

Influenza End of Season Report

2023-2024 Season

Influenza Activity During the 2023-2024 Season

Report created: December 5th, 2024

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Introduction

The Virginia Department of Health (VDH) monitors the trends and intensity of influenza (flu) activity year-round for public health surveillance. Influenza surveillance involves monitoring a variety of data sources, including syndromic surveillance, outbreak surveillance, laboratory surveillance, hospital surveillance, wastewater surveillance, and sentinel surveillance. These data are evaluated together to form a more complete picture of influenza activity in Virginia.

The annual flu season starts during MMWR Week 40, which is typically in October. The 2023–2024 flu season began October 1, 2023.

Influenza is not a reportable disease in Virginia or in most areas of the United States; therefore, it is difficult to know the exact number of people who are infected with influenza in each flu season. However, the Centers for Disease Control and Prevention (CDC) estimates the burden of influenza based on a variety of metrics. The 2023-2024 influenza season in the United States is considered to have been moderately severe. [CDC estimates](#) that influenza caused 34-75 million flu illnesses, 15-33 million flu-related medical visits, 380,000–900,000 flu-related hospitalizations, and 17,000–100,000 flu deaths.

This report is intended to summarize the 2023-2024 influenza season in Virginia with a comparison to national influenza activity.

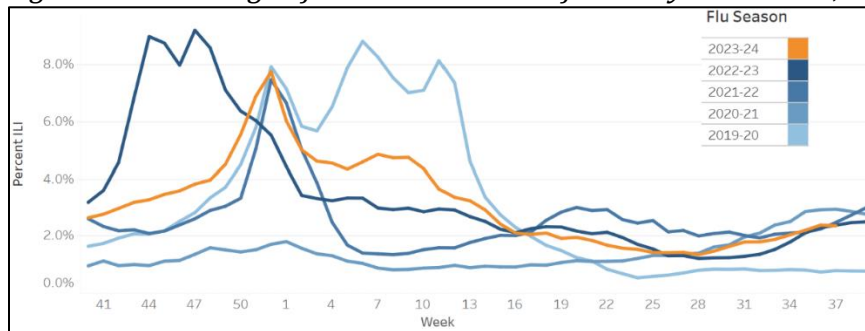
Influenza-like Illness (ILI)

An influenza-like illness (ILI) is defined as a fever of 100°F or greater and a cough and/or sore throat. Visits to emergency departments (ED) and urgent care centers (UCC) that are for an ILI are presented as a percent of total visits to estimate the timing and relative burden of the flu. These data represent illnesses that result in a medical visit. VDH receives data from participating EDs and urgent care centers through the syndromic surveillance program. CDC collects information on outpatient visits to health care providers for ILI through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). These systems both monitor visits for ILI and not laboratory-confirmed respiratory viruses, so they will capture visits due to any respiratory pathogen that presents with the symptoms of fever plus cough or sore throat. Therefore, these data should be evaluated in the context of other surveillance data to obtain a complete and accurate picture of influenza activity.

2023-2024 Season Data

In Virginia during the 2023–2024 flu season, ILI peaked sharply during MMWR week 52 (ending December 30, 2023) and started to decline in the following weeks. There was a slight increase starting MMWR week 6 (ending February 10, 2024) until MMWR week 9 (ending March 2, 2024). Starting in MMWR week 10 (ending March 9, 2024), ILI declined until the end of flu season. ILI peaked at a similar time as the previous four seasons, except for the 2022–2023 flu season, which peaked particularly early. At the peak of activity, Virginia reported 7.7% of the total visits to EDs and UCCs were due to ILI, which was a similar peak to the previous four seasons, except for the 2022–2023 season.

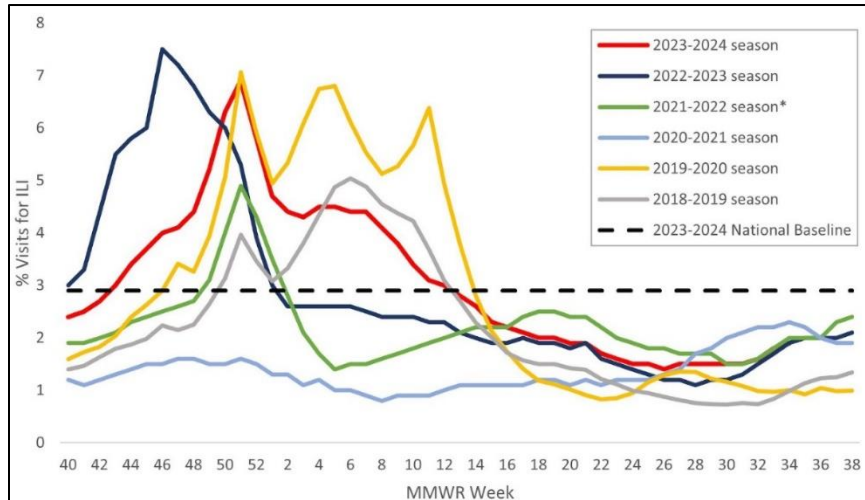
Figure 1. Percentage of ED and UCC Visits for ILI by Flu Season, Virginia



Source: VDH Flu Surveillance Dashboard (now retired)

Nationally, ILI increased sharply and reached its peak during MMWR week 52. After reaching the peak, it declined rapidly but stayed above the national ILI baseline of 2.9% for several weeks. ILI fell below the national baseline starting MMWR week 15 (ending April 13, 2024).

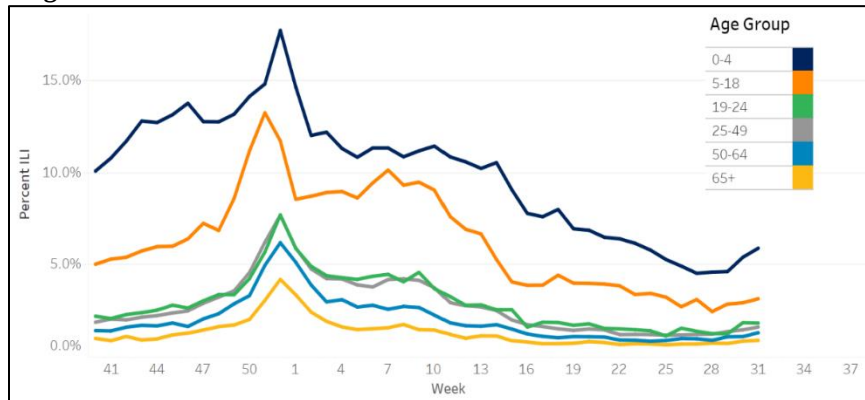
Figure 2. Percentage of Outpatient Visits for ILI Reported in ILINet by Flu Season, United States, 2018-2019 to 2023-2024



Source: CDC Influenza Activity in the US during the 2023-2024 Season

In Virginia, the percentage of visits for ILI peaked at MMWR week 52 (ending December 30, 2023) for persons aged 0–4 years and persons 19–years and older. The largest proportion of visits among the 5–18 years age group was observed in MMWR week 51 (ending December 23, 2023) with 13.2% of visits for that age group being for ILI.

