Florida Flu Review

Season: 2022-23

Week 35: August 27, 2023–September 2, 2023

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 ≥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.

Current predominant strain	Flu positivity rate
Influenza A H1N1 2009 Pandemic	**Increased**

Flu emergency department visits	Outbreaks in the current week*
Increased	**0**

No counties with outbreaks in current week

County flu and ILI activity trend

Increasing
Not changing
Decreasing
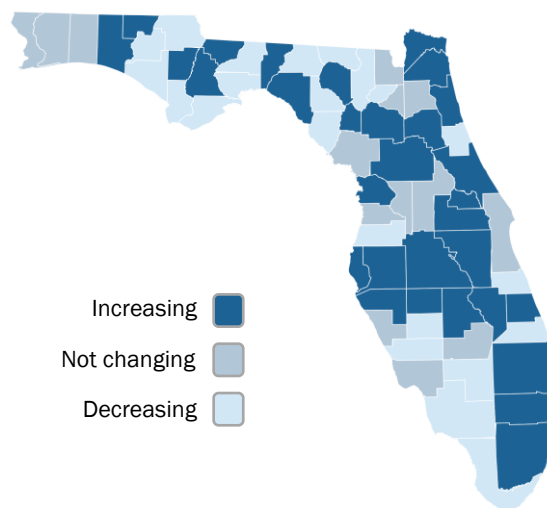
Data source: ESSENCE-FL

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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 find a flu vaccine near you, visit: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 ≥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.

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 increased from previous 3-week average
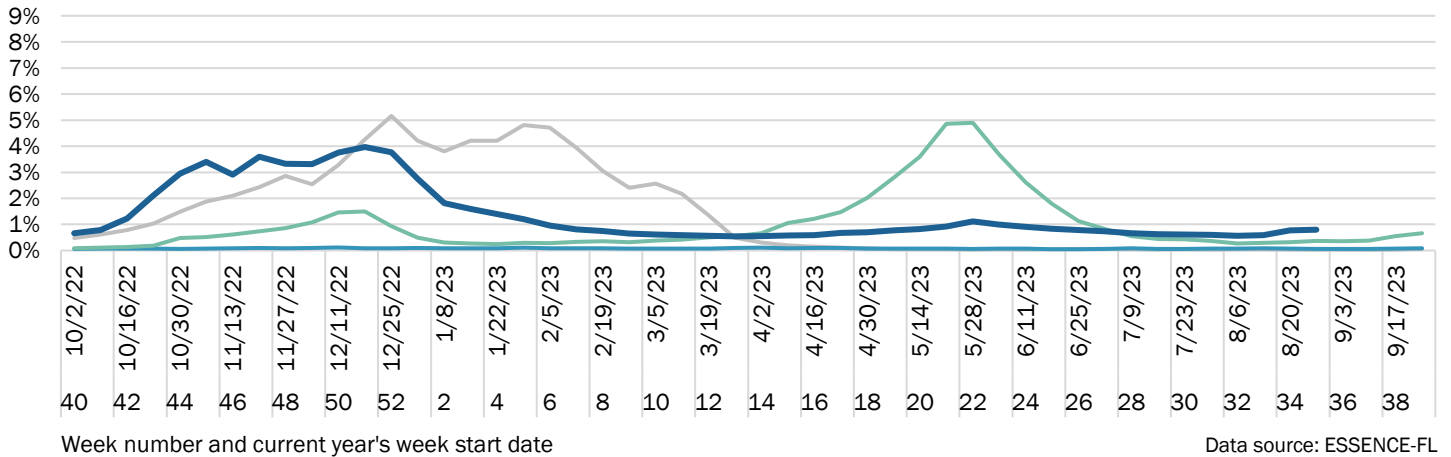

