Current Influenza Activity Level: **REGIONAL**

† *Regional:* Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.

*Confirmed:* Influenza laboratory Confirmed Cases are defined by positive molecular virus (RT-PCR) or Virus Culture test results. Those positive test results are reportable in Kentucky. (Positive results for Rapid Influenza Diagnostic Tests are not included in this report).

**Influenza-like Illness (ILI) Case Definition:**
- Fever (≥ 100°F [37.8°C], oral or equivalent, PLUS Cough
- OR-
- Fever (≥ 100°F [37.8°C], oral or equivalent, PLUS Sore Throat
- OR-
- Fever (≥ 100°F [37.8°C], oral or equivalent, PLUS Cough and Sore Throat

Activity Level Range: Sporadic ➞ Local ➞ Regional ➞ Widespread

***PLEASE NOTE FOR THIS REPORT THAT INFLUENZA-LIKE ILLNESS (ILI) DATA OBTAINED FROM BIOSENSE ESSENCE MAY BE INCOMPLETE DUE TO SYSTEM CHANGES.***

<table>
<thead>
<tr>
<th>Update for week 19:</th>
<th>Updated Total 2018-2019 Season:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Confirmed Influenza: 82 Cases</td>
<td>Lab Confirmed Total: 17,644 Cases</td>
</tr>
<tr>
<td>Number of Regions with Long Term Care Facility Outbreaks: 0 of 17 Regions</td>
<td>Total Number of Long Term Care Facility Outbreaks: 75 Outbreaks</td>
</tr>
<tr>
<td>Number of Regions with Confirmed Flu Cases: 7 of 17 Regions</td>
<td>Total Number of Regions with Confirmed Flu Cases: 17 of 17 Regions</td>
</tr>
<tr>
<td>Deaths Reported: 0 (under 18 years) 29* (18 years &amp; older)</td>
<td>Total Deaths Reported: 1 (under 18 years) 168 (18 years &amp; older)</td>
</tr>
<tr>
<td>Number of Regions with Increased ILI Activity: 8 of 17 Regions</td>
<td>Number of Regions with ILI Activity this Flu Season: 17 of 17 Regions</td>
</tr>
<tr>
<td>Number of Regions with Increased Influenza Activity: 5 of 17 Regions</td>
<td></td>
</tr>
</tbody>
</table>

**All data are preliminary and may change as more delayed reports are received**


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Fig 1: Laboratory Confirmed Cases by Age

![2018-2019 Total Laboratory Confirmed Influenza Cases in Kentucky, by Age](image)

Fig 2: Laboratory Confirmed Cases by Influenza Virus Types

![Total 2018-2019 Influenza Virus Types Reported in Kentucky](image)

*MMWR week 41: there was 1 case with dual infection (A/B).

Fig 3: 2018-2019 Total Laboratory Confirmed Influenza Cases in Kentucky, by Reporting Week

![2018-2019 Total Laboratory Confirmed Influenza Cases in Kentucky, by Reporting Week](image)

*Confirmed: Influenza laboratory Confirmed Cases are defined by positive RT-PCR or Virus Culture test results.
National Data
2018-2019 Influenza Season
Week 18 ending May 4, 2019

*All data are preliminary and may change as more reports are received.*

*Week 19 will be available May 23rd.*

Synopsis:

Influenza activity continues to decrease in the United States. While influenza A(H1N1)pdm09 viruses predominated from October to mid-February, influenza A(H3N2) viruses have been more commonly identified since late February. Small numbers of influenza B viruses also have been reported. Below is a summary of the key influenza indicators for the week ending May 4, 2019:

- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased. During the most recent three weeks, influenza A(H3) viruses were reported more frequently than influenza A(H1N1)pdm09 viruses nationally.

- **Virus Characterization:** The majority of influenza A(H1N1)pdm09 and influenza B viruses characterized antigenically are similar to the cell-grown reference viruses representing the 2018–2019 Northern Hemisphere influenza vaccine viruses. However, the majority of influenza A(H3N2) viruses are antigenically distinguishable from A/Singapore/INFIMH-16-0019/2016 (3C.2a1), a cell-propagated reference virus representing the A(H3N2) component of 2018-19 Northern Hemisphere influenza vaccines.

- **Antiviral Resistance:** The vast majority of influenza viruses tested (>99%) show susceptibility to oseltamivir and peramivir. All influenza viruses tested showed susceptibility to zanamivir.

- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) decreased to 1.6%, which is below the national baseline of 2.2%. One region reported ILI at their region-specific baseline level.

- **ILI State Activity Indicator Map:** Two states experienced low ILI activity; and New York City, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 48 states experienced minimal ILI activity.

- **Geographic Spread of Influenza:** The geographic spread of influenza in two states was reported as widespread; Puerto Rico and seven states reported regional activity; 18 states reported local activity; the District of Columbia, the U.S. Virgin Islands and 22 states reported sporadic activity; one state reported no activity; and Guam did not report.

- **Influenza-associated Hospitalizations:** A cumulative rate of 65.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (221.5 hospitalizations per 100,000 population).

- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.

- **Influenza-associated Pediatric Deaths:** Five influenza-associated pediatric deaths were reported to CDC during week 18.
