.

Background:

Children, especially those with underlying health conditions (like asthma or diabetes), are at higher risk for severe complications from influenza infection. **The single best way to protect children from influenza is to get them vaccinated every year.** The Florida Department of Health (the Department) encourages you and your family to get vaccinated by the end of October. To find a flu shot near you, please visit: www.floridahealth.gov/findaflushot.

Figure 16: In week 41, the percent of emergency department and urgent care center visits for ILI in children <18 years **increased**, and was above levels seen at this time in past seasons.

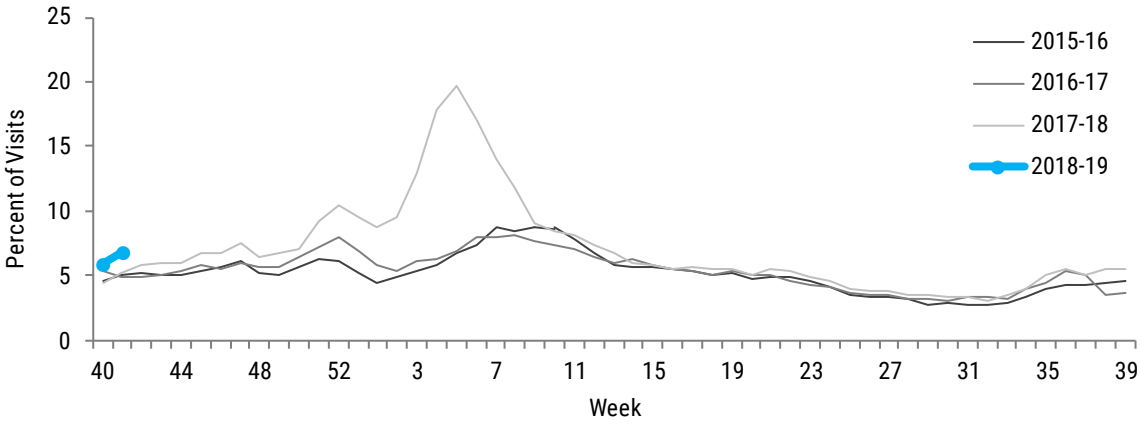


Figure 16 (to the left) shows **the percent of influenza-like illness (ILI) visits among children <18 years** at emergency department and urgent care centers, as reported into ESSENCE-FL, week 40, 2015 to week 41, 2018.

Outbreaks in Facilities Serving Children

Outbreak summary:

In week 41, two outbreaks of influenza or ILI were reported in facilities serving children (schools/camps or child daycares): one outbreak of influenza A unspecified and one outbreak of respiratory syncytial virus.

Additional outbreaks in these settings are expected in the coming weeks as we head further into the influenza season.

The Department recommends annual influenza vaccination as the first and most important step in protecting against influenza infection. **Now is the perfect time to get yourself and your family vaccinated.**

The Department also recommends you take everyday actions to prevent the spread of influenza (and other viruses) such as keeping sick children home until they are fever-free for 24 hours (without the use of fever reducing medication), covering your nose and mouth with your arm when you cough or sneeze, washing your hands often with soap and water, and avoiding touching your eyes, nose, and mouth.

Settings:

One outbreak was reported in a child daycare and one outbreak was reported in a school/camp.

Laboratory testing:

Thus far, no specimens have been available for testing at the Bureau of Public Health Laboratories for either of these outbreaks.

Hospitalizations and deaths:

One hospitalization was reported for one of these outbreaks. No deaths were reported for either outbreak.