Week number and current year's week start date

Data source: ESSENCE-FL

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

Week number and current year's week start date

Data source: ESSENCE FL
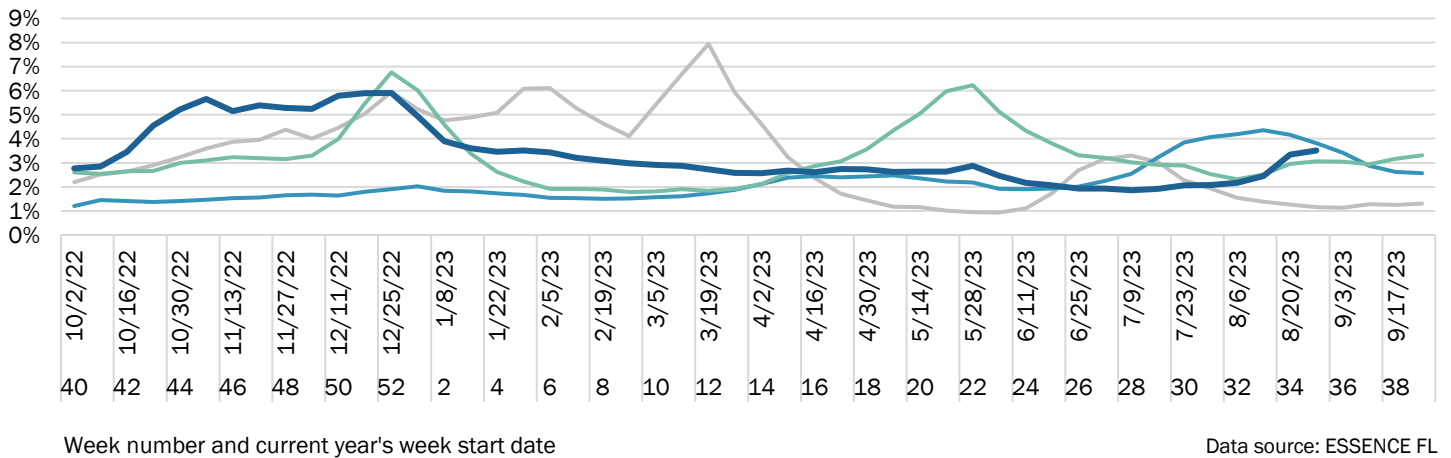
Figure 3: Percent of patients with ILI reported by ILINet providers increased from previous 3-week average

Week number and current year's week start date

Data source: ILINet data
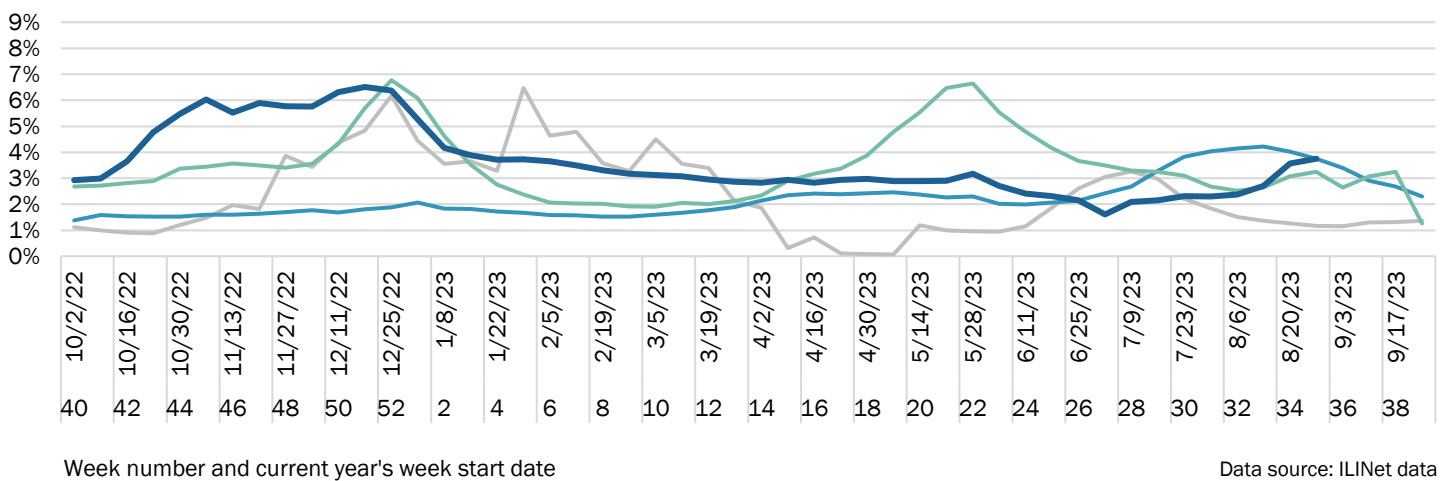
Influenza (flu) laboratory surveillance

