

# Florida Flu Review

Season: 2022-23

Week 52: December 25, 2022–December 31, 2022

Data are provisional and subject to change

## Flu season information

**Influenza (flu)** is a respiratory infection caused by a variety of flu viruses spread primarily by droplets made when infected people cough, sneeze, or talk. Less often, a person might become infected with flu by touching a surface or object contaminated with flu virus and then touching their own mouth, eyes, or nose. **Influenza-like-illness (ILI)** is defined as the presence of fever and cough or fever and sore throat without a laboratory-confirmed etiology.

### Season

The flu reporting year uses standard reporting weeks outlined by the Centers for Disease Control and Prevention (CDC), where every year has 52 or 53 reporting weeks. In Florida, the 2022–23 flu year began October 2, 2022 (week 40). Though flu season ends May 20, 2023 (week 20), surveillance continues year round. Seasons vary in timing, severity, and duration. It is not possible to predict what the 2022–23 flu season will be like in Florida.

### Surveillance and investigation

Surveillance is conducted to detect changes in the flu virus 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 flu, detect outbreaks and determine the onset, peak, and wane of the flu season to assist with prevention, particularly in high-risk populations like the very young, adults aged  $\geq 65$  years, and pregnant people.

Individual cases are not reportable in Florida with the exception of novel flu A (a new subtype of flu A) and flu-associated pediatric deaths. All outbreaks are reportable in Florida.

The Florida Department of Health will continue to make updates on the trends presented in this report as needed.

Annual vaccination is the best way to protect yourself and others from potentially severe complications from flu. Flu shots take up to two weeks to become fully effective, so it's important to get vaccinated as soon as possible to reduce your chances of getting the flu this season. To locate a vaccine near you, visit: [VaccineFinder.org](https://www.vaccinefinder.org).

CDC recommends antiviral treatment be initiated as soon as possible for people with confirmed or suspected flu who are at higher risk for complications (children  $< 2$  years, adults  $\geq 65$  years, pregnant people, and people with underlying medical conditions). Treatment should be administered within 48 hours of illness onset. For more information, contact your health care provider.