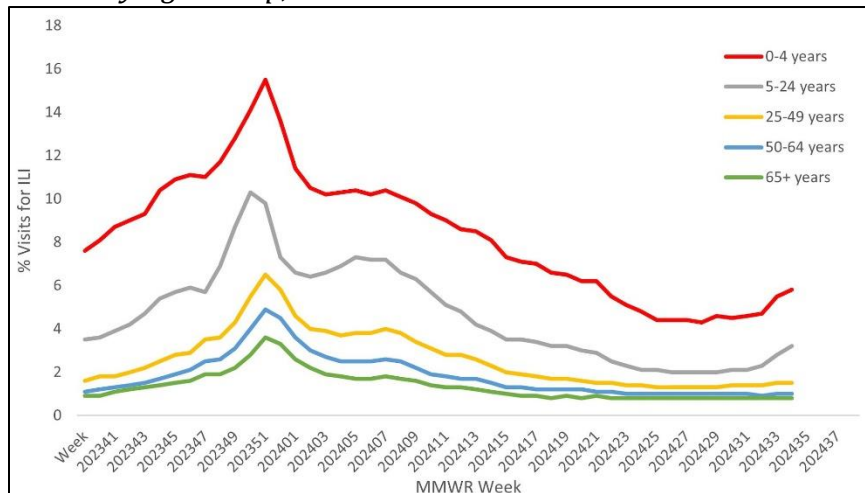
Figure 3. Percent of ED and UCC Visits for ILI in the 2023–2024 Flu Season by Age Group, Virginia



Source: VDH Flu Surveillance Dashboard (now retired)

Nationally, the percentage of ILI peaked at MMWR week 52 for age groups 0–4 years, 25–49 years, 50–64 years, and ≥65 years at 15.5%, 6.5%, 5%, and 4.3% respectively. However, for persons aged 5–24 years, the percent of ILI peaked at MMWR week 51.

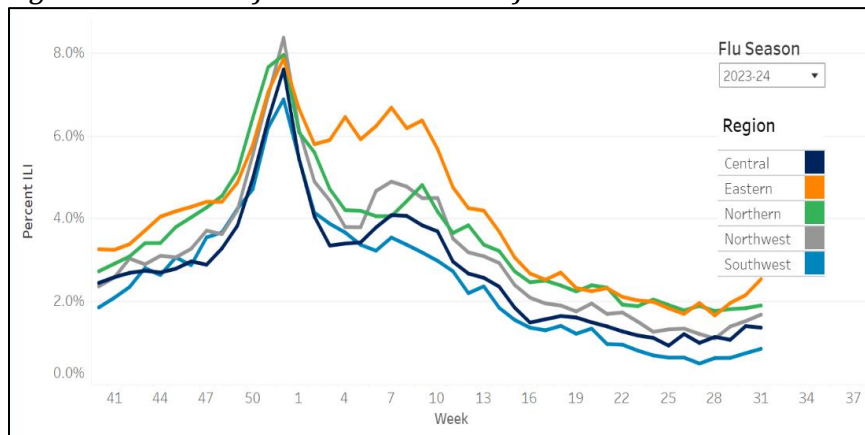
Figure 4. Percentage of Outpatient Visits for ILI Reported in ILINet During the 2023–2024 Flu Season by Age Group, United States



Source: CDC Influenza Activity in the US during the 2023-2024 Season

In Virginia, the percentage of visits for ILI peaked during MMWR week 52 (ending December 30, 2023) in all regions: Central (7.6%), Northwest (8.4%), Southwest (6.9%), Eastern (7.8%) and Northern (7.9%).

Figure 5. Percent of ED and UCC Visits for ILI in the 2023–2024 Flu Season by Region, Virginia



Source: VDH Flu Surveillance Dashboard (now retired)

Confirmatory Laboratory Reports

Laboratory data are useful in identifying new strains of influenza virus, understanding the effectiveness of the seasonal flu vaccine, and selecting components for the next season’s flu vaccine. In Virginia, influenza laboratory results are reportable when they have been confirmed by reverse transcriptase polymerase chain reaction (RT-PCR), viral culture, and antigen testing by direct fluorescent antibody (DFA). Rapid antigen tests are not reportable. As a result, influenza laboratory surveillance is an underestimate of the true incidence of influenza in Virginia.

Although there are four types of influenza viruses: A, B, C, and D. Only influenza A and influenza B cause seasonal flu. Influenza A viruses are subtyped by the proteins on their surface, hemagglutinin (H) and neuraminidase (N); for example, A(H1N1) or A(H3N2). Influenza B viruses are classified into two lineages: B/Victoria and B/Yamagata.

2023-2024 Season Data

In Virginia, 31,970 influenza positive specimens were reported. The predominant virus circulating in Virginia during the 2023–2024 flu season was influenza A. Not all influenza A virus results are subtyped. However, of those that were subtyped, 77% were A(H1N1) and 22% were A(H3N2). This was an unusually high season for influenza B, with 9,607 (30%) confirmed lab reports during the 2023–2024 flu season. Influenza B lineage information was available for 39 influenza B viruses, with all of them belonging to the Victoria lineage.

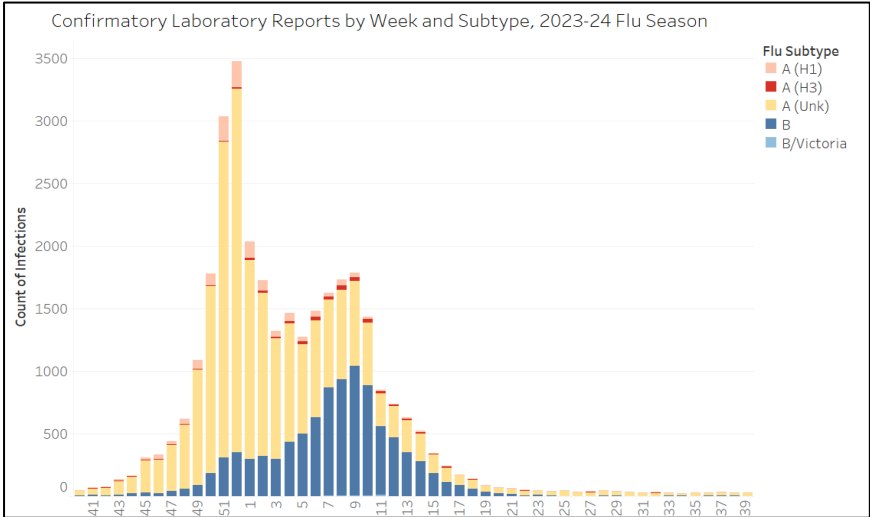
Table 1. Influenza Positive Laboratory Reports in the 2023–2024 Flu Season, Virginia

	Confirmed Lab Reports	% of Total Labs Reported
Influenza A	22,363	69.9%
A(Unk)	20,629	64.5%
A(H1N1)	1,349	4.2%
A(H3N2)	385	1.2%
Influenza B	9,607	30%
B(Unk)	9,568	29.9%
B/Victoria	39	0.1%
B/Yamagata	0	0%
Total Flu labs	31,970	-

Source: Virginia Electronic Disease Surveillance System (VEDSS); Unk = unknown; not all results are subtyped or classified by lineage

Influenza A was the predominant virus as a whole and through the end of February 2024. The smaller, second wave was predominated by influenza B viruses. B viruses continued to be dominant through the duration of the season, as overall influenza activity decreased.