Figure 4: 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.
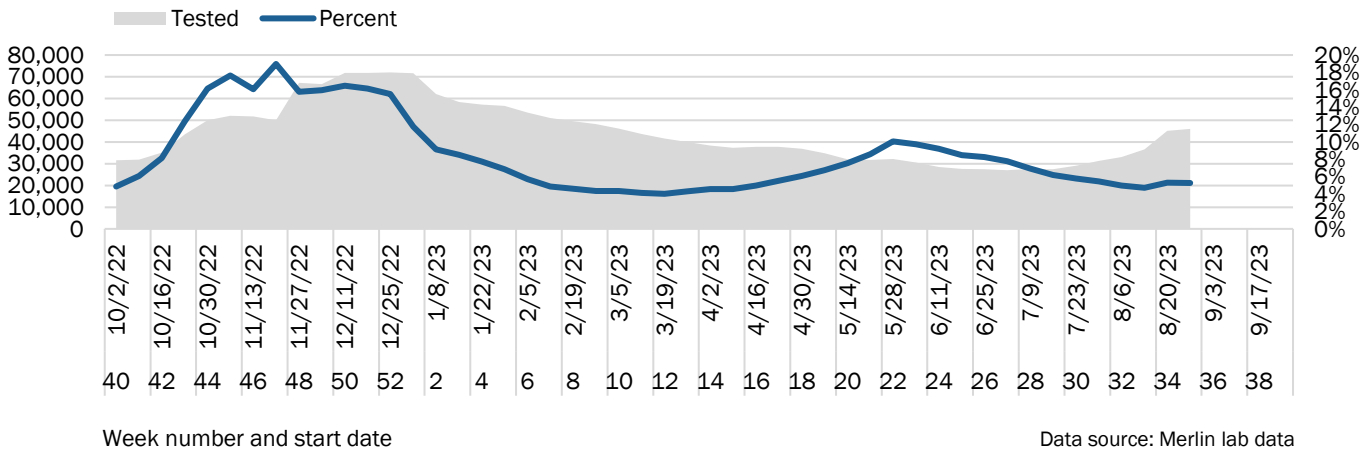

Week number and start date

Data source: Merlin lab data

Figure 5: Distribution of flu A and B for the current flu year and the previous 3 years

Week number and start date

Data source: Merlin lab data
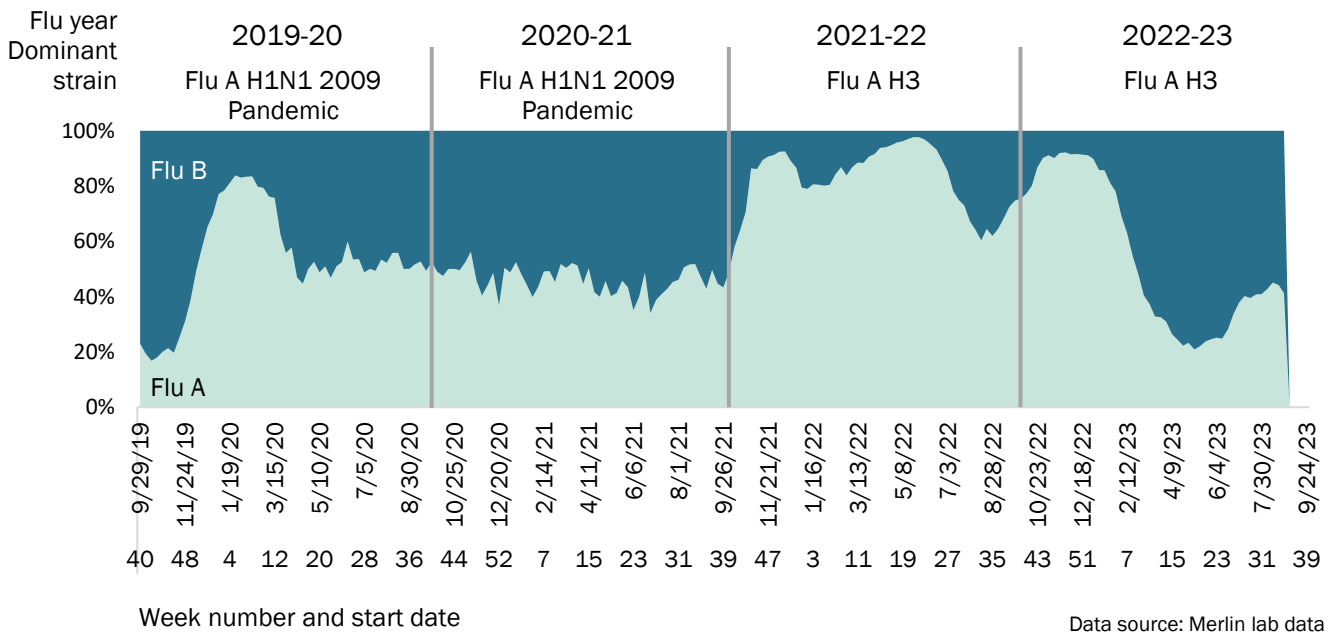
Figure 6: Distribution of subtypes and lineages for the current flu year and the previous 3 years

