

ANNUAL MARYLAND INFLUENZA SEASON SUMMARY

2024-2025 Season

Infectious Disease
Epidemiology and
Outbreak Response Bureau



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Section 1: Introduction

The Maryland Department of Health (MDH) Infectious Disease Epidemiology and Outbreak Response Bureau conducts continuous statewide influenza surveillance, in coordination with local and federal partners. Although influenza is not a reportable condition in Maryland, MDH uses a variety of metrics to assess the burden and severity of each influenza season. This report summarizes key influenza-related indicators and data (Table 1) collected and analyzed as part of this program for the 2024-2025 influenza season (October 2024-May 2025).

Table 1: Key Influenza-Related Indicators and Data, Maryland, 2024-2025

Influenza Activity • Outpatient influenza-like illness (ILI) visits • Emergency department (ED) and urgent care respiratory illness visits • Community-based respiratory illness • Clinical laboratories influenza tests • MDH Laboratories Administration influenza tests • Respiratory illness outbreaks
Severity • Influenza-associated hospitalizations • Influenza-associated adult deaths • Influenza-associated pediatric deaths
Vaccination • Influenza vaccination data

Section 2: Influenza Activity

Outpatient Influenza-Like Illness (ILI)

The **U.S. Influenza-Like Illness Surveillance Network (ILINet)** collects information from a network of healthcare providers (“sentinel providers”) on outpatient visits for respiratory illness. Sentinel providers include emergency departments (EDs), urgent care facilities, student health centers, family practice, internal medicine, OB/GYN and pediatricians. Sentinel providers report, on a weekly basis, the number of patient visits for ILI by age group and the total number of visits for any reason. For ILINet, ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat. The Centers for Disease Control and Prevention (CDC) manage ILINet in collaboration with health departments.

ILINet data are used to determine a weekly **ILI activity** level for each U.S. jurisdiction, which is based on the percent of outpatient visits due to ILI in a jurisdiction compared to the average percent of ILI visits that occur during weeks with little or no influenza virus circulation (non-influenza weeks) in that jurisdiction.

During the 2024-2025 influenza season, in Maryland:

- A total of 70 Maryland sentinel providers reported data to ILINet, with an average of 67 providers (96%) reporting weekly.
- 1,598,621 individuals visited Maryland sentinel providers and 62,856 (3.9%) of those patients reported ILI.
- Activity reached its peak in week 6 (early February), with percent positivity of 8.9% (Figure 1).

See Figures 1-3 for additional data on trends over time in outpatient visits to Maryland sentinel providers for ILI by season, age group-specific data for this season, as well as percentage by season.

Figure 1: Percent Outpatient Visits to Sentinel Providers for ILI by Week and Season

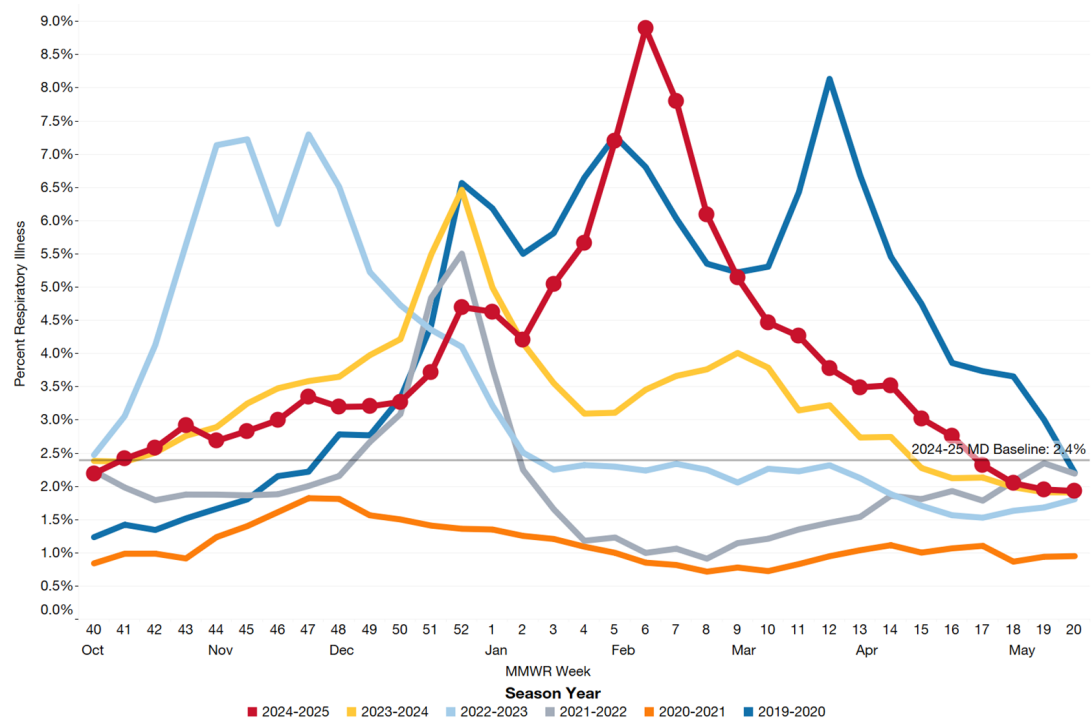


Figure 2: Number and Percent of ILI Visits to Sentinel Providers by Age, 2024-2025 Season

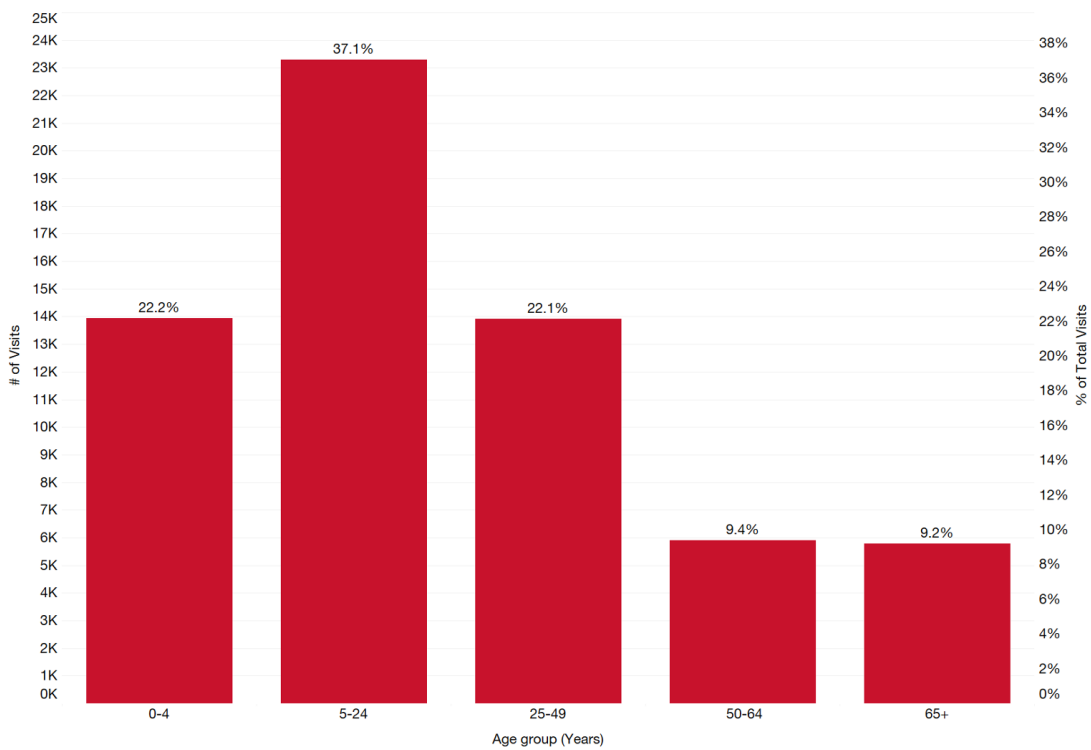
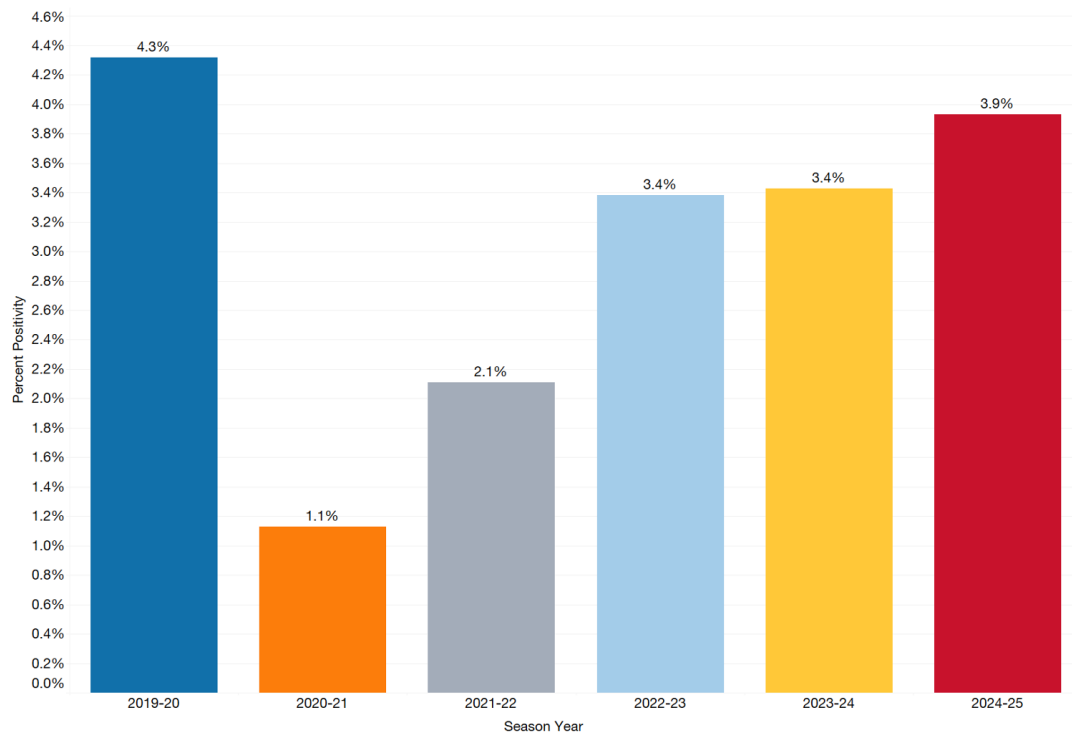


Figure 3: Percent Positivity of ILI Among Outpatient Visits to Sentinel Providers by Season



ED and Urgent Care Visits for ILI

Maryland's **Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)** is a syndromic surveillance system that uses multiple data sources, including ED and urgent care visits, to monitor patterns of illness for patients seeking healthcare in those settings. For this system, a person with a chief complaint of fever and either a cough or a sore throat, or complaining of "influenza" is classified as an ILI case.

During the 2024-2025 influenza season, in Maryland:

- MDH ESSENCE data sources include 49 EDs and 25 urgent care facilities.
- A total of 2,111,753 individuals visited these ED and/or urgent care facilities, with 107,285 (5.1%) of those individuals reporting ILI.
- Activity reached its peak in week 6 (early February), with percent positivity of 13.1% (Figure 4).

See Figures 4-6 for additional data on trends over time in Maryland ED and urgent care visits for ILI by season, age group-specific data for this season, as well as percentage by season.