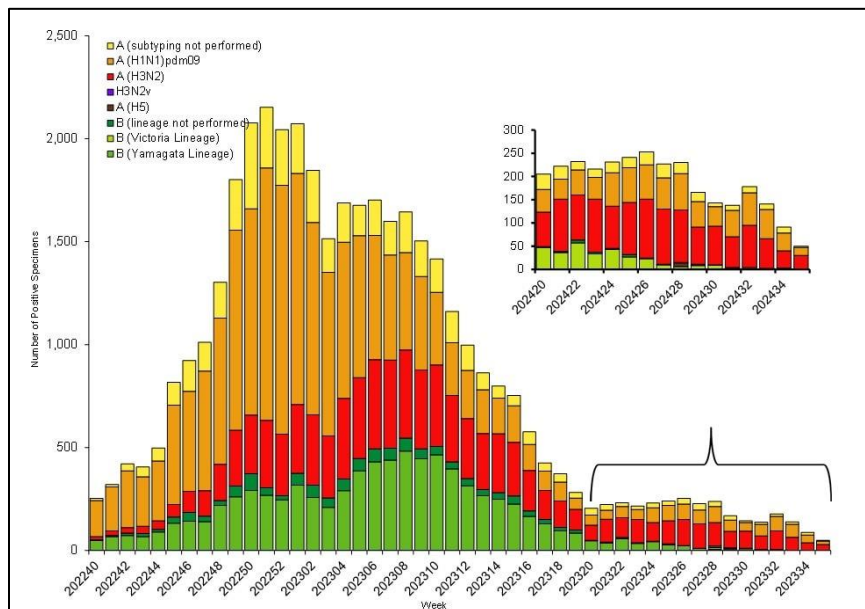
Figure 6. Influenza Positive Tests in the 2023–2024 Flu Season by MMWR Week and Subtype, Virginia



Source: VDH Respiratory Disease Data Dashboard

Nationally, during the 2023–2024 flu season, public health laboratories tested 129,638 specimens and reported 39,885 influenza positive specimens, with 76.9% positive for influenza A and 23.1% positive for influenza B viruses. Among 25,906 seasonal influenza A viruses that were subtyped, 16,875 (65.1%) were influenza A(H1N1)pdm09 viruses, and 9,031 (34.9%) were influenza A(H3N2) viruses. Influenza B lineage information was available for 8,010 (87.1%) influenza B viruses, with all of them belonging to the Victoria lineage. No influenza B/Yamagata lineage viruses have been identified worldwide since March 2020.

Figure 7. Influenza Positive Tests in the 2023–2024 Flu Season by Subtype and MMWR Week, United States



Source: [CDC Influenza Activity in the US during the 2023-2024 Season](#)

Outbreak Surveillance

In Virginia, certain facilities or programs, such as residential or day programs, services or facilities licensed or operated by any agency of the Commonwealth, schools, child care centers, and summer camps are [required to report](#) the presence or suspected presence of an outbreak to the local health department per Virginia Code [12VAC5-90-90D](#). Other entities and businesses may voluntarily report outbreaks.

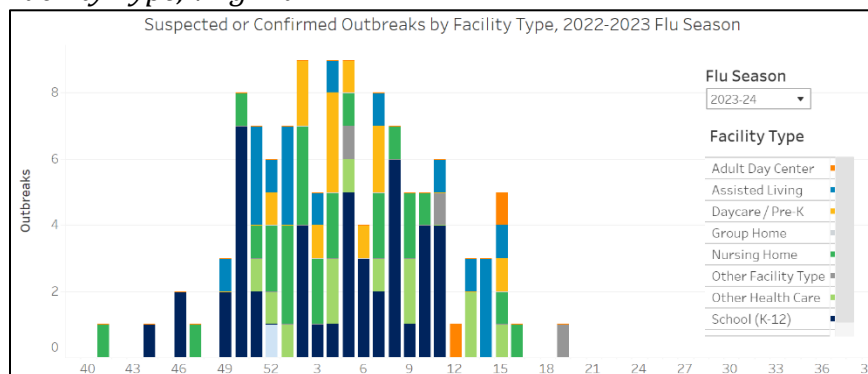
The outbreak data is captured in the Virginia Outbreak Surveillance System (VOSS). VOSS is the surveillance system used to report, track, and manage outbreak investigations of reportable diseases or other health conditions in Virginia.

2023–2024 Season Data

In Virginia, there were 117 flu outbreaks reported to VDH during the 2023–2024 season. A majority of the outbreaks were observed in K-12 school settings (45 outbreaks, 38.5%), followed by nursing homes (25 outbreaks, 21.4%), assisted living facilities (17 outbreaks,

14.5%), other healthcare facilities (12 outbreaks, 10.3%), daycare or pre-kindergarten facilities (12 outbreaks, 10.3%), other facilities (3 outbreaks, 2.6%), adult day centers (2 outbreaks, 1.7%), and shelters (1 outbreak, 0.9%). Early in the season, most of the outbreaks were reported from the K-12 school setting and nursing homes, but later in the season other group settings were a more common location. The number of outbreaks peaked during MMWR week 50 (ending December 16, 2023), and then fluctuated into the New Year.

Figure 8. Suspected or Confirmed influenza Outbreaks in the 2023–2024 Flu Season by Facility Type, Virginia



Source: VDH Flu Surveillance Dashboard (now retired)

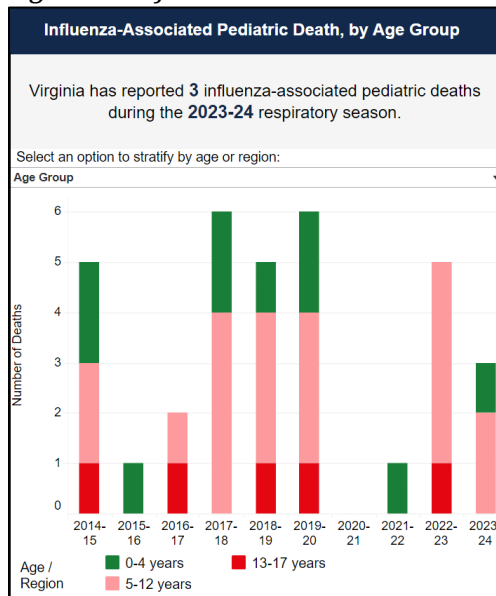
Influenza-Associated Deaths

Influenza associated deaths are captured through two different sources. Influenza-associated deaths in children less than 18 are individually reportable in Virginia and are investigated and reported by the local health departments (LHDs). Flu associated deaths in adults are recorded in the vital records data. All death certificates (pediatric and adult) are sent to the National Center for Health Statistics (NCHS) to be coded with a cause of death. Data on adult deaths due to pneumonia, influenza, and/or COVID-19 together with reported cases of influenza-associated pediatric deaths are used to estimate the mortality burden due to flu.

2023-2024 Season Data

Three influenza-associated pediatric deaths were reported in Virginia during the 2023–2024 flu season. Two of them were reported in the 5–12 years age group, and one was reported in the 0–4 years age group. These deaths occurred in the Eastern, Northern, and Northwest regions.