	2019-20	2020-21	2021-22	2022-23
Flu A H3	245	11	13,044	7,025
Flu A H1N1 2009 Pandemic	3,180	44	275	5,711
Flu A H1	590	1	17	371
Flu B Victoria	176	2	0	82
Flu B Yamagata	8	2	0	1
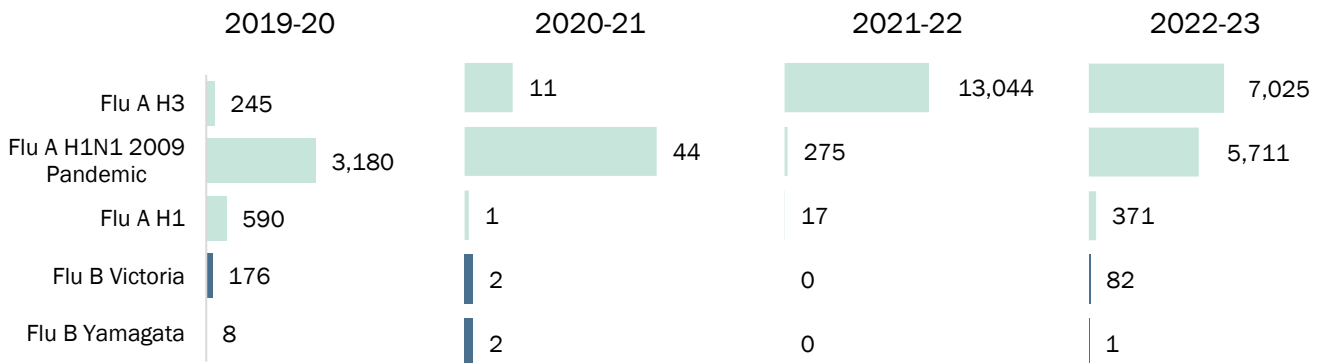
Influenza (flu) and influenza-like-illness (ILI) outbreaks

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.