Figures 17-18: In week 41, **no new influenza-associated pediatric deaths were reported.**

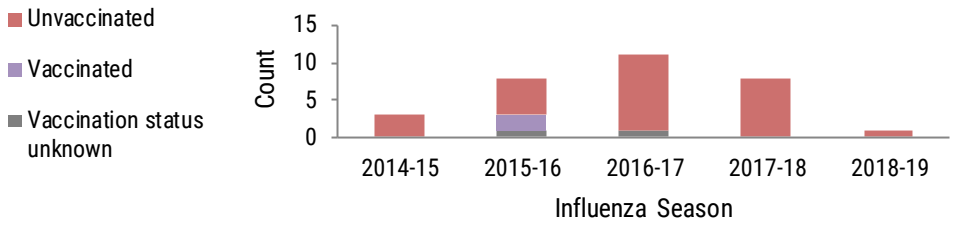


Figure 17 (above) shows the number of **influenza-associated pediatric deaths** as reported in Merlin **by vaccination status**, week 40, 2014 to week 41, 2018.

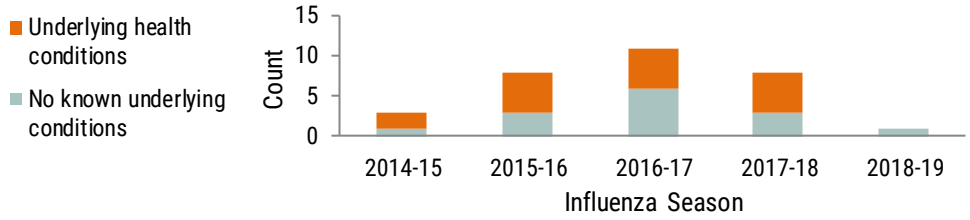


Figure 18 (above) shows the number of **influenza-associated pediatric deaths** as reported in Merlin by **medical history**, week 40, 2014 to week 41, 2018.

In week 41, no new influenza-associated pediatric deaths were reported. One influenza-associated pediatric death has been reported so far this season in an **unvaccinated child** with **no known underlying medical conditions**.

The Florida Department of Health receives reports of influenza-associated pediatric deaths each season. **Most deaths are reported in unvaccinated children and children with underlying medical conditions.**

Children, especially those with certain health conditions are at increased risk of severe complications from influenza infection. **Influenza vaccination has been shown to reduce a child's likelihood of dying from influenza by up to 60%.** For more information, please visit: www.cdc.gov/media/releases/2017/p0403-flu-vaccine.html.

At-Risk Populations: Pregnant Women

Background:

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

Figure 19: In week 41, emergency department and urgent care center visits for influenza among pregnant women **remained the same** and was similar to levels seen at this time in past seasons.

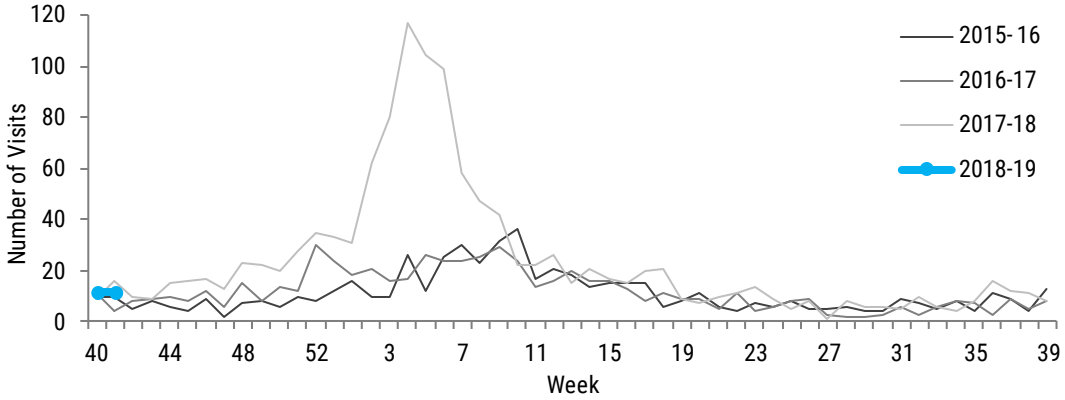


Figure 19 (to the left) shows the **number of visits* to emergency department and urgent care centers with chief complaints of influenza infection and pregnancy**, as reported in ESSENCE-FL, week 40, 2015 to week 41, 2018.