Current predominant strain

**Influenza A H3**

Flu positivity rate

**decreasing**

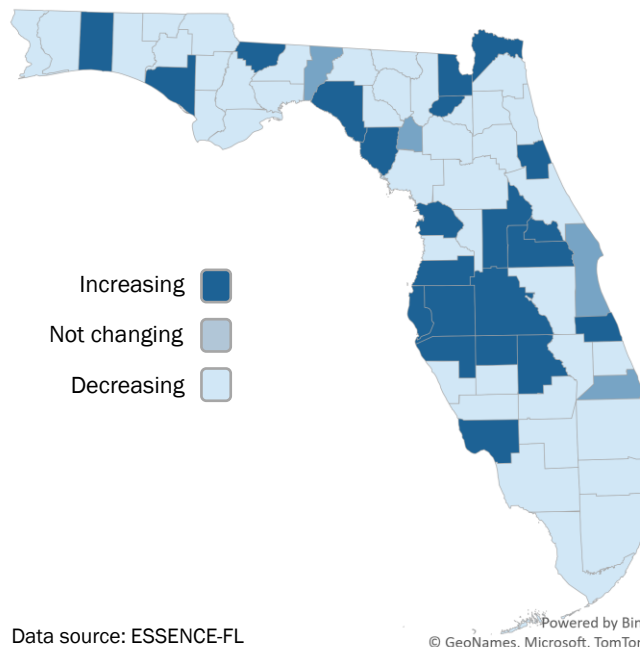
Flu emergency department visits

**Decreasing**

Outbreaks in the current week

**2**

## County flu and ILI activity trend

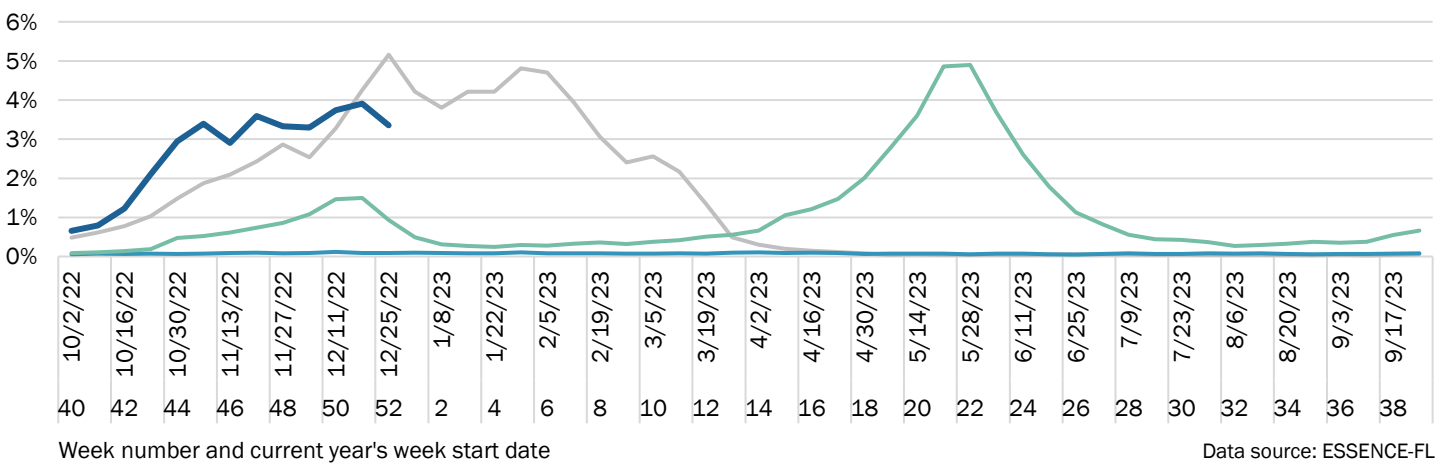


# Influenza (flu) and influenza-like illness (ILI) surveillance

Figures below show flu and ILI visit data from emergency departments (EDs) participating in ESSENCE-FL and ILI patient data from ILINet providers statewide for the current year and the previous 3 years. Data is calculated based on comparison of the current year's week visit percentage to the previous 3-week average.

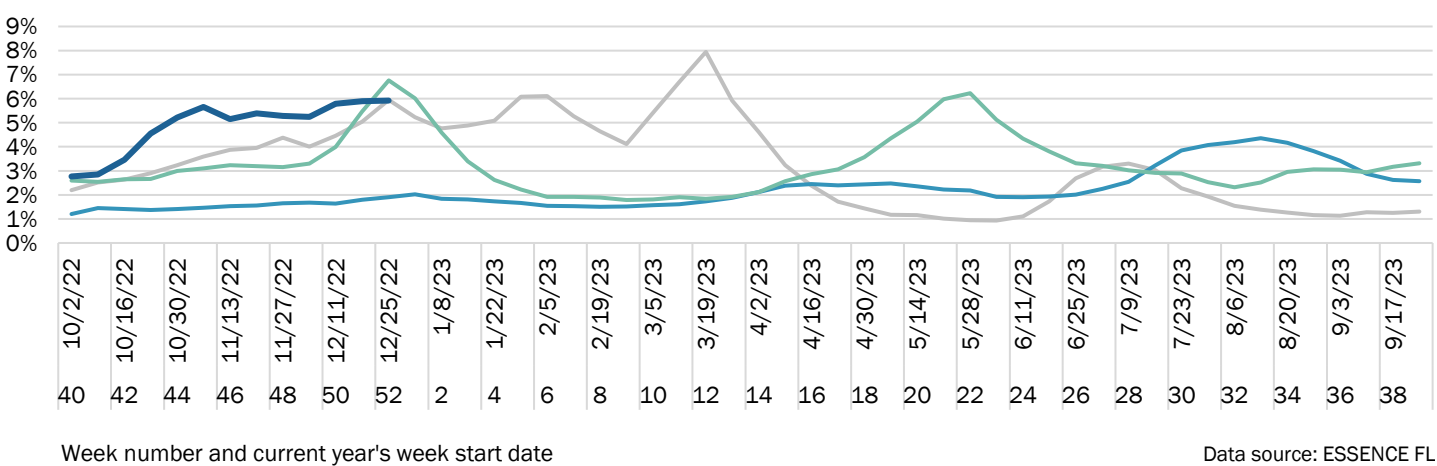
2019-20      2020-21      2021-22      2022-23

