February 15, 2018

The Influenza Season is defined by MMWR surveillance weeks, beginning week 40 (October) and continues through week 39 (the following September).

Influenza Surveillance Indicators

Lab Confirmed Cases
Hospital Emergency Visits
Outpatient Clinics
School Absenteeism
Flu Near You

One previously reported pediatric death has been retracted due to a laboratory result that was later determined to be a false positive from an out of state clinical laboratory.

Loisballs.com

Maricopa County Department of Public Health
WEEKLY INFLUENZA UPDATE
2017-2018 Season (10/01/2017-09/30/2018)

The first official day of the 2017-2018 Influenza Season was October 1, 2017 and the surveillance season will continue through September 30, 2018. Maricopa County identified its first locally-acquired influenza case of the 2017-2018 season in week 41.

(These numbers are provisional due to a back-log in data-entry.)

- Since October 1, 2017 11,334 cases have been laboratory-confirmed
- Some ILI (Influenza like Illness) indicators showed a slight decline this week.
- Maricopa County reported 2 Pediatric Influenza Death this season, PCR positive for A/H3 & B/Victoria

The Influenza Season is defined by MMWR surveillance weeks, beginning week 40 (October) and continues through week 39 (the following September).

Weeks w/Widespread Activity (AZ) Week 50-52 & 1-6 Week 6 - 9 Week 5 - 14 Week 1 - 6
Weeks w/ILI above Regional Threshold Week 41, 43, 45-52 & 1-6 Week 49, 52 & 1-23 Week 51 - 16 Week 50 - 11
Weeks w/Outpatient visits above Threshold Week 47 - 52 & 1 - 6 Weeks 47, 48, 50-52, 1-3, 5-10, 14 & 17-21 Weeks 45-52, 1-21, 23, 35 & 36 Weeks 48, 50-52, 1-10 & 12-14
Pediatric Deaths 2 1 3 1
Total Cases 11,334 6,633 14,353 6,601

No Activity
Sporadic
Local
Regional
Widespread
Arizona State Influenza

www.FluNearYou.org
**Individuals with Laboratory Confirmed Influenza**

Trends of influenza laboratory test results compared to the previous 3 seasons. The current season is in red.

<table>
<thead>
<tr>
<th>Table 1. Laboratory-Confirmed Influenza Cases Compared to Last Week and Last Season, Maricopa County</th>
<th>Cumulative Season Total</th>
<th>Current Week Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018 Season</td>
<td>11334</td>
<td>470</td>
</tr>
<tr>
<td>2016-2017 Season</td>
<td>1388</td>
<td>360</td>
</tr>
<tr>
<td>5 Season Average (2012-2017)</td>
<td>559</td>
<td>684</td>
</tr>
<tr>
<td>% increase compared to 2016-2017 Season</td>
<td>717%</td>
<td>31%</td>
</tr>
<tr>
<td>% increase compared to 5 season average</td>
<td>1927%</td>
<td>-31%</td>
</tr>
<tr>
<td>% increase compared to last week</td>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>

![Graph depicting influenza trends over weeks from 2014 to 2018]
### Types of Influenza in Maricopa County

#### Table 2. Influenza 2017-18 Season

<table>
<thead>
<tr>
<th>Types/Subtypes</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>10151</td>
<td>90%</td>
</tr>
<tr>
<td>Subtype 2009 H1N1</td>
<td>68</td>
<td>1%</td>
</tr>
<tr>
<td>Subtype H3</td>
<td>1589</td>
<td>16%</td>
</tr>
<tr>
<td>Subtyping not performed or unknown</td>
<td>8494</td>
<td>84%</td>
</tr>
<tr>
<td>Type B</td>
<td>1131</td>
<td>10%</td>
</tr>
<tr>
<td>Unknown</td>
<td>52</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11334</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Graph 2: Confirmed influenza cases by Age-Group and Type.*

- Type A: 90%
- Type B: 10%
- Type Unknown: 0%

* 1 Influenza A is a confirmed case with unknown age.
Influenza Like Illness Activity at Hospital Emergency Departments

This influenza season there have been 9279 visits to emergency departments by individuals with flu-like symptoms. To be counted as an individual with flu-like symptoms, the patient must have both fever and cough/sore throat.

These show the number of patients with flu-like symptoms seen at 12 emergency departments.

This compares what percent of all emergency department visits were individuals with flu-like symptoms (fever and cough/sore throat). The graph shows the trend week by week, with the current season in red.
Influenza-Like Illness Activity at Sentinel Site Outpatient Facilities Reported to the Centers for Disease Control and Prevention (CDC)

Maricopa County sentinel sites (outpatient facilities) report visits due to flu-like symptoms. This week, 7.62% of visits at outpatient facilities were due to flu-like symptoms, last week outpatient facilities reported 7.03%.
Absentee Activity at Schools

Absenteeism trends compared to the last three school years show the percent of students reported absent and illustrates the week by week trend, the current school year in red. (School Surveillance will begin Week 40 thru Week 20).

![Graph showing absentee activity at schools with data points for different years and a chart of influenza virus.]
The following report summarizes data captured from volunteer reports to the Flu Near You participatory surveillance platform between CDC Weeks 40 and 39 (October 2017 to October 2018). This report is intended to update Maricopa County public health professionals and other partners on system performance and results during the 2017-18 influenza season. Results are NOT final and may be subject to change pending further analyses.

Count of participants and rate of ILI cases per MMWR week in Maricopa County
Flu Season: 2017-2018

Why register for Flu Near You?
Registered users have access to many features, such as:
- The ability to report their symptoms
- A map that displays where users can find vaccines in their area
- A map of flu activity in their area and across the nation
- Updated news on the current flu season, flu shots, treatment, recovery time, and more

Everyone is invited to participate in Flu Near You by enrolling at
https://flunearyou.org
The Maricopa County Department of Public Health wishes to thank all of the Influenza surveillance participants:
Arizona Department of Health Services
Local Hospital Emergency Departments & Infection Control Practitioners
Local Outpatient Facilities and Medical Directors
Maricopa County Public Schools
Maricopa County Office of Vital Statistics

Questions about this report may be directed to: epidemiology@mail.maricopa.gov

Information on influenza activity for the state, the U.S. and the world may be found at the following websites:

http://www.azdhs.gov/phs/oids/epi/flu/index.htm (ADHS)
https://www.cdc.gov/flu/weekly/fluactivitysurv.htm (CDC)