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

Background:

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

Figure 20: In week 41, the percent of emergency department and urgent care center visits for ILI in adults ≥65 years **increased**, but remained similar to levels observed at this time in past seasons.

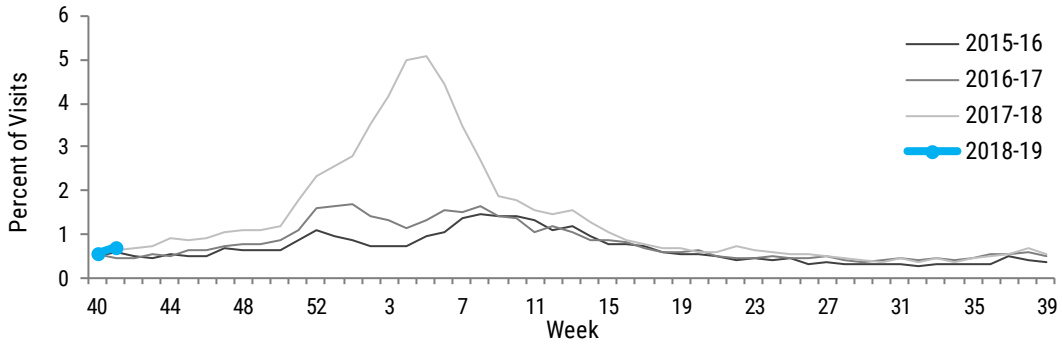


Figure 20 (to the left) shows **the percent of influenza-like illness (ILI) visits among adults ≥65 years** at emergency departments and urgent care centers, as reported into ESSNECE-FL, week 40, 2015 to week 41, 2018.

Outbreaks in Facilities Serving Adults ≥65 Years

Outbreak summary:

In week 41, no new outbreaks of influenza or influenza-like illness (ILI) were reported in facilities serving adults ≥65 years (assisted living facilities, nursing facilities, or other long-term care facilities). Outbreaks in these settings are expected as we head further into the influenza season.

The Florida Department of Health (the Department) recommends annual influenza vaccination as the first and most important step in protecting against influenza infection and the Department strongly urges long-term care facility administrators and directors to actively recommend and offer influenza vaccines to all residents, staff, and health care personnel who have not yet received their 2018-19 vaccinations. **Now is the perfect time to get vaccinated.**

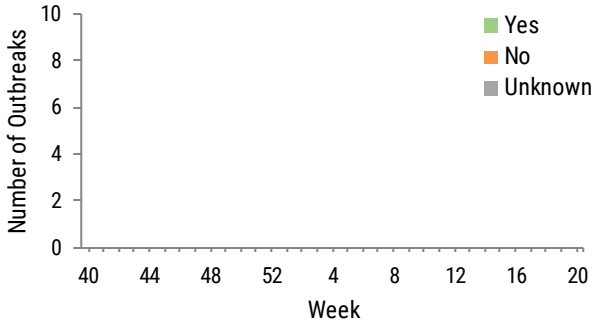


Figure 21 (above) shows the number of outbreaks where **antiviral treatment was administered to ill individuals** by week in facilities serving adults ≥65 years, as reported in Merlin.