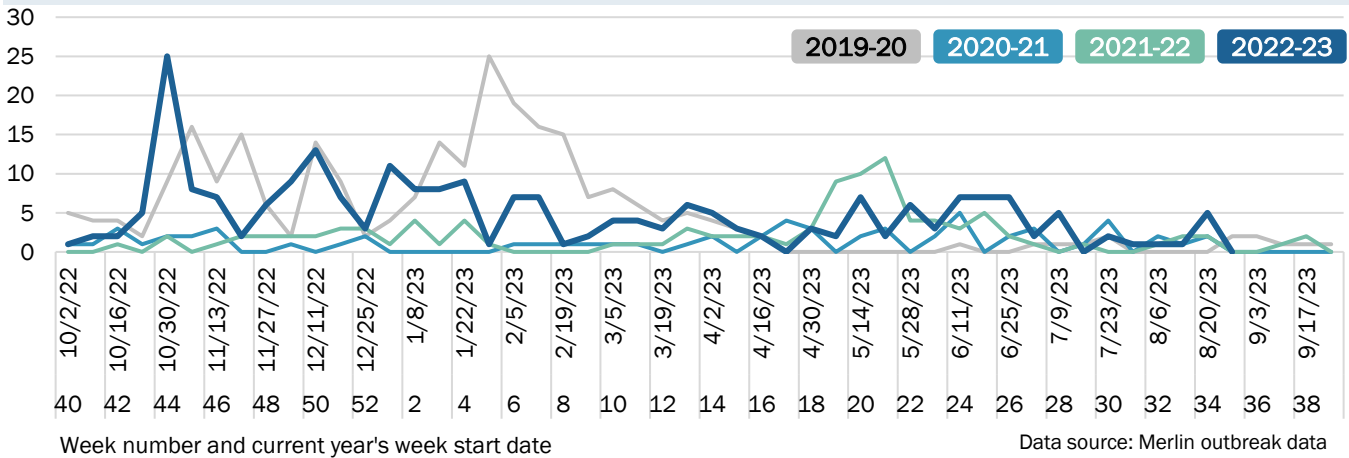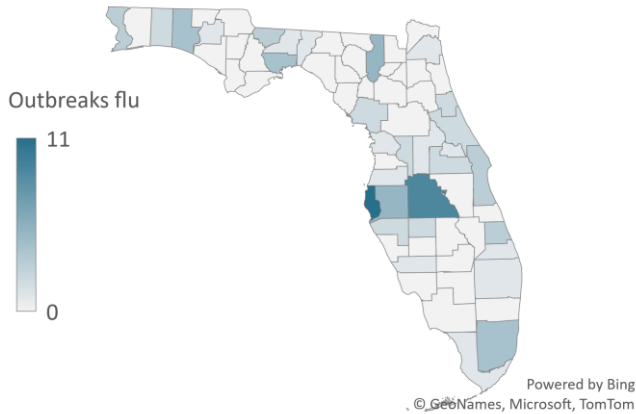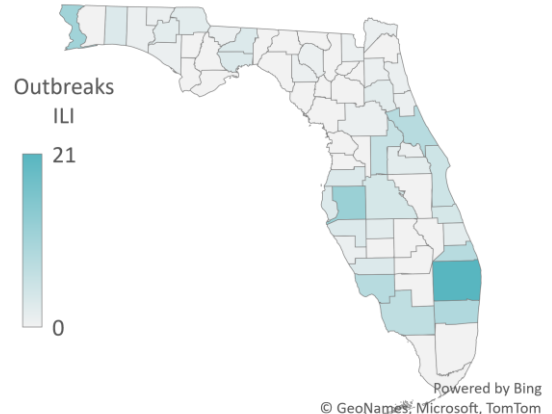**Figure 7:** Flu and ILI outbreaks during the current flu year and previous 3 years

Week number and current year's week start date

Data source: Merlin outbreak data

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

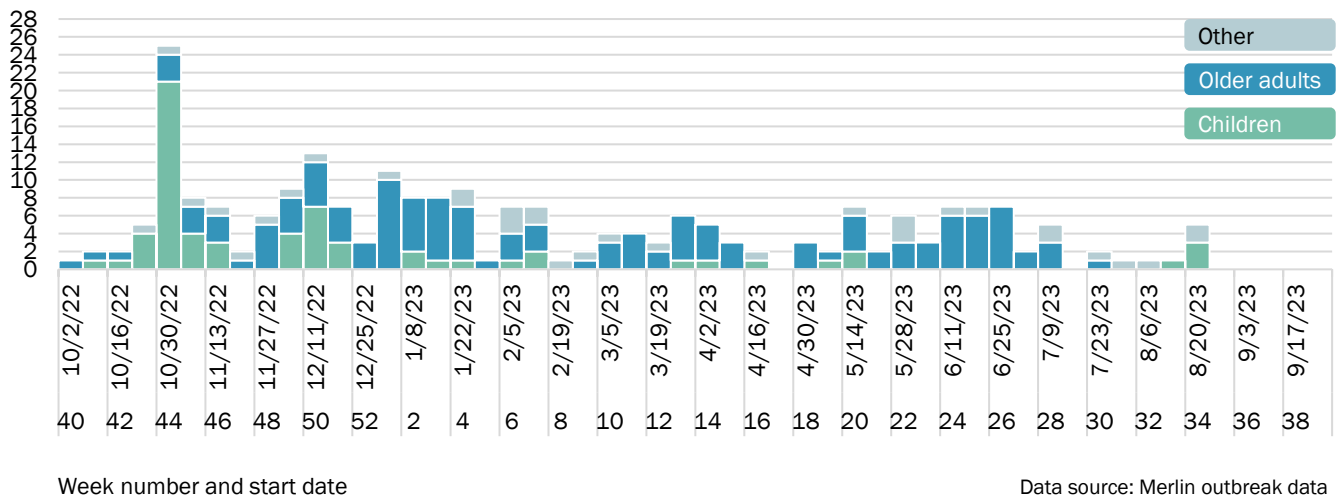**Flu:** 0 new outbreaks in the current week