Figure 4: Percent of ED and Urgent Care Visits for ILI by Week and Season

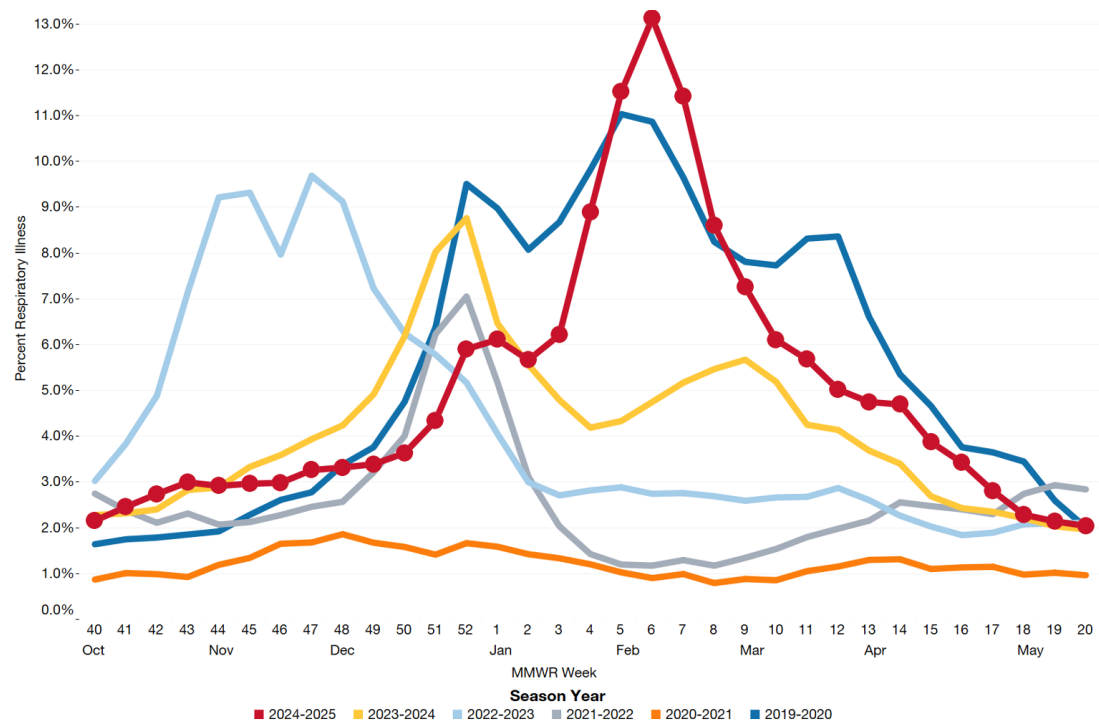


Figure 5: Number and Percent of ED and Urgent Care Visits for ILI, by Age Group, 2024-2025 Season

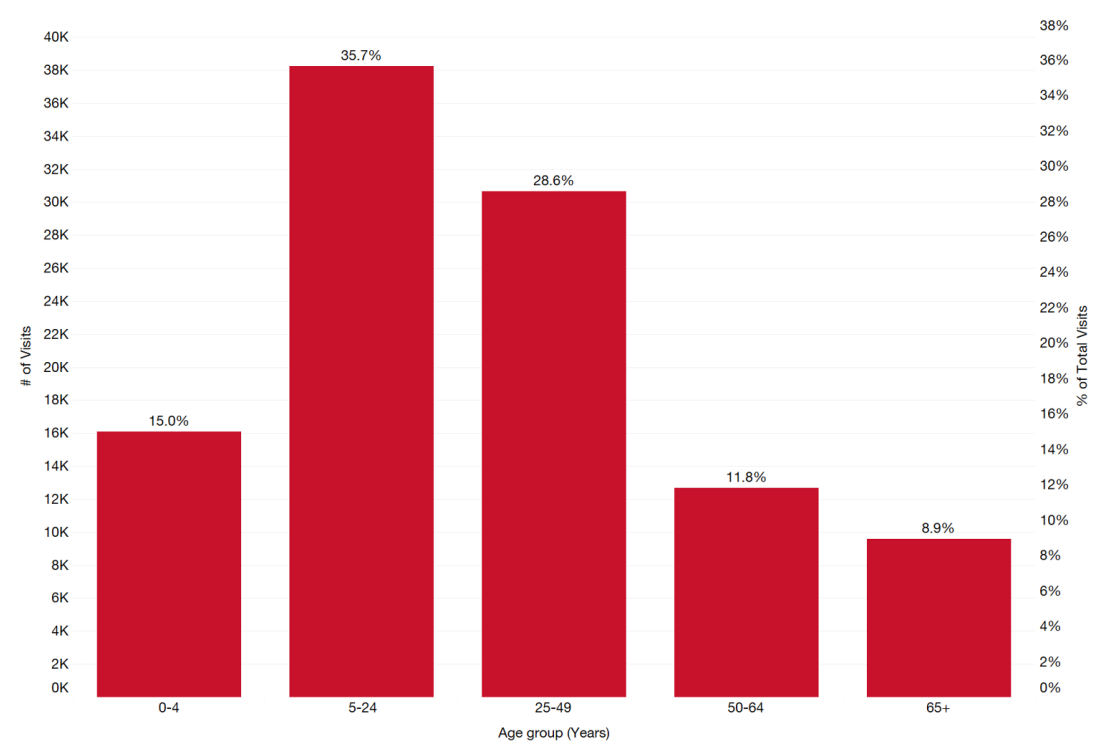
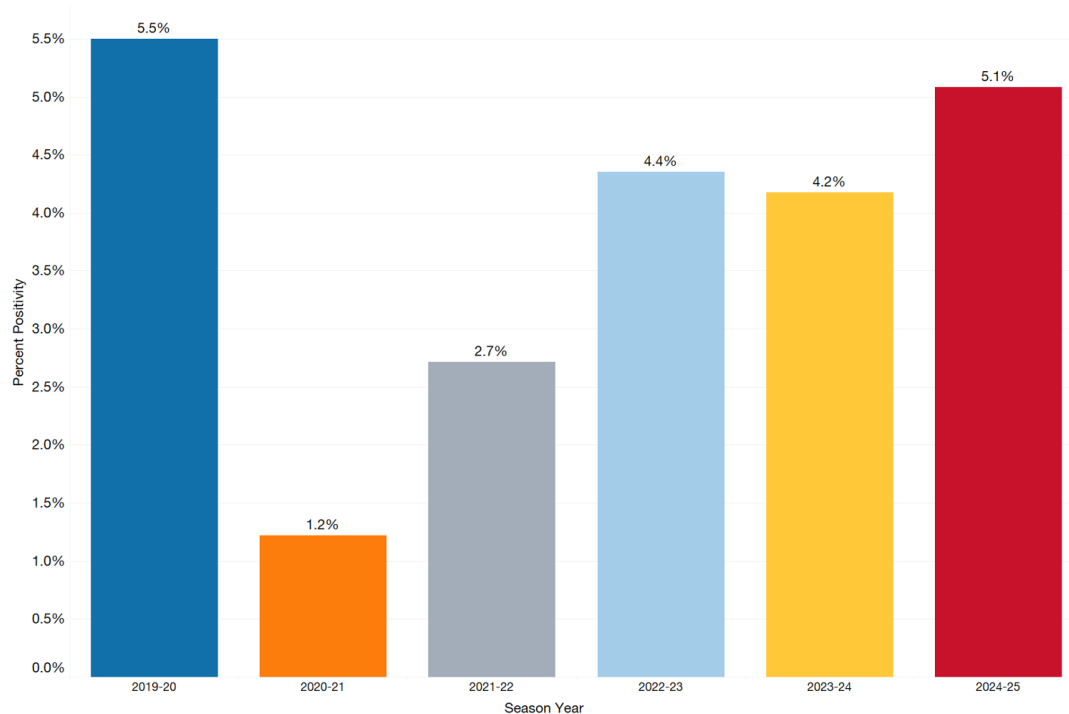


Figure 6: Percent Positivity of ILI Among ED and Urgent Care Visits by Season



Community-Based Influenza Surveillance

The **Maryland Resident Influenza Tracking Survey (MRITS)** is an email-based surveillance system where participants are asked weekly if they experience any symptoms of respiratory illness. If they respond in the affirmative, they are asked follow-up questions, including if they missed any regular activities. MRITS captures a subset of the population with respiratory illness symptoms who might not be interacting with the healthcare system through outpatient provider visits, EDs, or urgent care facilities.

For the 2024-2025 influenza season, in Maryland:

- 2,699 participants were surveyed about respiratory symptoms and, on average, 352 (13%) participants reported weekly.
- 112 individuals reported having ILI symptoms and, collectively, missing 252 days of regular activity.

See Figures 7 and 8 for additional data on trends over time in community-based respiratory illness reported through MRITS by season, as well as age group-specific data for this season.

Figure 7: Percent of MRITS Respondents Reporting ILI by Week, 2024-2025 Season

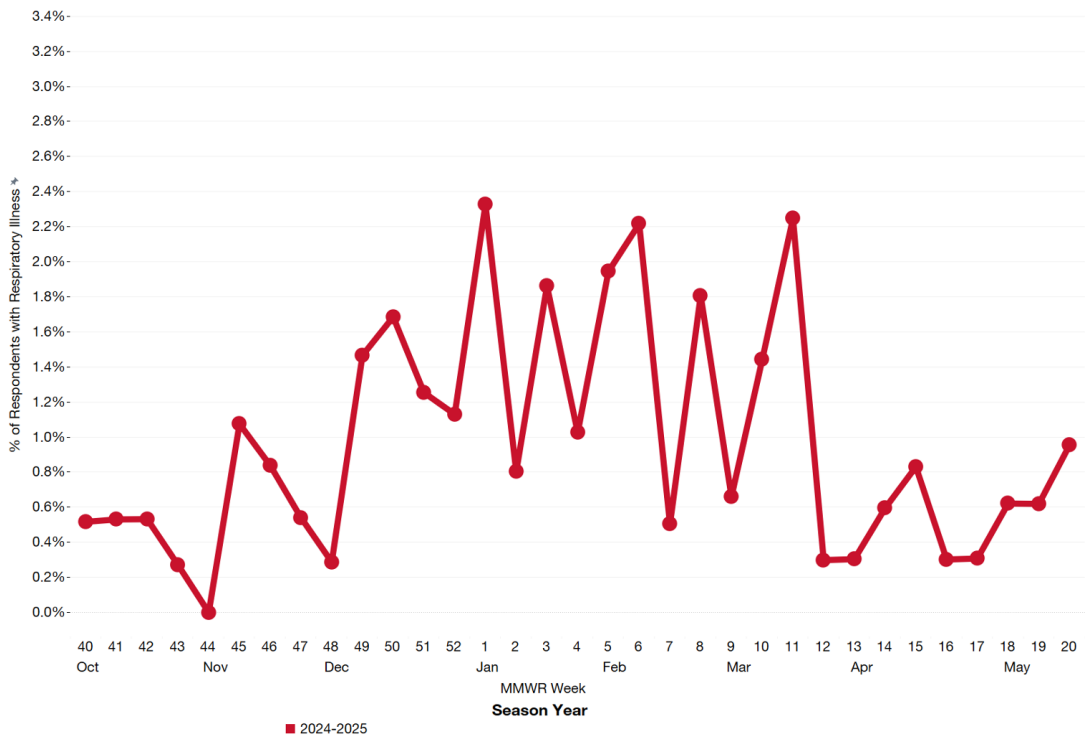
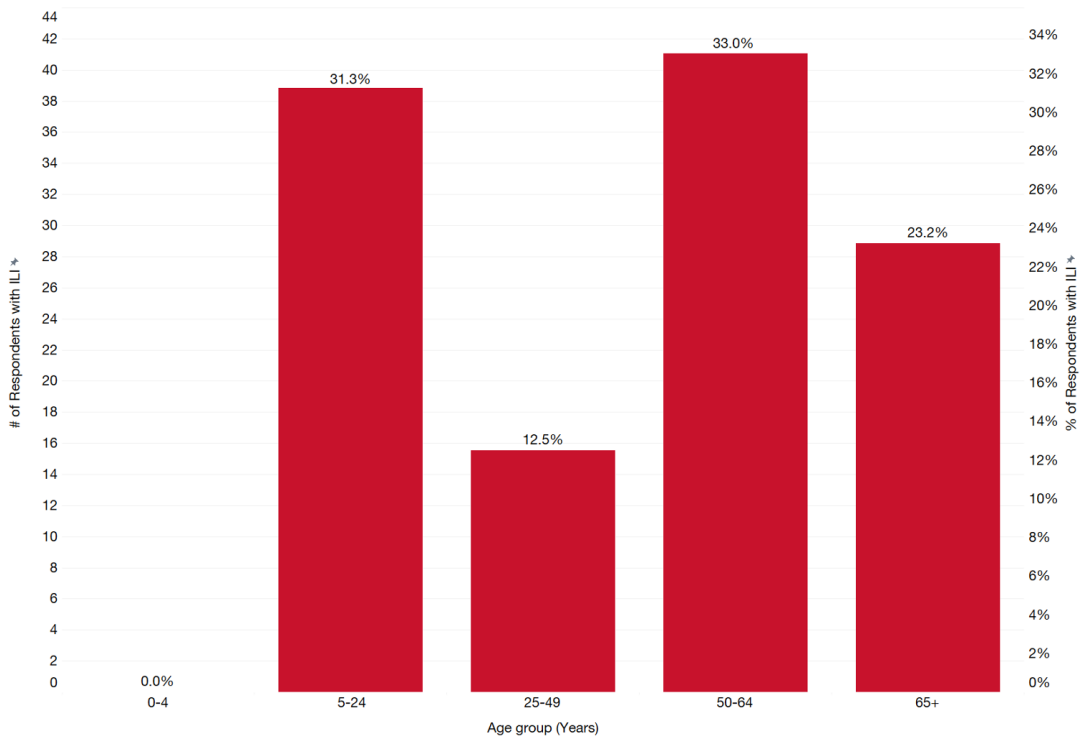