**Figure 1:** Percent of ED visits with discharge diagnoses of flu decreased from previous 3-week average



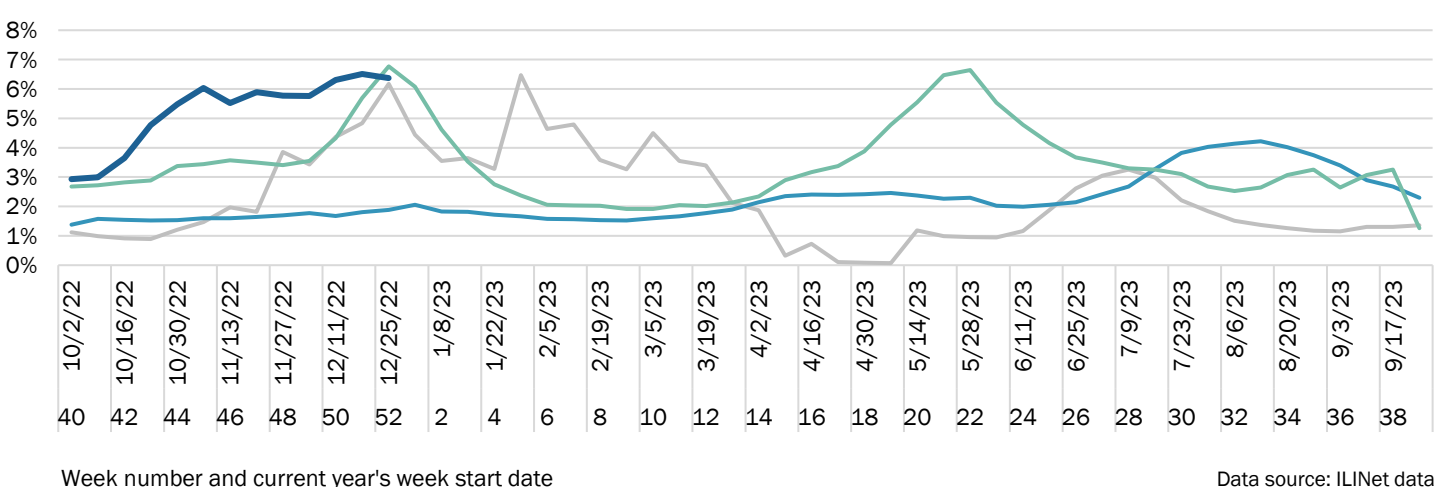
Data source: ESSENCE-FL

**Figure 2:** Percent of ED visits with chief complaints of ILI increased from previous 3-week average



Data source: ESSENCE FL

**Figure 3:** Percent of patients with ILI reported by ILINet providers increased from previous 3-week average

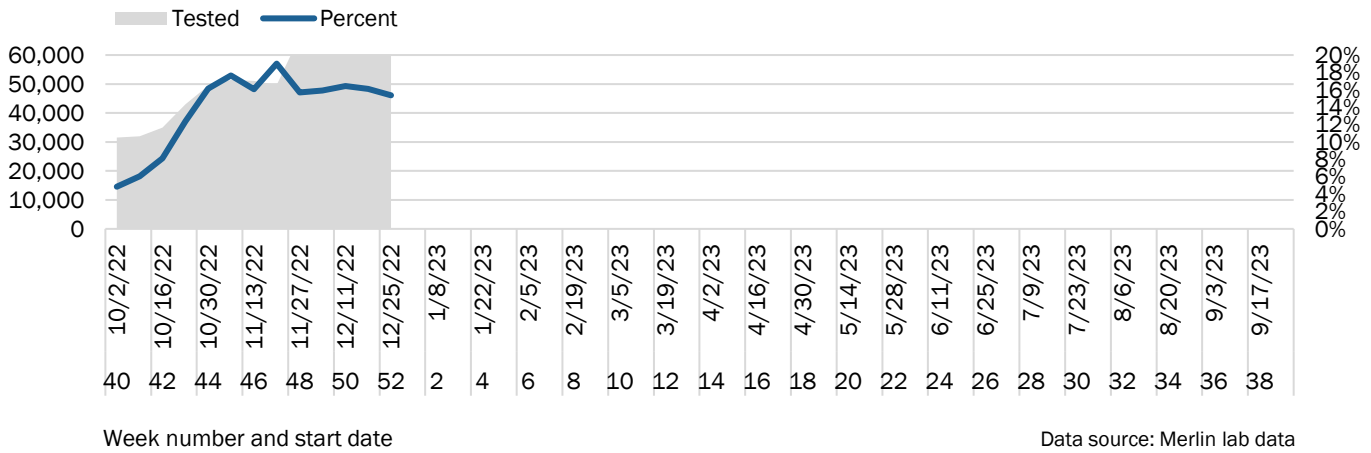


Data source: ILINet data

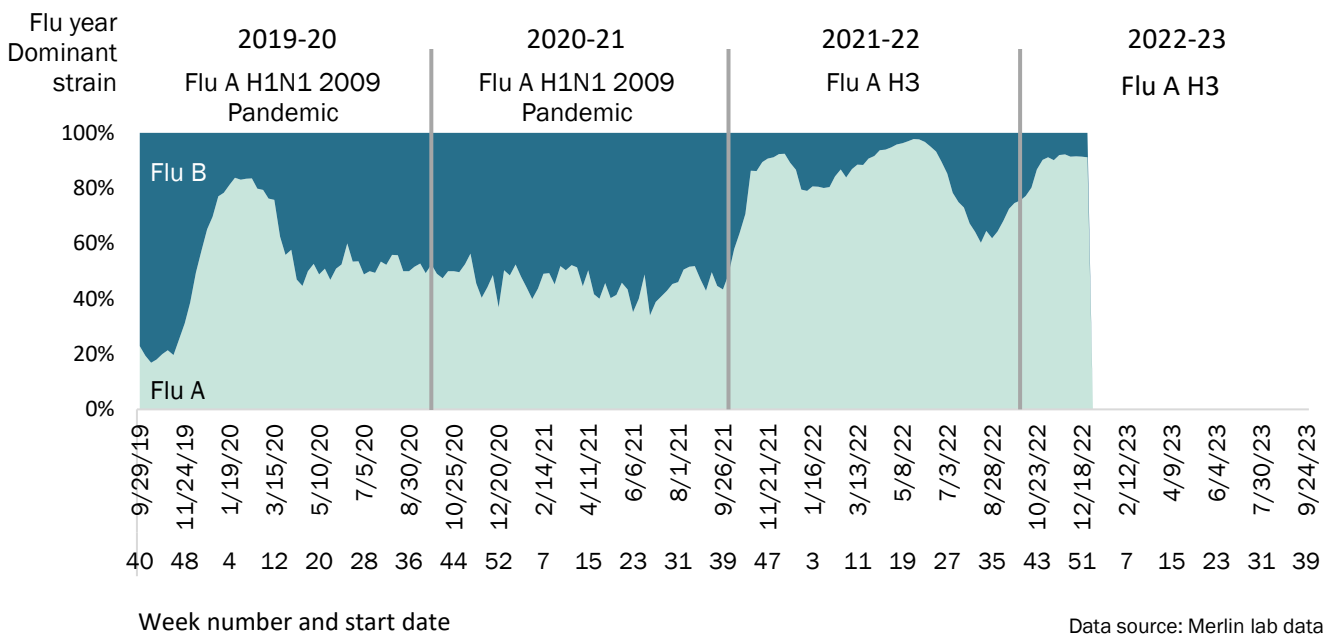
# Influenza (flu) laboratory surveillance

**Figure 6:** Number of specimens tested and percent positive for flu for the current flu year

The most recent weeks may be incomplete since data are aggregated by the earliest date associated with the lab result.