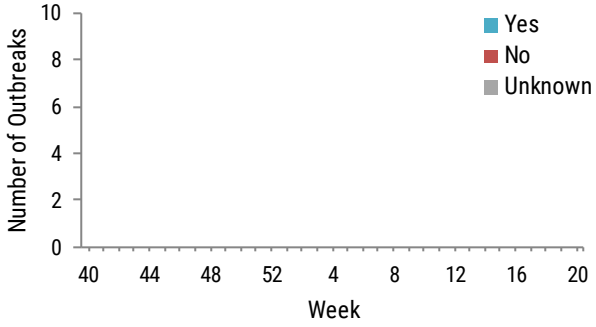
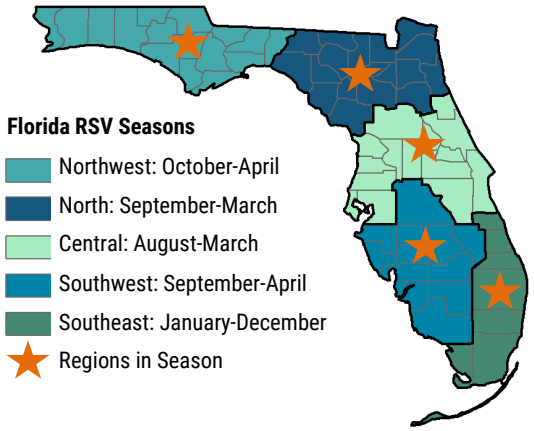


Figure 22 (above) shows the number of outbreaks where **antiviral chemoprophylaxis was administered to at-risk individuals** by week in facilities serving adults ≥65 years, as reported in Merlin.

Background:

Respiratory syncytial virus (RSV) is a common respiratory virus that usually causes mild, cold-like symptoms. Young children and older adults, especially those with certain underlying health conditions, are at higher risk for severe illness from RSV. Prophylaxis is available for children who qualify. For more information, contact your health care provider.



Map 5 (above) shows **Florida's RSV regional season breakdown.** Regions that are currently in RSV season are marked with **orange stars**.

RSV Surveillance:

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

The determination of unique seasonal and geographic trends of RSV activity in Florida has important implications for prescribing patterns for initiating prophylaxis to children at high risk for complications from RSV infection. The American Academy of Pediatrics currently recommends preapproval for prophylactic treatment be made based on state surveillance data. For more information on RSV surveillance systems used in Florida, see page 17.

Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. The Florida Department of Health established regional RSV regions and seasons based on activity thresholds provided by the Centers for Disease Control and Prevention (see Map 5). **Currently, all five of Florida's regions are in RSV season.**

To learn more about RSV in Florida, please visit: www.floridahealth.gov/rsv.

Week 41 (October 7-13, 2018) Activity Summary:

In week 41, RSV activity in children <5 years increased statewide but remained within levels observed at this time in previous years.

One outbreak of RSV was reported in an Escambia County child daycare.

No new possible RSV-associated pediatric deaths were identified in week 41. A total of three possible RSV-associated pediatric deaths have been identified so far in 2018 and one of those deaths was investigated and ruled out. Investigations will occur to determine if the remaining two deaths meet case definition.

Figure 23: In week 41, the percent of emergency department and urgent care center visits for RSV among children <5 years **increased** but remained within levels observed at this time in previous years.