Figure 8: Number and Percent of MRITS Respondents Reporting ILI by Age Group, 2024-2025 Season



Clinical Laboratory Influenza Testing

Many clinical laboratories in Maryland voluntarily report to MDH the total number of influenza tests performed each week and the test results. The majority of these labs perform rapid influenza diagnostic tests (RIDTs). These tests identify influenza cases, but they cannot characterize the different types of influenza lineage and subtypes. Additionally, these tests are less sensitive during low influenza activity.

For the 2024-2025 influenza season, in Maryland:

- 72 clinical laboratories reported data during the season, and, on average, 67 clinical laboratories (93%) reported weekly.
- These laboratories reported 436,845 tests completed during the season, of which 74,506 (17.1%) were positive for influenza. Of the positive tests, 54,632 (73.3%) were Type A and 19,874 (26.7%) were Type B.
- From week 49 to week 11, Influenza A was the most commonly detected type.
- Activity reached its peak in week 5 (early February), with percent positivity of 35.2% (Figure 9).

See Figures 9-12 for additional data on trends over time in percent positive influenza testing reported by clinical laboratories in Maryland, influenza type for this season, and total percent by season.

Figure 9: Influenza Testing Reported by Maryland Clinical Laboratories by Week and Season

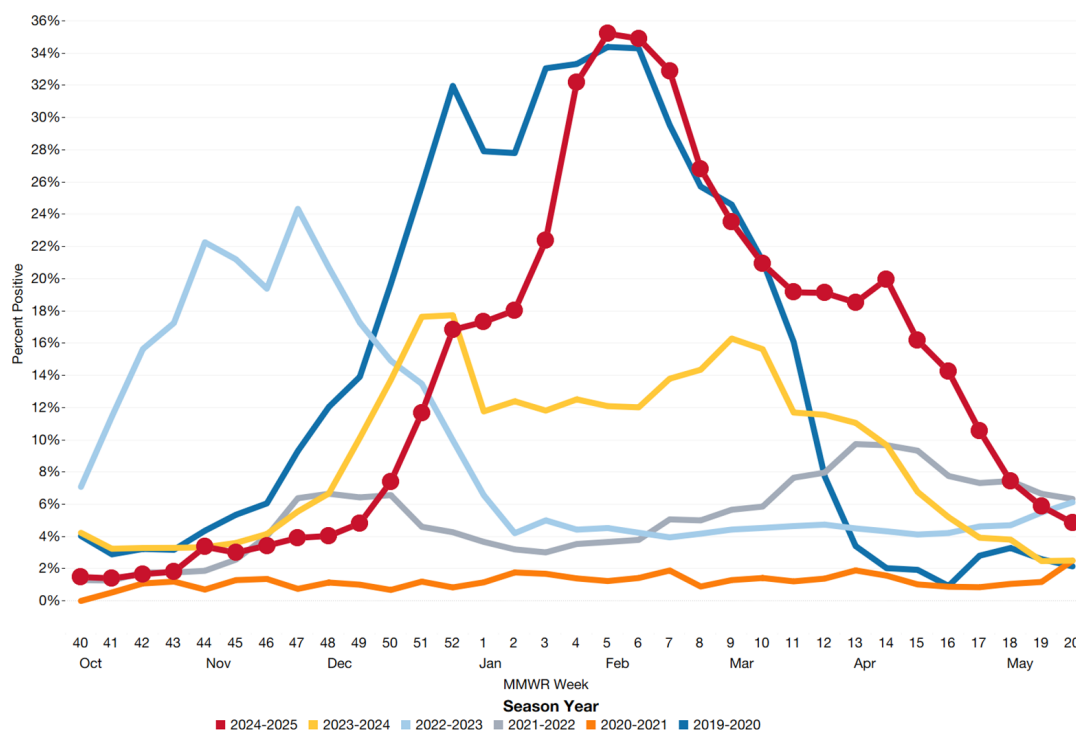


Figure 10: Count of Positive Influenza Tests Reported by Maryland Clinical Laboratories by Influenza Type by Week, 2024-2025 Season

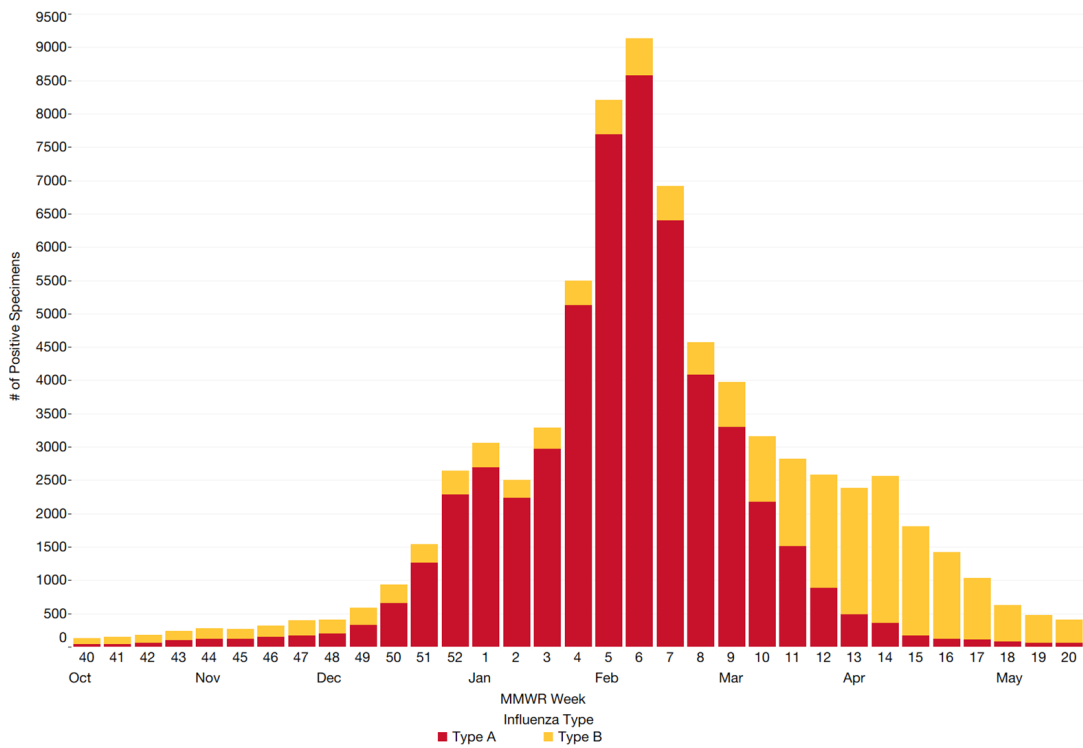


Figure 11: Total Count and Percent of Positive Influenza Tests Reported by Maryland Clinical Laboratories by Influenza Type, 2024-2025 Season

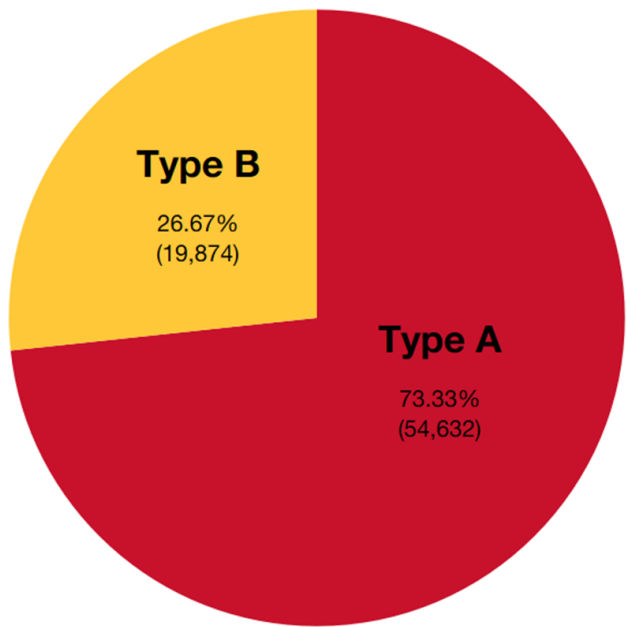
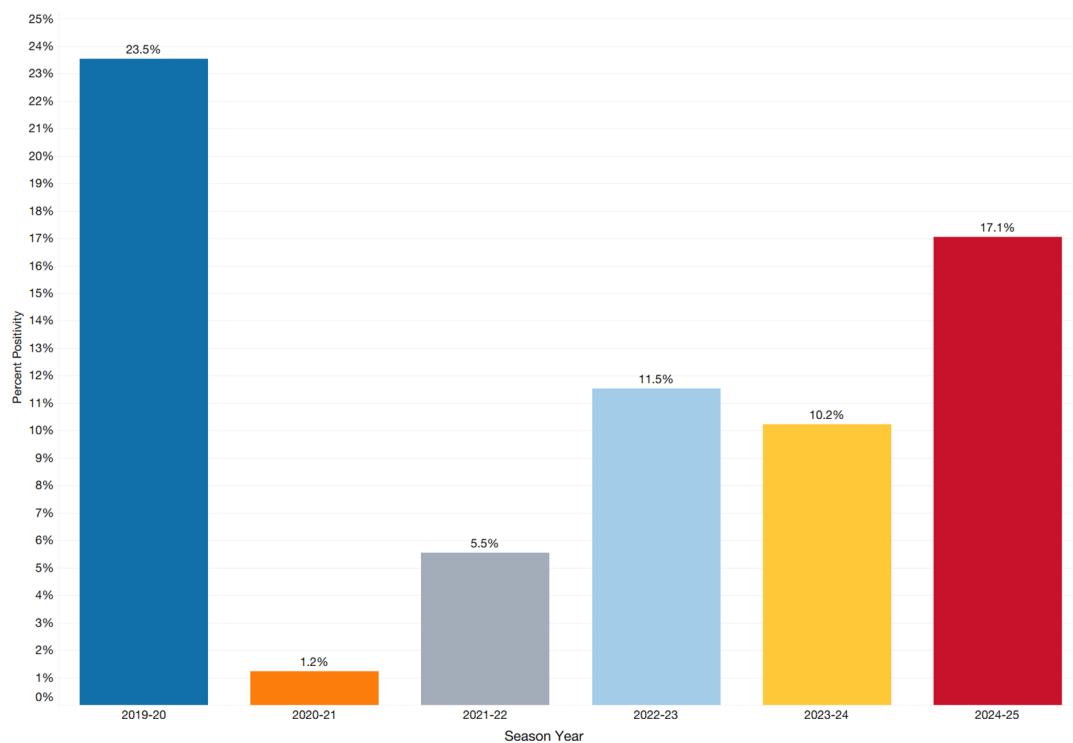


Figure 12: Influenza Percent Positivity Reported by Maryland Clinical Laboratories by Season



MDH Laboratories Administration Influenza Testing

The MDH Laboratories Administration performs influenza Polymerase Chain Reaction (PCR) tests. These tests are more reliable than RIDTs and can also identify the different types and subtypes of the influenza virus that are known to circulate during the influenza season (e.g. A(H1N1), B/Victoria).

