

USET Area Seasonal Influenza Report: 2022-2023 Season Data

Additional Information on Data Sources

The data included is sourced from the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS) Protect, and Indian Health Service (IHS). This data aims to provide a general overview on the current incidence of influenza and vaccination across the United States, within Indian Health Services, and specifically within the Nashville region.

Data is reported by Morbidity and Mortality Weekly Report (MMWR) week. The MMWR week is the week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of MMWR disease incidence reporting and publishing.

Difference in Influenza Activity

At the top of the report, “Difference in Influenza Activity” provides data comparing the past MMWR week to the previous week to previous week to show the change. This is meant to highlight the trends week to week and emphasize the increase or decrease in the metrics.

Percentage of Positive Influenza Tests Reported to CDC:

This data is collected from the chart under the U.S Virologic Surveillance in Clinical Laboratories heading and is reflective of the percentage of influenza tests that were positive out of all influenza tests reported to the CDC are from clinical laboratories nationwide. This monitors whether influenza activity is increasing or decreasing week to week.

Data Source: <https://www.cdc.gov/flu/weekly/>

Weighted Percentage of Visits for Influenza Like Illness (ILI) Reported by ILI Net:

Weighted percentage of visits for influenza-like-illness (ILI) data is the Outpatient Respiratory Illness Visits heading for the 2022-2023 season. Influenza like illness is reported as a fever and cough or sore throat. These cases are not laboratory confirmed and are only meant to give an overview of respiratory illness burden, not only laboratory confirmed influenza positive cases within the United States.

Data Source: <https://www.cdc.gov/flu/weekly/>

Number of New Influenza Hospital Admissions Reported to National Healthcare Safety Network (NHSN):

This is sourced from National Healthcare Safety Network data and includes laboratory confirmed cases of influenza. The following dataset provides facility-level data for hospital utilization aggregated on a weekly basis (Sunday to Saturday). These are derived from reports

with facility-level granularity across two main sources: (1) HHS TeleTracking, and (2) reporting provided directly to HHS Protect by state/territorial health departments on behalf of their healthcare facilities. The hospital population includes all hospitals registered with Centers for Medicare & Medicaid Services (CMS) as of June 1, 2020. It includes non-CMS hospitals that have reported since July 15, 2020. It does not include psychiatric, rehabilitation, Indian Health Service (IHS) facilities, U.S. Department of Veterans Affairs (VA) facilities, Defense Health Agency (DHA) facilities, and religious non-medical facilities.

Data Source: <https://www.cdc.gov/flu/weekly/>

Percentage ILI Visits for National Indian Health Service:

Percentage of ILI visits is the number of ILI visits divided by total number of daily outpatient visits on a national scale for IHS. ILI visits are reported as a fever and cough or sore throat and these cases are not laboratory confirmed as influenza.

Data Source: IHS Weekly Influenza Report

Percentage ILI Visits for IHS Nashville Area:

Percentage of ILI visits is the number of ILI visits divided by total number of daily outpatient visits specifically for the IHS Nashville Area. ILI visits are reported as a fever and cough or sore throat and these cases are not laboratory confirmed as influenza.

Data Source: IHS Weekly Influenza Report

Influenza Like Illness Activity Level by State

The map on the first page is entitled “Influenza-Like-Illness Activity Level by State”. This system monitors visits for respiratory illness that includes fever plus a cough or sore throat (ILI), not laboratory confirmed influenza and may include patient visits due to other respiratory pathogens that cause similar symptoms. Activity levels are based on the percentage of outpatient visits due to ILI in a jurisdiction compared to the average percentage of ILI visits that occur during weeks with little or no influenza virus circulation (non-influenza weeks) in that jurisdiction. The number of sites reporting each week is variable; therefore, baselines are adjusted each week based on which sites within each jurisdiction provide data. To perform this adjustment, provider level baseline ILI ratios are calculated for those that have a sufficient reporting history. Providers that do not have the required reporting history to calculate a provider-specific baseline are assigned the baseline ratio for their practice type. The jurisdiction level baseline is then calculated using a weighted sum of the baseline ratios for each contributing provider. The activity levels compare the mean reported percentage of visits due to ILI during the current week to the mean reported percentage of visits due to ILI during non-influenza weeks.