**Figure 7:** Distribution of flu A and B for the current flu year and the previous 3 years



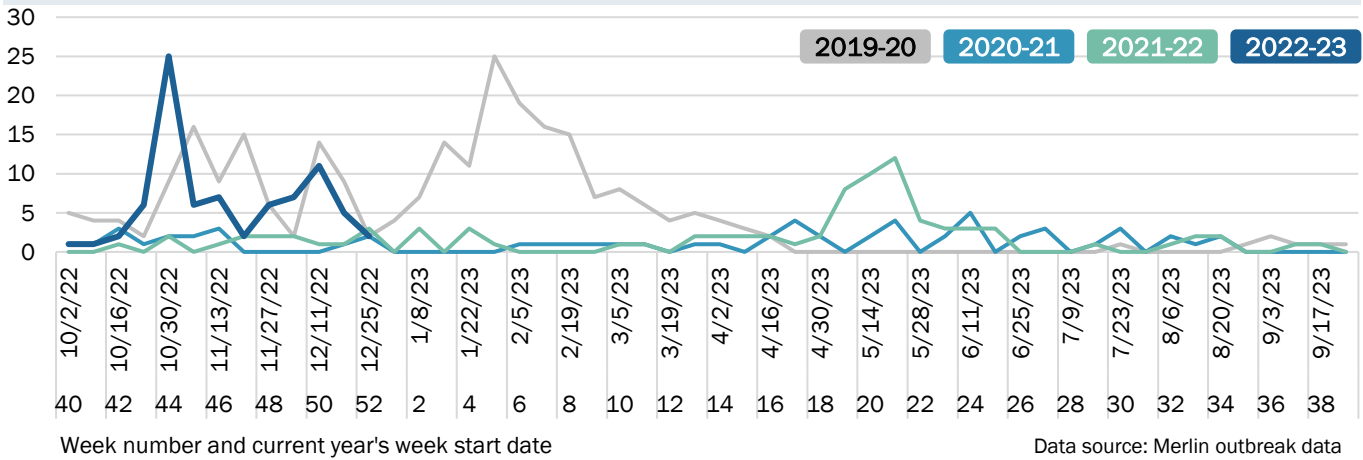
**Figure 8:** Distribution of subtypes and lineages for the current flu year and the previous 3 years

	2019-20	2020-21	2021-22	2022-23
Flu A H3	245	11	13,043	5745
Flu A H1N1 2009 Pandemic	3,180	44	273	2524
Flu A H1	590	1	17	188
Flu B Victoria	176	2	0	8
Flu B Yamagata	8	2	0	1

# Influenza (flu) and influenza-like-illness (ILI) outbreaks

The COVID-19 pandemic has impacted the number of outbreaks. Very few flu and ILI outbreaks were reported in 2020-21, and the number of outbreaks in 2021-22 remained lower than during previous years.

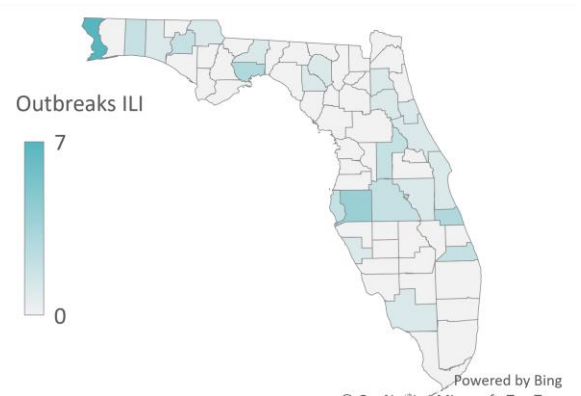
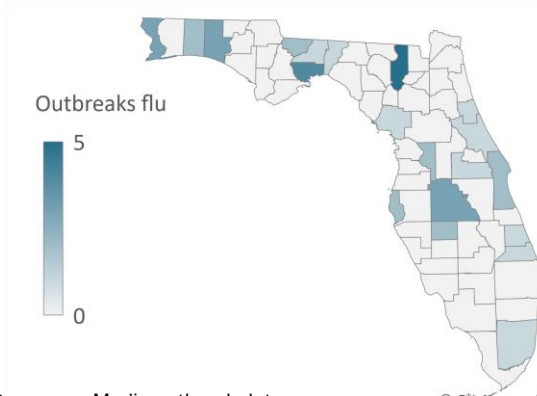
**Figure 7:** Flu and ILI outbreaks during the current flu year and previous 3 years