For the 2024-2025 influenza season, in Maryland:

- The MDH Laboratories Administration tested a total of 3,032 specimens with 2,102 (69.3%) testing positive.
- The most common type was Type A/H1 with 867 (28.6%), followed by Type A/H3 with 758 (25.0%).

See Figures 13 and 14 for additional data on trends over time in positive influenza PCR results at MDH Laboratory by season, influenza type and lineage data for this season, as well as breakdown of subtypes by week.

Figure 13: Breakdown of Subtypes of Positive Influenza PCR Testing Results Reported by MDH Laboratories Administration by Week, 2024-2025 Season

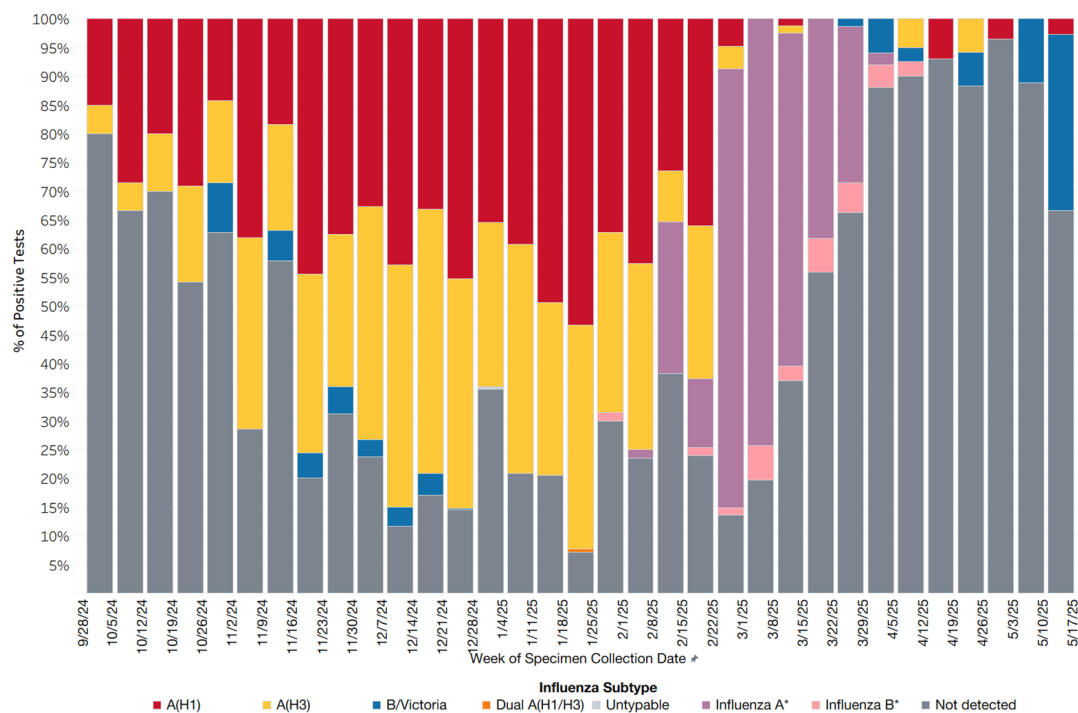
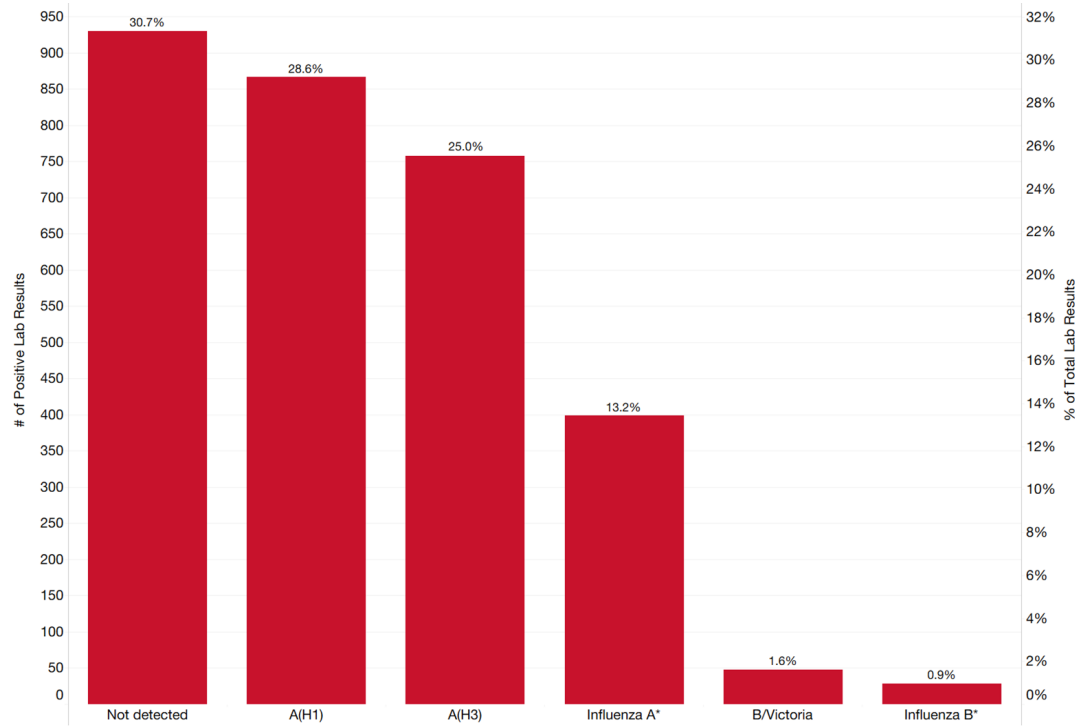


Figure 14: Positive Influenza PCR Testing Reported by MDH Laboratories Administration by Subtype, 2024-2025 Season



*Subtyping was not performed for these test results.

Non-COVID-19 Respiratory Outbreaks

In Maryland, respiratory illness outbreaks are routinely reported to local health departments and MDH, and then investigated and responded to by public health authorities. Such outbreaks can occur in many different settings, including nursing homes, hospitals, schools and child care facilities. Respiratory illness outbreaks have been divided into COVID-19 outbreaks and non-COVID-19 respiratory outbreaks. During the 2024-2025 influenza season, there were 480 COVID-19 outbreaks reported.

For the 2024-2025 influenza season, in Maryland:

- 534 non-COVID-19 respiratory outbreaks were reported.
- The most commonly reported outbreak was influenza with 351 (65.7%), followed by influenza-like illness with 68 (12.7%), RSV with 49 (9.2%), and pneumonia with 45 (8.4%) outbreaks.
- The number of outbreaks peaked during weeks 5 and 6 (early February), with 61 reported in each week. This included 41 influenza outbreaks in week 5 and 47 in week 6 (Figure 15).

See Figures 15-17 for additional data on trends over time for non-COVID-19 respiratory outbreaks in Maryland by season, type of outbreaks, as well as facility.

Figure 15: Non-COVID-19 Respiratory Illness Outbreaks Reported in Maryland by Week and Season

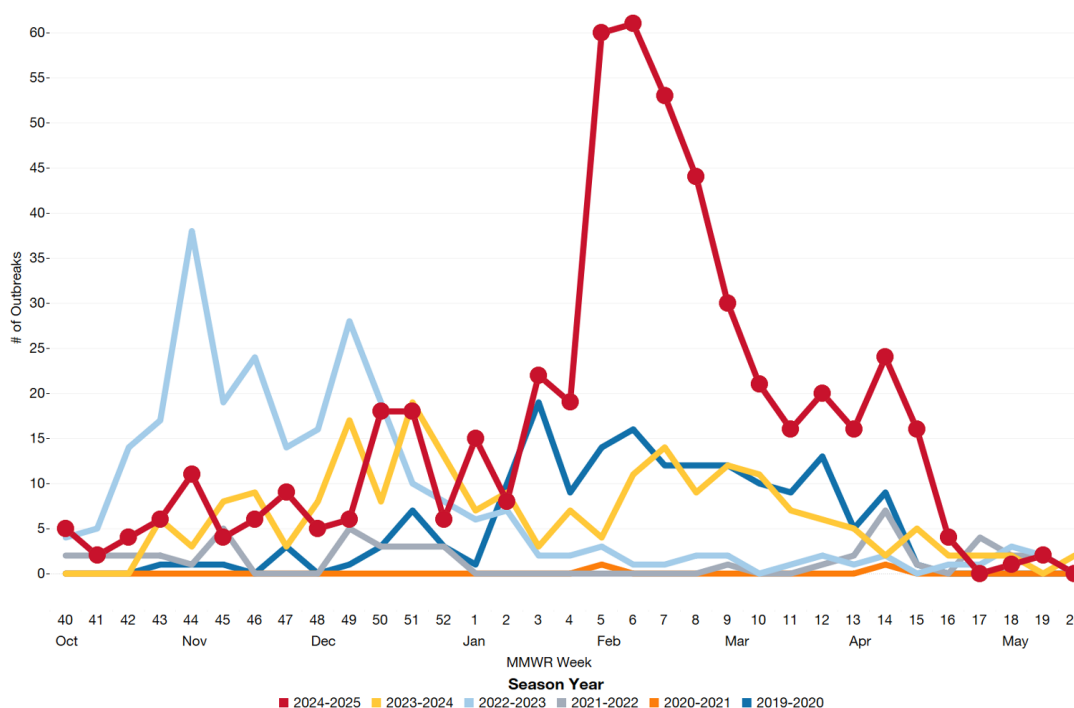


Figure 16: Non-COVID-19 Respiratory Illness Outbreaks Reported in Maryland by Type, 2024-2025 Season