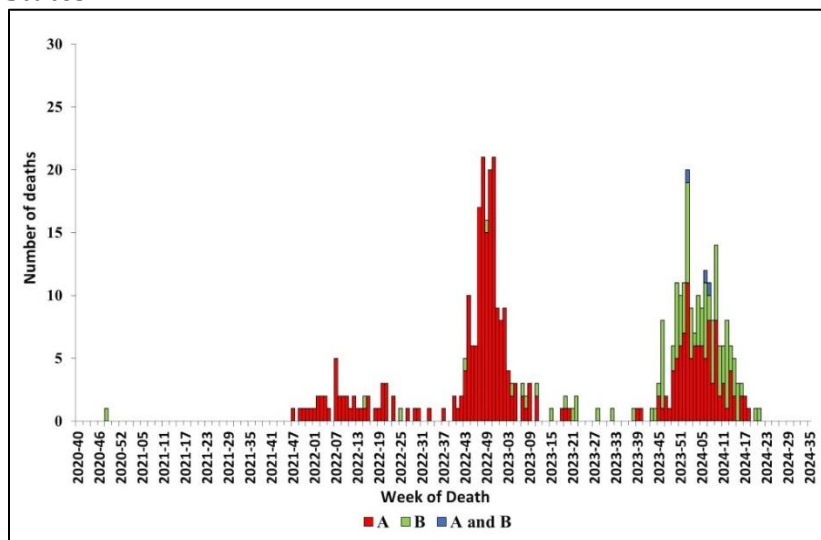
Figure 9. Influenza-Associated Pediatric Deaths by Flu Season and Age Group, Virginia



Source: [VDH Respiratory Dashboard](#)

Nationally, a total of 197 laboratory-confirmed influenza-associated pediatric deaths were reported to CDC. This is nearly equal to the highest number of deaths reported during a seasonal influenza epidemic. A total of 104 of the reported deaths were associated with influenza A viruses, 90 were associated with influenza B viruses, and 3 were associated with influenza A and B virus co-infection. The mean age at death was 7 years (range = 4 weeks–17 years). Among the 187 children and adolescents with a known medical history, 93 (49.7%) had at least one underlying medical condition associated with higher risk for developing serious influenza-related complications. Among the 157 children and adolescents who were eligible for influenza vaccination (age ≥6 months at date of illness onset) and for whom vaccination status was known, 130 (82.8%) were not fully vaccinated.

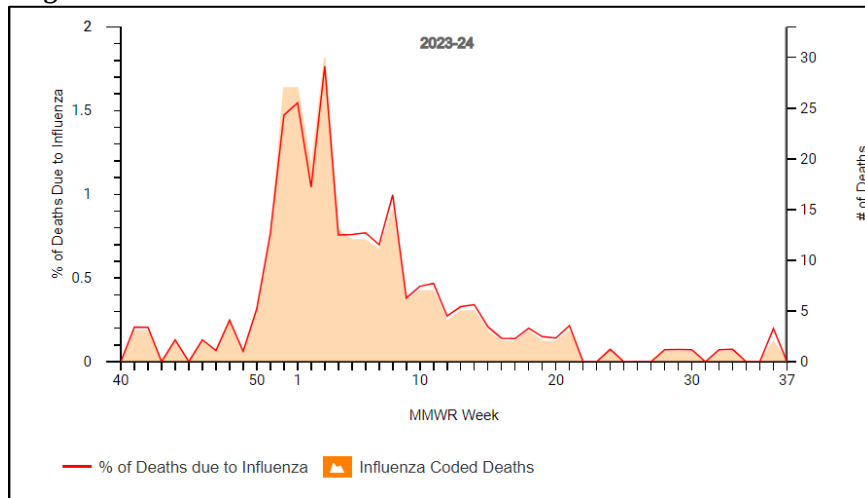
Figure 10. Influenza-Associated Pediatric Deaths by Virus Type and Week of Death, United States



Source: [CDC Influenza Activity in the US during the 2023-2024 Season](#)

Influenza-associated deaths in adults in Virginia peaked during MMWR week 3 (ending January 20, 2024) with 30 influenza coded deaths. By the end of the 2023–2024 flu season, MMWR week 40 (ending October 7, 2023) through MMWR week 18 (ending May 4, 2024), there were a total of 243 influenza coded deaths.

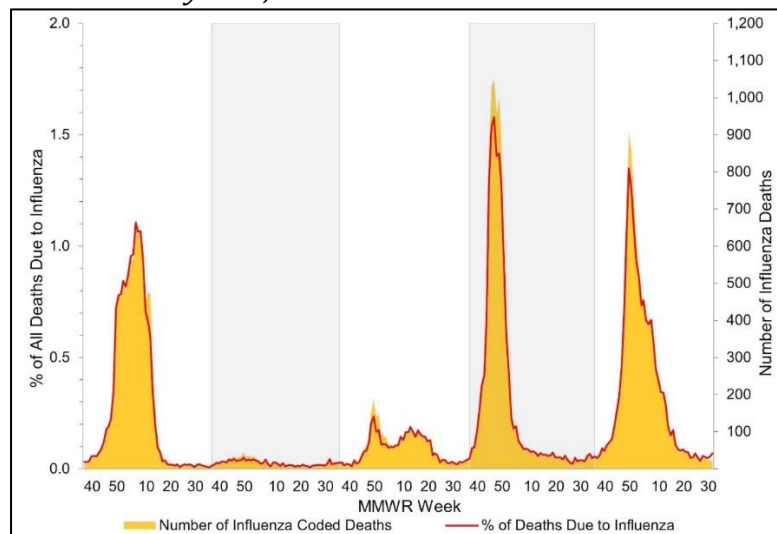
Figure 11. Percentage and Number of Deaths Due to Influenza in the 2023–2024 Flu Season, Virginia



Source: [National Center for Health Statistics Mortality Surveillance System \(cdc.gov\)](https://www.cdc.gov/nchs/data/mortality/mortality_2023-24_influenza.html)

Nationally, NCHS estimates that a total of 10,289 deaths, or 0.4% of deaths from all causes, had influenza listed as an underlying or contributing cause of death. The number of deaths associated with influenza in the 2023–2024 flu season peaked during MMWR week 1 (ending January 6, 2024) with 903 deaths. The peak weekly percentage of deaths due to influenza was lower during this season compared to last, but the cumulative percentage of deaths due to influenza was slightly higher due to the longer duration of elevated influenza-associated mortality.

Figure 12. Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System, 2019–20 to 2023–2024 Seasons



Source: [CDC Influenza Activity in the US during the 2023-2024 Season](https://www.cdc.gov/flu/weekly/fluactivity-us-2023-24)

Hospitalization Surveillance

During the 2023-2024 season, Virginia began a pilot program to monitor influenza-associated hospitalizations in children and adults who reside in the Fairfax Health District. Fairfax County Health Department (HD) conducted active surveillance at all five hospitals within its district, including medical chart abstractions. This program is modeled from the CDC Influenza Hospitalization Surveillance Network, FluSurv-NET. CDC FluSurv-NET is designed to conduct population-based surveillance for laboratory-confirmed influenza-associated hospitalizations. CDC FluSurv-NET covers approximately 9% of the US population.

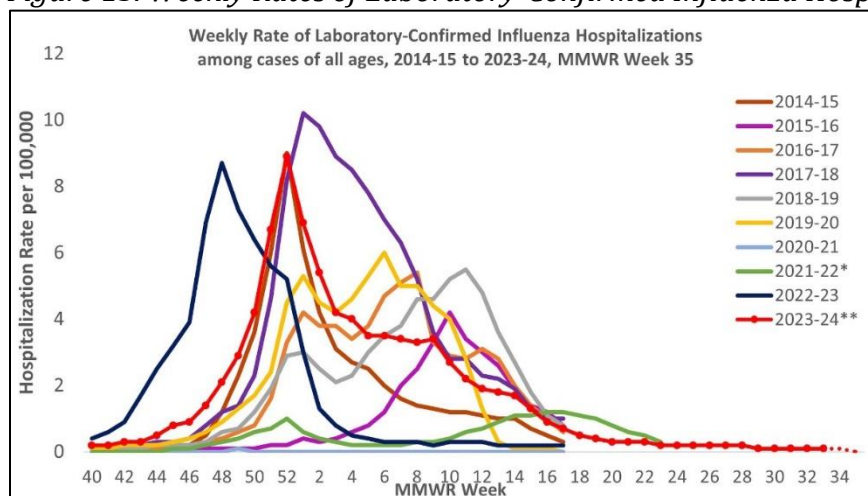
2023-2024 Season Data

In the Virginia pilot jurisdiction, medical chart reviews identified:

- 427 influenza-associated hospitalizations in Fairfax County
 - 300 were Flu A (no subtype)
 - 45 cases were 2009 H1N1
 - 13 cases were H3
 - 63 were Flu B (no lineage)
 - 6 were positive tests categorized as “other”
- 16 influenza-associated deaths
 - 1 pediatric influenza-associated death
 - 15 adult influenza-associated deaths

CDC FluSurv-NET reported a total of 25,390 laboratory-confirmed influenza-related hospitalizations. Hospitalization rates peaked nationally during MMWR week 52 (ending December 30, 2023) at 8.9 per 100,000 population. The overall cumulative hospitalization rate was 83.1 per 100,000 population. This is the second highest cumulative rate since the 2009-2010 season.