ILI: 0 new outbreaks in the current week

No counties with outbreaks in current week

Data source: Merlin outbreak data

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

Week number and start date

Data source: Merlin outbreak data

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

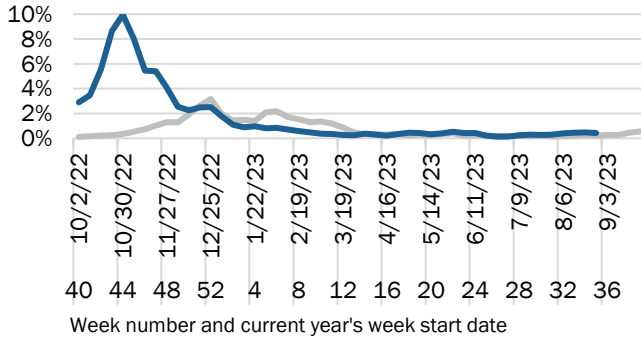**Figure 10:** ED visits in northwest region 1 didn't change

Week number and current year's week start date

Figure 11: ED visits in north central region 2 decreased

Week number and current year's week start date
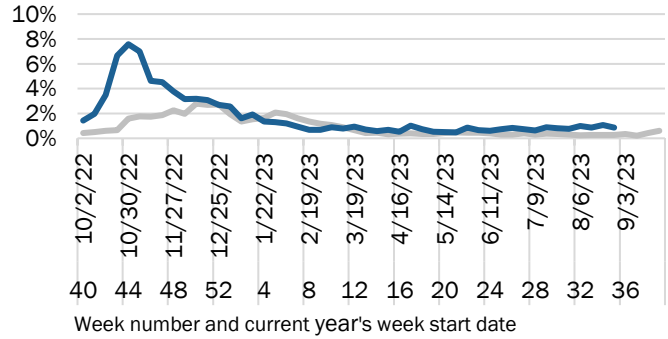
Figure 12: ED visits in northeast region 3 increased

Week number and current year's week start date
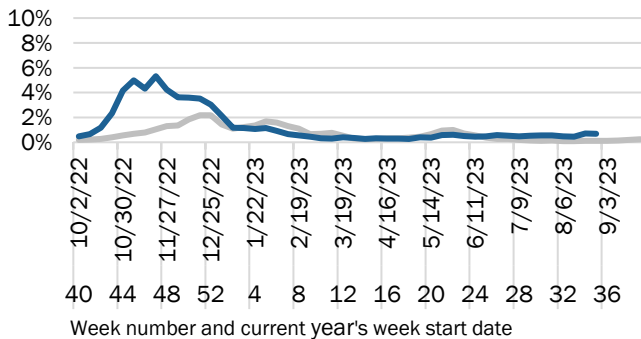
Figure 13: ED visits in central west region 4 increased

Week number and current year's week start date
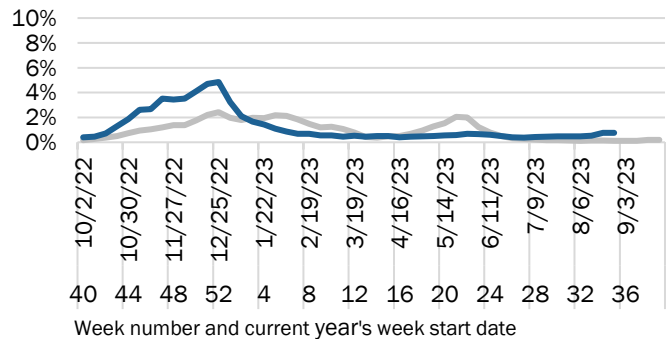
Figure 14: ED visits in central east region 5 increased