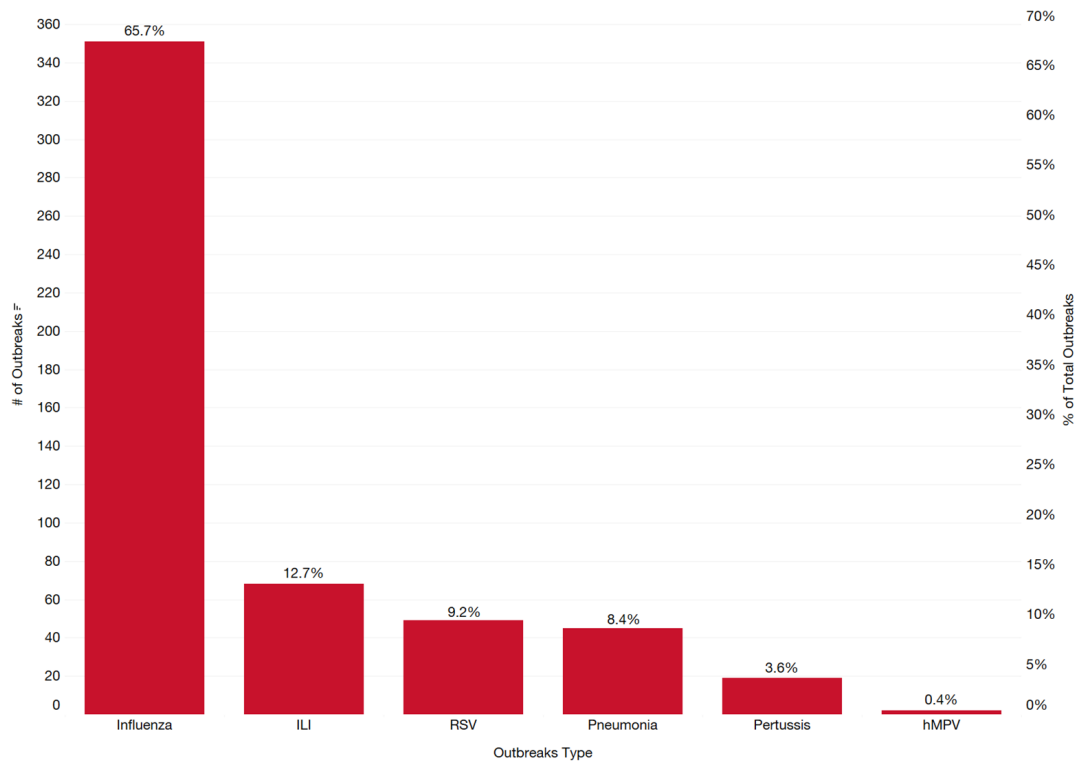
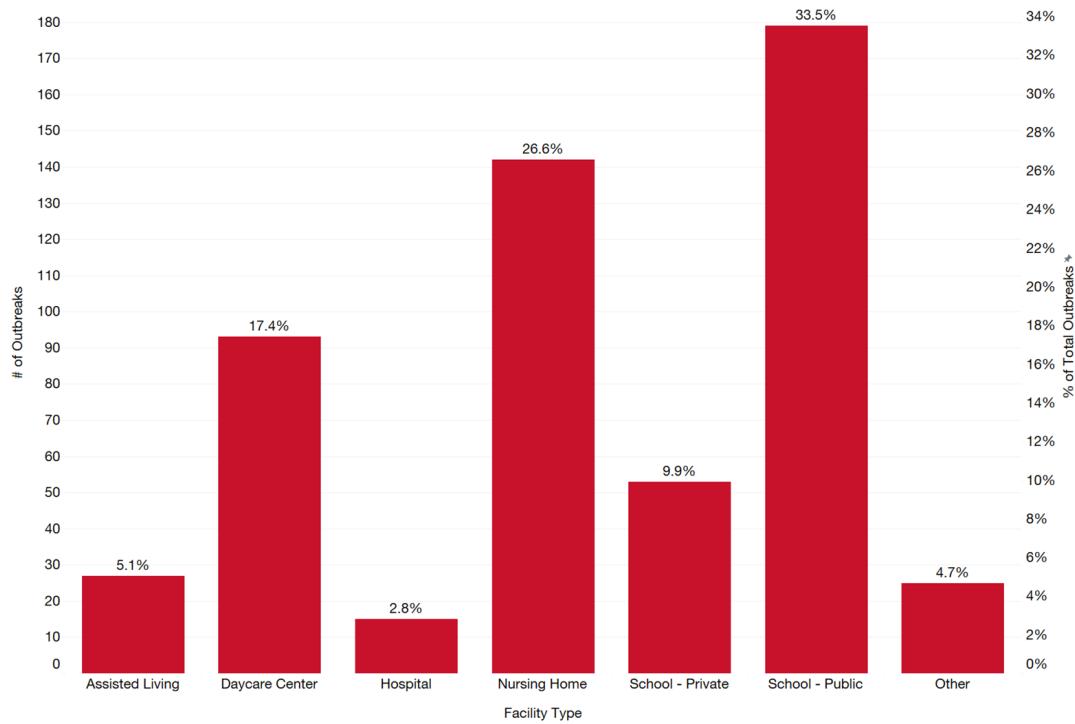


Figure 17: Non-COVID-19 Respiratory Illness Outbreaks Reported in Maryland by Facility Type, 2024-2025 Season



Section 3: Influenza Severity

Influenza-Associated Hospitalization

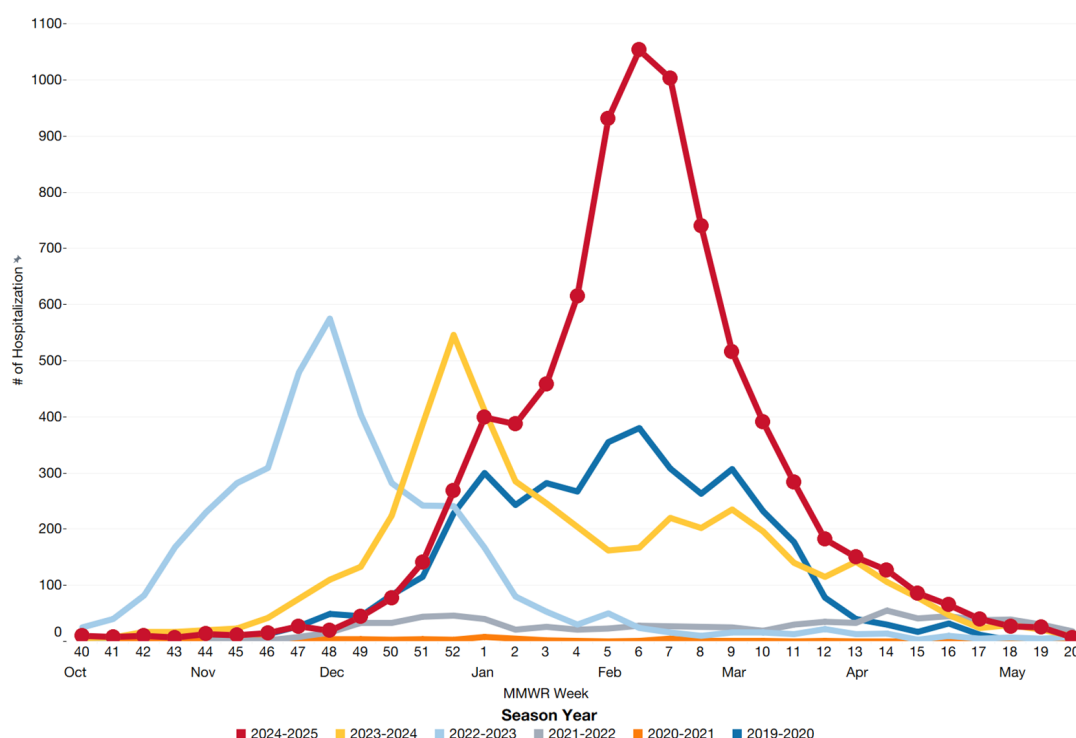
The Maryland Emerging Infectious Program (EIP) conducts active surveillance for laboratory-confirmed influenza-associated hospitalizations in Maryland. A person with an overnight hospital stay along with a positive influenza test of any kind (e.g. RIDT or PCR) is considered an “influenza-associated hospitalization” for purposes of influenza surveillance in Maryland.

For the 2024-2025 influenza season, in Maryland:

- A total of 8,133 individuals were hospitalized due to influenza-associated illness, or 134.6 hospitalizations per 100,000 population*.
- Activity reached its peak in week 6 (early February), with 1,053 hospitalizations reported (Figure 18).

See Figures 18-22 for additional data on trends over time in influenza-associated hospitalizations in Maryland by season, per 100,000 population* by age, race, ethnicity, and gender for this season, as well as total number of hospitalizations by season.

Figure 18: Influenza-Associated Hospitalizations in Maryland by Week and Season



*Population data were obtained from the Maryland Department of Planning.

Figure 19: Influenza-Associated Hospitalizations per 100,000 Population* in Maryland by Age Group, 2024-2025 Season

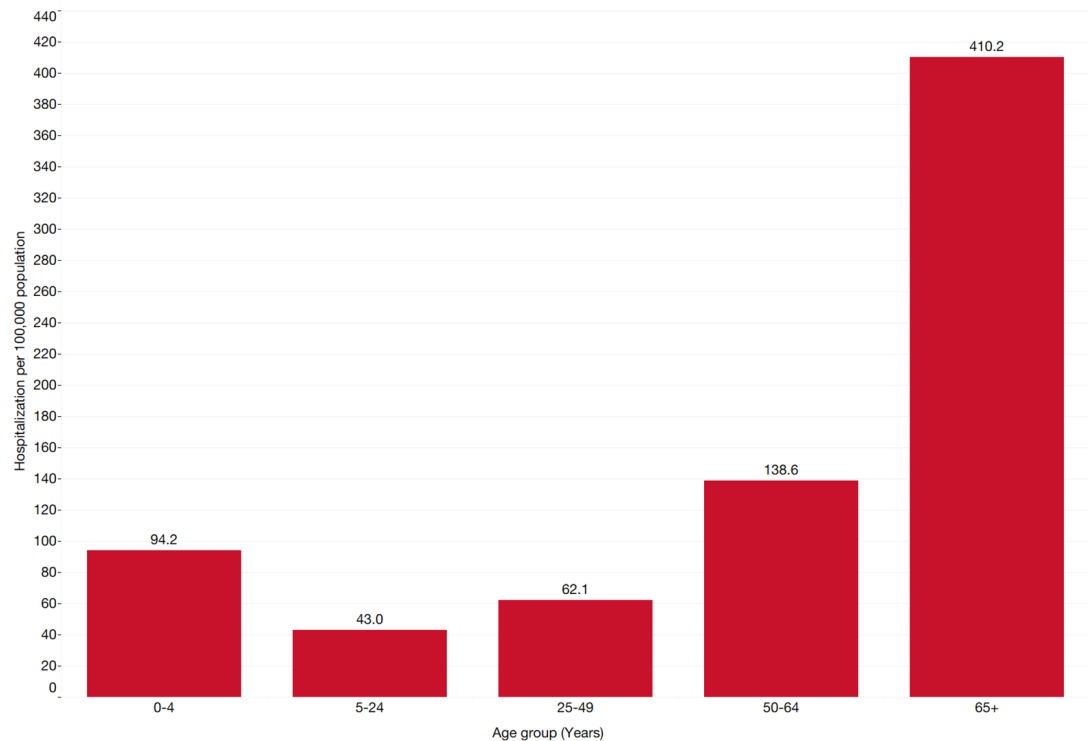
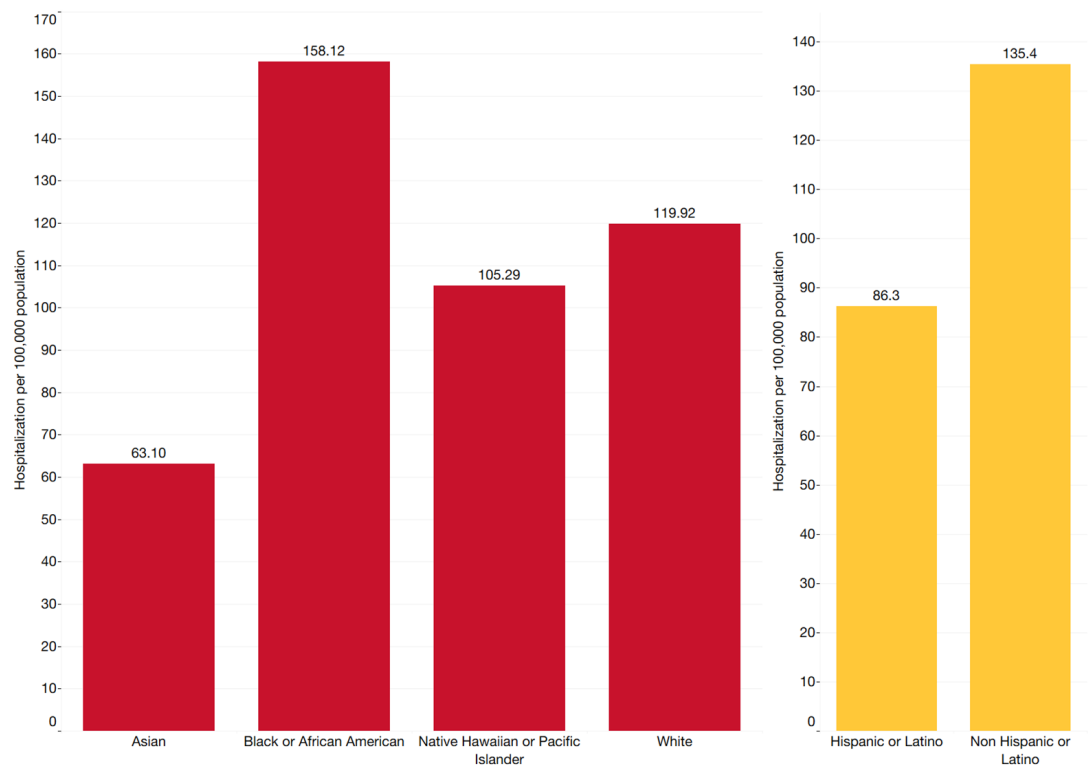


Figure 20: Influenza-Associated Hospitalizations per 100,000 Population* in Maryland by Race and Ethnicity, 2024-2025 Season



*Population data were obtained from the Maryland Department of Planning.