Figure 13. Weekly Rates of Laboratory-Confirmed Influenza Hospitalizations – United States



Source: CDC Influenza Activity in the US during the 2023-2024 Season

Wastewater Surveillance

Wastewater is tested to detect traces of infectious diseases that may be circulating in a community, even if people don't have symptoms. This data can be used as an early indicator that levels of infections may be increasing or decreasing in a community.

The VDH Wastewater Surveillance (WWS) Sentinel Monitoring Program began weekly wastewater flu sampling on March 13, 2023, and continues to date. During the 2023–2024 flu season, between 24–36 sites sent weekly wastewater samples to the Hampton Roads Sanitation District for influenza A and B testing.

CDC's National Wastewater Surveillance System (NWSS) program collects and displays wastewater data from communities across the United States. Data is collected from over 1,500 sites and covers approximately 45% of the U.S. population. Infectious diseases that are monitored include influenza, COVID-19, RSV, and MPOX.

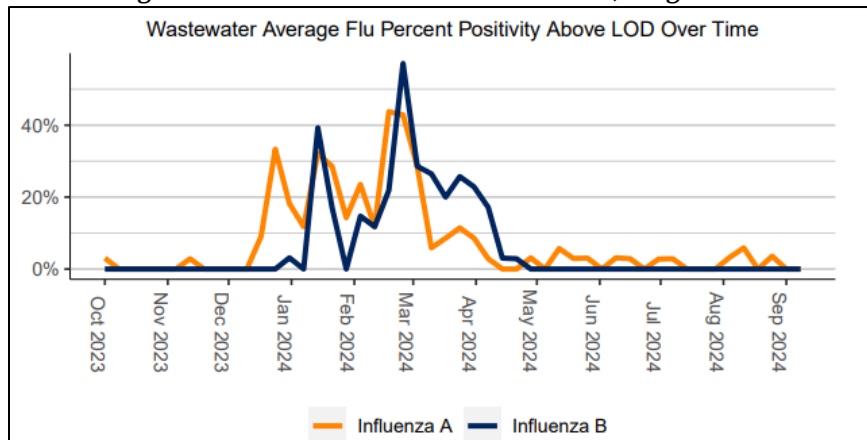
2023-2024 Season Data

In Virginia, 1,244 samples were tested for influenza A virus, with 538 (43.2%) being found positive and 121 (9.7%) being found positive above the level of detection (LOD). For influenza B virus, 1,243 samples were tested, with 442 (35.6%) being found positive and 37 (3.0%) being found positive above the LOD. Due to such low percentages of virus detection above the LOD, all performed analyses in this report were qualitative only. The averaged weekly site percent positivity (PP), total and above the LOD, were used as the primary visualizations. The ubiquitous low viral concentrations represent a limitation of the dataset.

For influenza A virus, the average PP for all tested sites each week ranged between 3.0% and 83.3%. The influenza A virus PP first peaked during MMWR week 52 (ending December 30, 2023). The overall peak occurred MMWR week 9 (ending March 2, 2024), with 43.8% of samples above the LOD.

For influenza B virus, the average PP for all tested sites each week ranged between 0% and 82.9%. The influenza B virus PP first peaked during MMWR week 4 (ending January 27, 2024). Overall, the peak occurred MMWR week 9 (ending March 2, 2024) with 57.1% of samples above the LOD.

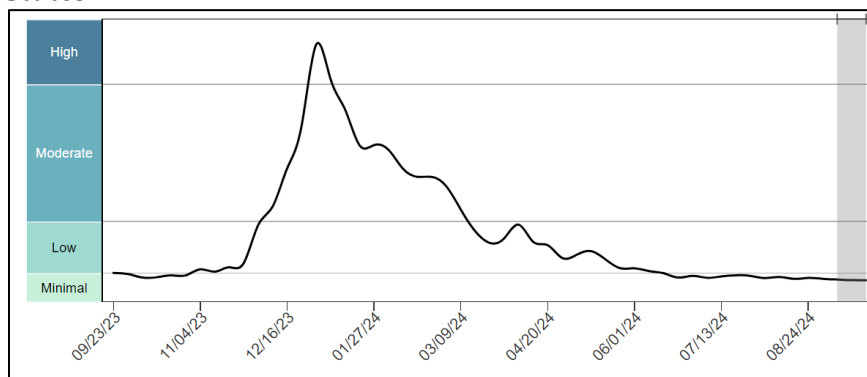
Figure 14. Wastewater Flu A and B Average Percent Positivity Over Time for all Sentinel Monitoring Sites in the 2023–2024 Flu Season, Virginia



Source: VDH Wastewater Surveillance Sentinel Monitoring Program

Nationally, influenza A viral activity was categorized as high from the week ending December 23, 2023 through the week ending January 6, 2024. Activity declined and was categorized as moderate for several months until reaching low levels during the week ending March 16, 2024.

Figure 15. Wastewater Viral Activity Levels of Influenza A for 2023–2024 Flu Season, United States



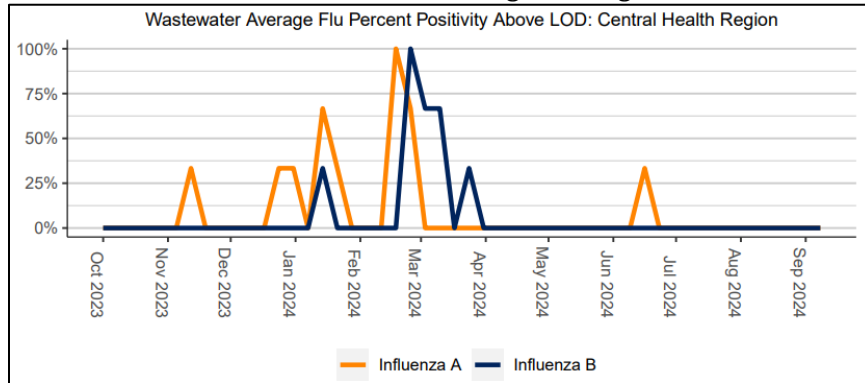
Source: Influenza A Wastewater Data – National Trends | NWSS | CDC

The Virginia WWS sampling sites can be seen geographically on the [SARS-CoV-2 in Wastewater](#) dashboard. The figures below show PP above LOD over time for all samples collected during the 2023–2024 flu season by region (Central, Eastern, Northern, Northwest, Far Southwest, Near Southwest). Each region contained 2–9 sites each week, which were averaged and graphed over time.

Of note when interpreting this data, the served sewer shed populations of the sampling sites are very different. Due to inherent variabilities in each site’s sewer system and the associated population pools, the recommended way of interpreting shifts in viral concentrations is to observe each site uniquely. Data should be collected over a long period of time and used in conjunction with other public health metrics.

