Wayne County 2019-2020 Influenza Season Summary

**Summary:**
The purpose of this report is to provide an overview of the 2019-2020 influenza season for Wayne County. The data presented in the report is based on public health surveillance systems designed to gather information on the extent and severity of influenza like illness (ILI).

- 495 ILI emergency department (ED) visits occurred during the 2019-2020 season. The number of ILI emergency department (ED) visits was 57% higher than the 3-year historical average for Wayne County.
- 62 influenza associated hospitalizations were reported to the Wayne County Health Department during the 2019-2020 influenza season. The number of influenza hospitalizations was 56% lower than the 3-year historical average.
- Zero cases of novel influenza infections were reported to the Wayne County Health Department which is consistent with the historical average.
- 1 Wayne County resident died from influenza during 2019-2020 influenza season. The historical average is 4 deaths.

**Dashboard:**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2019-2020 Season</th>
<th>Historical Average</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of ILI ED visits(^1)</td>
<td>495</td>
<td>316</td>
<td>+57%</td>
</tr>
<tr>
<td>ILI ED Visit Rate per 100,000(^1)</td>
<td>427</td>
<td>272</td>
<td></td>
</tr>
<tr>
<td>Number of Influenza Hospitalizations(^2)</td>
<td>66</td>
<td>141</td>
<td>-56%</td>
</tr>
<tr>
<td>Influenza Hospitalization Rate per 100,000(^2)</td>
<td>57</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>Number of Novel Influenza Infections(^2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of Influenza Deaths(^3)</td>
<td>1</td>
<td>4</td>
<td>-3</td>
</tr>
</tbody>
</table>
**Number and Rate of ILI ED Visits by Season:**

The number and rate of ILI ED visits during each of the last 4 influenza seasons (Figure 1). The number and rate of ILI ED visits have increased during each of the last four influenza seasons.

![Figure 1: Number and Rate of ILI ED Visits by Influenza Season](image)

**Number of ILI ED Visits by Week:**

The number of ILI ED visits during the 2019-2020 season exceeded the historical average between week 51 of 2019 and week 14 of 2020. The highest number of ILI ED visits occurred during week 1 and week 8 of the 2019-2020 season. The highest number of ED visits occurred during week 6 for the historical average (Figure 2).

![Figure 2: Number of ILI ED Visits by Week and Influenza Season](image)
Rates of ILI ED Visits by Sex:

Rates of ILI ED visits were slightly higher among females compared to males during the 2019-2020 season. 2019-2020 season rates exceeded the historical average for both males and females (Figure 3).

Rates of ILI ED Visits by Age Group:

During 2019-2020 season, the highest rates of ILI ED visits were found among children ages 0 to 4. Rates decreased with age with the lowest rates occurring among the 50 to 64 age group (183 per 100,000). ILI ED visit rates during the 2019-2020 season were higher than the historical average for all age groups (Figure 4).
Rates of ILI ED Visits by Race and Ethnicity:

The highest rates of ILI ED visits were found among Blacks followed by White, non-Hispanics, and Hispanics. ILI ED visit rates during the 2019-2020 season were higher than the historical average for White, non-Hispanics and Blacks. Rates among Hispanics were similar to the historical average (Figure 5).

![Figure 5: ILI ED Visit Rates by Race, Ethnicity, and Influenza Season](image-url)
Geographic Distribution of Wayne County ILI ED Visits:

The highest rate of ILI ED visits was found in the 44270 zip code (88% higher than the county average). The lowest rates were found in the 44676 and 44606 zip codes (less than half of the county average).
Number and Rate of Influenza Hospitalizations by Influenza Season:

66 influenza associated hospitalizations were reported to the Wayne County Health Department. The rate for Wayne County residents was 57 per 100,000. The number and rate of influenza hospitalizations in the 2019-2020 influenza season were lower than the previous three seasons (Figure 7).

Number of Influenza Hospitalizations by Week:

The highest number of influenza hospitalizations were reported during weeks 8 and 9 of 2020. The peak in influenza hospitalizations was later and lower during the 2019-2020 season compared to the historical average which occurs in week 1 (figure 8).
Influenza Hospitalization Rates by Sex:

Influenza hospitalization rates were higher among females than males during the 2019-2020 influenza season. Rates were lower than the historical average for both males and females (Figure 9).

![Figure 9: Influenza Hospitalization Rate by Sex](image)

Influenza Hospitalization Rates by Age Group:

Influenza hospitalization rates follow a J-shape distribution. Rates decreased from age 0-4 to 5-24 then increased with age after age 25. Rates during the 2019-2020 influenza season were lower for all age groups compared to the historical average (Figure 10).

![Figure 10: Influenza Hospitalization Rates by Age Group](image)
**Influenza Hospitalization Rates by Race and Ethnicity:**
Influenza hospitalization rates were highest among Blacks followed by Hispanics and Whites. Rates were higher among Hispanics compared to the historical average and lower for Whites and Blacks (Figure 11).

![Figure 11: Influenza Hospitalization Rates by Race and Ethnicity](chart.png)
Geographic Distribution of Influenza Hospitalizations:

The highest rate of ILI ED visits was found in the 44214 zip code (237% higher than the county average). The lowest rates were found in the 44618 and 44645 zip codes (less than half of the county average).

Methods:

The influenza season was defined in this report as the period from October 1 to April 30. ED visits, hospitalizations, and deaths occurring during this time period were included in the report. Rates were calculated by dividing the number of ED visits and hospitalizations by the number of residents. The number of residents were based on 2018 5-year population estimates from the American Community Survey administered by the U.S. Census Bureau. Rates were reported as rates per 100,000.
Data Sources:

1. Emergency Department Visits (EpiCenter): EpiCenter collects emergency department chief complaint data from hospitals and urgent care facilities across Wayne County and classifies them into symptom and syndrome categories. Rates for chief complaints regarding fever + ILI and other symptoms commonly detected during the flu season are analyzed.

2. Influenza-Associated Hospitalizations (ODRS): Influenza-associated hospitalizations and novel influenza infections are reported by the Wayne County Health Department and hospitals using the Ohio Disease Reporting System (ODRS). Hospitalizations can be used as an indicator of the severity of illness during a particular influenza season. This condition became reportable in January 2009.

3. Office of Vital Statistics: The Wayne County Health Department Office of Vital Statistics receives reports on the causes of death that occur within the county. Influenza deaths were included in this report if they were listed as the underlying cause of death on the death certificate.