Figure 21: Influenza-Associated Hospitalizations per 100,000 Population* in Maryland by Gender, 2024-2025 Season

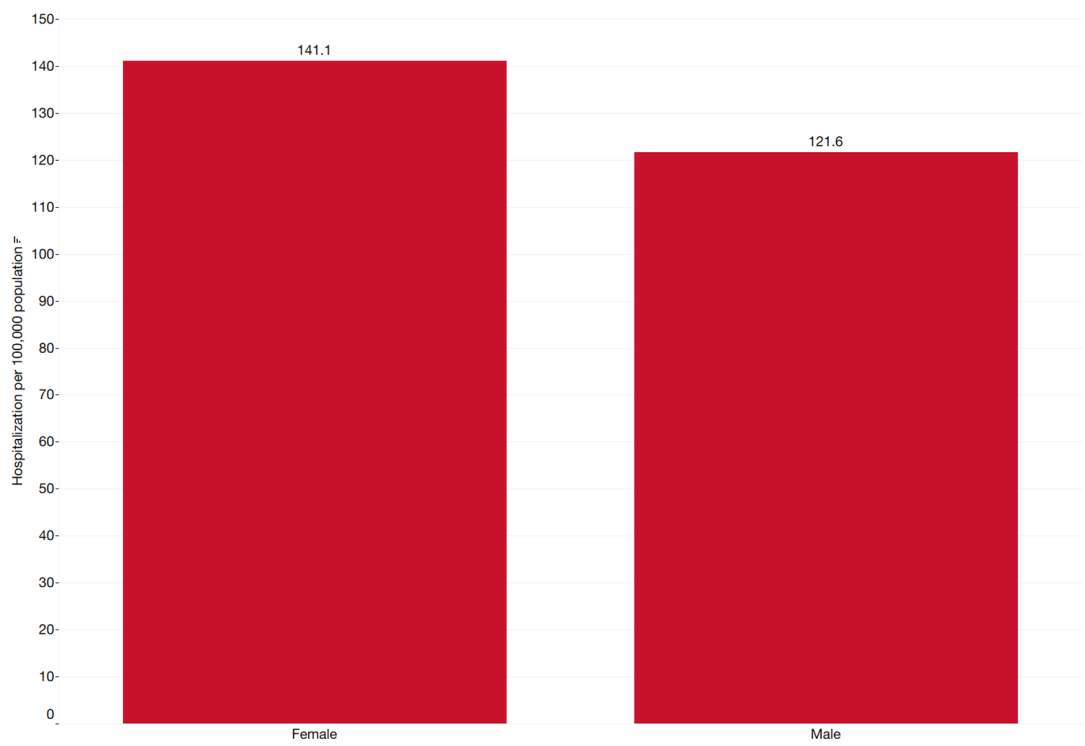
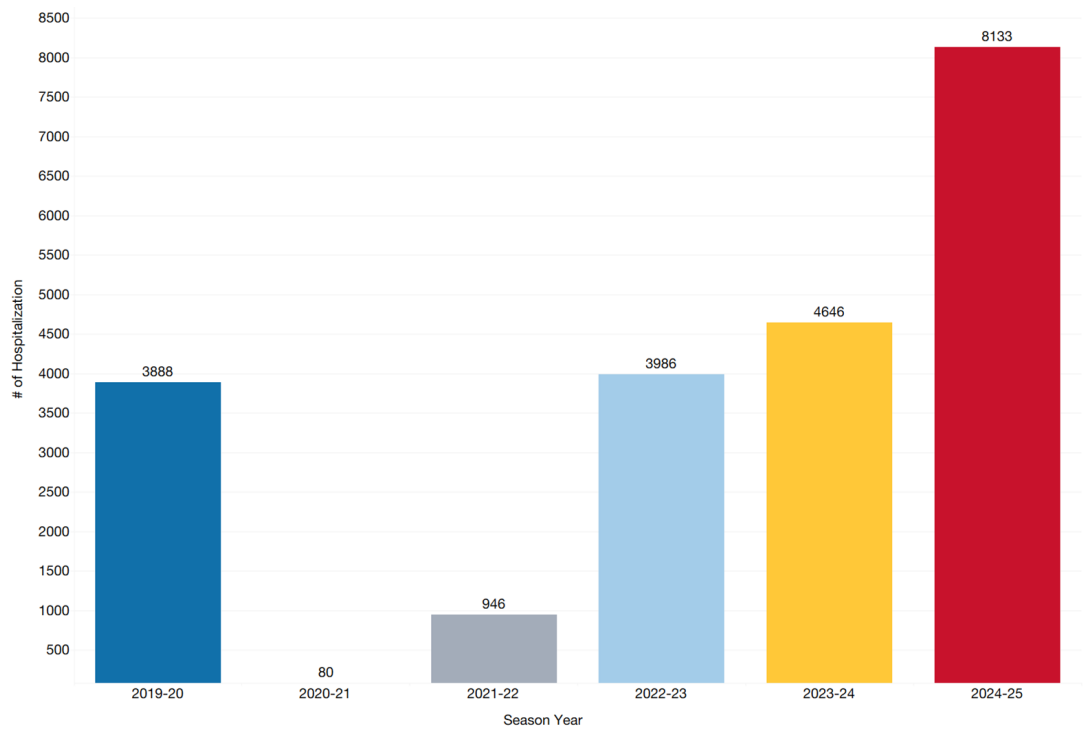


Figure 22: Total Influenza-Associated Hospitalizations in Maryland by Season



*Population data were obtained from the Maryland Department of Planning.

Influenza-Associated Adult Death

MDH's influenza-associated death data are obtained through the Maryland Electronic Death Registration System (MD-EDRS), a web-based application that medical certifiers and funeral directors use to report deaths electronically to the MDH. An influenza-associated adult death is an individual whose death certificate includes influenza in the underlying cause. Additionally, surveillance for mortality in hospitalized patients is conducted as a component of Maryland EIP.

For the 2024-2025 influenza season, in Maryland:

- 215 influenza-associated adult deaths were reported.

215

Influenza-associated
adult deaths
(2024-25 influenza season)

Influenza-Associated Pediatric Death

Maryland participates in national tracking of deaths of persons under 18 years of age who had a positive influenza test during their course of illness leading to death. An influenza-associated pediatric death is one with a clinically compatible illness and a positive influenza test of any kind.

For the 2024-2025 influenza season, in Maryland:

- 7 influenza-associated pediatric deaths were reported.

7

Influenza-associated
pediatric deaths
(2024-25 influenza season)

See Figures 23-27 for additional data on trends over time in influenza-associated deaths in Maryland, by race, ethnicity, and gender, as well as season.

Figure 23: Influenza-Associated Adult and Pediatric Deaths, 2024-2025 Season

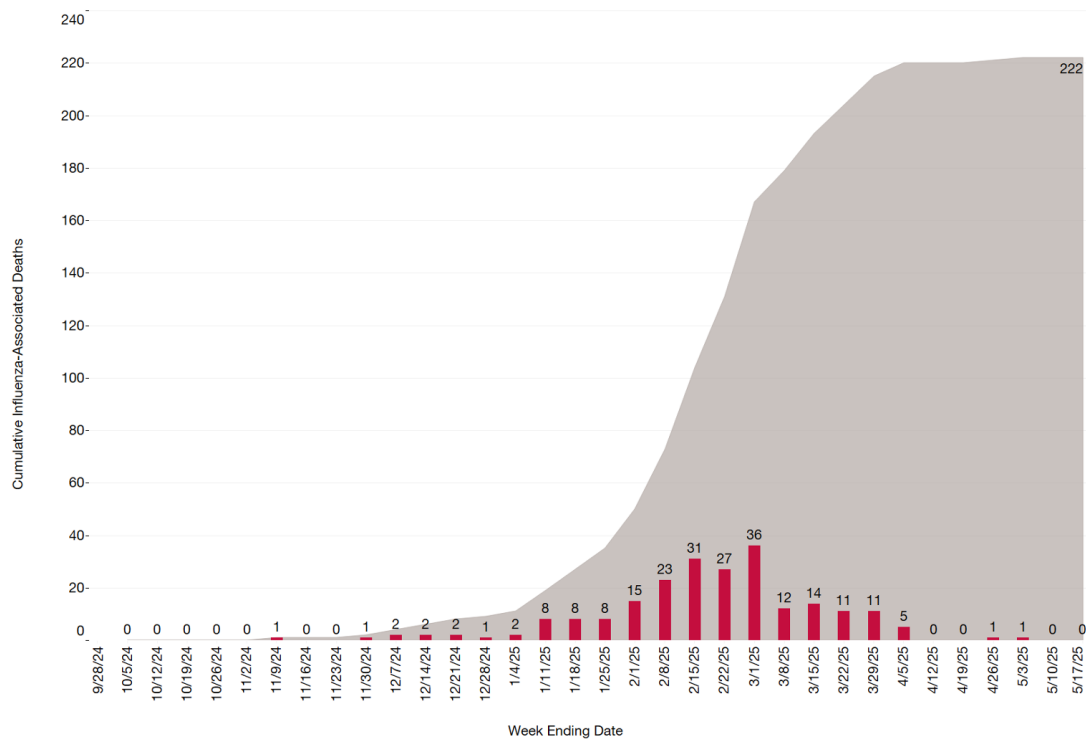


Figure 24: Influenza-Associated Adult and Pediatric Deaths by Race and Ethnicity, 2024-2025 Season

