Florida FLU REVIEW

Season: 2018-19

Week 1: 12/30/18-1/5/19

Geographic Spread: **Widespread**

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

ILI Activity Trend: **Decreasing**

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

In week 1, ILI activity decreased statewide and was similar to levels observed at this time in past seasons; however, heightened activity is expected for several more weeks.

While an overall decrease was seen statewide, increases were still observed in the panhandle region (see page 8) and in adults aged ≥65 years (see page 11).

One new outbreak of influenza was reported in week 1. A total of 62 influenza or ILI outbreaks have been reported so far this season. For a complete list of outbreaks reported so far this season, see page 14.

No new influenza-associated pediatric deaths were reported in week 1. Children, especially those with underlying medical conditions, are at higher risk for complications from influenza infection. Influenza vaccination can be life-saving in children. For more information, see page 10.

While influenza A 2009 (H1N1) remains the most common subtype identified at the Bureau of Public Health Laboratories in Florida, influenza A (H3) viruses continue to be consistently identified. Nationally, influenza A 2009 (H1N1) remains the predominant subtype overall; however, the Centers for Disease Control and Prevention reports influenza A (H3) as the predominant subtype in the southeastern region of the United States.

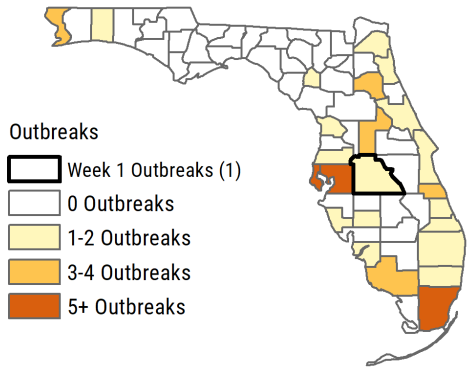
It's not too late to get your flu vaccine. People who have not yet been vaccinated for the 2018-19 season should do so as soon as possible. Influenza vaccines are safe and are the best way to protect yourself and your loved ones from influenza and its potentially severe complications.

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

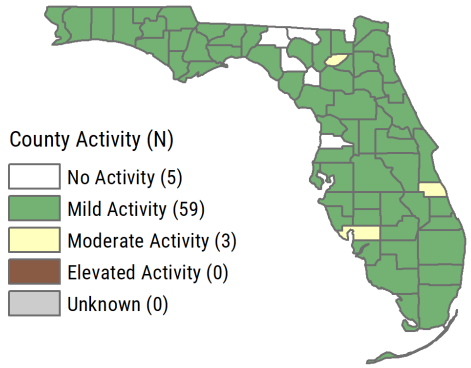
- Wash your hands often with soap and water (if soap is not available, use an alcohol-based sanitizer)
- Avoid touching your eyes, nose, and mouth
- If you do get sick, stay home until fever-free for at least 24 hours (without the use of fever-reducing medication)

Influenza and ILI Outbreaks

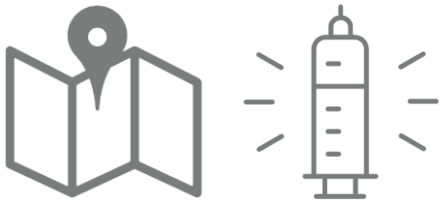
Reported as of 1/5/19



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:
FloridaHealth.gov/FindAFluShot

Posted January 9, 2019 on the Bureau of Epidemiology (BOE) website: 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 52 or 53 reporting weeks. Increased surveillance for influenza in Florida for the 2018-19 season began in week 40 (starting on September 30, 2018) and will extend through week 20 (ending May 21, 2019). This report is produced by the Florida Department of Health on a weekly basis during the regular influenza season and an abbreviated report is published on a biweekly basis during the summer months.

Surveillance case definitions for ILI vary slightly across surveillance systems. **For more information on Florida's influenza surveillance systems and associated case definitions, see page 16.**

Statewide Activity

Figure 1: In week 1, **the percent of emergency department and urgent care center visits for ILI statewide decreased** and was similar to levels observed at this time during the 2017-18 influenza season.

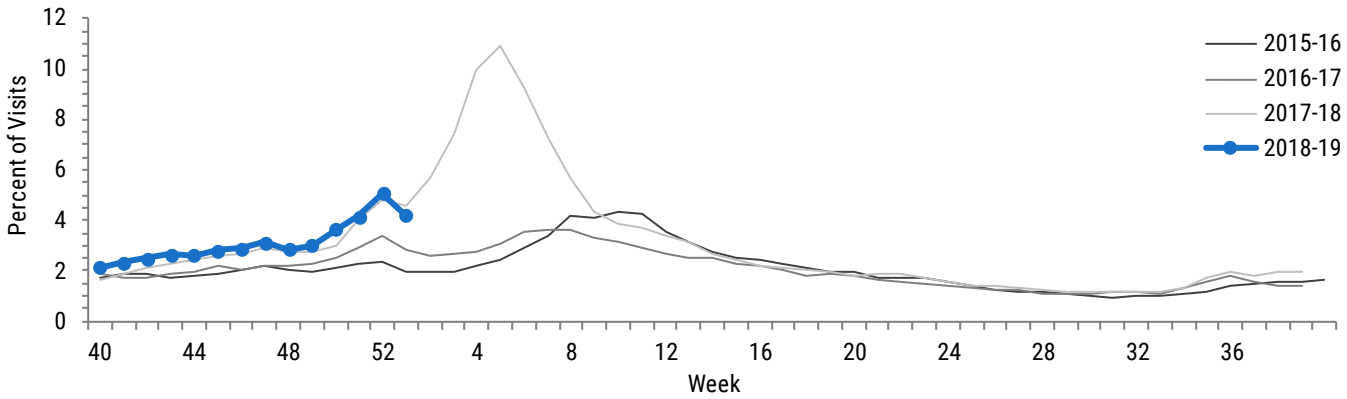


Figure 1 (above) shows **the percent of visits for influenza-like illness (ILI)** for facilities participating in ESSENCE-FL (n=339) statewide for the current season (week 40, 2018 to week 1, 2019) and the last three seasons (2017-18, 2016-17, and 2015-16). The ESSENCE-FL ILI syndrome captures visits 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.

Statewide Activity

Figure 2: In week 1, Florida reported **widespread geographic spread of influenza** to the Centers for Disease Control and Prevention.

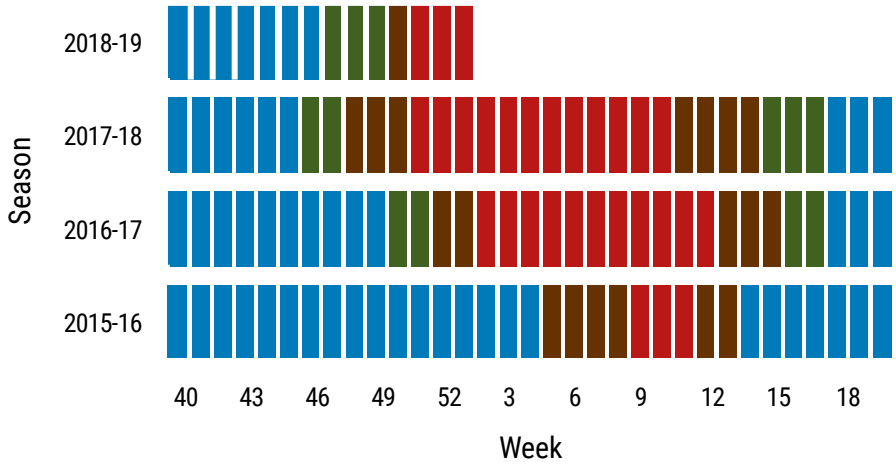


Figure 2 (to the left) shows Florida's self-reported **geographic spread of influenza** as reported to the Centers for Disease Control and Prevention, week 40, 2015 to week 1, 2019.

