



Missouri Weekly Influenza Surveillance Report 2014-2015 Influenza Season¹

Week 49: November 30 – December 6, 2014

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

Summary:

- The estimated influenza activity in Missouri is Regional².
- Eleven laboratory-confirmed cases, including ten influenza A (H3) and one influenza B, were reported from the State Public Health Laboratory during week 49. A season-to-date total of 3,318 influenza cases have been reported in Missouri.
- Influenza-like illness activity is above baseline for both the Missouri Outpatient ILI Surveillance Network (ILINet) and hospital emergency room visit chief complaint data reported through ESSENCE. The reported percentage of visits for ILI was 2.88% and 2.3% through ILINet and ESSENCE respectively³.
- No confirmed outbreaks of influenza or ILI were reported during Week 49 in Missouri. No ILI-associated school closures were reported during Week 49.
- No influenza-associated pediatric deaths have been reported in Missouri to date, this influenza season. Deaths involving Pneumonia and Influenza (P&I) reported to the Bureau of Vital Records decreased to 46 deaths during Week 48, resulting in a season-to-date total of 622 P&I associated deaths in Missouri⁴.
- National influenza activity and surveillance information is prepared by the Centers for Disease Control and Prevention (CDC). The information including a weekly report (FLUVIEW) is available online at <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>.

¹The 2014-2015 influenza season in Missouri began CDC Week 40 (Week ending October 4, 2014) through CDC Week 20 (week ending May 23, 2015).

²Regional is defined as: Increased ILI in at least 2 regions but less than half of the regions, AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions. OR Institutional outbreaks (ILI or lab confirmed) in at least 2 regions, but fewer than half of the regions, AND recent lab confirmed influenza in the affected regions.

³Influenza-like Illness (ILI) is defined 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.

⁴The P&I data are available one week later. The P&I data for the CDC Week provided is the most current data available.

Surveillance Data:

Table 1. Number of Laboratory-positive Influenza Cases by Influenza Type, Missouri, CDC Week 47-49 (November 16 – December 6, 2014)

Influenza Type	Week 47	Week 48	Week 49	2014-2015 Season-to-Date*
Influenza A	415	961	1,393	3,049
Influenza B	43	29	42	226
Influenza Unknown Or Untyped	3	5	27	43
Total	461	995	1,462	3,318

*Influenza Season begins Week Ending October 4, 2014 (CDC Week 40)
Data Source: Missouri Health Information Surveillance System (WebSurv).

Table 2. Number of Laboratory-positive Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 49 (November 30 – December 6, 2014)

Age Group	Week 49 Cases	Week 49 Rate*	2014-2015 [†] Season-to-Date	2014-2015 [†] Season-to-Date Rate*
00-04	339	89	660	174
05-14	487	62	1,161	148
15-64	497	13	1,190	30
65+	139	16	307	35
Total	1,462	24	3,318	55

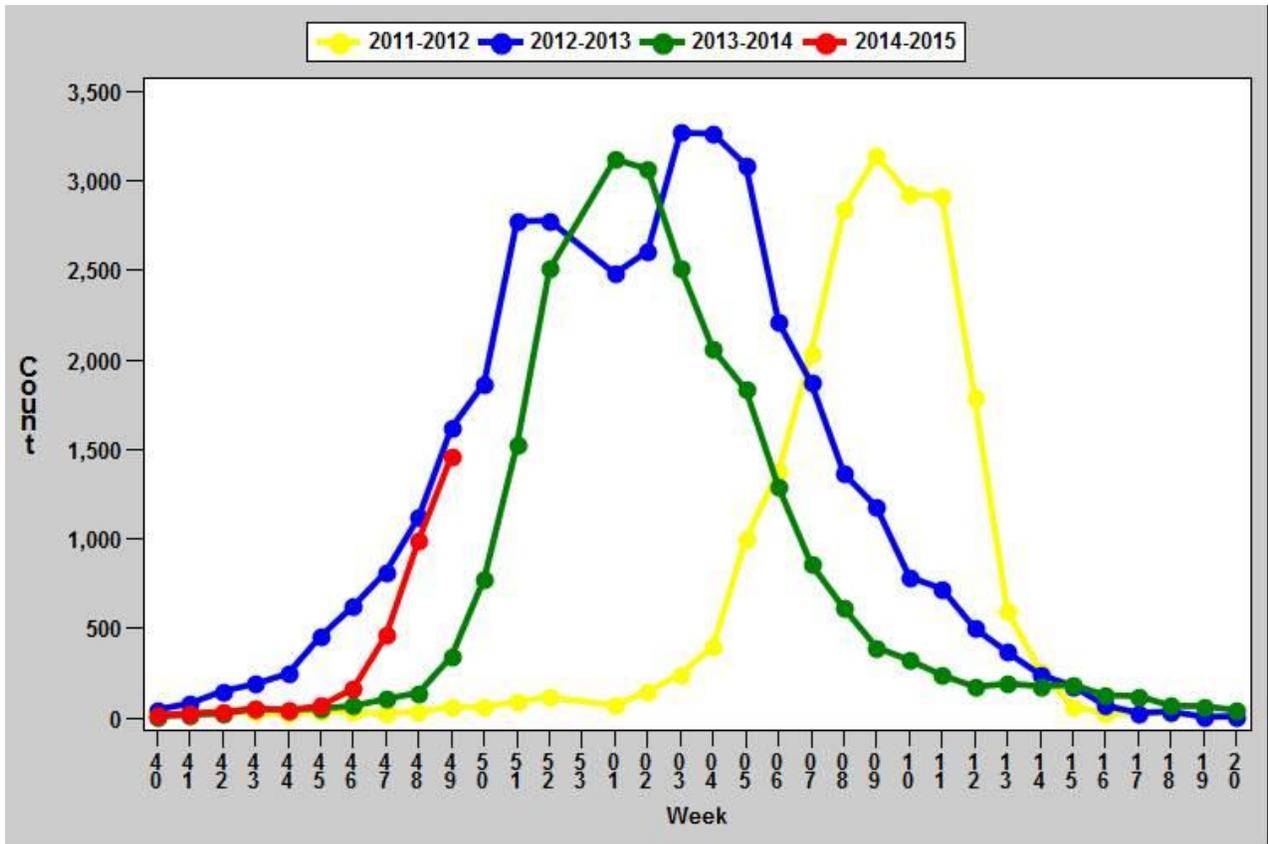
*Incidence Rate per 100,000 population
[†]Influenza Season begins Week Ending October 4, 2014 (CDC Week 40)
Data Source: Missouri Health Information Surveillance System (WebSurv)