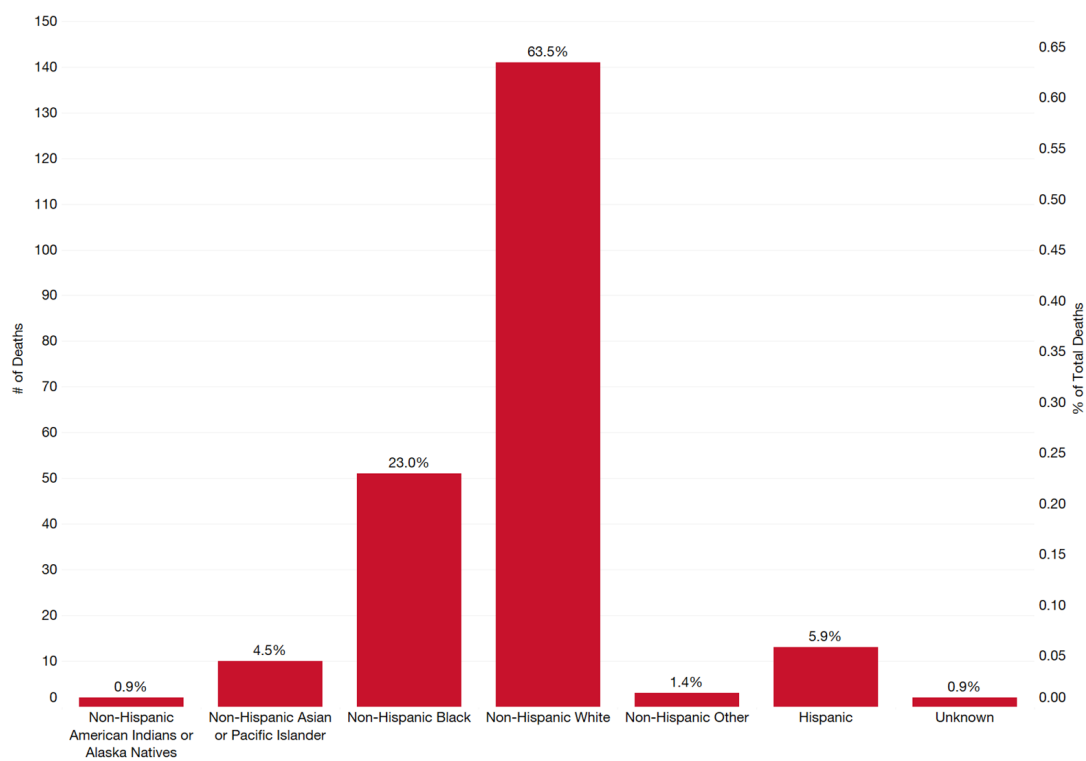


Figure 25: Influenza-Associated Adult and Pediatric Deaths by Age Group, 2024-2025 Season

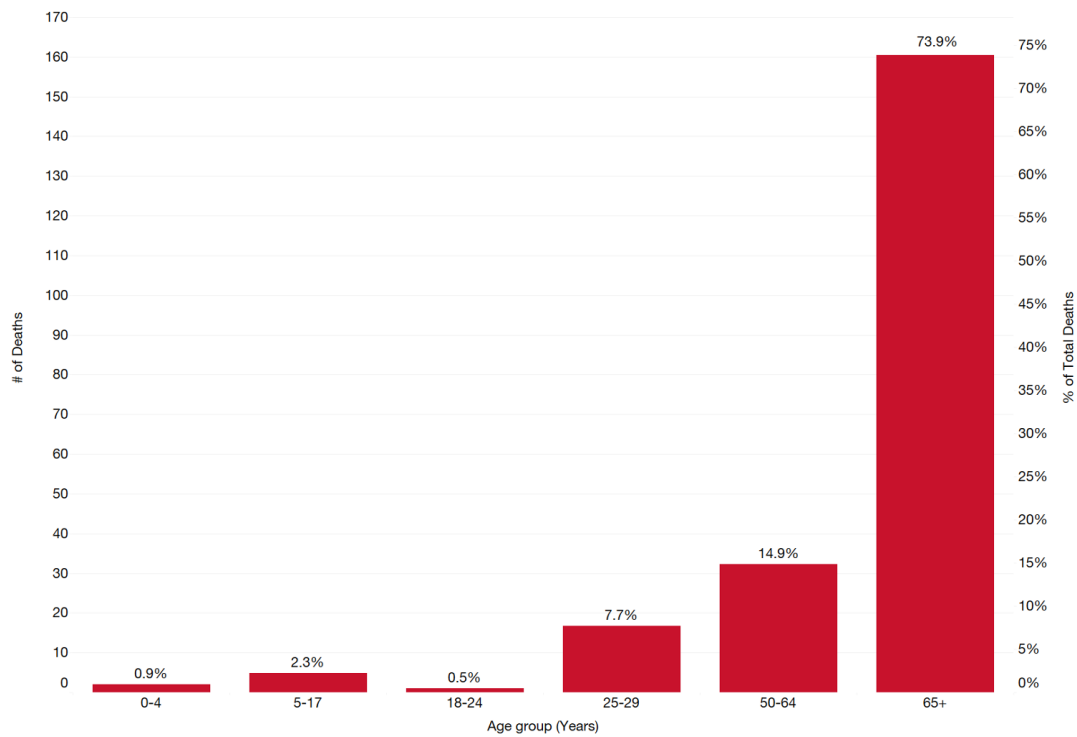


Figure 26: Influenza-Associated Adult and Pediatric Deaths by Gender, 2024-2025 Season

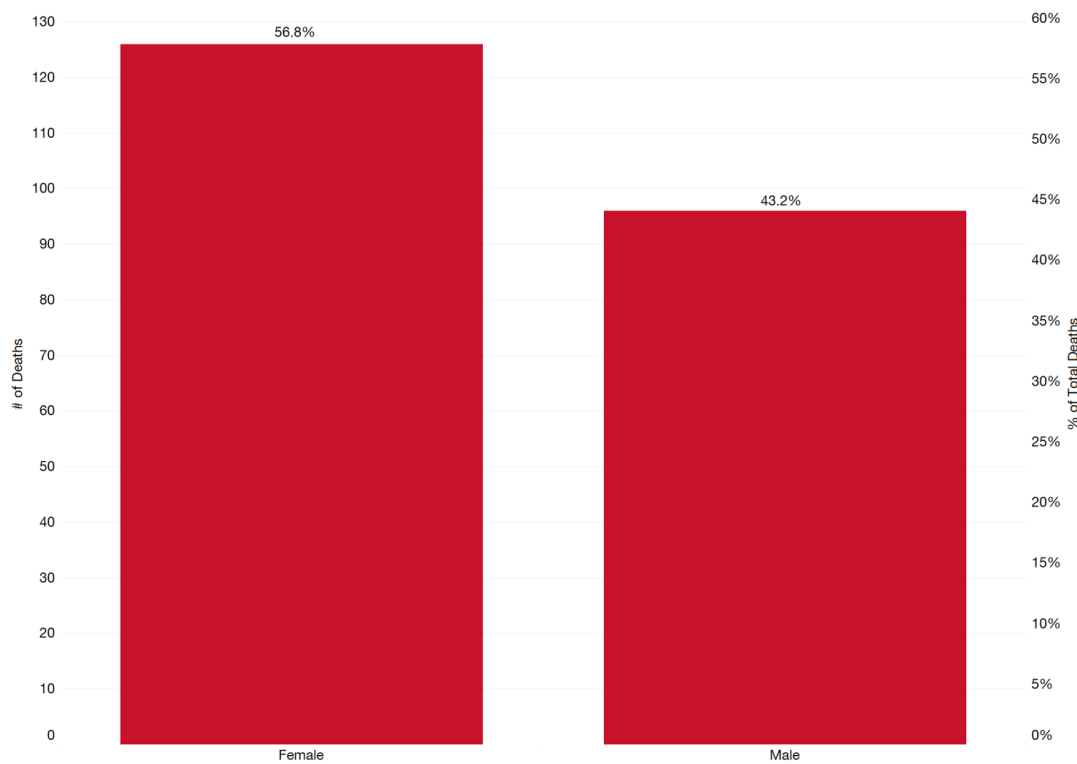
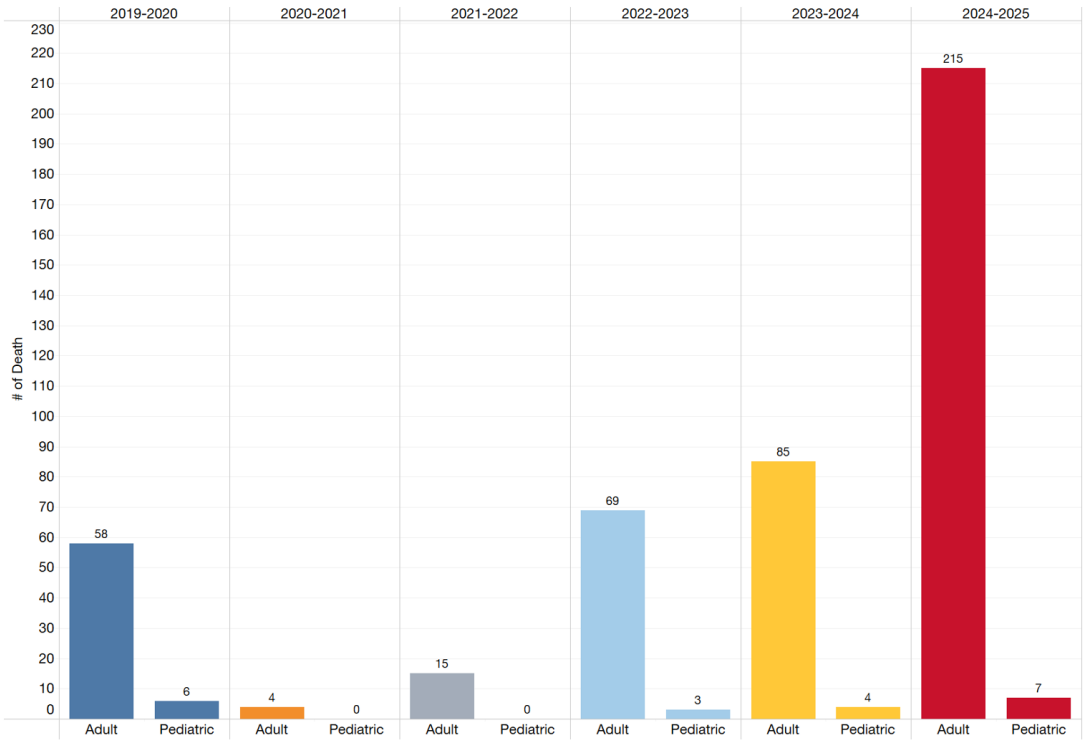


Figure 27: Influenza-Associated Adult and Pediatric Deaths by Type and Season



Section 4: Influenza Vaccination

Influenza Vaccination Data Reported to ImmuNet and Vaccine Coverage Survey Data

ImmuNet is the data source for influenza vaccination in Maryland. ImmuNet is Maryland's Immunization Information System, a confidential and secure database that stores an individual's vaccination records. Maryland statute requires that all vaccinations be recorded in ImmuNet; however, it is possible that not all influenza vaccinations were reported. In addition, survey data are also used to determine vaccine coverage rates. The surveys cannot be used to determine county-level coverage.

For the 2024-2025 influenza season, in Maryland:

- A total of 1,963,273 (32%) individuals had influenza vaccinations recorded in ImmuNet.
- Based on CDC [National Immunization Survey](#) and the [Behavioral Risk Factor Surveillance System](#) telephone surveys involving Maryland residents, CDC estimates [54.2%](#) of Maryland adults >18 years and [65.9%](#) of children 6 months to 17 years received an influenza vaccination during the 2024-2025 influenza season.

While the immunizations reported to ImmuNet might underestimate actual coverage percentages (given the higher coverage estimates provided by the CDC surveys), these figures are presented for comparisons between groups, which is not possible with CDC survey data.

See Figures 28-31 for data on Maryland influenza vaccination by county, race, ethnicity, age, and gender.