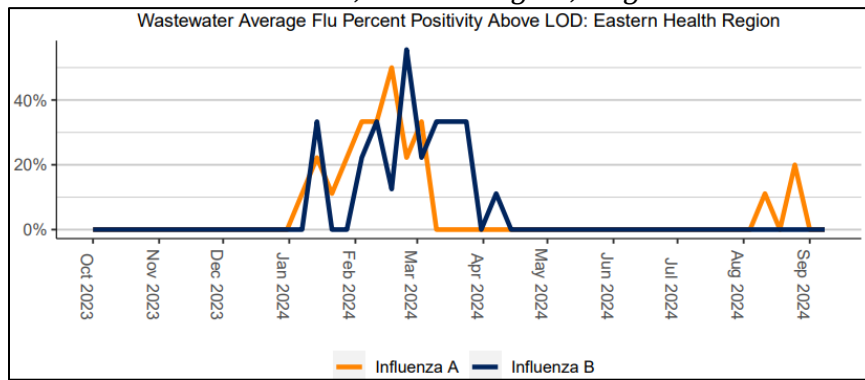
The Central Health Region, comprised of four sewer sheds, was the only region to reach 100% test positivity for influenza B.

Figure 16. Wastewater Flu A and B Average Percent Positivity Above the Level of Detection in the 2023–2024 Flu Season, Central Region, Virginia



Source: Virginia Wastewater Surveillance Sampling Program

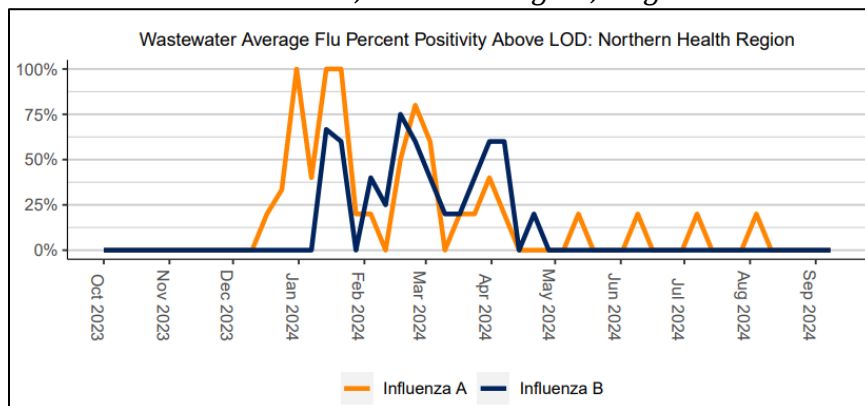
Figure 17. Wastewater Flu A and B Average Percent Positivity Above the Level of Detection in the 2023–2024 Flu Season, Eastern Region, Virginia



Source: Virginia Wastewater Surveillance Sampling Program

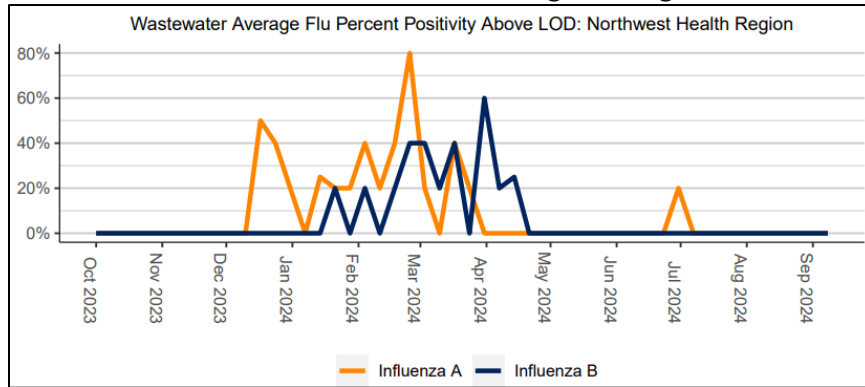
The Northern Health Region was the first health region to see 100% positivity of influenza A wastewater sentinel monitoring samples around January 2024.

Figure 18 Wastewater Flu A and B Average Percent Positivity Above the Level of Detection in the 2023–2024 Flu Season, Northern Region, Virginia



Source: Virginia Wastewater Surveillance Sampling Program

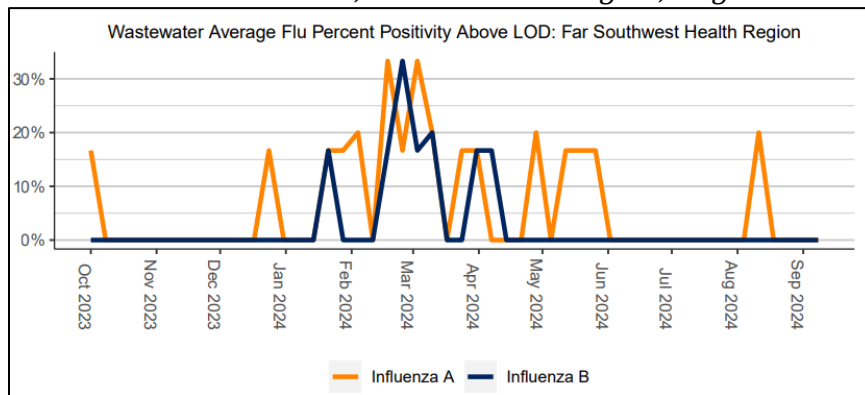
Figure 19. Wastewater Flu A and B Average Percent Positivity Above the Level of Detection in the 2023–2024 Flu Season, Northwest Region, Virginia



Source: Virginia Wastewater Surveillance Sampling Program

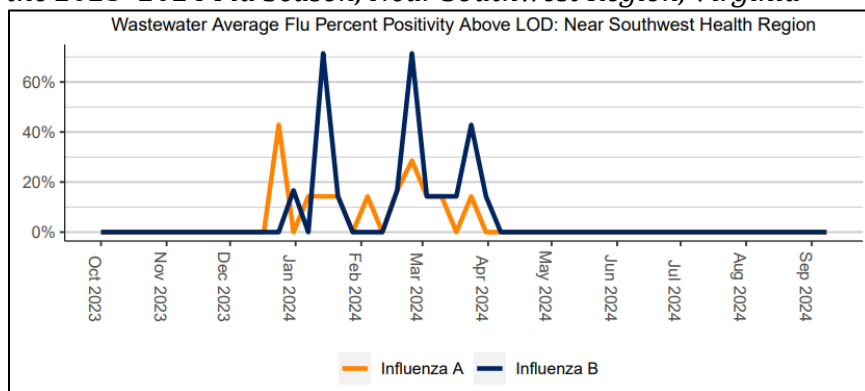
The Far Southwest Health Region had the lowest range of influenza percent positivity. It never exceeded 35% positivity, while all other health regions did.