Week number and current year's week start date
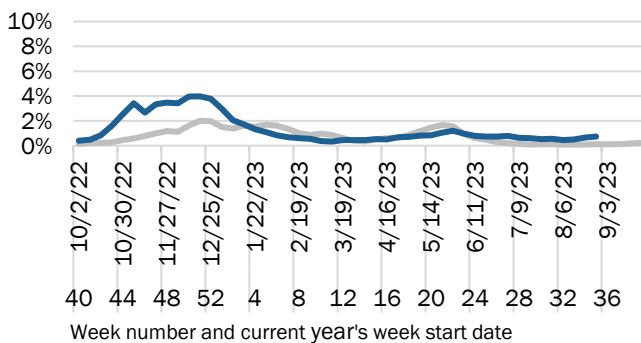
Figure 15: ED visits in southwest region 6 didn't change

Week number and current year's week start date
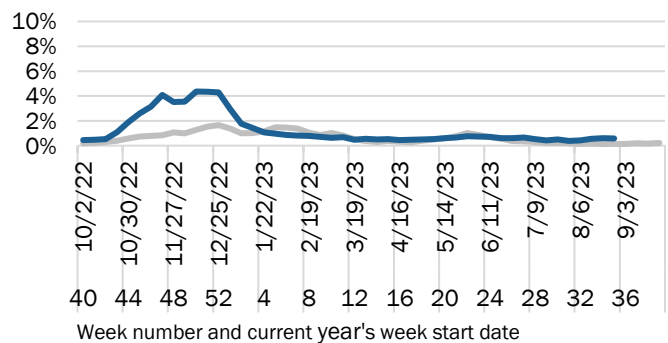
Figure 16: ED visits in southeast region 7 increased

Week number and current year's week start date

Figure 17:

329 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 of data.

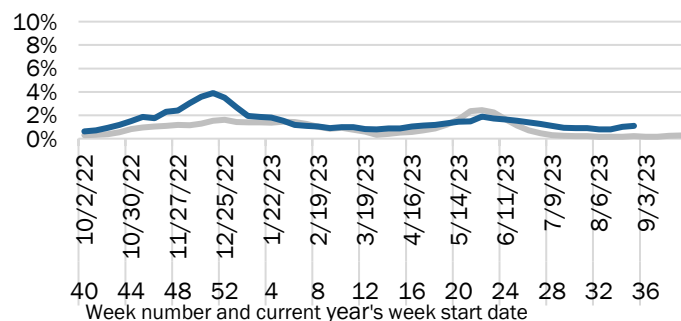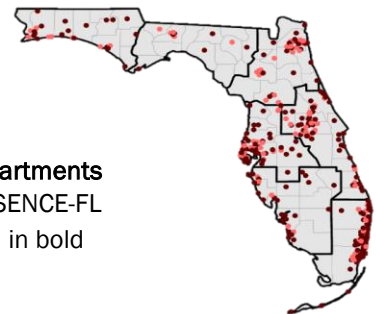**Figure 18:** Hospital admissions with flu diagnoses per 100,000 population for current flu year and previous 3 years by age group
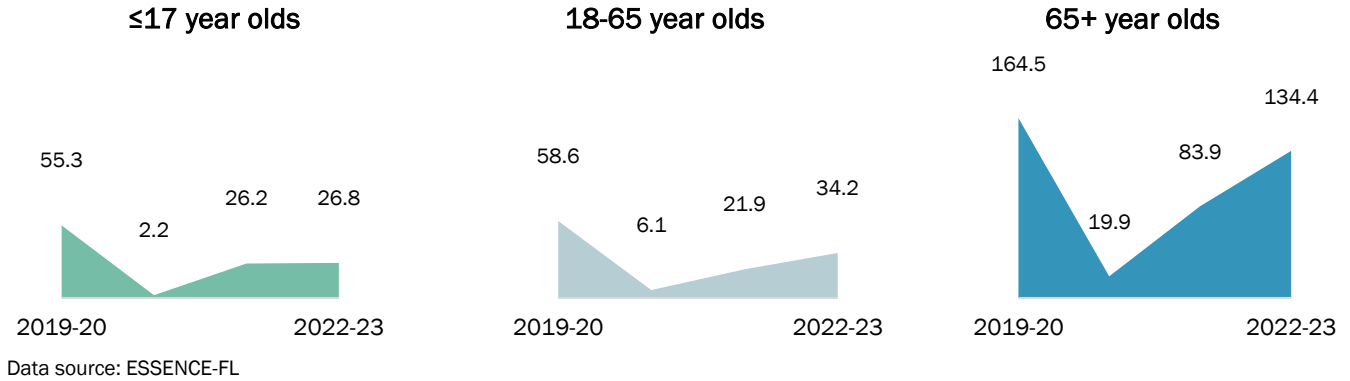
≤17 year olds
55.3
2.2
26.2 26.8
2019-20   2022-23