Figure 28: Proportion of Maryland Population* Vaccinated for Influenza and Reported to ImmuNet, by County, 2024-2025 Season

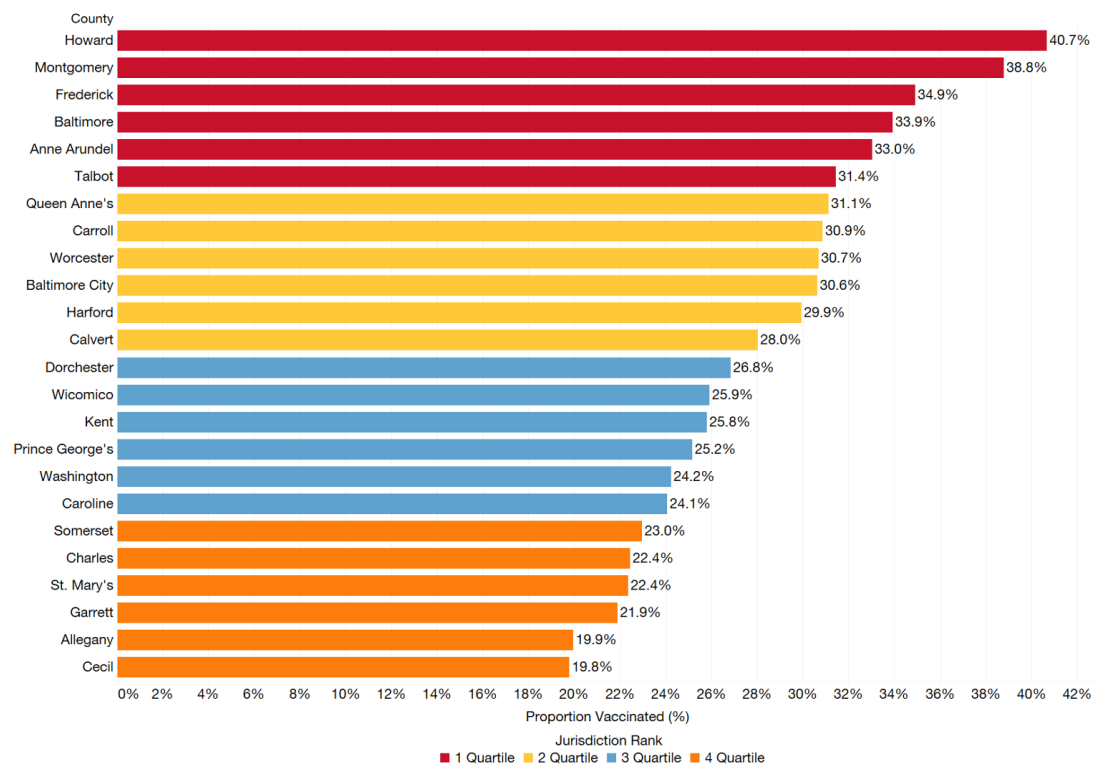
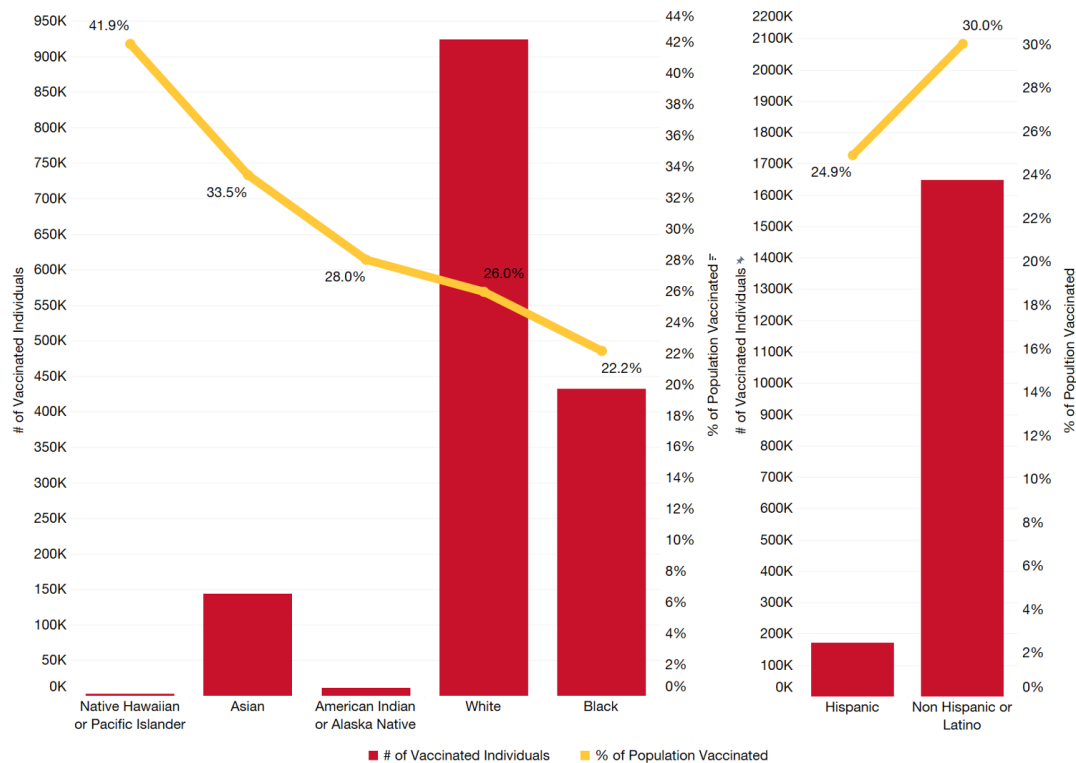


Figure 29: Proportion of Maryland Population* Vaccinated for Influenza and Reported to ImmuNet by Race and Ethnicity, 2024-2025 Season



*Population data were obtained from the Maryland Department of Planning.

Figure 30: Proportion of Maryland Population* Vaccinated for Influenza and Reported to ImmuNet by Age Group, 2024-2025 Season

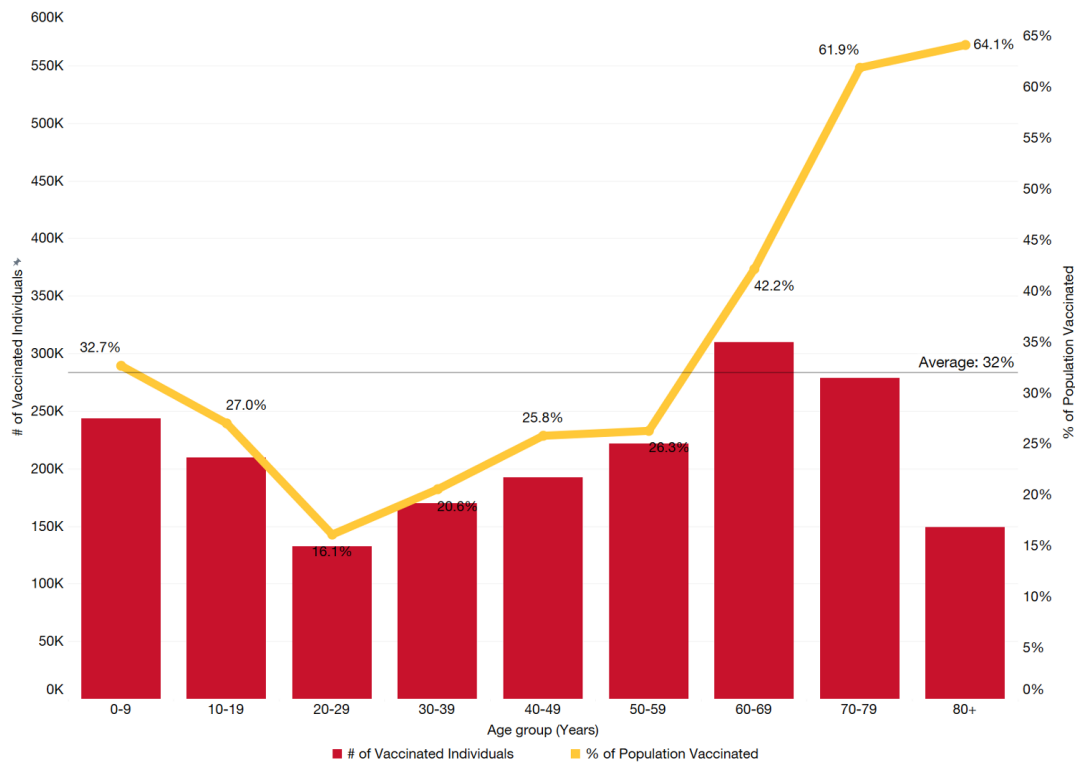
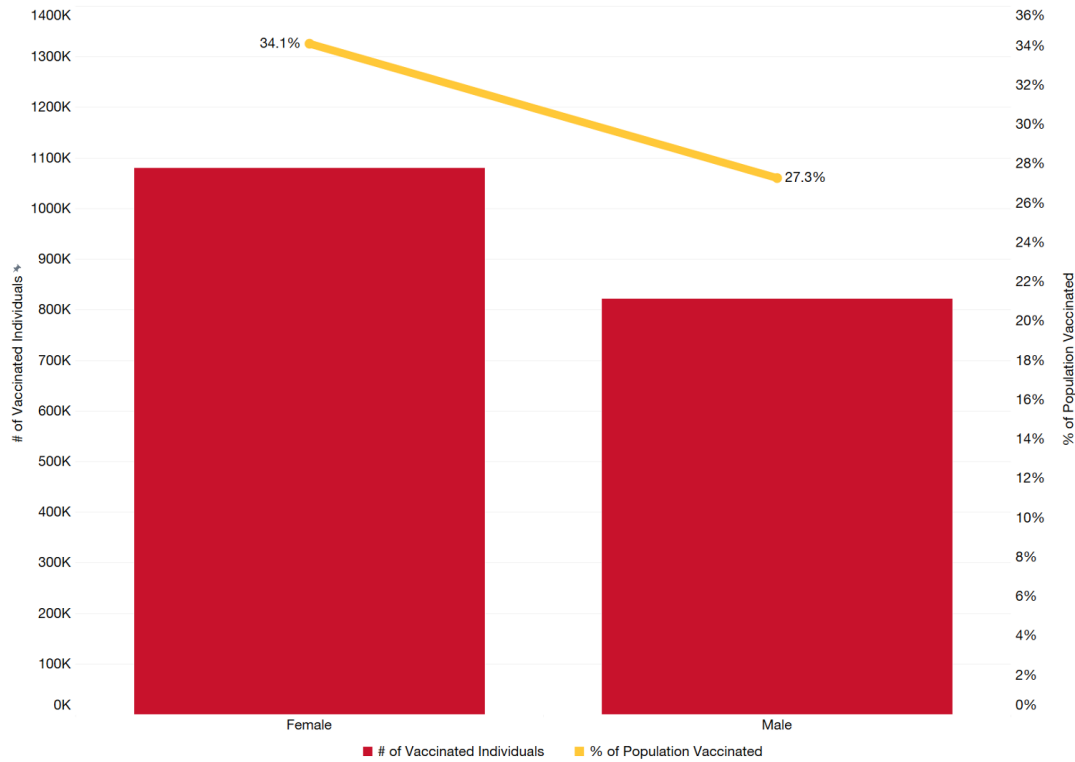


Figure 31: Proportion of Maryland Population* Vaccinated for Influenza and Reported to ImmuNet by Gender, 2024-2025 Season



*Population data were obtained from the Maryland Department of Planning.

Section 5: Summary

This report summarizes key Maryland influenza-related indicators and data during the 2024-2025 influenza season, including indicators of ILI activity and influenza severity, as well influenza vaccination. The overall influenza activity this season was the highest observed in recent years. Activity peaked in early February, later than during the COVID-19 pandemic but similar to the timing seen in the 2019-2020 season. During the peak, influenza activity reached the highest levels observed since the COVID-19 pandemic. Influenza severity, indicated by hospitalization and death, was also higher than the most recent seasons. Some potential contributing factors for elevated activity this season might include: lower vaccination rates, late start of the flu season, decreased immunity following COVID-19 pandemic, and the co-circulation of both Types A/H1 and A/H3. Influenza A viruses were predominant, with Type A/H1 being the most common, followed by type A/H3, while Type B/Victoria circulation remained low.

Resources

CDC Influenza

<https://www.cdc.gov/flu/index.htm>

MDH Influenza

<https://health.maryland.gov/phpa/INFLUENZA/FLUWATCH/PAGES/INDEX.ASPX>

MDH Emerging Infections Program

<https://health.maryland.gov/phpa/OIDEOR/EIP/pages/Home.aspx>

MDH Influenza Dashboard

<https://health.maryland.gov/phpa/influenza/Pages/flu-dashboard.aspx>

MDH ImmuNet

<https://health.maryland.gov/phpa/oideor/immun/pages/immunet.aspx>