Defining geographic spread of influenza:

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 1, **the percent of patients with ILI reported by ILINet outpatient providers statewide decreased** and was 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=49), week 40, 2015 to week 1, 2019.

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

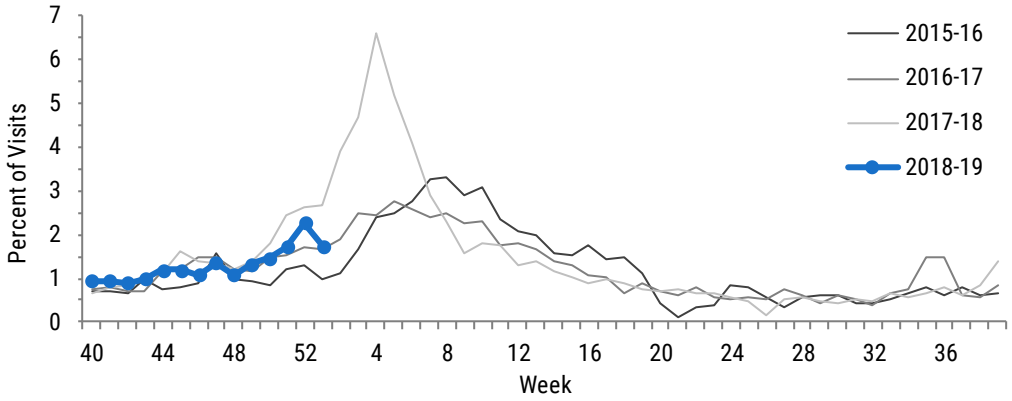


Figure 4: In week 52 (ending 12/29/18), **the number of pneumonia and influenza deaths identified statewide increased slightly** and was similar to levels observed at this time during the 2016-17 influenza season.

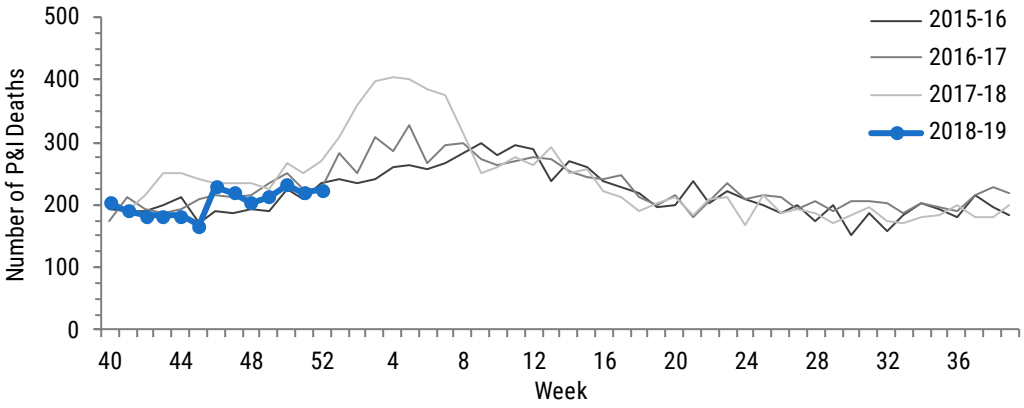


Figure 4 (left) shows **pneumonia and influenza (P&I) deaths*** for all Florida counties from the Bureau of Vital Statistics, as reported into ESSENCE-FL, week 40, 2015 to week 52, 2018.

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

County Influenza Activity

Figure 5: The majority of counties reported **mild activity** for week 1.

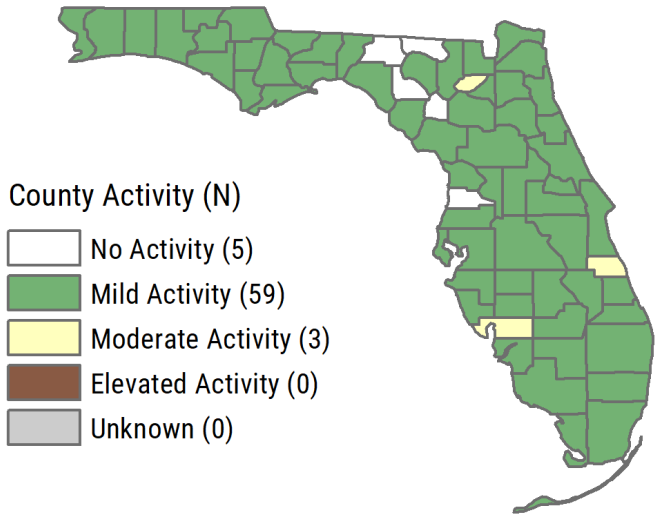
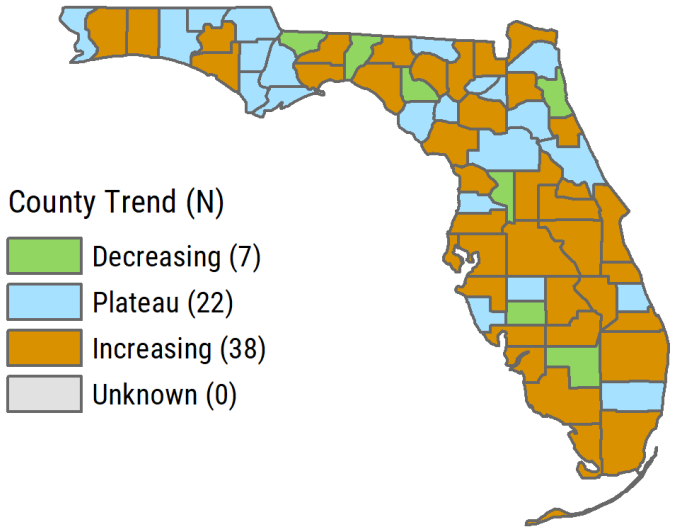


Figure 6: Most counties reported **increasing activity** for week 1.



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

Figure 7: In week 1, the majority of counties reported **no or minimal influenza activity** across all settings. Two counties reported **high influenza activity** in health care settings.