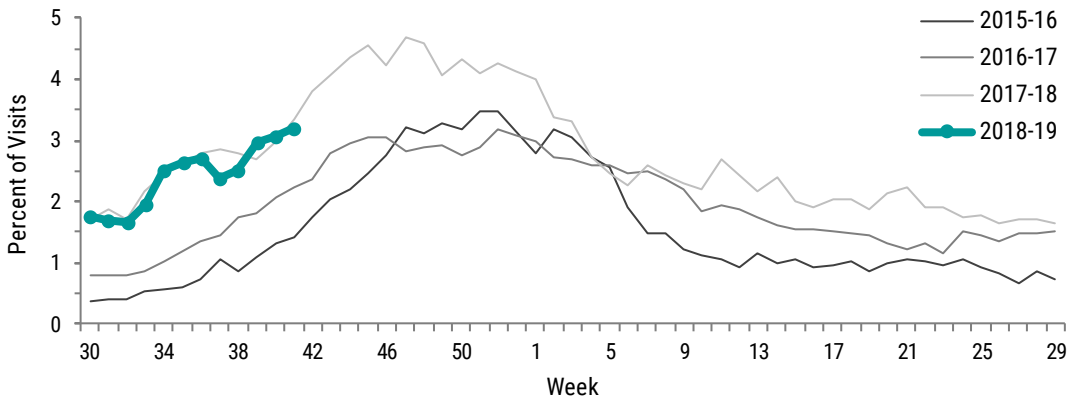


Figure 23 (to the left) shows **the percent of emergency department and urgent care center visits with discharge diagnoses that include respiratory syncytial virus (RSV) or RSV-associated illness among children <5 years**, as reported in ESSENCE-FL, week 30, 2015 to week 41, 2018.

The overall trend displayed in Figure 23 has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.

Figure 24: In week 41, the percent of specimens testing positive for RSV **decreased** and was below levels observed at this time in previous years.

Figure 25 (to the right) shows **the percent of specimens testing positive for respiratory syncytial virus (RSV)**, as reported by hospital laboratories (n=6), week 30, 2015 to week 41, 2018.

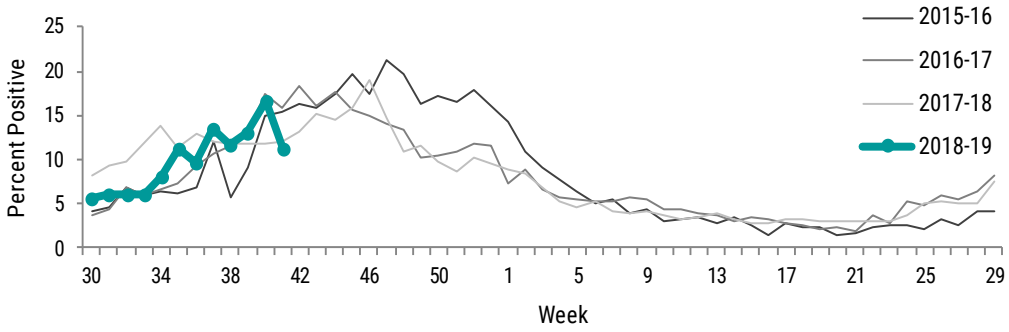


Figure 25: In recent weeks, the percent of specimens testing positive for rhinovirus **decreased** but remained higher than other respiratory viruses under surveillance.

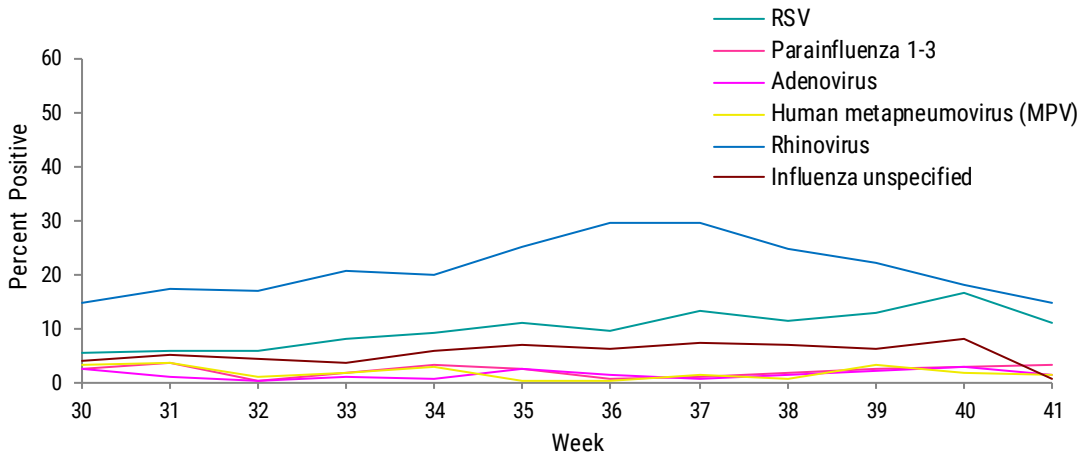


Figure 25 (to the left) shows **the percent of laboratory results testing positive for eight common respiratory viruses**, as reported by laboratories participating in the National Respiratory and Enteric Virus Surveillance System (NRVESS) and laboratories reporting validated respiratory virus data to the Florida Department of Health via electronic laboratory reporting (n=6), week 30, 2018 (beginning July 22, 2018) to week 41, 2018.

