Week Ending Saturday 12/14/2019

Shirley Louie, MS, CIH
Acting State Epidemiologist; Director, Center for Public Health Practice

Prepared by:

Haytham Safi, MD, MPH
Influenza Surveillance Coordinator
Haytham.Safi@Arkansas.gov
501-661-2920

Reviewed by:

Lori Simmons, MS, Branch Chief, Epidemiology
Kellye McCartney, Branch Chief, Immunizations/Outbreak Control
Jennifer Dillaha, MD, Medical Director, Immunizations/Outbreak Response
Mike Cima, PhD, Chief Epidemiologist, Associate Director for Science, CHP
During flu season, the Arkansas Department of Health (ADH) produces a Weekly Influenza Report for clinicians. The report provides information on flu activity in the state. The report also compares influenza-like-illness (ILI) in Arkansas to activity in the U.S. ADH receives reports of only a fraction of flu cases since it only requires reports of hospitalizations, deaths, and outbreaks. Therefore, it is important to understand that the information in the weekly update is representative of the timing and location of activity, but it does not reflect the overall burden of disease. It is presumed that there are many more people actually affected than the report shows. Clinicians and policy makers may find the report helpful in terms of communicating to colleagues and patients about the current status of the flu season.

Report Key Points:

- For Week 50, Arkansas reported “Regional” activity to the Centers for Disease Control and Prevention (CDC) for geographic spread of influenza, and “High” or 10 out of 10 for ILI intensity.

- Since September 29, 2019, 3,100 positive influenza tests have been reported to the ADH online database by health care providers, with over 500 positive tests reported this week. **Please note that reported cases reflect only a portion of the actual numbers of flu cases in the state.**

- Among flu antigen tests this season that can distinguish between influenza A and B virus types, 54 percent were influenza A, and 46 percent were influenza B.

- There were 109 positive PCR flu tests from private labs this week: 60 tested positive for influenza A, 48 tested positive for influenza B, and 1 positive for both A and B. At the ADH lab, 2 tested positive for influenza A subtype H1N1, and 3 tested positive for influenza B subtype Victoria; 1 sample tested negative for influenza this week.

- About 3.1 percent of patients visiting emergency rooms this week were there for ILI (Syndromic Surveillance). About 5.1 percent of outpatient visits were for ILI (ILINet sentinel providers).

- The average school absenteeism rate last week was 5.6 percent among public schools.

- To date, 8 influenza-related deaths have been reported in Arkansas this flu season. CDC has reported a total of 10 pediatric deaths nationwide this season.

- To date, one nursing home in Arkansas has reported influenza outbreak.

- Nationally, the proportion of deaths reported to the National Center for Health Statistics attributed to pneumonia and influenza (P&I) was below the epidemic threshold this week.

- For Week 49, the geographic spread of influenza was reported as widespread in 23 states and regional in Puerto Rico and 14 states; 12 states reported local activity; the District of Columbia, the U.S. Virgin Islands and 1 state reported sporadic activity; and Guam did not report.


**For Additional National and International Influenza Surveillance Information:**

- CDC - Seasonal Influenza (Flu) - Weekly Report: [http://www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)
**Death Report for Week 50**
- Deaths from all causes: 675
- Deaths due to Pneumonia: 52
- PCR confirmed Flu Deaths: 0
- Death Certificate or Flu Antigen only: 1

**Cumulative Flu Deaths since 09/29/2019**
- PCR confirmed Flu deaths: 1
- Death Certificate or Antigen only: 7
- Cumulative Flu deaths: 8

**ER Visits (Syndromic Surveillance)**
- **Week Ending: 12/14/2019**
  - Total Visits: 21,737
  - Visits with ILI: 668
- **Previous Week**
  - Total Visits: 22,572
  - Visits with ILI: 716

**Total Flu-Related Hospital Admissions**
- **PCR Confirmed:**
  - Cumulative: 35
  - Week ending 12/14/2019: 5
- **Antigen Positive:**
  - Cumulative: 99
  - Week ending 12/14/2019: 14

**Weekly Arkansas ILI Intensity Level**

**PCR Lab Confirmed Influenza Cases**
- Total Cases since 09/29/2019: 480
- Week ending 12/14/2019: 114

Reported cases reflect only a portion of the actual numbers of flu cases in the state.