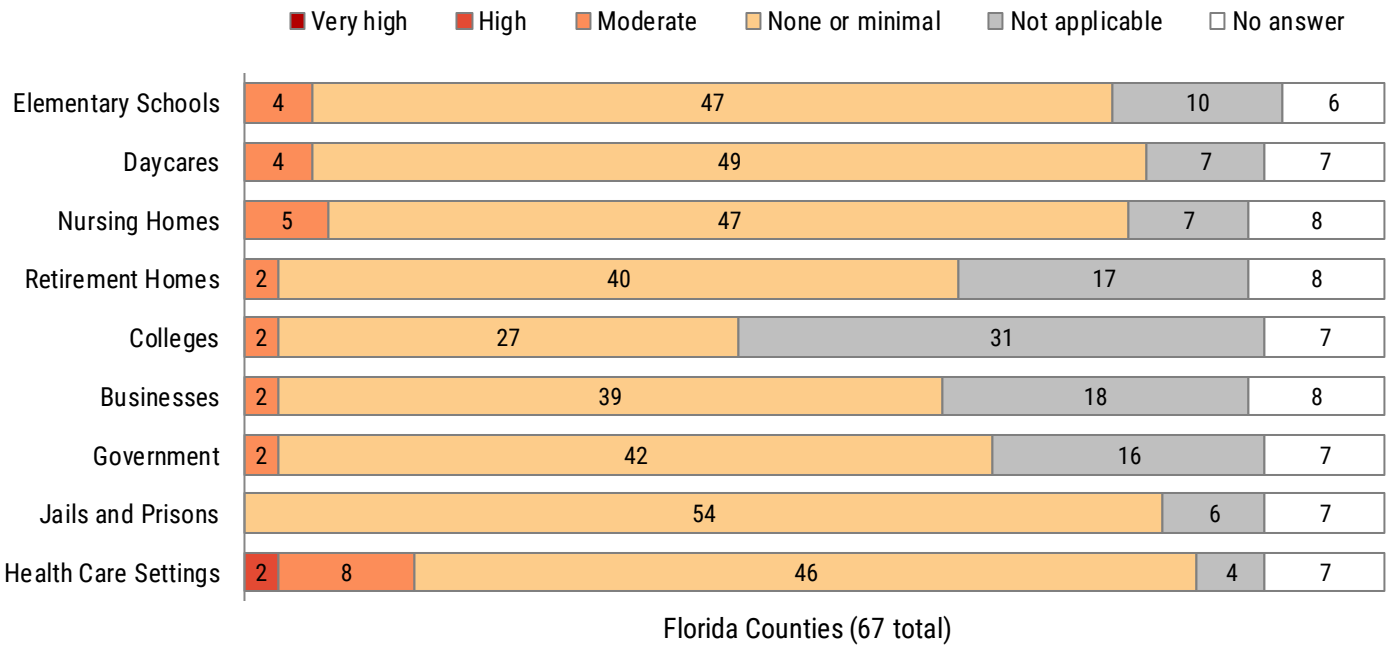


Figure 7 (above) shows the results of the influenza activity assessment completed by county health departments for week 1, 2019. As part of the assessment, county health departments are asked to evaluate influenza activity in certain settings within their county. The assessment scale for activity ranges from no or minimal activity to very high activity.

Outbreaks of Influenza and Influenza-like Illness

Statewide Outbreaks

In week 1, one outbreak of influenza unspecified was reported.

As of week 1, a total of 62 outbreaks of influenza or ILI have been reported for the 2018-19 season. A complete list of the outbreaks reported so far this season by etiology and setting type is available on page 14.

Laboratory testing:

At least one specimen was collected for testing at the Bureau of Public Health Laboratories for this outbreak. Those results are not yet available.

Hospitalizations and deaths:

No hospitalizations or deaths were reported for the outbreak reported in week 1.

So far this season, hospitalizations have been reported in nine out of 62 outbreaks. Deaths were reported in two of the 62 outbreaks reported so far this season.

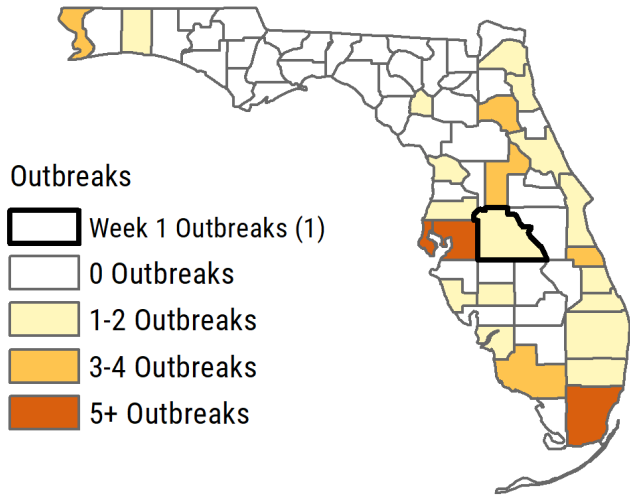


Figure 8 (above) shows **reported influenza and influenza-like illness (ILI) outbreaks by county**. Counties with outbreaks reported in week 1 are **outlined in bold.**

For detailed information on notable outbreaks reported in week 1, 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 9: In week 1, **one new outbreak was in a nursing facility.** The majority of outbreaks reported so far this season have been in facilities serving children (schools/camps and child daycares).

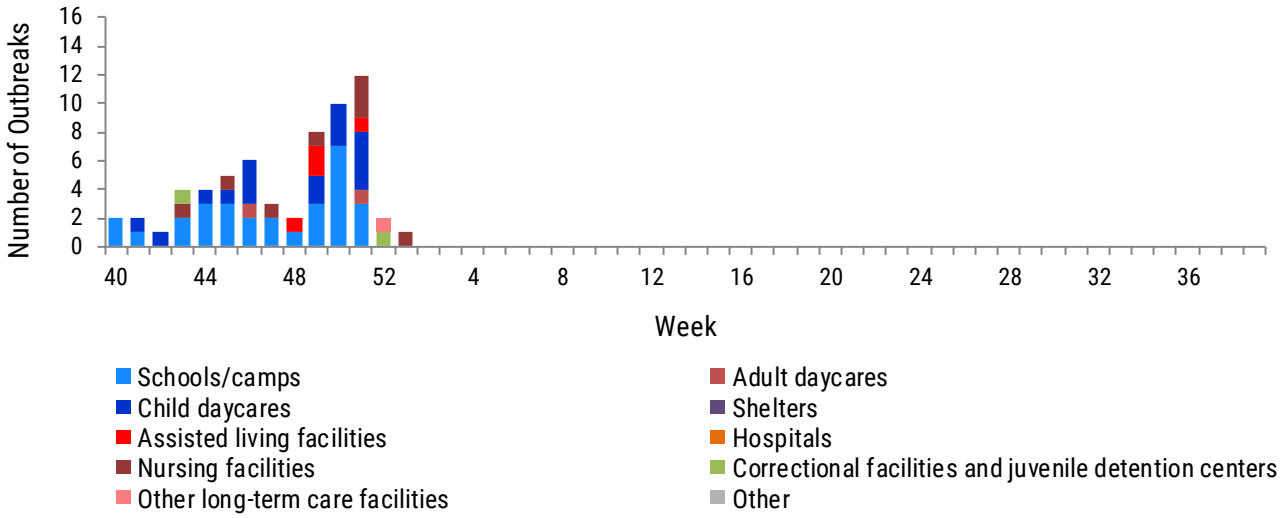


Figure 9 (above) shows the distribution of **influenza and influenza-like illness (ILI) outbreaks by facility type** as reported in Merlin, week 40, 2018 to week 1, 2019.

Laboratory Surveillance

Figure 10: In recent weeks, **influenza A 2009 (H1N1) has remained the most common influenza subtype detected at BPHL. Influenza A (H3)** has also been consistently identified at BPHL throughout the season.