Figure 26: In week recent weeks, **RSV was the non-influenza respiratory virus most frequently identified** in specimens submitted by ARIES providers.

Figure 26 (to the right) shows **the number of specimens submitted by Acute Respiratory Infection Epidemiology and Surveillance Program (ARIES) providers (n=4) testing positive for 12 common respiratory viruses** as reported by the Bureau of Public Health Laboratories, week 30, 2018 (beginning July 22, 2018) to week 40, 2018. (ending October 6, 2018).

Note: The most recent data available are displayed here. Laboratory results for submitted specimens that have not yet been tested in full will be included in future reports.

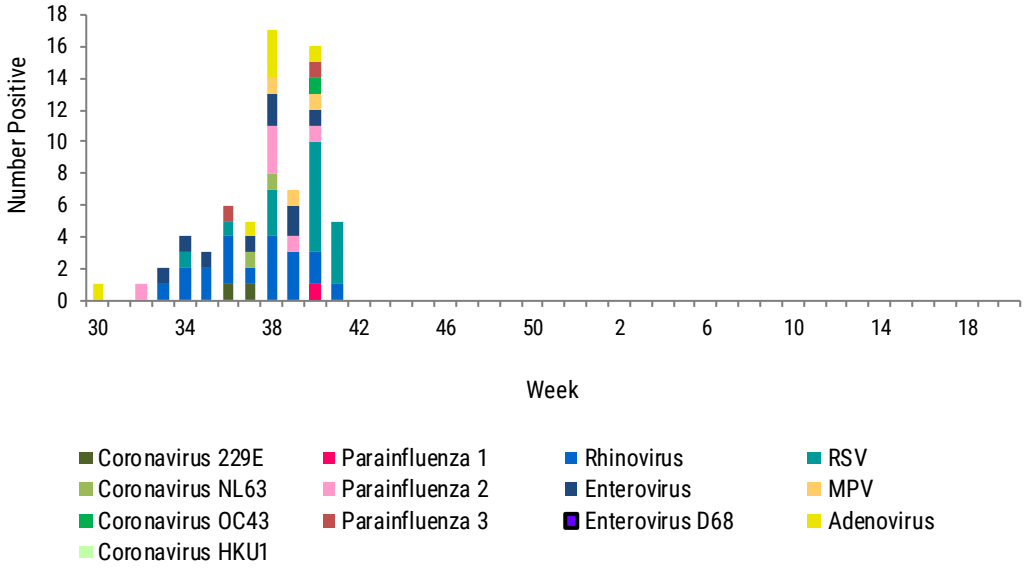


Table 3: Summary of Influenza and Influenza-like Illness Outbreaks Reported in Week 41, 2018 by Setting

Setting	Number of Outbreaks (Percent of Outbreaks)	Implicated Viruses
Schools/camps	1 (50%)	One outbreak of influenza A unspecified
Child daycares	1 (50%)	One outbreak of respiratory syncytial virus (RSV)
Adult daycares	0 (0%)	No outbreaks
Correctional facilities and juvenile detention centers	0 (0%)	No outbreaks
Nursing facilities	0 (0%)	No outbreaks
Assisted living facilities	0 (0%)	No outbreaks
Other long-term care facilities	0 (0%)	No outbreaks
Hospitals	0 (0%)	No outbreaks
Shelters	0 (0%)	No outbreaks
Other settings	0 (0%)	No outbreaks
Total	2 (100%)	One outbreak of influenza A unspecified One outbreak of RSV