**Figure 8:** Number of flu and ILI outbreaks during the current flu year by county

**Flu:** 1 new outbreak in the current week

**ILI:** 1 new outbreak in the current week

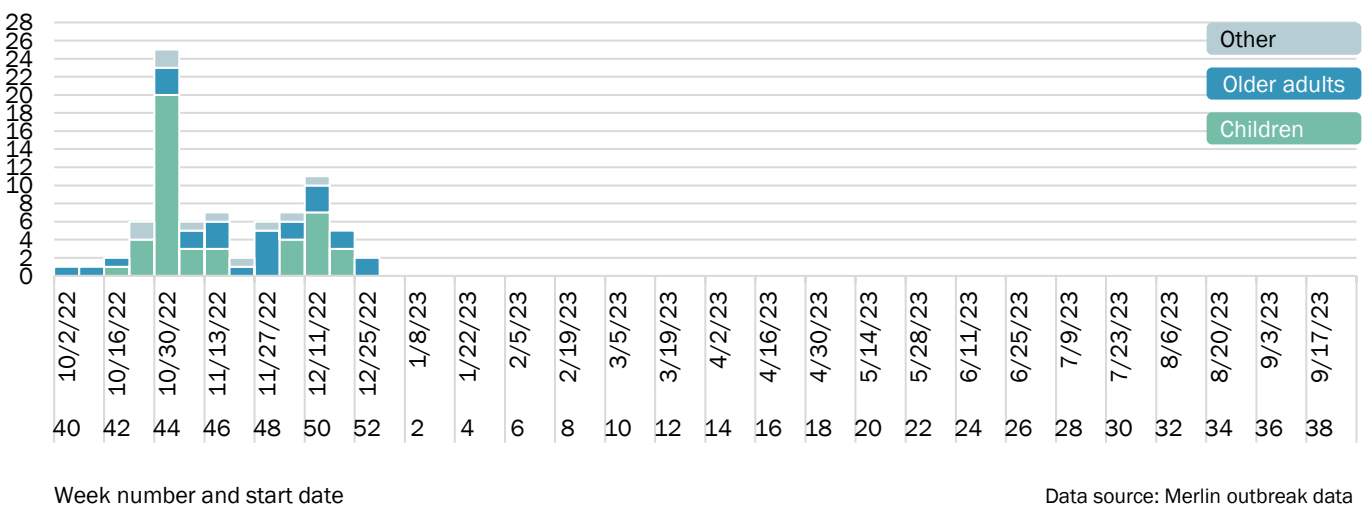


Data source: Merlin outbreak data

© GeoNames, Microsoft, TomTom

© GeoNames, Microsoft, TomTom

**Figure 9:** Number of flu and ILI outbreaks by facility's primary age group served for the current flu year



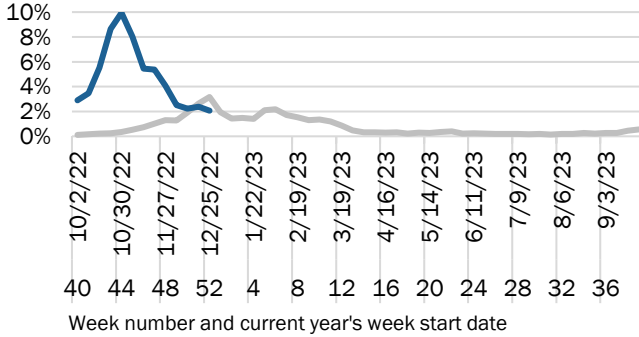
# Regional influenza (flu) activity

Figures below show the percent of emergency department (ED) visits with a discharge diagnosis of flu for facilities participating in ESSENCE-FL by region for the current flu year and the previous 3-year average.

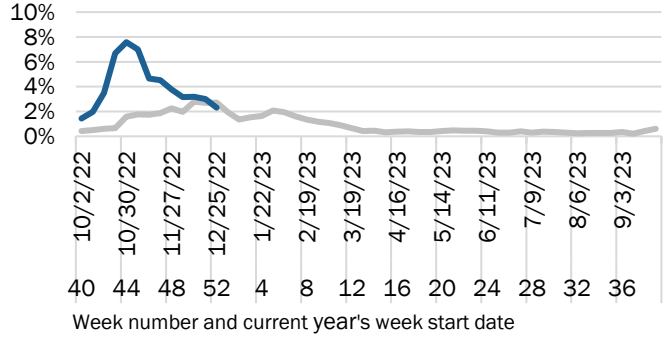
Previous 3-year average

2022-23

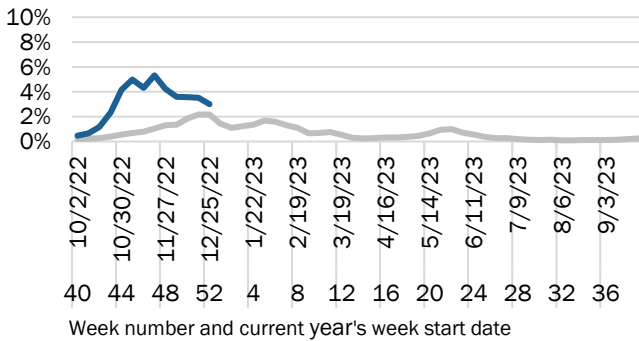
**Figure 11:** ED visits in northwest region 1 decreased



