Week 1 influenza & influenza-like illness (ILI) activity summary:

During week 1, influenza and ILI activity remained at low levels across the state.

Influenza seasons vary in timing, severity, and duration. It is not possible to predict what the 2021–22 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. The flu vaccine may be given at the same time as the COVID-19 vaccine (www.cdc.gov/vaccines/pandemic-guidance/index.html).

During the last four weeks, the percent of influenza-positive laboratory results remained low but is increasing. The predominant strain for the 2021–22 influenza season is influenza A (H3). There was no predominant strain detected in Florida for the 2020–21 influenza season.

The percent of emergency department and urgent care center visits with discharge diagnoses that indicate influenza infection remained low in recent weeks but are increasing for the first time since March 2020.

No new influenza-associated pediatric deaths were reported in week 1.

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

The COVID-19 pandemic is affecting health care seeking behavior, which may be impacting the ILI and influenza activity trends shown in this report. An overall reduction in the number of emergency department and urgent care center visits has been observed since March 2020, along with changes in the reasons for seeking care at these facilities.

The Florida Department of Health will continue to make updates and provide clarification on the trends presented in this report as needed.
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 2021–22 season began in week 40 (starting on October 3, 2021) and will extend through week 20 (ending May 21, 2022). 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 last two pages of the report.
Figure 3: In week 1, the percent of emergency department visits with a discharge diagnosis of influenza statewide decreased and remained below the previous three-season activity for this time.

Figure 3 shows the percent of visits with discharge diagnoses that indicate influenza infection for facilities participating in ESSENCE-FL (n=309) statewide for the current season (week 40, 2021 to week 1, 2022) and the previous three seasons (2020–21, 2019–20, and 2018–19).**

Figure 4: In week 1, 58% of emergency department visits with a discharge diagnosis of influenza statewide were in those who have a reported race* of white, 24% of visits were in those who have a reported race of black or African American and 18% were in an unknown or other* racial category.

Figure 4 shows the statewide percent of visits with discharge diagnoses that indicate influenza infection by three racial categories for facilities participating in ESSENCE-FL (n=309) statewide for the current season (week 30, 2021 to week 1, 2022).**

*Other race includes visits with the following reported races: Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, multiracial, other, and unknown.

Data quality must be improved for more accurate visualization of smaller minority groups.

Figure 5: In week 1, 58% of emergency department visits with a discharge diagnosis of influenza statewide were in those who have a reported ethnicity† of not Hispanic or Latino, 28% of visits were in those who have a reported ethnicity of Hispanic or Latino, and 14% were in an unknown ethnicity.

Figure 5 shows the statewide percent of visits with discharge diagnoses that indicate influenza infection by ethnicity categories for facilities participating in ESSENCE-FL (n=309) statewide for the current season (week 30, 2021 to week 1, 2022).**

**Of note, influenza may not be laboratory-confirmed for all the visits included in this query.

†Race and ethnicity categories are mapped from data submitted by facilities participating in ESSENCE-FL. Individual facilities have varying practices for collecting and storing race and ethnicity values, which may impact the data displayed.
Statewide Activity: Influenza and Influenza-like-illness

Figure 6: In week 1, the percent of emergency department and urgent care center visits for ILI statewide decreased. Levels were greater than those observed at this time in previous seasons.

Figure 7: ILI has previously been used to represent influenza activity, but now is important to view in the context of diagnoses for common viral respiratory pathogens. In week 1, the number of visits with a discharge diagnosis of Coronavirus Disease 2019 (COVID-19) decreased along with visits with other viral respiratory related diagnoses (influenza, respiratory syncytial virus (RSV)).

Of note, these are not laboratory-confirmed disease visits and do not equal laboratory-confirmed COVID-19 cases in Florida. Data are incomplete and may change as additional data are received. Counts are not mutually exclusive, visits may be counted in one or more categories.

Figure 8: In week 51 (ending 12/25/21), the number of pneumonia and influenza deaths identified statewide decreased and was below levels observed at this time in previous seasons. Of note, the query used to capture these data excludes pneumonia associated with COVID-19 to better capture influenza death trends in Florida.

*For more information on the use of ESSENCE-FL for viral respiratory disease surveillance, see page 16.
**For more information on RSV surveillance, see page 12.
Statewide Activity: Influenza-like illness

Figure 9: In week 1, the percent of patients with ILI reported by ILINet providers statewide decreased and was above levels observed during previous seasons.

For ILINet, ILI is defined as a fever ≥100°F in conjunction with sore throat or cough. This definition was updated starting with the 2021–22 season which impacts comparisons between season.