Table 4: Summary of Influenza and Influenza-like Illness Outbreaks Reported for the 2018-19 Season by Setting

Setting	Number of Outbreaks (Percent of Outbreaks)	Implicated Viruses
Schools/camps	3 (75%)	One outbreak of influenza A unspecified One outbreak of influenza unspecified and group A *Streptococcus* One outbreak of unknown etiology
Child daycares	1 (25%)	One outbreak of RSV
Adult daycares	0 (0%)	No outbreaks
Correctional facilities and juvenile detention centers	0 (0%)	No outbreaks
Nursing facilities	0 (0%)	No outbreaks
Assisted living facilities	0 (0%)	No outbreaks
Other long-term care facilities	0 (0%)	No outbreaks
Hospitals	0 (0%)	No outbreaks
Shelters	0 (0%)	No outbreaks
Other settings	0 (0%)	No outbreaks
Total	4 (100%)	One outbreak of influenza A unspecified One outbreak of influenza unspecified and group A *Streptococcus* One outbreak of RSV One outbreak of unknown etiology

Summary of Notable Influenza and Influenza-like illness (ILI) Outbreaks Reported in Week 41, 2018:

In week 41, 2018, one notable outbreak of influenza or ILI was reported.

Escambia County:

A child daycare reported five children with ILI. All five children sought health care and one child was hospitalized. At least one child tested positive for respiratory syncytial virus (test type unknown) at a local health care provider. No specimens have been available for testing at the Bureau of Public Health Laboratories thus far. Control measures were reviewed with facility leadership. This investigation is ongoing.

ESSENCE-FL Syndromic Surveillance and Vital Statistics Portal Data source for figures 1, 4, 9-16, 19, 20, and 23; map 4

Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) measures trends in influenza-like illness (ILI) visits from emergency departments (ED) and urgent care clinics (UCC) and influenza mortality by using death certificates from the Bureau of Vital Statistics. Participating EDs and UCCs (n=332) 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.

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

Florida ILINet Data source for figures 2 and 3

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

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

County Influenza Activity in EpiGateway Data source for figure 5; maps 1 and 2

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

Outbreak Reporting in Merlin Data source for figures 6, 21, and 22; map 3; tables 3 and 4

Merlin tracks influenza and ILI outbreak investigations by CHDs. Reports by CHDs include the type of respiratory disease causing the outbreak, settings where outbreaks are occurring, and recommendations made to mitigate the spread of disease. CHD epidemiologists report outbreaks of influenza or ILI into Merlin, Florida's reportable disease surveillance system.

Outbreaks in assisted living facilities, nursing facilities, and long-term care facilities are defined as two or more cases of influenza or ILI. In schools/camps and child daycares, outbreaks are defined as three or more epidemiologically linked cases of influenza or ILI. The Department does not count household clusters as outbreaks.

Bureau of Public Health Laboratories (BPHL) Data source for figure 7 and table 1

BPHL performs testing and subtyping on surveillance specimens from sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations, and medical examiners.

Laboratory Viral Respiratory Surveillance Data source for figures 24 and 25

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

United States World Health Organization Collaborating Laboratories Influenza Virus Surveillance Data source for figure 8; table 2

The United States World Health Organization Collaborating Laboratories Influenza Virus Surveillance is a system that captures antigenic characterizations results for specimens submitted by BPHL to CDC for testing.

Acute Respiratory Infection Epidemiology and Surveillance (ARIES) Program Data source for figure 31

Acute Respiratory Infection Epidemiology and Surveillance Program (ARIES) is a nationwide surveillance system composed of 17 participating jurisdictions. Florida has four sentinel providers enrolled in ARIES who submit weekly ILI counts, as well as submit ILI specimens to BPHL for testing.

Case-Based Influenza Surveillance Data source for figures 17 and 18

Death in a child whose laboratory-confirmed influenza infection has been identified as a contributing to the child's death are 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.