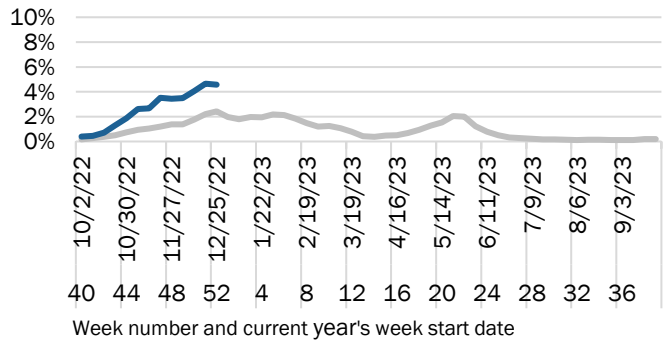
**Figure 12:** ED visits in north central region 2 decreased



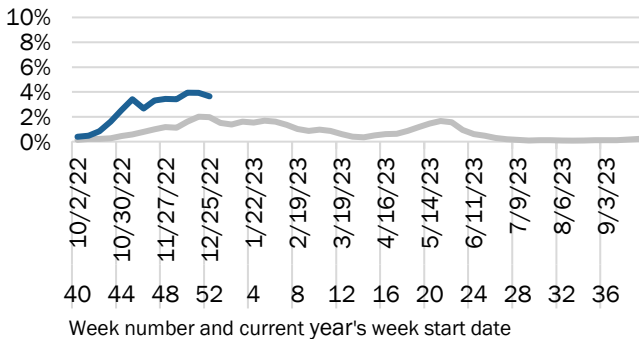
**Figure 13:** ED visits in northeast region 3 decreased



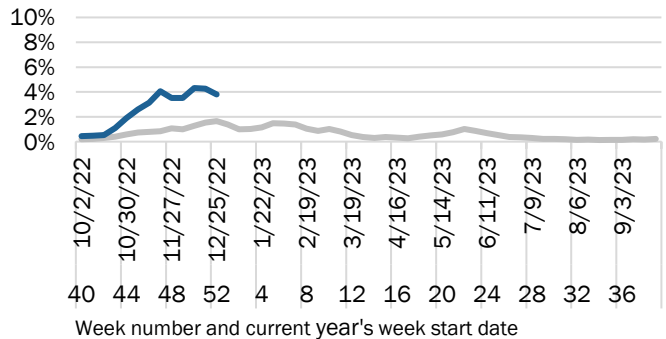
**Figure 14:** ED visits in central west region 4 increased



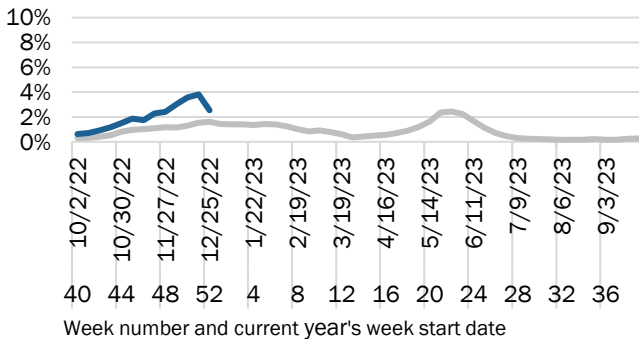
**Figure 15:** ED visits in central east region 5 didn't change



**Figure 16:** ED visits in southwest region 6 decreased



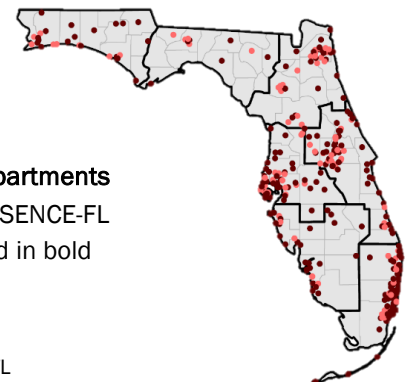
**Figure 17:** ED visits in southeast region 7 decreased