Figure 20. Wastewater Flu A and B Average Percent Positivity Above the Level of Detection in the 2023–2024 Flu Season, Far Southwest Region, Virginia



Source: Virginia Wastewater Surveillance Sampling Program

Figure 21. Wastewater Flu A and B Average Percent Positivity Above the Level of Detection in the 2023–2024 Flu Season, Near Southwest Region, Virginia



Source: Virginia Wastewater Surveillance Sampling Program

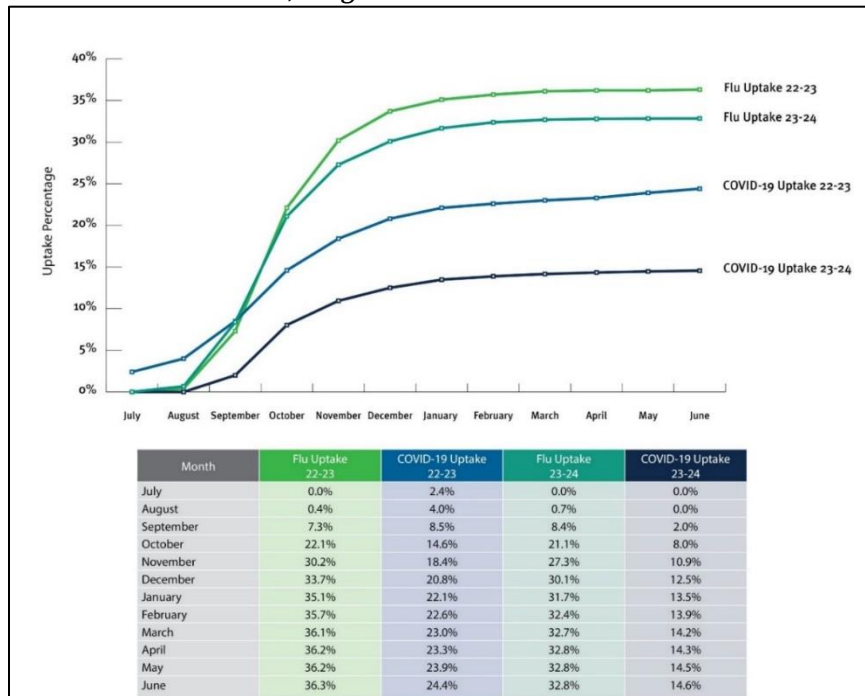
Vaccination Data

Everyone aged six months and older is recommended to receive an annual flu vaccination, with rare exception. To assess flu vaccination coverage in Virginia for the 2023-2024 season, the Virginia Immunization Information System (VIIS) is reviewed. VIIS is the statewide registry where healthcare providers are required to report vaccines administered in Virginia. Coverage rates use population estimates from the 2022 American Community Survey (ACS). No population estimates are available for out-of-state individuals or those without a reported locality. CDC analyzes data from two large, nationally representative surveys to estimate national flu vaccination coverage.

2023-2024 Season Data

In Virginia, coverage of the 2023-2024 influenza vaccine reached 32.8% of Virginia population by June 2024. This is similar, yet lower, than the 2022-2023 cumulative coverage of 36.3%.

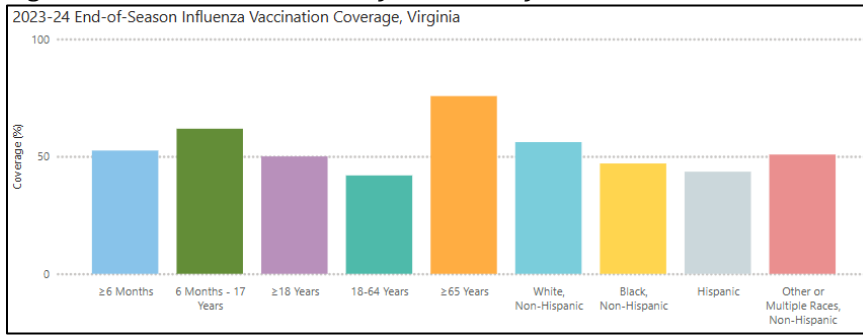
Figure 22. COVID-19 and Flu Vaccine Cumulative Uptake Percentage for Flu Seasons 2022–2023 and 2023–2024, Virginia



Source: [VDH Respiratory Immunization Dashboard](#)

According to CDC’s latest FluVaxView data, which is sourced from survey data, Virginia’s flu vaccination coverage was estimated at 52.5%, which is higher than the national 2023–2024 flu season rate of 47.2%. Virginia has had higher vaccination coverage than the national average since at least the 2010–2011 flu season. Coverage rates were estimated as highest in adults 65 years of age and older (75.7%), followed by children aged 6 months through 17 years (65.8%). White, non-Hispanic had the highest vaccine coverage rate (56.1%) followed by Other or Multiple Races, Non-Hispanic (50.8%), then Black, Non-Hispanic (47%) and Hispanic (43.5%).

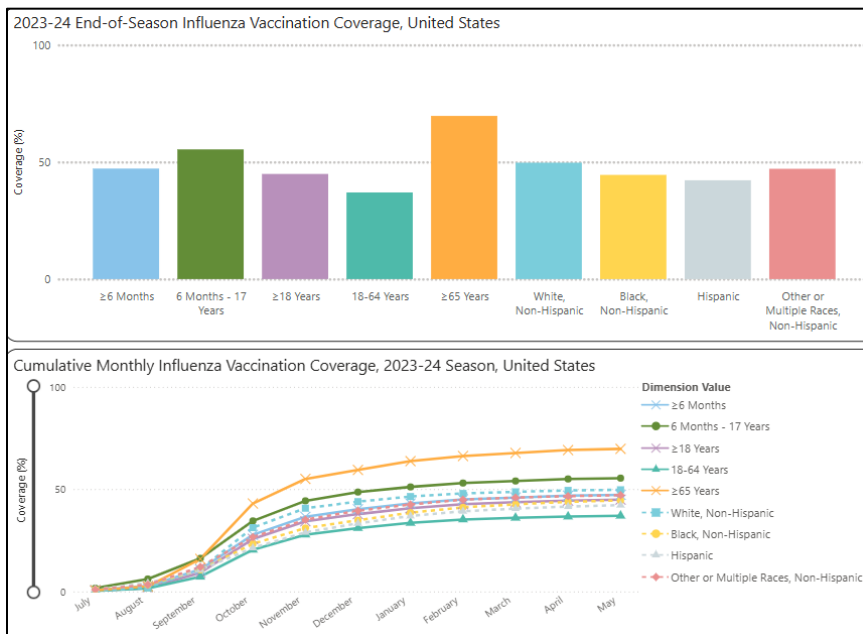
Figure 23. 2023–2024 End-of-Season Influenza Vaccination Coverage, Virginia



Source: [FluVaxView Interactive Dashboard](#)

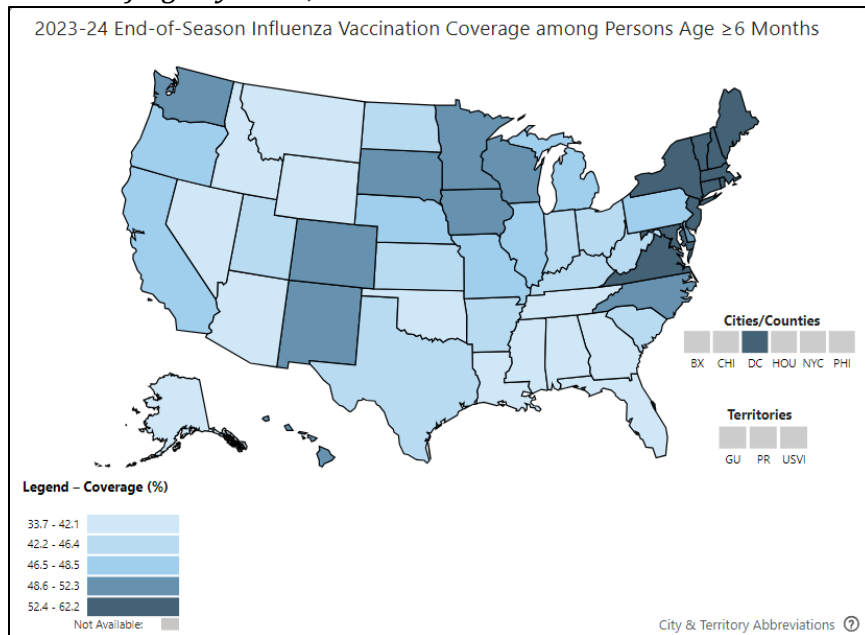
Nationally, influenza 2023-2024 vaccination coverage with ≥1 dose of flu vaccine was 55.4% among children 6 months through 17 years, a decrease of 2.0 percentage points compared with the 2022–23 flu season (57.4%) and a decrease of 8.3 percentage points compared with the pre-pandemic 2019–20 season (63.7%). The last time flu vaccination coverage among children was this low or lower was 12 seasons ago (2011–12, 51.5%). Interpretation of the estimates should take into consideration survey [limitations](#).

