



# Missouri Weekly Influenza Surveillance Report 2017-2018 Influenza Season<sup>1</sup>

## Week 40: October 1 – 7, 2017

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

### Summary:

- The 2017-2018 influenza season began with Week 40 (week ending October 7, 2017) and ends Week 39 (week ending September 29, 2018). This is the first Weekly Influenza Surveillance Report of the 2017-2018 influenza season.
- The estimated influenza activity in Missouri is Sporadic<sup>2</sup>.
- During Week 40, a total of 47 laboratory-positive<sup>3</sup> influenza cases (42 influenza A and 5 influenza B) were reported in Missouri. County specific influenza data is available through interactive maps accessible on the Interactive Maps section located on page 2 of this report. No laboratory-confirmed cases of influenza were reported by the Missouri State Public Health Laboratory (MSPHL) during Week 40.
- Influenza-like illness (ILI) activity was below baseline for the Missouri Outpatient ILI Surveillance Network (ILINet). The reported percentage of outpatient visits for ILI was 1.08% (Figure 5).<sup>4</sup> The percentage of respiratory specimens testing positive for influenza in Missouri laboratories reporting to the National Respiratory and Enteric Virus Surveillance System (NREVSS) was low during Week 40 (Figure 6). The ILI data from ESSENCE is currently not available due to system upgrades. The data and subsequent analysis will be included in future reports as available.
- No influenza-associated deaths have been reported in Missouri as of Week 40.<sup>5</sup>
- No influenza or ILI-associated outbreaks or school closures have been reported in Missouri as of Week 40.
- Influenza activity remained low in the U.S. during Week 40. National influenza surveillance information is prepared by CDC and is included in the weekly FluView report, which is available online at <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>.

<sup>1</sup>The 2017-2018 influenza season begins CDC Week 40 (week ending October 7, 2017) and ends CDC Week 39 (week ending September 29, 2018).

<sup>2</sup>Sporadic is defined as: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of influenza-like illness.

<sup>3</sup>Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

<sup>4</sup>Influenza-like illness (ILI) is defined by ILINet as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza. Influenza-like illness (ILI) is defined by ESSENCE as Emergency Department chief complaints that contain keywords such as “flu”, “flulike”, “influenza” or “fever” plus “cough” or “fever” plus “sore throat”.

<sup>5</sup>All influenza-associated deaths became reportable in Missouri in 2016.

## Surveillance Data:

### Interactive Maps

The jurisdiction-specific influenza data are provided through interactive maps available at <http://arcg.is/1zWLFw>. Click on the jurisdiction to view the influenza data specific to that jurisdiction.

- Reported Laboratory-positive Influenza Cases by Influenza Type by Jurisdiction, CDC Week 40
- Reported Week-specific Rate per 100,000 Population, CDC Week 40
- Reported Laboratory-positive Influenza Cases by Influenza Type by Jurisdiction, Season-to-Date
- Reported Rate per 100,000 Population, Season-to-Date

### Data Figures

**Figure 1. Number of Laboratory-positive<sup>†</sup> Influenza Cases by Influenza Type, Missouri, CDC Week 40 (October 1 – 7, 2017)<sup>\*</sup>**

Influenza Type	Week 40	2017-2018* Season-to-Date
Influenza A	42	42
Influenza B	5	5
Influenza Unknown Or Untyped	0	0
<b>Total</b>	<b>47</b>	<b>47</b>

<sup>†</sup>Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

\*Influenza season begins week ending October 7, 2017 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv).

**Figure 2. Number of Laboratory-positive<sup>†</sup> Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 40 (October 1 – 7, 2017)<sup>‡\*</sup>**

Age Group	Week 40 Cases	Week 40 Rate <sup>‡</sup>	2017-2018* Season-to-Date	2017-2018* Season-to-Date Rate <sup>‡</sup>
00-04	4	1	4	1
05-24	10	1	10	1
25-49	7	0	7	0
50-64	5	0	5	0
65+	21	2	21	2
<b>Total</b>	<b>47</b>	<b>1</b>	<b>47</b>	<b>1</b>

<sup>†</sup>Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

\*Influenza season begins week ending October 7, 2017 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