**Figure 18:**

**317 emergency departments** reporting data to ESSENCE-FL with regions outlined in bold

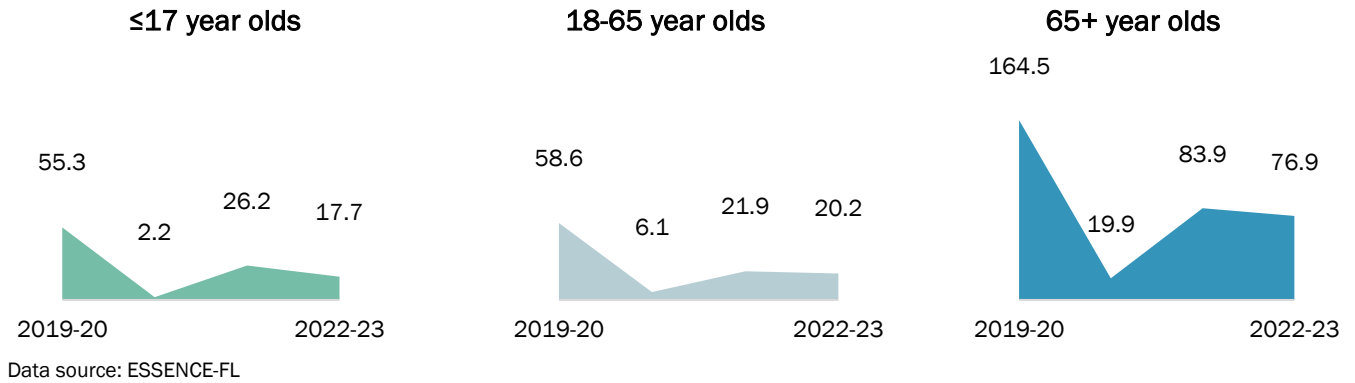
Data source: ESSENCE-FL



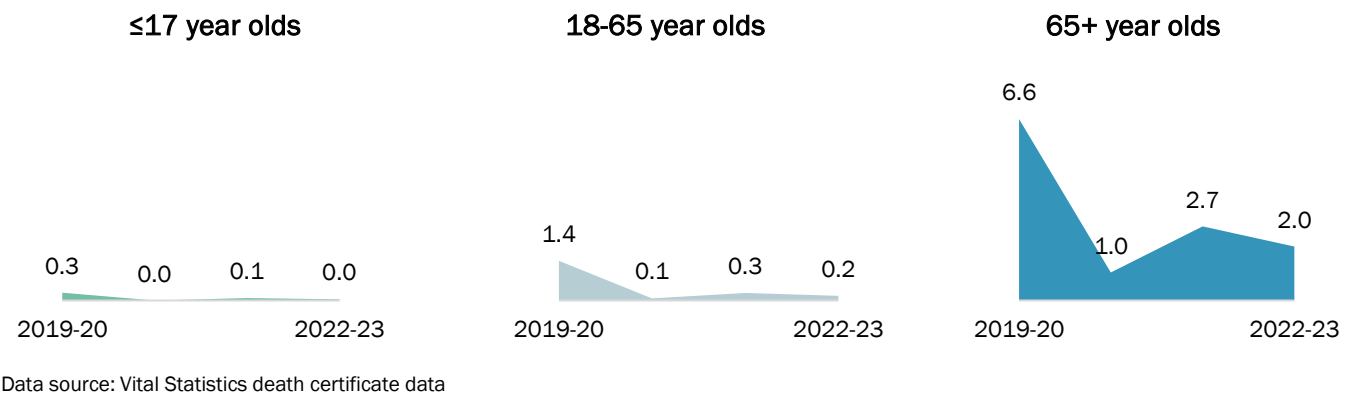
# Outcomes of influenza (flu)

Data for the current flu year includes hospitalizations and deaths since week 40, 2022 (October 2, 2022). Previous years include the full year of data.

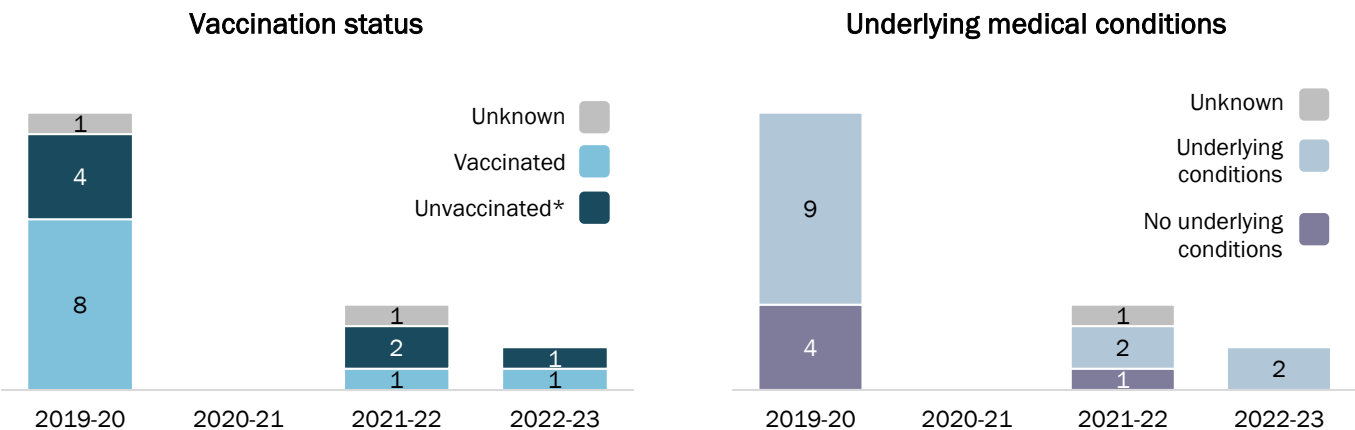
**Figure 19:** Hospital admissions with flu diagnoses per 100,000 population for current flu year and previous 3 years by age group



**Figure 20:** Deaths per 100,000 population for current flu year and previous 3 years by age group



**Figure 21:** Pediatric flu-associated deaths by vaccination status and underlying health conditions for the current flu year and previous 3 years



Data source: Merlin case data for pediatric flu-associated deaths

## Data source notes

All data are preliminary and subject to change.

### ESSENCE-FL

Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL) evaluates trends in influenza and flu-related visits from emergency departments (EDs), free-standing emergency departments (FSEDs), and urgent care centers (UCCs). Facilities are continually onboarded in ESSENCE-FL, meaning the denominator updates with the most available data by flu year. This report includes only patients residing in Florida.