Circulating Viral Respiratory Pathogens

Figure 10: In week 1, the percent of specimens testing positive for influenza unspecified increased slightly while parainfluenza 1–3, RSV, rhinovirus, adenovirus, and human metapneumovirus decreased when compared with previous weeks. This information may change as additional data are received.

Figure 10 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 (NREVSS) and laboratories reporting validated respiratory virus data to the Florida Department of Health via electronic laboratory reporting (n=4), week 30, 2021 to week 1, 2022.
Influenza and Influenza-like-illness Outbreaks

Week 1 Outbreaks at a Glance:

Number Reported: 0 Outbreaks
Influenza-Associated: 0 Outbreaks
Severe Outcomes*: 0 Outbreaks

Outbreak Summary:

Zero ILI and zero influenza-associated outbreaks were reported in week 1.
Severe outcomes* (hospitalizations or deaths) were reported in one outbreak reported so far this season.
During the previous season, minimal outbreaks were reported overall.

Figure 11 shows reported influenza or ILI outbreaks by county. Counties with outbreaks reported in week 1 are outlined in bold.

Figure 12: In week 1, zero outbreaks were reported in group settings.

Figure 13: As of week 1, 72.7% of outbreaks reported so far this season were influenza-associated.

Figure 13 shows the total number of outbreaks and the number of influenza-associated outbreaks as reported in Merlin by county health departments for the 2021–22 season as of week 1, 2022.
For more information on how ILI and influenza-associated outbreaks are defined, see page 16.

*Severe outcomes are defined as hospitalization or death among one or more outbreak cases.

**Total outbreaks includes the number of influenza-associated outbreaks in addition to outbreaks of ILI.
Outbreaks with COVID-19 identified: 0 Outbreaks

Summary of Outbreaks with Influenza and COVID-19 identified:
*Cocirculation is defined at the outbreak level. To meet criteria, during the outbreak period at least one person must test positive for influenza and at least one person must test positive for COVID-19, the disease caused by the virus SARS-CoV-2.

Figure 14: In week 1, no outbreaks were reported with influenza and SARS-CoV-2 cocirculating.

Figure 14 shows the number of influenza and COVID-19 associated outbreaks by week as reported in Merlin by county health departments, week 40, 2021 to week 1, 2022.

Table 1: Summary of Influenza or ILI Outbreaks Reported During the 2021–22 Season by Setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Number of Outbreaks (Percent of Outbreaks)</th>
<th>Number ILI or Influenza-Associated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary or secondary schools</td>
<td>2 (18%)</td>
<td>1 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 ILI outbreak</td>
</tr>
<tr>
<td>Child daycares</td>
<td>4 (36%)</td>
<td>2 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 ILI outbreak</td>
</tr>
<tr>
<td>Camps</td>
<td>0 (0.0%)</td>
<td>0 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Assisted living facilities</td>
<td>0 (0.0%)</td>
<td>0 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Nursing facilities</td>
<td>0 (0.0%)</td>
<td>0 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Other long-term care facilities</td>
<td>2 (18%)</td>
<td>2 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Post-secondary schools</td>
<td>2 (18%)</td>
<td>2 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Correctional facilities</td>
<td>0 (0.0%)</td>
<td>0 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Additional facility types</td>
<td>1 (9%)</td>
<td>1 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ILI outbreaks</td>
</tr>
<tr>
<td>Total</td>
<td>11 (100.0%)</td>
<td>8 influenza-associated outbreaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 ILI outbreaks</td>
</tr>
</tbody>
</table>
Laboratory Surveillance

Figure 15: In week 1, 1% of specimens tested were positive for influenza.

Figure 16: Since week 30, 2021 the majority of specimens tested positive for influenza A (H3). This is the predominant strain identified so far this season. During the previous influenza season (2020-2021), no predominant influenza subtype was detected due to low volume of positive results.

Figure 16 shows the number of influenza-positive laboratory results at the Bureau of Public Health Laboratories (BPHL) by lab-event date,* week 30, 2021 through week 1, 2022.

*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.
Figures 17–23 show the percent of emergency department visits with discharge diagnoses that indicate influenza infection at ESSENCE-FL participating facilities (n=309) for the current season from week 40, 2021 and the previous three seasons (2020–21, 2019–20, and 2018–19). Data are organized by region (see Figure 24).

Figure 17: In region 1, influenza activity decreased during week 1 and was within the previous three-seasons for this time.

Figure 18: In region 2, influenza activity decreased during week 1 and was within the previous three-seasons for this time.

Figure 19: In region 3, influenza activity decreased during week 1 and was within the previous three-seasons for this time.

Figure 20: In region 4, influenza activity decreased during week 1 and was within the previous three-seasons for this time.

Figure 21: In region 5, influenza activity decreased during week 1 and was within the previous three-seasons for this time.