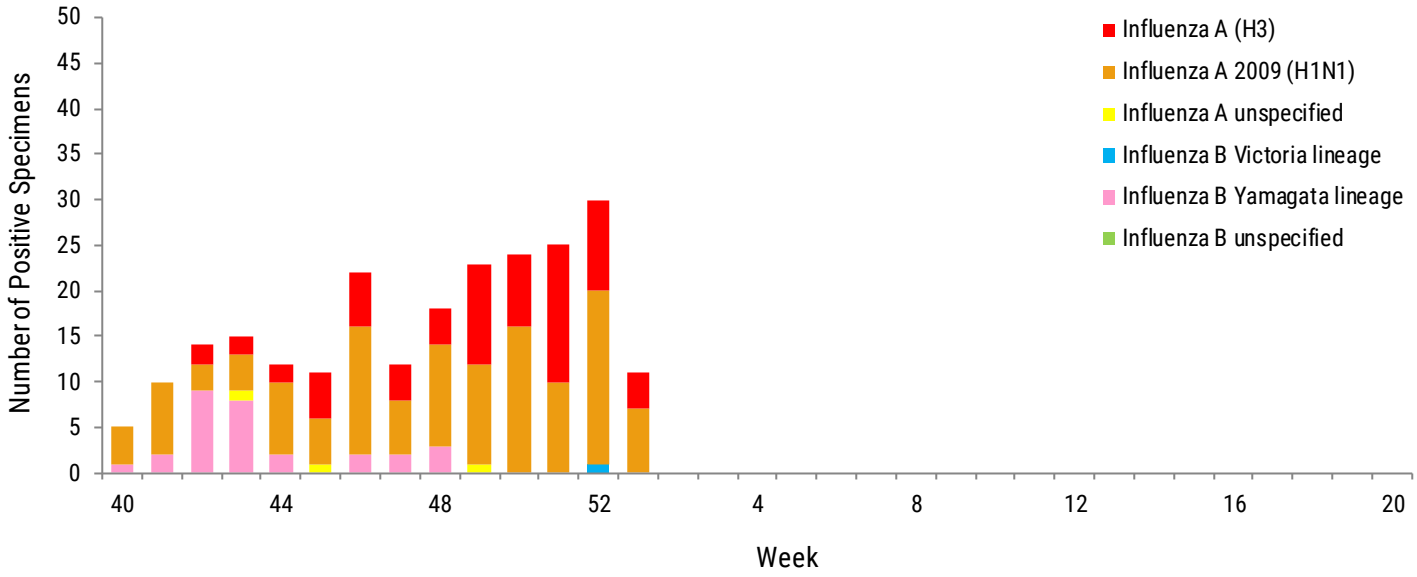


Figure 10 (above) shows the number of **influenza-positive specimens at the Bureau of Public Health Laboratories (BPHL)** by lab-event date,* week 40, 2018 through week 1, 2019.

Influenza A 2009 (H1N1) has been the most common influenza subtype detected at BPHL so far this season, but influenza A (H3) viruses have also been consistently identified at BPHL throughout the season. Influenza vaccines are designed to protect against both of these viruses.

**Table 1: Bureau of Public Health Laboratories Viral Surveillance by Lab Event Date*
Reported by 10:00 a.m. January 9, 2019**

Influenza Type	Current Week 1	Previous Week 52	Current 2018-19 Season
Total Specimens Tested	**13**	**36**	**523**
Influenza positive specimens (% of total specimens tested)	**11 (84.6%)**	**30 (83.3%)**	**232 (44.4%)**
Influenza A 2009 (H1N1) (% of influenza positives)	7 (63.6%)	19 (63.3%)	126 (54.3%)
Influenza A (H3) (% of influenza positives)	4 (36.4%	10 (33.3%)	73 (31.5%)
Influenza A unspecified (% of influenza positives)	-	-	3** (1.3%)
Influenza B Yamagata (% of influenza positives)	-	-	29 (12.5%)
Influenza B Victoria (% of influenza positives)	-	1 (3.3%)	1 (0.4%)
Influenza B unspecified (% 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.

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

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:
FloridaHealth.gov/diseases-and-conditions/influenza/_documents/flulabreportguide.pdf

Laboratory Surveillance: Antigenic Characterization

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 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 11 (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 1, 2019

Antigenic Characterization	Number of Specimens
A/MICHIGAN/45/2015-LIKE (H1N1)pdm09	14
A/SINGAPORE/INFIMH-16-0019/2016-LIKE (H3N2) BY FRA	1
A/SINGAPORE/INFIMH-16-0019/2016-LIKE (H3N2) LOW BY FRA	1
B/COLORADO/06/2018-LIKE	0
B/PHUKET/3073/2013-LIKE	6

Table 2 (to the left) summarizes **available antigenic characterization results** received for specimens collected from week 30, 2018 (beginning July 22, 2018) through week 1, 2019, 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 11: As of week 1, **the majority of specimens** submitted to CDC for antigenic characterization were **antigenically similar** to their respective vaccine reference strain.

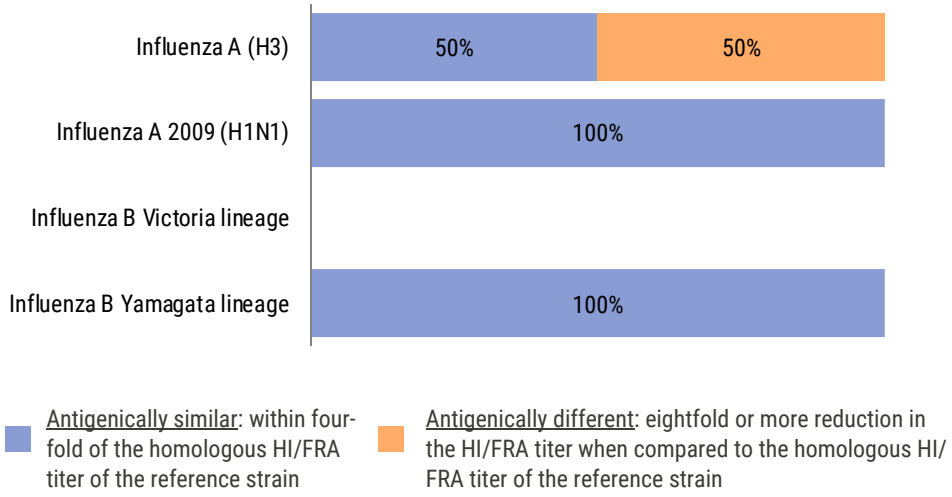


Figure 11 (to the left) shows **the percentage of specimens** submitted to CDC that are **antigenically similar to reference strains** representing the recommended vaccine components of the 2018-19 northern hemisphere vaccine, week 30, 2018 (beginning July 22, 2018) to week 1, 2019 by virus type.

As of week 1, 2019, antigenic characterizations results are still pending for 14 influenza A (H3N2) isolates, 10 influenza A 2009 (H1N1) isolates, and five influenza B Yamagata lineage isolates submitted to CDC by BPHL during this timeframe.

Regional Activity

Figures 12-18 (below) show **the percent of emergency department and urgent care center visits for influenza-like illness (ILI)** at ESSENCE-FL participating facilities (n=339) from week 40, 2015 to week 1, 2019. Data are organized by Regional Domestic Security Task Force Regions (see Figure 19).

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

Figure 12: In **region 1, ILI activity increased** during week 1 and was similar to levels observed at this time in past seasons.

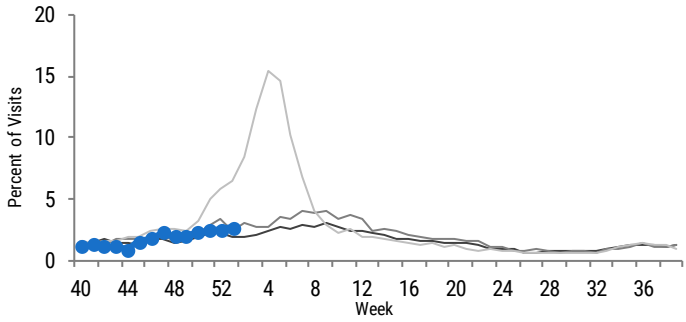


Figure 13: In **region 2, ILI activity increased** during week 1 and was within levels observed at this time in past seasons.