<sup>‡</sup>Incidence Rate per 100,000 population

**Figure 3. Number of Laboratory-positive<sup>†</sup> Influenza Cases and Case Rates by Region, Missouri, CDC Week 40 (October 1 – 7, 2017)<sup>\*\*</sup>**

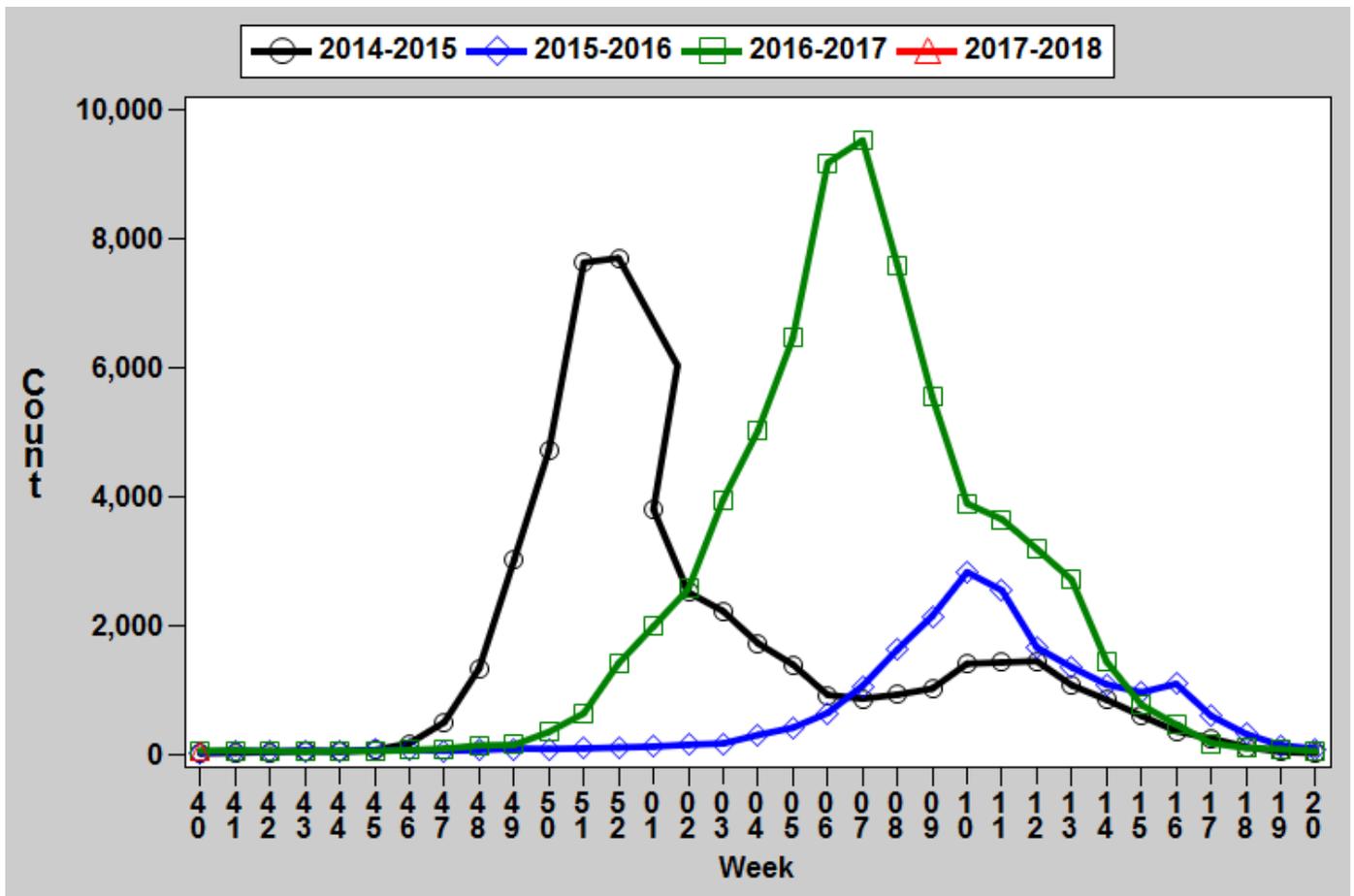
District	Week 40 Cases	Week 40 Rate <sup>‡</sup>	2017-2018* Season-to-Date	2017-2018* Season-to-Date Rate <sup>‡</sup>
Central	1	0	1	0
Eastern	27	1	27	1
Northwest	2	0	2	0
Southeast	16	3	16	3
Southwest	1	0	1	0
<b>Total</b>	<b>47</b>	<b>1</b>	<b>47</b>	<b>1</b>