Figure 22: In region 6, influenza activity decreased during week 1 and was within the previous three-seasons for this time.

Figure 23: In region 7, influenza activity slightly decreased during week 1 and was within the previous three-seasons for this time.

Figure 24 shows emergency departments and free-standing emergency departments and reporting data to ESSENCE-FL (n=310) with regions outlined in bold.
At-Risk Populations

Children Aged <18 Years

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 Centers for Disease Control and Prevention continues to recommend influenza vaccination as long as flu viruses are circulating. To find a flu shot near you, please visit: VaccineFinder.org.

Figure 25: In week 1, the percent of emergency department visits with a discharge diagnosis of influenza in children <18 years decreased and was within the previous three-season average for this time.

- Figure 25 shows the percent visits with discharge diagnoses that indicate influenza infection among children <18 years at emergency departments, as reported into ESSENCE-FL, for the current season (week 40, 2021 to week 1, 2022) and the previous three seasons (2020–21, 2019–20, and 2018–19).

Figures 26–27: In week 1, no new influenza-associated pediatric deaths were reported. No influenza-associated pediatric deaths have been reported so far this season.

- Figure 26 shows the number of influenza-associated pediatric deaths as reported in Merlin by vaccination status, week 40, 2018 to week 1, 2022.

- Figure 27 shows the number of influenza-associated pediatric deaths as reported in Merlin by medical history, week 40, 2018 to week 1, 2022.

*The Advisory Committee on Immunization Practices (ACIP) recommends children aged six months to eight years receive two doses of influenza vaccine administered a minimum of four weeks apart during their first season of vaccination for optimal protection. The Florida Department of Health includes children in this age group who did not receive a second influenza vaccine in this unvaccinated category. To learn more about the ACIP’s 2021–22 recommendations, please visit: www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm
At-Risk Populations Continued

Pregnant People

Influenza is five times more likely to cause severe illness in pregnant people (even those who are generally healthy) compared to those who are not pregnant. Pregnant people 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 people and their babies, and are recommended at any time during pregnancy. Vaccination during pregnancy provides antibody protection to infants too young to be vaccinated for influenza and has been shown to protect pregnant people from influenza-associated hospitalization and preterm birth. For more information, talk to your health care provider.

Figure 28: In week 1, the number of emergency department visits for influenza among pregnant people decreased and was within levels observed at this time during previous seasons.

*This count underrepresents the true number of pregnant people 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.

Adults Aged ≥65 Years

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 29: In week 1, the percent of emergency department visits with a discharge diagnosis of influenza in adults ≥65 years decreased and was within the previous three-season average for this time.
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.

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 pre-approval 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 30). Currently, all of Florida’s five regions are in RSV season.

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

Week 1 (January 2, 2022–January 8, 2022) Activity Summary

In week 1, RSV activity in children <5 years decreased and was below levels observed at this time during typical seasonal activity.

No new RSV-associated outbreaks were reported in week 1. A total of 6 RSV-associated outbreaks have been reported since week 30, 2021 (beginning on July 25, 2021).

Figure 31: In week 1, the percent of emergency department visits for RSV among children <5 years decreased and was below levels observed at this time during typical seasonal activity.

*The overall trend displayed in Figure 31 has been validated through review of hospital discharge data collected by the Agency for Health Care Administration.
RSV Surveillance

Figure 32: In week 1, the percent of specimens testing positive for RSV remained stable. Levels were below those observed at this time during typical seasonal activity.

Figure 32 shows the percent of specimens testing positive for respiratory syncytial virus (RSV), as reported by hospital laboratories (n=4), week 30, 2018 to week 1, 2022.

Summary of RSV-Associated Outbreaks:
Since week 30, 2021, 6 RSV-associated outbreaks have been reported. For RSV outbreak definitions, see page 16.

RSV-Associated Outbreaks in Week 1:

0 Outbreaks

Figure 33: In week 1, no new RSV-associated outbreaks were reported. The majority of outbreaks reported since week 30 have been reported in facilities serving children.

Figure 33 shows the number of RSV-associated outbreaks by setting and week as reported by county health departments in Merlin, week 30, 2021 to week 1, 2022.

Figure 34: In week 1, no RSV-associated outbreaks were reported. Since week 30, 6 outbreaks have been reported in Florida’s southeast, central, and north regions.*

Figure 34 shows a summary of RSV-associated outbreaks by region* as reported by county health departments in Merlin, week 30, 2021 to week 1, 2022.

*Regions defined in figure 30.
Other Respiratory Virus Surveillance

Figure 35 shows the number of unique times a pathogen was associated with a respiratory outbreak for outbreaks reported from week 30, 2021 to week 1, 2022.