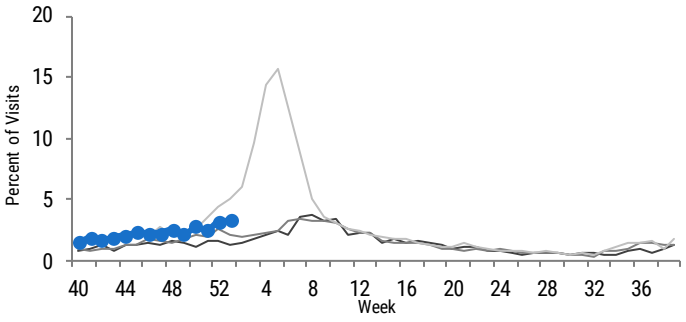


Figure 14: In **region 3, ILI activity decreased** during week 1 and was within levels observed at this time in past seasons.

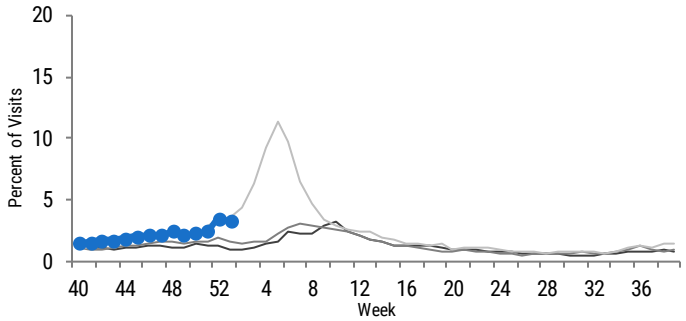


Figure 15: In **region 4, ILI activity decreased** during week 1 and was within levels observed at this time in past seasons.

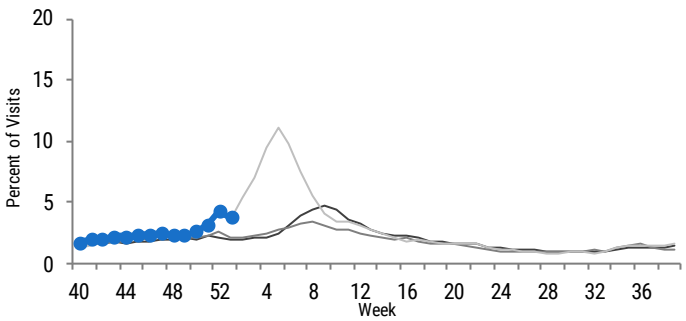


Figure 16: In **region 5, ILI activity decreased** during week 1 and was within levels observed at this time in past seasons.

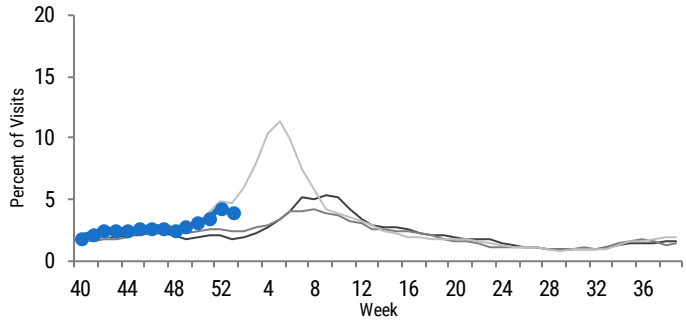


Figure 17: In **region 6, ILI activity decreased** during week 1 and was within levels observed at this time in past seasons.

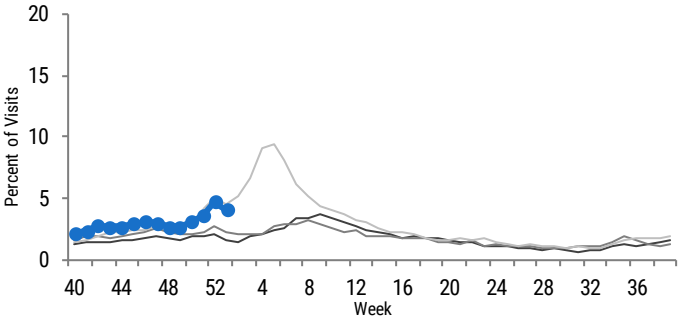
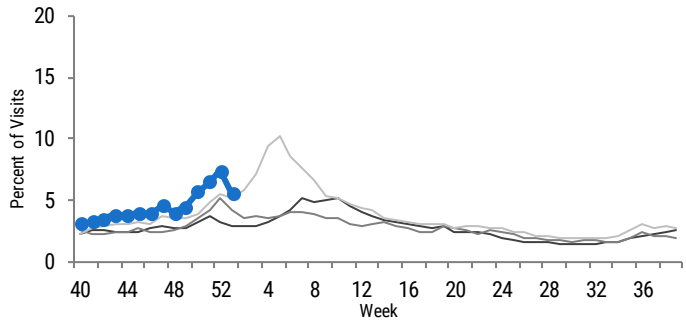


Figure 18: In **region 7, ILI activity decreased** during week 1 but remained slightly above levels observed at this time in past seasons.



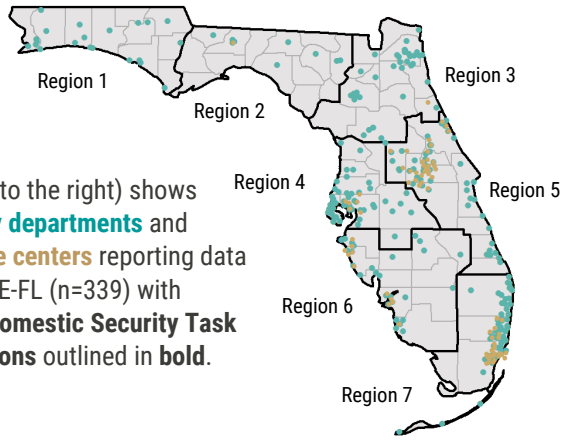


Figure 19 (to the right) shows **emergency departments** and **urgent care centers** reporting data to ESSENCE-FL (n=339) with **Regional Domestic Security Task Force Regions** outlined in **bold**.

At-Risk Populations: Children

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 encourages you and your family to get vaccinated as soon as possible. To find a flu shot near you, please visit: FloridaHealth.gov/FindAFluShot.

Figure 20: In week 1, **the percent of emergency department and urgent care center visits for ILI in children <18 years decreased** but remained slightly above levels seen at this time in past seasons.