<sup>†</sup>Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

<sup>\*</sup>Influenza season begins week ending October 7, 2017 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

<sup>‡</sup>Incidence Rate per 100,000 population

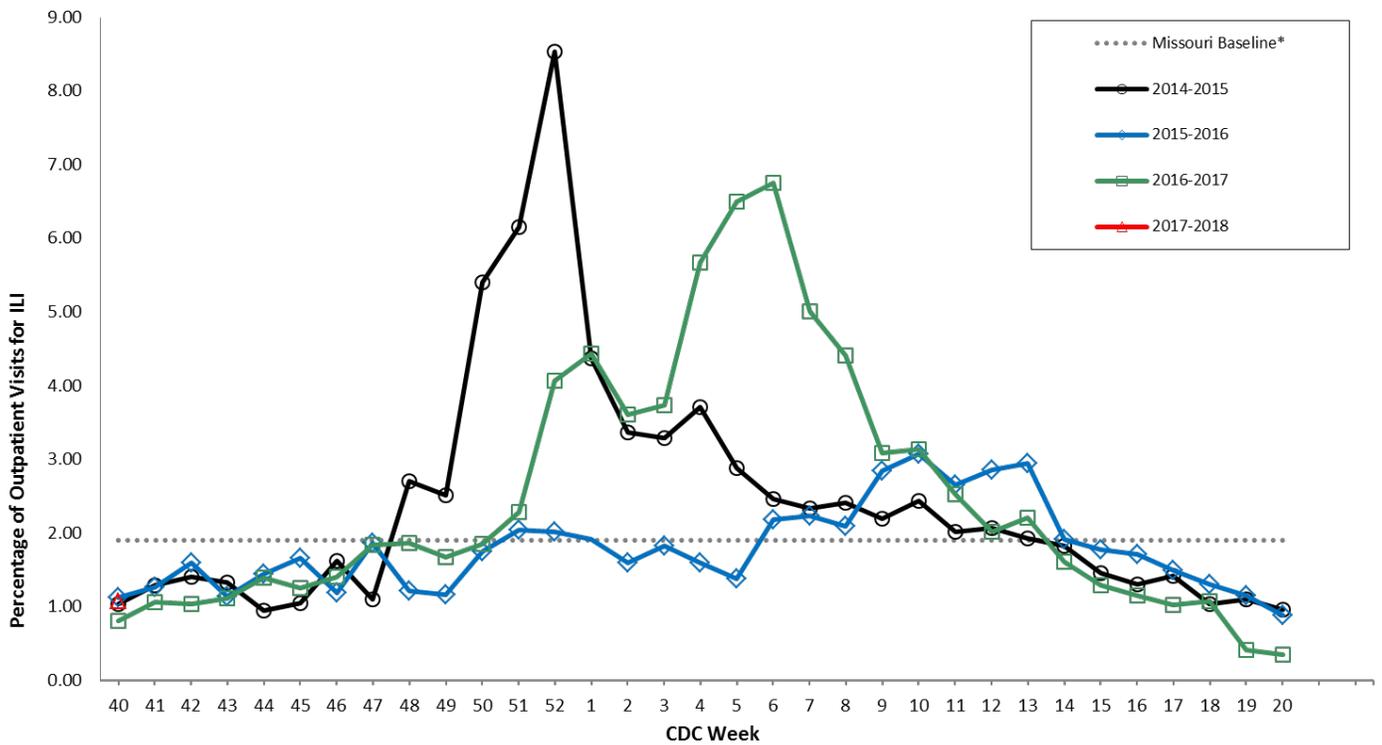
**Figure 4. Number of Laboratory-positive<sup>†</sup> Influenza Cases by CDC Week, Missouri, 2014-2018<sup>\*</sup>**



<sup>†</sup>Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

<sup>\*</sup>2017-2018 season-to-date through the week ending May 19, 2018 (Week 20). The 2014-2015 season had 53 weeks rather than the usual 52. Week 53, 2014-2015 flu season has 3,082 reported confirmed cases. Data Source: Missouri Health Information Surveillance System (WebSurv).