18-65 year olds
58.6
6.1
21.9 34.2
2019-20   2022-23

65+ year olds
164.5
134.4
83.9
19.9
2019-20   2022-23

Data source: ESSENCE-FL

Figure 19: Deaths per 100,000 population for current flu year and previous 3 years by age group

≤17 year olds
0.3   0.0   0.1   0.2
2019-20   2022-23

18-65 year olds
1.4
0.1   0.3   0.5
2019-20   2022-23

65+ year olds
6.6
6.0
2.7
1.0
2019-20   2022-23

Data source: Vital Statistics death certificate data
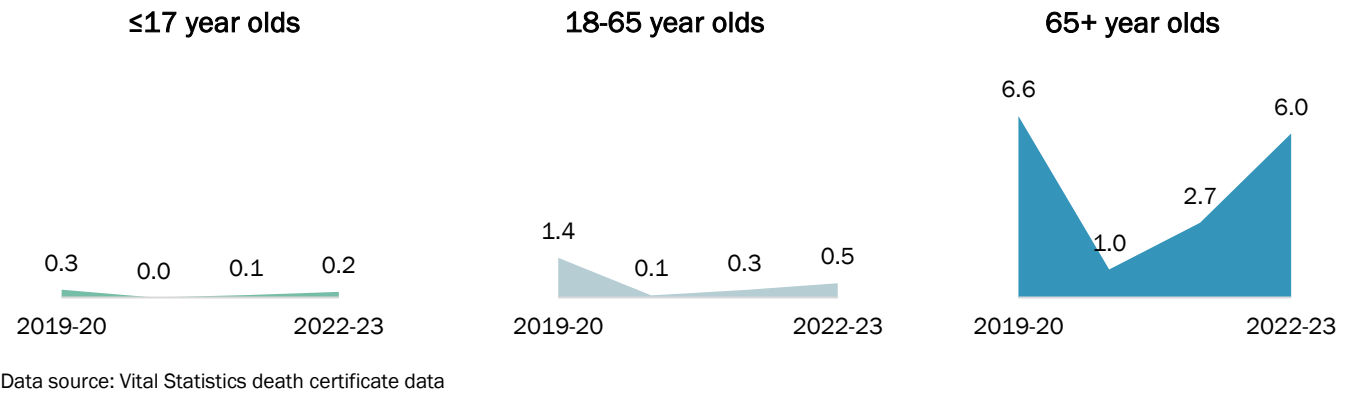
Figure 20: Pediatric flu-associated deaths by vaccination status and underlying health conditions for the current flu year and previous 3 years

Vaccination status
| 2019-20 | 2020-21 | 2021-22 | 2022-23 |
1 (Unknown), 4 (Vaccinated), 8 (Unvaccinated*) — 2019-20
1 (Unknown), 2 (Vaccinated), 1 (Unvaccinated*) — 2021-22
1 (Vaccinated), 11 (Unvaccinated*) — 2022-23

Legend:
- Unknown
- Unvaccinated*
- Vaccinated

Underlying medical conditions
9 (Underlying conditions), 4 (No underlying conditions) — 2019-20
1 (Unknown), 2 (Underlying conditions), 1 (No underlying conditions) — 2021-22
8 (Underlying conditions), 4 (No underlying conditions) — 2022-23

Legend:
- Unknown
- Underlying conditions
- No underlying conditions

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 that are enrolled in ILINet submit weekly ILI counts 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 factor 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.

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