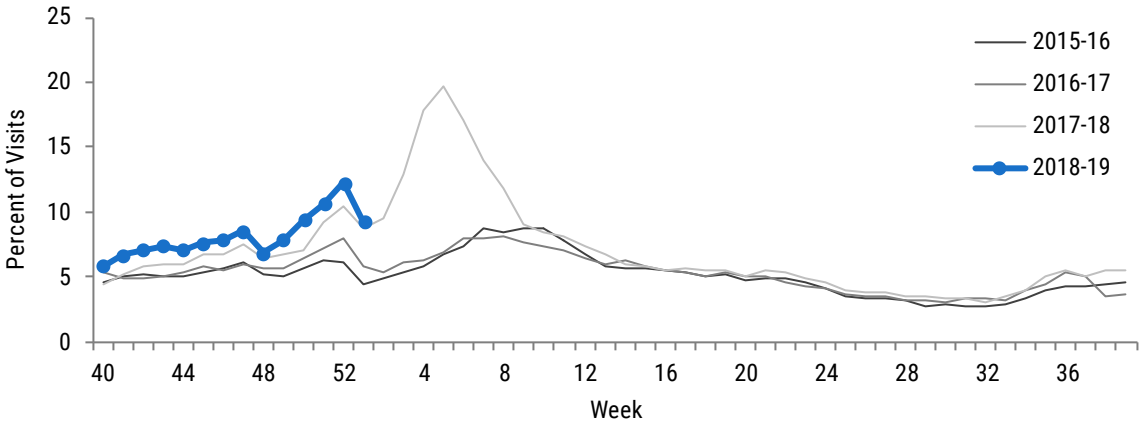


Figure 20 (to the left) shows **the percent of influenza-like illness (ILI) visits among children <18 years** at emergency department and urgent care centers, as reported into ESSENCE-FL, week 40, 2015 to week 1, 2019.

Outbreaks in Facilities Serving Children

In week 1, no new outbreaks were reported in facilities serving children (schools/camps and child daycares).

The majority of outbreaks reported so far this season have been in facilities serving children. It's not uncommon for outbreaks in facilities serving children to be reported early in the season, ahead of facilities serving other groups. Additional outbreaks in these settings are expected in the coming weeks as we head further into the influenza season.

It's not too late to get vaccinated. The Florida Department of Health recommends you get yourself and your family vaccinated as soon as possible. Annual influenza vaccination is the first and most important step in protecting against influenza infection. Flu vaccines are safe and the best way to prevent influenza and influenza-associated complications.

The Florida Department of Health 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.

At-Risk Populations: Children

Figures 21-22: In week 1, **no new influenza-associated pediatric deaths were reported.**

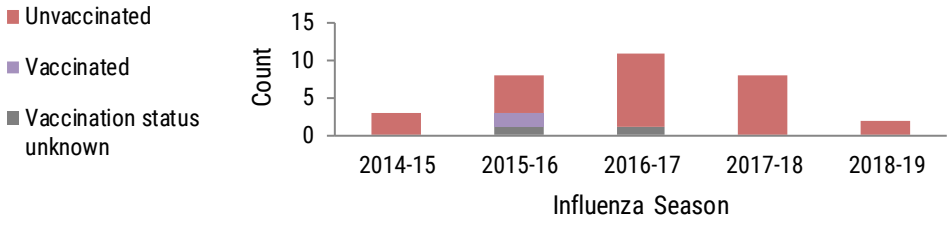


Figure 21 (above) shows the number of **influenza-associated pediatric deaths** as reported in Merlin **by vaccination status**, week 40, 2014 to week 1, 2019.

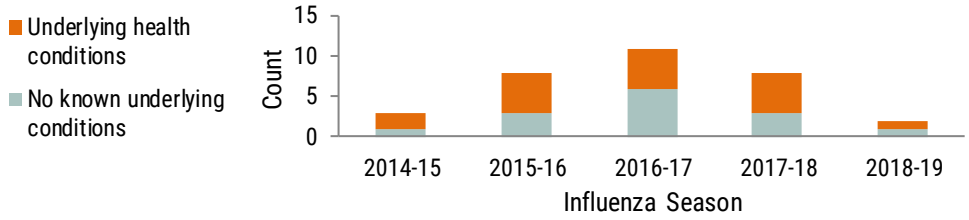


Figure 22 (above) shows the number of **influenza-associated pediatric deaths** as reported in Merlin by **medical history**, week 40, 2014 to week 1, 2019.

In week 1, **no new influenza-associated pediatric deaths were reported.** Two influenza-associated pediatric deaths have been reported so far this season: one in an **unvaccinated child** with **no known underlying medical conditions** and one in an **unvaccinated child** with **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 23: In week 1, the **number of emergency department and urgent care center visits for influenza among pregnant women decreased** and was similar to levels seen at this time during the 2017-18 influenza season.

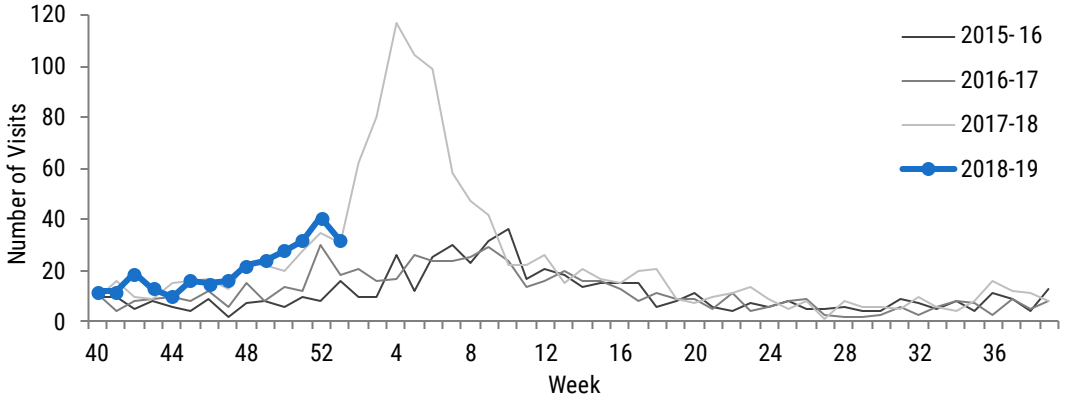


Figure 23 (to the left) shows the **number of visits* to emergency department and urgent care centers with chief complaints of influenza infection and pregnancy**, as reported in ESSENCE-FL, week 40, 2015 to week 1, 2019.

*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.

At-Risk Populations: Adults ≥65 Years Old

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% 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 24: In week 1, the **percent of emergency department and urgent care center visits for ILI in adults ≥65 years increased** and was within levels observed at this time in past seasons.

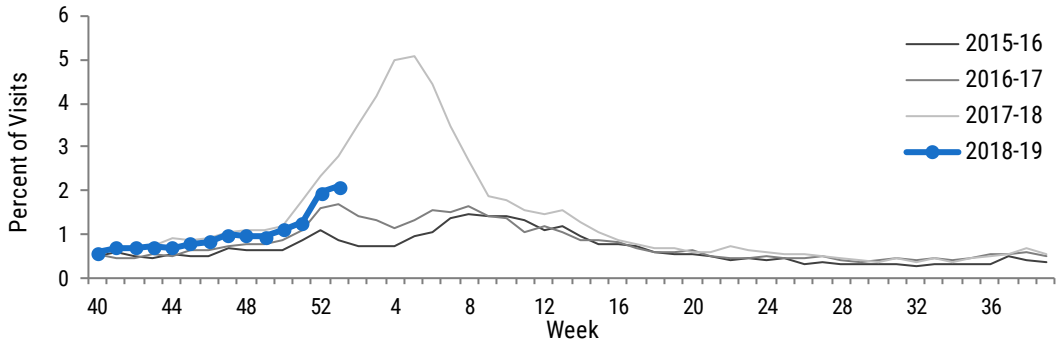


Figure 24 (to the left) shows **the percent of influenza-like illness (ILI) visits among adults ≥65 years** at emergency departments and urgent care centers, as reported into ESSNECE-FL, week 40, 2015 to week 1, 2019.