Table 3. Number of Laboratory-positive Influenza Cases and Case Rates by Region, Missouri, CDC Week 49 (November 30 – December 6, 2014)

District	Week 49 Cases	Week 49 Rate*	2014-2015 [†] Season-to-Date	2014-2015 [†] Season-to-Date Rate*
CE	67	10	494	74
EA	1,001	45	1,850	83
NW	249	16	559	35
SE	120	25	314	66
SW	25	2	101	10
Total	1,462	24	3,318	55

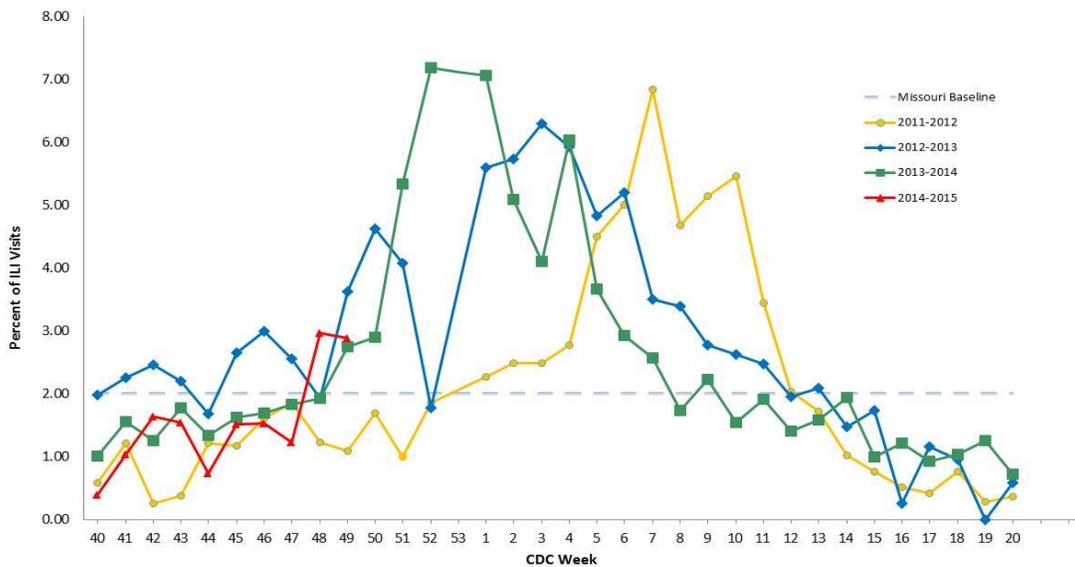
*Incidence Rate per 100,000 population
[†]Influenza Season begins Week Ending October 4, 2014 (CDC Week 40)
Data Source: Missouri Health Information Surveillance System (WebSurv)

Graph 1. Number of Laboratory-positive Influenza Cases by CDC Week, Missouri, 2011-2015*