**Discharge diagnoses of flu:** people visiting participating EDs and FSEDs who have a discharge diagnosis of influenza (with exclusions for vaccination, parainfluenza, and *Haemophilus influenzae*). Florida developed the query. This is presented in the report as a percentage of all visits to participating EDs and FSEDs for the week.

**Chief complaints of influenza-like illness (ILI):** people visiting participating EDs and FSEDs whose chief complaints include the words “influenza” or “flu.” The query also searches for key words such as “fever” and (“cough” or “sore throat”). ILI is a defined syndrome within ESSENCE-FL. Report figures are a percentage of all visits to participating EDs and FSEDs for the week.

**Hospital admissions with flu diagnoses:** people who were hospitalized with a discharge diagnosis of influenza (with exclusions for vaccination, parainfluenza, and *Haemophilus influenzae*). Florida developed the query. Only data from EDs are included in these figures. Report figures use a rate per 100,000 population.

### U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

ILINet is a nationwide surveillance system composed of sentinel providers, predominately outpatient health care providers. In Florida, the majority of our sentinel providers are hospital facilities and EDs/FSEDs. Sentinel providers enrolled in ILINet submit weekly ILI and total visit counts, in addition to submitting ILI specimens to the Bureau of Public Health Laboratories (BPHL) for virologic surveillance. Health care providers that are interested in enrolling in ILINet, contact your local county health department: <https://www.floridahealth.gov/all-county-locations.html>.

### Merlin lab data

All flu results, including positive and negative, are reportable in Florida for all laboratories participating in electronic laboratory reporting. While many laboratories can distinguish between flu A and flu B, further subtyping is done primarily by BPHL. BPHL performs testing and subtyping on surveillance specimens from sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations, and medical examiners. Since only positive results are subtyped, only a small proportion of lab results are subtype results. Some laboratories also routinely submit pre-screened influenza-positive specimens for testing at BPHL for surveillance purposes.

### Merlin outbreak data

Flu and ILI outbreaks are reportable in Florida. Reported outbreaks are investigated and documented in Merlin by local county health departments to track activity throughout the year compared to previous years.

**ILI outbreaks** are defined by setting type using the ILI symptom definition: either fever and cough or fever and sore throat without an established etiology. Definitions by setting type include:

**Facilities serving adults ≥65 years** (long-term care facilities, assisted living facilities, and nursing homes): ≥2 ill individuals with ILI symptoms within 72 hours, in the absence of positive laboratory results.

**Facilities serving children** (primary/secondary schools and daycares): ≥3 ill individuals with ILI symptoms within 72 hours who are epidemiologically linked (see below for definition), in the absence of positive laboratory results.

**Other settings:** ≥2 ill individuals with ILI symptoms within 72 hours, in the absence of positive laboratory results.

## Data source notes

**Flu outbreaks** are defined by setting type with at least one individual testing positive for influenza. Definitions by setting type include:

**Facilities serving adults ≥65 years** (long-term care facilities, assisted living facilities, and nursing homes): ≥2 ill individuals with ILI symptoms within 72 hours, where ≥1 individual tests positive for influenza.

**Facilities serving children** (primary/secondary schools and daycares): ≥3 ill individuals with ILI symptoms within 72 hours who are epidemiologically linked (see below for definition), where ≥1 individual tests positive for influenza.

**Other settings:** ≥2 ill individuals with ILI symptoms within 72 hours, where ≥1 individual tests positive for influenza.

Household clusters are not counted as outbreaks.

**Epidemiological linkage:** individuals were present in the setting during the same time period (e.g., same classroom) and there is not a more likely source of exposure for identified cases (e.g., same household).

### Merlin case data for pediatric flu-associated deaths

Flu-associated pediatric deaths are reportable in Florida and are defined as a child <18 years old with clinically compatible symptoms and a laboratory-confirmed flu infection identified as a contributing to the child's death is a reportable condition in Florida. Deaths are aggregated by date of death.

The Advisory Committee on Immunization Practices (ACIP) recommends children aged 6 months to 8 years receive 2 doses of flu vaccine administered a minimum of 4 weeks apart during their first season of vaccination for optimal protection. The Florida Department of Health considers children in this age group who did not receive a second flu vaccine to be unvaccinated. To learn more about the ACIP's 2022–23 recommendations, please visit: [www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm](http://www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm).

### Vital Statistics death certificate

Death certificate data are queried for the terms “influenza”, “H1N1”, and ICD9/ICD10 codes J09, J10, J11. Deaths with any of these terms are excluded: “coronavirus”, “COVID”, “SARS”, “aspir”, “pneumonitis”, “parainfluenza”, “influenzae”, and ICD9/ICD10 codes “U07.1” and “U071”. Deaths are aggregated by date of death. Prior to the 2021-22 year, they were aggregated by date of notification of death. Report figures use a rate per 100,000 population.

### Flu and ILI activity trends

The following criteria are used to assess trend for flu and ILI emergency department visits and lab positivity.

**Increasing:** current week is >0.001 higher than the previous 3-week average (i.e., 0.1%)

**Decreasing:** current week is >0.001 lower than the previous 3-week average

**No change:** current week is within +/-0.001 of the previous 3-week average