Outbreaks in Facilities Serving Adults ≥65 Years

In week 1, one new outbreak of influenza or ILI was reported in facilities serving adults aged ≥65 years (assisted living facilities, nursing facilities, and long-term care facilities): one outbreak of influenza unspecified.

So far this season, 13 outbreaks have been reported in facilities serving adults ≥65 years. Additional outbreak reports are expected as we head further into the influenza season.

Those who have not yet been vaccinated for the 2018-19 season should do so as soon as possible. The Florida Department of Health recommends annual influenza vaccination as the first and most important step in protecting against influenza infection and **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.**

<u>Laboratory testing:</u>

At least one specimen was collected and submitted to the Bureau of Public Health Laboratories for this outbreak. Those results are not yet available.

<u>Control measures:</u>

Outbreak control measures were reviewed with facility leadership for this outbreak.

Antiviral treatment and chemoprophylaxis were recommended and implemented for this outbreak.

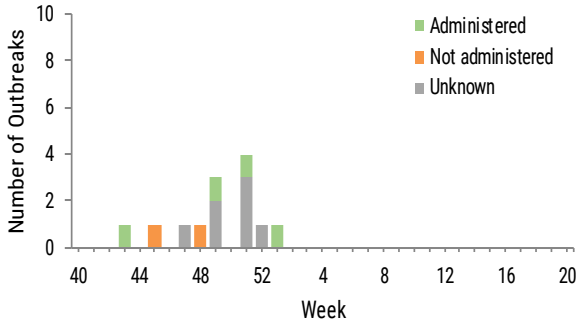


Figure 25 (above) shows the number of outbreaks where **antiviral treatment was administered to ill individuals** by week in facilities serving adults ≥65 years, as reported in Merlin.

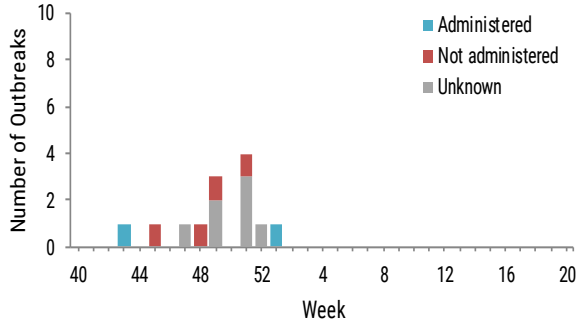


Figure 26 (above) shows the number of outbreaks where **antiviral chemoprophylaxis was administered to at-risk individuals** by week in facilities serving adults ≥65 years, as reported in Merlin.

Respiratory Syncytial Virus Surveillance

Background:

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

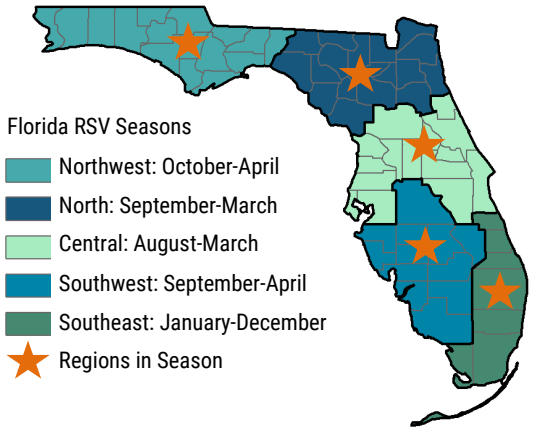


Figure 27 (above) shows **Florida's RSV regional season breakdown.** Regions that are currently in RSV season are marked with **orange stars**.

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 the last page of this report.

Florida's RSV season is longer than the rest of the nation and has distinct regional patterns. The Florida Department of Health established regional RSV seasons based on activity thresholds provided by the Centers for Disease Control and Prevention (see Figure 27). **Currently, all five of Florida's regions are in RSV season.**

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

Week 1 (December 30, 2018 —January 5, 2019) Activity Summary:

In week 1, RSV activity in children <5 years decreased and was similar to levels observed at this time in previous years.

No new outbreaks of RSV were reported in week 1. Six outbreaks of RSV have been reported so far this season.

No new possible RSV-associated pediatric deaths were identified in week 1. No possible RSV-associated pediatric deaths have been identified so far in 2019.

Figure 28: In week 1, **the percent of emergency department and urgent care center visits for RSV among children <5 years decreased** and was within levels observed at this time in previous years.

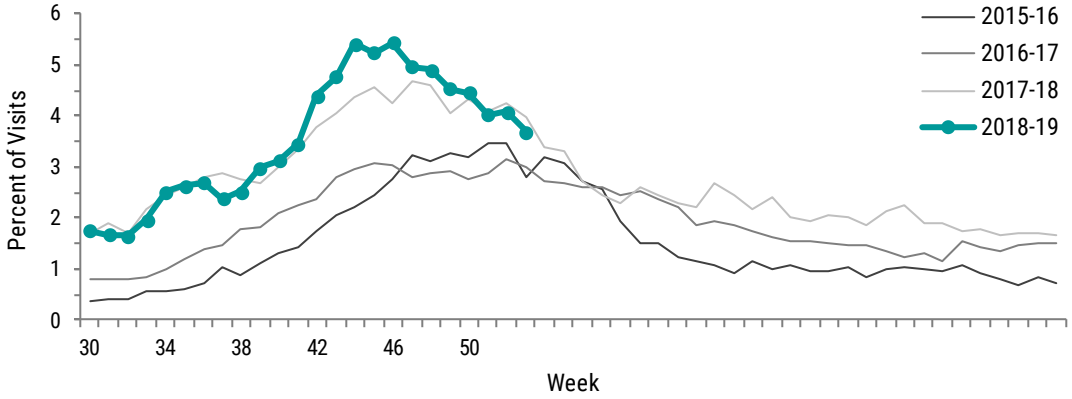


Figure 28 (to the left) shows **the percent of emergency department and urgent care center visits with discharge diagnoses that include respiratory syncytial virus (RSV) or RSV-associated illness among children <5 years***, as reported in ESSENCE-FL, week 30, 2015 to week 1, 2019.

*The overall trend displayed in Figure 28 has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.

RSV & Other Respiratory Virus Surveillance

Figure 29: In week 1, **the percent of specimens testing positive for RSV decreased** and was similar to levels observed at this time in 2017.

Figure 29 (to the right) shows **the percent of specimens testing positive for respiratory syncytial virus (RSV)**, as reported by hospital laboratories (n=7), week 30, 2015 to week 1, 2019.

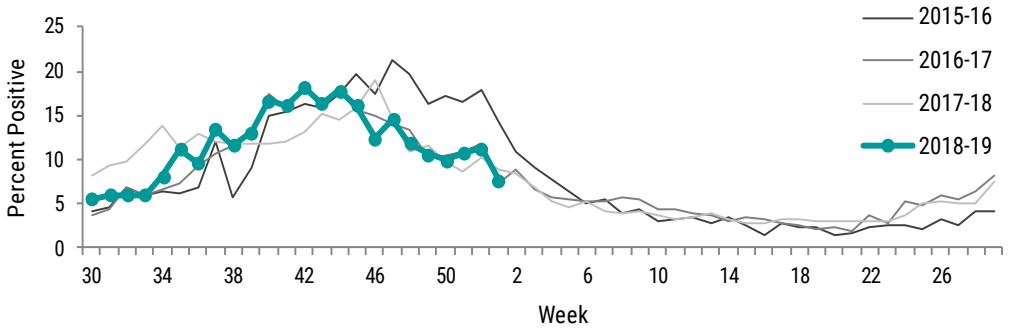


Figure 30: In recent weeks, the percent of specimens testing positive for **rhinovirus** or **influenza** decreased, but remained higher than other respiratory viruses under surveillance.