**Figure 5. Percentage of Outpatient Visits for Influenza-like Illness (ILI), Missouri Outpatient ILI Surveillance Network (ILINet) 2014-2018\*†**

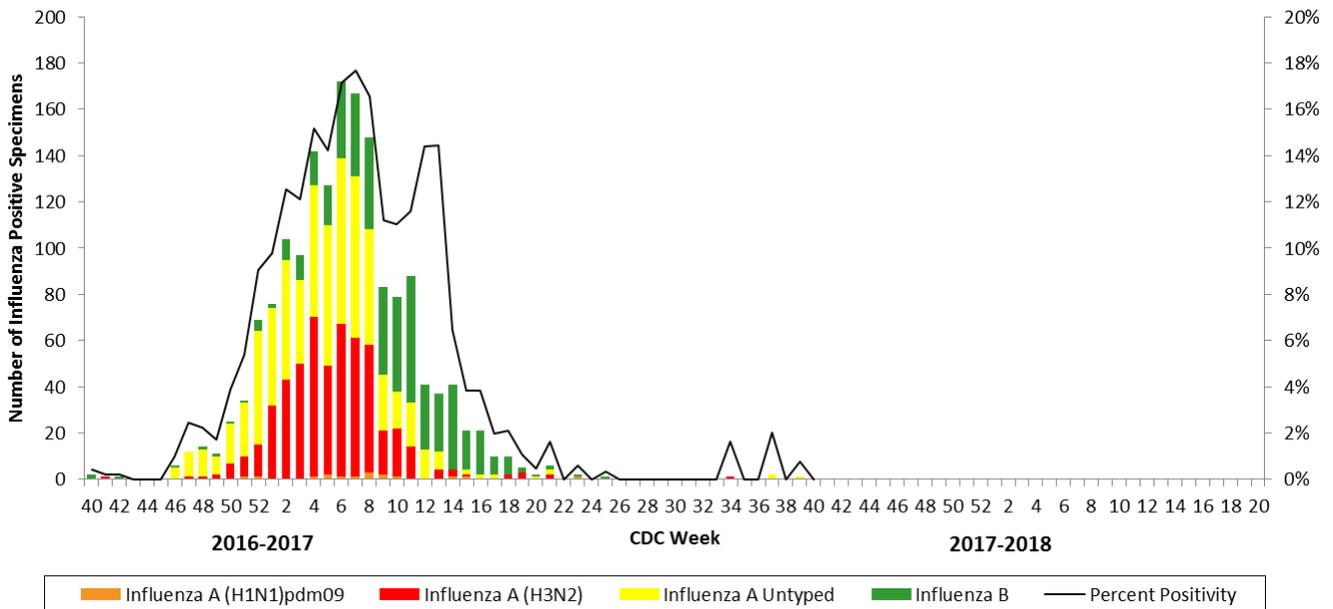


\*The ILINet Region 7 (MO, IA, KS, NE) baseline is the mean percentage of patient visits for ILI during non-influenza weeks for the previous three seasons, plus two standard deviations. A non-influenza week is defined as periods of two or more consecutive weeks in which each week accounted for less than 2% of the season's total number of specimens that tested positive for influenza.

Data Source: U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Centers for Disease Control and Prevention (CDC).

† 2017-2018 season-to-date through the week ending May 19, 2018 (Week 20). The 2014-2015 season had 53 weeks rather than the usual 52. The percentage of outpatient visits for ILI during Week 53 was 7.63.

**Figure 6. Season-to-Date PCR (+) Tests for Influenza in Missouri**



Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2016-2017 season-to-date through the week ending May 19, 2018 (Week 20).

## **Additional Influenza Data Sources:**

**Centers for Disease Control and Prevention: National Influenza Surveillance (FluView):** <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>

**The National Respiratory and Enteric Virus Surveillance System (NREVSS):** <https://www.cdc.gov/surveillance/nrevss/>

**World Health Organization: International Influenza Surveillance:** [http://www.who.int/influenza/surveillance\\_monitoring/en/](http://www.who.int/influenza/surveillance_monitoring/en/)