Figure 24. 2023–2024 End-of-Season Influenza Vaccination Coverage by Age Group, United States



Source: [FluVaxView Interactive Dashboard](#)

Figure 25. 2023–2024 End-of-Season Influenza Vaccination Coverage Among Persons ≥ 6 Months of Age by State, United States



Source: [FluVaxView Interactive Dashboard](#)

Sentinel Surveillance

The [Influenza Sentinel Surveillance Program \(SSP\)](#) relies on a network of providers that voluntarily submit weekly specimens for testing from patients presenting with ILI symptoms at participating outpatient facilities. The SSP depends on collaboration between providers, LHDs, the Division of Consolidated Laboratory Services (DCLS) and VDH Central Office for success.

The DCLS testing workflow included multiple types of molecular tests that detect both flu and COVID-19 and other respiratory pathogens. Once a specimen tests positive for flu, the specimen gets routed to further subtyping and sequencing. However, if the specimen tests negative for either flu or COVID-19, respiratory viral panel testing is performed to test for other respiratory pathogens. Laboratory data results submitted through this program are then sent to the Virginia Electronic Disease Surveillance System (VEDSS).

2023-2024 Season Data

For the 2023-2024 season, providers were represented from four of the five health planning regions: Central, Eastern, Northwest, and Southwest. Nine provider locations submitted specimens for testing at DCLS. For the 2023–2024 flu season, there were 304 specimens submitted that met the ILI criteria. Among the specimens, 12% (35) were positive for influenza and 15% (46) were positive for COVID-19. The eastern region submitted the highest number of specimens throughout the season. Most of the ILI specimens were received from patients aged 25–49 years. The least number of specimens

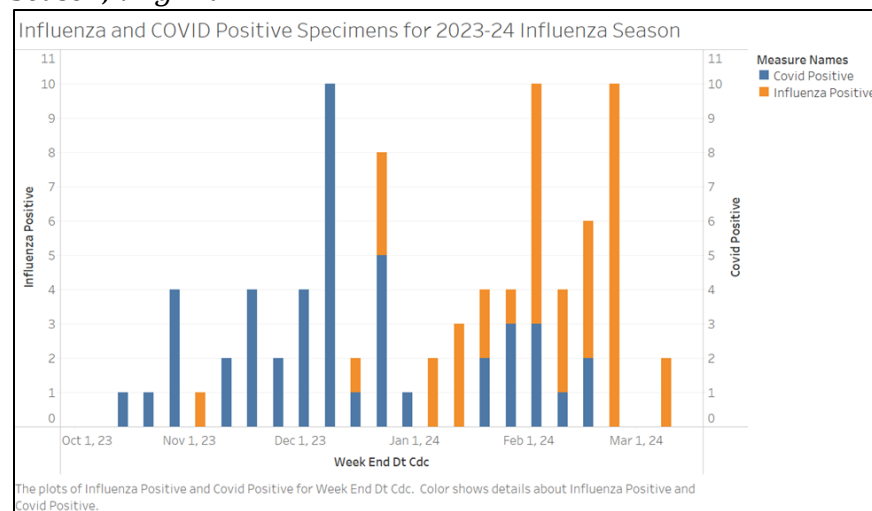
submitted were for those in the 19–24 years age group, which had the highest percentage of flu positive tests.

Table 2. Summary of Influenza Specimens Submitted by Providers in the SSP During the 2023–2024 Flu Season, Virginia

Region	Provider Location (County)	Specimens Received, N	Flu Positive Specimens with Subtype, N (%)	SARS-CoV-2 Positive Specimens, N (%)
Central	Colonial Heights City	15	4 (27%)	2 (13%)
Eastern	Gloucester	74	4 (5%)	17 (23%)
	Newport News City	65	9 (14%)	7 (11%)
	York	51	6 (12%)	7 (14%)
	Chesapeake City	64	8 (13%)	6 (9%)
	Virginia Beach City	22	1 (5%)	6 (27%)
Northwest	Orange	0	0 (0%)	0 (0%)
	Winchester City	10	3 (30%)	0 (0%)
Southwest	Franklin	3	0 (0%)	1 (33%)

Source: VDH Influenza Sentinel Surveillance Program

Figure 26. Influenza and COVID-19 Positive Labs Reported to the SSP in the 2023–2024 Flu Season, Virginia



Source: VDH Influenza Sentinel Surveillance Program

Conclusion

In Virginia, the 2023–2024 flu season had high activity which peaked around MMWR week 52 (ending December 30, 2023) with influenza A as the predominant circulating virus. More influenza B positive labs were observed compared to other recent seasons; this was

seen in confirmatory laboratory reports, FluSurv-NET data, and wastewater surveillance data. Virginia's peak activity and the proportion of influenza A:B viruses mirrored national trends.

At its peak, Virginia reported 7.7% of the total visits to EDs and urgent care centers were due to ILI, which was similar to the previous four seasons, except for the 2022–2023 season. The 0-4 years age group had the highest proportion of ED and urgent care center visits be for ILI.

Of the 304 specimens submitted to the Virginia Sentinel Surveillance program from patients that met ILI criteria, 12% were positive for influenza and 15% were positive for COVID-19. COVID-19 positive specimens predominated from October-January, with more influenza detections January-March.

There were 117 flu outbreaks reported to VDH during the 2023–2024 season, occurring most commonly in K-12 school and nursing home settings.

Influenza-associated deaths in adults in Virginia peaked slightly later than the rest of the country (MMWR week 3 compared to week 1), and in the 2023–2024 flu season there were a total of three pediatric deaths reported.

The Virginia Immunization Information System recorded 3,007,035 influenza vaccines during the 2023–2024 flu season, which represents 35.5% of the overall population in Virginia. However, according to CDC's [FluVaxView data](#), sourced from survey data, Virginia's flu vaccination rate for the 2023–2024 flu season was estimated at 52.5% which is higher than the national 2023–2024 flu season estimation rate of 47.2%. Using the survey data, Virginia has had higher vaccination coverage than the national average since at least the 2010–2011 flu season. The highest uptake was seen in adults 65 years of age and older, followed by children aged 6 months through 17 years.

VDH began participating as a pilot state for CDC's FluSurv-NET in the 2023–2024 flu season. Fairfax County HD conducted active surveillance at all five hospitals within its district and completed 427 medical chart reviews for influenza-associated hospitalizations in children and adults, gaining insight into local morbidity and mortality trends. VDH will continue to work with Fairfax County HD in future flu seasons to understand the risk factors associated with hospitalization and inform evidence-based practices to reduce the burden of influenza in Virginia.

VDH's mission is to protect the health and promote the well-being of all people in Virginia. Although the true burden of influenza may not be known, national, state, and regional data can be combined to develop a picture of how influenza is affecting Virginia's population. Ongoing data collection through ILI-NET, laboratory reports, outbreak surveillance, vital records, FluSurv-NET, wastewater surveillance, vaccination records, and the influenza sentinel surveillance program will continue to inform public health, lead to more effective prevention and control measures, and ultimately contribute to a healthier future for our Commonwealth.

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