Nathaniel Smith, MD, MPH, Director and State Health Officer

Outbreak Response/Epidemiology
Influenza Weekly Report
Arkansas 2017-2018

Week Ending Saturday 10/07/2017

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During the 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 US. ADH receives reports of only a fraction of flu cases. 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 40, Arkansas reported “Sporadic” activity to the Centers for Disease Control and Prevention (CDC) for geographic spread of influenza, and “Minimal” or 1/10 for ILI intensity.
- Since October 1, 2017, about 90 positive influenza tests have been reported to the ADH online database by health care providers. In Week 40, 17 counties reported influenza cases. The majority of reports came from Craighead, Jefferson, Pulaski, and Saline Counties.
- Among flu antigen tests that can distinguish between Influenza A and B virus types, 88 percent were Influenza A, and 12 percent were Influenza B.
- There were 7 positive PCR flu tests last week from private labs: 1 influenza A, 1 influenza B, 2 were influenza A subtype H1N1, and 3 were influenza A subtype H3N2. There was no positive flu tests from the ADH lab, only 3 samples tested negative for influenza.
- About 1.2 percent of patients visiting emergency rooms last week were there for ILI. About 1 percent of outpatient visits were for ILI.
- The average school absenteeism rate last week was 5.5 percent among public schools.
- No influenza death has been reported in Arkansas this flu season.
- The proportion of deaths reported to the National Center for Health Statistics attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold.
- You can report flu year-round and view the weekly influenza report during the influenza season at: http://www.healthy.arkansas.gov/programs-services/topics/influenza. You can also access the reporting website directly at: https://FluReport.ADH.Arkansas.gov

For Additional National and International Influenza Surveillance Information:
CDC - Seasonal Influenza (Flu) - Weekly Report: http://www.cdc.gov/flu/weekly/
Death Report for Week 40
- Deaths from all causes: 549
- Deaths due to Pneumonia: 38
- PCR confirmed Flu Deaths: 0
- Death Certificate or Flu Antigen only: 0

Cumulative Flu Deaths since 10/01/2017
- PCR confirmed Flu deaths: 0
- Death Certificate or Flu Antigen only: 0
- Cumulative Flu deaths: 0

ER Visits
- Week Ending: 10/07/2017
  Weighted Average: 1.2%
  – Total Visits: 22,645
  – Visits with ILI: 269
- Previous Week
  Weighted Average: 1.1%
  – Total Visits: 22,460
  – Visits with ILI: 253

Total Flu-Related Hospital Admissions
- PCR Confirmed:
  – Cumulative: 5
  – Week ending 10/07/2017: 5
- Antigen Positive:
  – Cumulative: 4
  – Week ending 10/07/2017: 4

Weekly Arkansas ILI Intensity Level Reported by Sentinel Providers

PCR Lab Confirmed Influenza
- Total Cases since 10/01/2017: 7
- Week Ending 10/07/2017: 7

<table>
<thead>
<tr>
<th>PCR Tests</th>
<th>ADH Lab Week 40</th>
<th>Other Labs Week 40</th>
<th>Cumulative Cases Since 10/01/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B+</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B/Victoria</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B/ Yamagata</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H1N1+</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>H3+</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Unsubtypable</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Negative</td>
<td>3</td>
<td>--</td>
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</tr>
</tbody>
</table>

PCR Confirmed Influenza Cases since 10/01/2017

<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>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5-18 yr.</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>19-24 yr.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25-49 yr.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50-64 yr.</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&gt;= 65 yr.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

School Absenteeism*
- Week Ending: 10/07/2017
  - Percent Absent: 5.49
  - Previous Week: 5.39
  Average daily absenteeism for all public schools during this reporting week.

Geographic ILI Activity Level Reported for Week 40:
School Report:

Weekly School Absenteeism Rates, Arkansas Public Schools

School Absenteeism Rate per County, Arkansas 2017-2018
Percent Absent for Week Ending 10/7/2017

Date: October 10, 2017
Source: Arkansas Department of Health
Author: Hayahm Sohi, Epidemiologist

Percent of students absent

0 - 5
6 - 10
11 - 15
16 - 20
20+
Increase 10% from Previous Rate
**Influenza Mortality by Age Group, Arkansas 2000-2017 (Provisional)**

Report Updated: 10/07/2017

![Bar chart showing influenza mortality by age group from 2000 to 2017](chart.png)

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

**Hospital Report – Downloaded from ESSENCE (Syndromic Surveillance)**

**Percent ER Visits with ILI**

![Line chart showing percent ER visits with ILI from 2014 to 2018](chart2.png)

**Legend:**
- 65+ Yrs
- 45-64 Yrs
- 25-44 Yrs
- 19-24 Yrs
- 5-18 Yrs
- 0-4 Yrs
US Outpatients Influenza Surveillance (ILINET)

Percentage of Outpatient Visits Due to Influenza-like Illness Reported by the US Outpatient Influenza-like-Illness Surveillance Network (ILINet) in Arkansas

Week, Month of Report

|       Oct       |      Nov       |      Dec       |
|       Jan      |          Feb     |        Mar       |         Apr       |       May       |
|                |                |                |                |                |

Week, Month of Report

|        Jun       |          Jul            |        Aug       |
|                |                |                |
|    Sep         |                |                |

Average 2012-17

2017-18

YR 2016-17

Off Season Rate

2016-17

Weekly Influenza Claims Paid by Medicaid and BCBS

Influenza Claims Paid by Medicaid and BCBS of Arkansas

Week, Month of Report

|       Oct       |      Nov       |      Dec       |
|       Jan      |          Feb     |        Mar       |
|                |                |                |

Week, Month of Report

|        Jun       |          Jul            |        Aug       |
|                |                |                |
|    Sep         |                |                |

Average 2012-17

YR 2016-17

Off Season Baseline

YR 2017-18
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists

**No map this week**

Arkansas Flu Activity Level Reported for Week 40: Sporadic
Antigen Report:

Reported Influenza Positive Antigens by Age Group, Arkansas 2017-18

Reported Influenza Positive Antigens by Type, Arkansas 2017-18
Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2016-17 Season

Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System Data through the week ending September 16, 2017, as of October 5, 2017