<table>
<thead>
<tr>
<th>PCR Tests</th>
<th>ADH Lab Week 50</th>
<th>Other Labs Week 50</th>
<th>Cumulative Cases Since 09/29/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>0</td>
<td>60</td>
<td>234</td>
</tr>
<tr>
<td>B+</td>
<td>0</td>
<td>48</td>
<td>218</td>
</tr>
<tr>
<td>Both A and B</td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>B/Victoria</td>
<td>3</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>B/ Yamagata</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H1N1+</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>H3+</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Unsubtypeable</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>109</td>
<td>480</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**PCR Confirmed Influenza Cases since 09/29/2019**

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>PCR+</th>
<th>Hospitalized</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 yr.</td>
<td>104</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>5-18 yr.</td>
<td>169</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>19-24 yr.</td>
<td>24</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>25-44 yr.</td>
<td>88</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>45-64 yr.</td>
<td>64</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>&gt;= 65 yr.</td>
<td>30</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>480</td>
<td>35</td>
<td>1</td>
</tr>
</tbody>
</table>

**School Absenteeism**

Week Ending: 12/14/2019
- Percent Absent: 5.6
- Previous Week: 5.4

- Average daily absenteeism for all public schools during this reporting week.

**Geographic ILI Activity Level Reported for Week 50:**
Weekly School Absenteeism Rates, Arkansas Public Schools

School Absenteeism Rate per County, Arkansas 2019-2020
Percent Absent for Week Ending 12/13/2019

Percent of students absent
- 0 - 5
- > 5 - 10
- > 10 - 15
- > 15 - 20
- > 20
- No Report

Data: December 15, 2019
Source: Arkansas Department of Health
Author: Haythem Sell, Epidemiologist
Influenza Mortality by Age Group, Arkansas 2005-2020 (Provisional)
Report Updated: 12/17/2019

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2019-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 Yrs</td>
<td>0</td>
</tr>
<tr>
<td>5-18 Yrs</td>
<td>0</td>
</tr>
<tr>
<td>19-24 Yrs</td>
<td>1</td>
</tr>
<tr>
<td>25-44 Yrs</td>
<td>3</td>
</tr>
<tr>
<td>45-64 Yrs</td>
<td>4</td>
</tr>
<tr>
<td>65+ Yrs</td>
<td>172</td>
</tr>
</tbody>
</table>

Flu Season

* All seasons range from week 40 to week 39 except 2009-2010 started week 36
Source: ADH Outbreak Response Section, and Center for Health Statistics

Hospital Report – Downloaded from ESSENCE (Syndromic Surveillance)
Percent ER Visits with ILI

Week

% of Patients with ILI

2017-2018
2018-2019
2019-2020
Arkansas Subset of US Outpatients Influenza Surveillance (ILINET)

Percentage of Outpatient Visits Due to Influenza-like Illness Reported by ILINet in Arkansas

Week, Month of Report

<table>
<thead>
<tr>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-20</td>
<td>Average 2013-18</td>
<td>Off Season Rate</td>
<td>2018-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weekly Influenza Claims Paid by Medicaid and BCBS of Arkansas

Week, Month of Report

<table>
<thead>
<tr>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
</tr>
</thead>
</table>
Reported Influenza Positive Antigens by Age Group, Arkansas 2019-20

- 0-4 Yrs
- 5-18 Yrs
- 19-24 Yrs
- 25-44 Yrs
- 45-64 Yrs
- 65+ Yrs

Reported Influenza Positive Antigens by Type, Arkansas 2019-20

- A+ Antigen
- B+ Antigen
- Positive for Both A & B
Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2019-2020 Season

Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System Data through the week ending November 30, 2019, as of December 12, 2019