The 13 activity levels correspond to the number of standard deviations below, at, or above the mean for the current week compared with the mean during non-influenza weeks. Activity levels are classified as minimal (levels 1-3), low (levels 4-5), moderate (levels 6-7), high (levels 8-10), and very high (levels 11-13). An activity level of 1 corresponds to an ILI percentage below the mean, level 2 corresponds to an ILI percentage less than 1 standard deviation above the mean, level 3 corresponds to an ILI percentage more than 1 but less than 2 standard deviations above the mean, and so on, with an activity level of 10 corresponding to an ILI percentage 8 to 11 standard deviations above the mean. The very high levels correspond to an ILI percentage 12 to 15 standard deviations above the mean for level 11, 16 to 19 standard deviations above the mean for level 12, and 20 or more standard deviations above the mean for level 13.

The 'ILI Activity Indicator' map reflects the intensity of ILI activity, not the extent of geographic spread of ILI, within a jurisdiction. Therefore, outbreaks occurring in a single area could cause the entire jurisdiction to display high or very high activity levels. In addition, data collected in ILINet may disproportionately represent certain populations within a jurisdiction, and therefore, may not accurately depict the full picture of respiratory illness activity for the entire jurisdiction. Differences in the data presented here by CDC and independently by some health departments likely represent differing levels of data completeness with data presented by the health department likely being more complete.

Data Source: <https://www.cdc.gov/flu/weekly/usmap.htm>

The lower graph on the first page is the "Percentage of Outpatient Visits for Respiratory Illness Reported By The U.S. Outpatient Influenza-like Illness Surveillance Network". This compares the percentage of outpatient visits for respiratory illness by season. The new season begins each year on the Sunday of MMWR week 40. For 2022, October 2nd was the start date of Week 40. The current season is notated by a black line with red triangles. The 2022- 2023 baseline, which is the black dotted horizontal line. The baseline is developed by calculating the mean percentage of patient visits for ILI during non-influenza weeks for the most recent three seasons excluding the COVID-19 pandemic and adding two standard deviations. The national baseline should not be compared to regional data. For regional baseline estimates or additional information click [here](#).

Data Source: <https://www.cdc.gov/flu/weekly/index.htm#HHSProtect>

Seasonal Influenza Vaccination by IHS Region

The top left bar chart on page two is entitled "Seasonal Influenza Vaccination by IHS Region". The bars in red emphasize the national IHS seasonal vaccination percentage and the Nashville region, in which USET Tribal Nations are located.

Data Source: IHS Weekly Influenza Report

Nashville Area Seasonal Influenza Vaccination by Age Group

The top right bar chart on page two is entitled “Nashville Area Seasonal Influenza Vaccination by Age Group.” The age groups range from six months and up because a seasonal influenza vaccine is recommended for everyone six months of age and older.

Data Source: IHS Weekly Influenza Report

Number of New Hospital Admissions by HHS Protect Region

The graph on the bottom of page two is entitled “Number of New Hospital Admissions by HHS Protect Region.” Hospitals report to HHS Protect the number of patients admitted with laboratory-confirmed influenza. As of March 2020, all hospitals registered with Centers for Medicare & Medicaid Services (CMS) and non-CMS hospitals are required to report COVID-19 and influenza information on laboratory testing, capacity and utilization, and patient flows to facilitate the public health response to the 2019 Novel Coronavirus (COVID-19) pandemic. Currently, hospitals from all 50 states and U.S. territories report COVID-19 and influenza data to HHS Protect. The numbers of new hospital admissions with laboratory-confirmed influenza virus infection reported to HHS Protect are aggregated by week at the national and HHS region level. New hospital admissions are defined as patients who were admitted to an inpatient bed on the previous calendar day and had a positive influenza test at admission or during the 14 days prior. Laboratory confirmation includes detection of influenza virus infection through molecular tests (e.g., polymerase chain reaction, nucleic acid amplification), antigen detection tests, immunofluorescence tests, and virus culture. For hospital reporting, laboratory-confirmed influenza is defined as influenza A or B.

Data Source: <https://www.cdc.gov/flu/weekly/index.htm#HHSProtect>