*Figure 36* shows the number of PCR-positive laboratory findings for enterovirus unspecified, enterovirus D68, and rhinovirus by week** among specimens submitted to the Bureau of Public Health Laboratories (BPHL) for extended respiratory panel testing.

*Figure 37* shows the number of PCR-positive laboratory findings for parainfluenza 1-3 by week** among specimens submitted to BPHL for extended respiratory panel testing.

*Figure 38* shows the number of PCR-positive laboratory findings for seasonal coronaviruses NL63, HKU1, OC43, and 229E by week** among specimens submitted to BPHL for extended respiratory panel testing.

*Figure 39* shows the number of PCR-positive laboratory findings for human metapneumovirus and adenovirus by week** among specimens submitted to BPHL for extended respiratory panel testing.

*Data shown in figures 36–39 include results for specimens submitted by Optional Influenza Surveillance Enhancements Program (OISE) providers (n=4) as reported by BPHL.

**Results are organized by week based on “lab event date” (defined as the earliest of the following dates associated with testing at the laboratory: date specimen collected, date received by the laboratory, date reported or date inserted).
### Table 2: Summary of Notable* Influenza-Associated, Respiratory Syncytial Virus (RSV)-Associated and Influenza-like Illness (ILI) Outbreaks Reported in Week 1, 2022

<table>
<thead>
<tr>
<th>Setting</th>
<th>County</th>
<th>Number of Cases</th>
<th>Number of Cases Died</th>
<th>Number of Cases Hospitalized</th>
<th>Outbreak Etiology</th>
<th>Estimated Percent Vaccinated for Influenza</th>
<th>Investigation Status</th>
</tr>
</thead>
</table>

No notable outbreaks were reported in week 1, 2022.

*For the purposes of this report, notable outbreaks are defined as influenza-associated, RSV-associated or ILI outbreaks with one or more deaths, or 30 or more cases. Outbreaks with COVID-19 identified as an additional etiology to influenza or RSV will also be included here. For more information on how outbreaks are defined, see page 16.
Outbreak Reporting in Merlin

Outbreak investigations are tracked in Merlin (Florida's reportable disease surveillance system) by investigating CHDs. Outbreak reports include implicated viruses or bacteria, the outbreak setting and recommendations made to mitigate the spread of disease (among other data elements). All outbreak data are considered preliminary and subject to change. As such, outbreak counts may increase or decrease as additional information is received.

- ILI outbreaks in facilities serving adults aged ≥65 years (assisted living facilities, nursing facilities and long-term care facilities) are defined as two or more individuals with ILI (fever and cough or fever and sore throat in the absence of positive laboratory results). ILI outbreaks in facilities serving children (primary/secondary schools and child daycares) are defined as three or more epidemiologically linked individuals with ILI.
- Influenza-associated outbreaks in facilities serving adults aged ≥65 years are defined as two or more individuals with respiratory symptoms, where at least one individual tests positive for influenza. Influenza-associated outbreaks in facilities serving children are defined as three or more epidemiologically linked individuals with respiratory symptoms, where at least one individual tests positive for influenza. Testing may be conducted by the Bureau of Public Health Laboratories (BPHL), commercial laboratories, hospitals or private health care providers.
- RSV-associated outbreaks in facilities serving adults aged ≥65 years are defined as two or more individuals with respiratory symptoms, where at least one individual tests positive for RSV. RSV-associated outbreaks in facilities serving children are defined as three or more epidemiologically linked individuals with respiratory symptoms, where at least one individual tests positive for RSV. Testing may be conducted by BPHL, commercial laboratories, hospitals or private health care providers.
- Notable outbreaks include influenza-associated, RSV-associated or ILI outbreaks in any setting with 30 or more cases, or one or more cases who died. Outbreaks with COVID-19 identified as an additional etiology to influenza or RSV are also included as notable.
- Household clusters are not counted as outbreaks.

Continued on next page.

BPHL performs testing and subtyping on surveillance specimens from sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations and medical examiners. Sentinel providers include both ILINet and Acute Respiratory Infection Epidemiology and Surveillance Program (ARIES) providers. Some laboratories also routinely submit pre-screened influenza-positive specimens for testing at BPHL for surveillance purposes.

**Case-Based Influenza Surveillance** Data source for figures 26 and 27

Death in a child whose laboratory-confirmed influenza infection has been identified as a contributing to the child’s death is a reportable condition in Florida. Influenza-associated pediatric deaths are documented by CHDs in Merlin.

In addition, an individual of any age suspected as being infected with non-seasonal or pandemic influenza A is reportable condition in Florida. Such cases are referred to as cases of ‘novel influenza A.’ Novel influenza A cases are documented by CHDs in Merlin.

For more information about reportable diseases and conditions, please visit FloridaHealth.gov/DiseaseReporting.