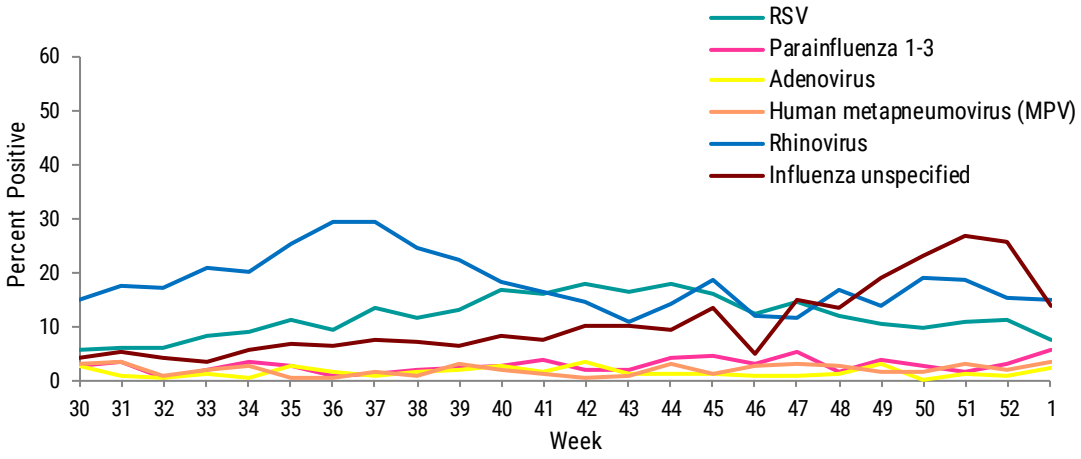
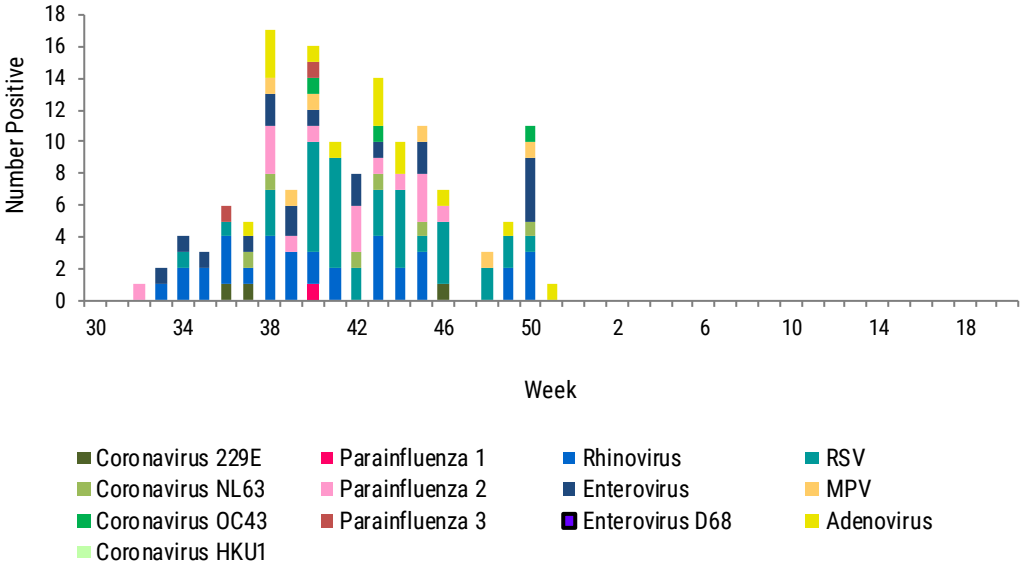


Figure 30 (to the left) shows **the percent of laboratory results testing positive for eight common respiratory viruses**, as reported by laboratories participating in the National Respiratory and Enteric Virus Surveillance System (NRVESS) and laboratories reporting validated respiratory virus data to the Florida Department of Health via electronic laboratory reporting (n=7), week 30, 2018 (beginning July 22, 2018) to week 1, 2019.

Figure 31: In recent weeks, **rhinovirus, enterovirus,** and **RSV** were the non-influenza respiratory viruses most commonly identified in specimens submitted by ARIES providers.

Figure 31 (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 52, 2018 (ending December 29, 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.



Summary of Outbreaks

Table 3: Summary of Influenza and Influenza-like Illness Outbreaks Reported in Week 1, 2019 by Setting

Setting	Number of Outbreaks (Percent of Outbreaks)	Implicated Viruses and Bacteria
Schools/camps	0 (0%)	No outbreaks
Child daycares	0 (0%)	No outbreaks
Adult daycares	0 (0%)	No outbreaks
Correctional facilities and juvenile detention centers	0 (0%)	No outbreaks
Nursing facilities	1 (100%)	1 influenza unspecified
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	1 (100%)	1 influenza unspecified

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 and Bacteria
Schools/camps	29 (47%)	12 influenza A unspecified 1 influenza A unspecified and influenza B unspecified 3 influenza unspecified 1 influenza unspecified and group A *Streptococcus* 1 group A *Streptococcus* 11 unknown etiology
Child daycares	16 (26%)	2 influenza A unspecified 3 influenza unspecified 5 respiratory syncytial virus (RSV) 1 human metapneumovirus (MPV) 5 unknown etiology
Adult daycares	2 (3%)	2 influenza A unspecified and influenza B unspecified
Correctional facilities and juvenile detention centers	2 (3%)	1 influenza B Yamagata lineage 1 unknown etiology
Nursing facilities	8 (13%)	3 influenza A unspecified 1 influenza unspecified 1 RSV 3 unknown etiology
Assisted living facilities	4 (6%)	1 influenza unspecified 3 unknown etiology
Other long-term care facilities	1 (2%)	1 influenza A unspecified
Hospitals	0 (0%)	No outbreaks
Shelters	0 (0%)	No outbreaks
Other settings	0 (0%)	No outbreaks
Total	62 (100%)	18 influenza A unspecified 3 influenza A unspecified and influenza B unspecified 1 influenza B Yamagata lineage 8 influenza unspecified 1 influenza unspecified and group A *Streptococcus* 1 group A *Streptococcus* 6 RSV 1 MPV 23 unknown etiology

Summary of Outbreaks

Summary of Notable Influenza and Influenza-like Illness (ILI) Outbreaks Reported in Week 1, 2019:

In week 1, 2019, there were no notable outbreaks of influenza or ILI reported.

Florida ILI Surveillance System Summary

ESSENCE-FL Syndromic Surveillance and Vital Statistics Portal Data source for figures 1, 4, 12-20, 23, 24, and 28

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=339) 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 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 5-7

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

Outbreak Reporting in Merlin Data source for figures 8, 9, 25, and 26; 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 Florida Department of Health does not count household clusters as outbreaks.

Bureau of Public Health Laboratories (BPHL) Data source for figure 10 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.

United States World Health Organization Collaborating Laboratories Influenza Virus Surveillance Data source for figure 11; 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.

Case-Based Influenza Surveillance Data source for figures 21 and 22

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 FloridaHealth.gov/DiseaseReporting.

Laboratory Viral Respiratory Surveillance Data source for figures 29 and 30

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.

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.