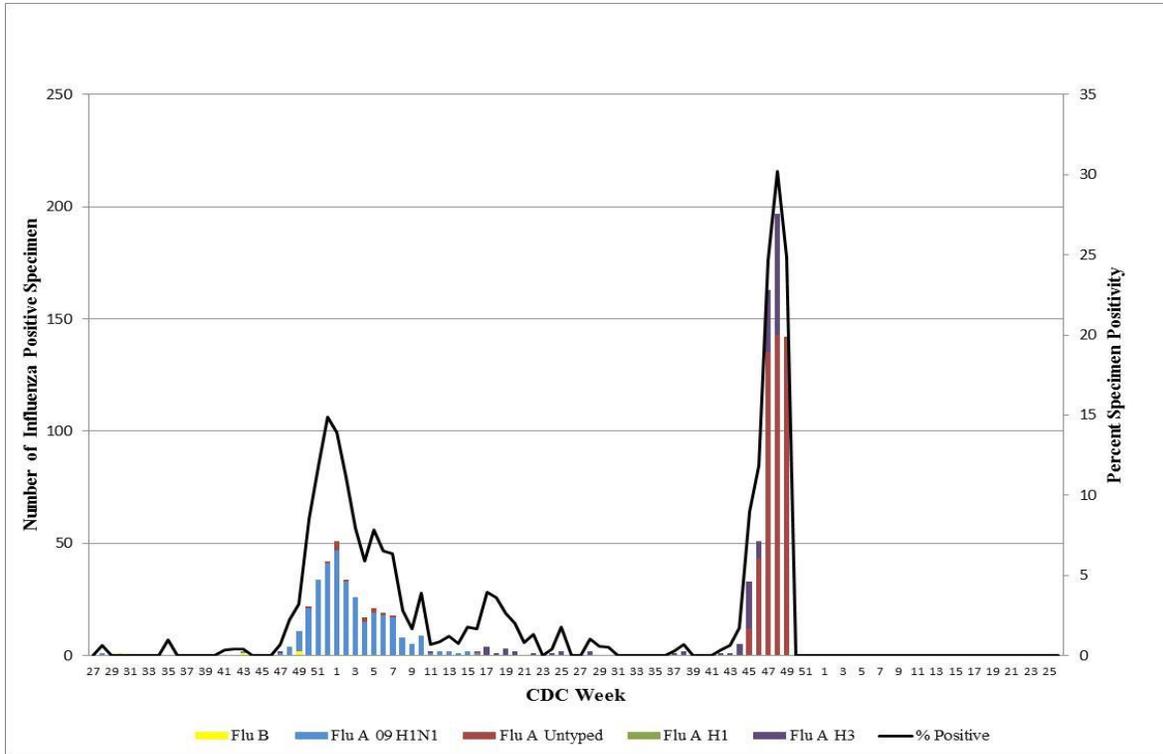
*2014-2015 Season-to-Date through the week ending December 6, 2014 (Week 49)
Data Source: Missouri Health Information Surveillance System (WebSurv).

Graph 2. Percentage of Visits for Influenza-like-Illness (ILI), Missouri Outpatient ILI Surveillance Network (ILINet) 2011-2015*



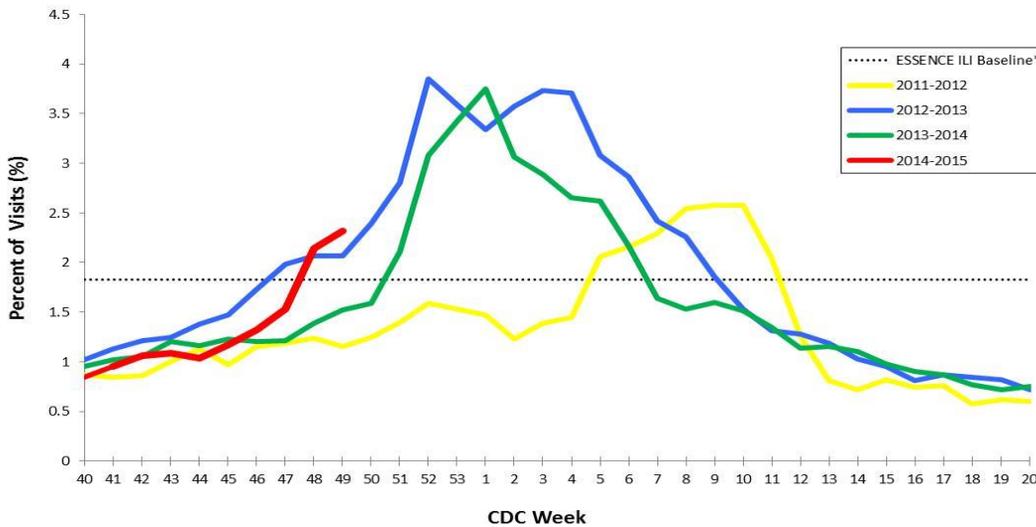
*2014-2015 Season-to-Date through the week ending December 6, 2014 (Week 49)

Graph 3. St. Louis Children’s Hospital Season-to-Date PCR (+) Influenza Test by CDC Week



*Data Source: St. Louis Children’s Hospitals
 *This data is based on testing in all age groups in St Louis metro and SE Missouri
 *†Influenza Season begins Week Ending October 4, 2014 (CDC Week 40)

Graph 4. Percentage of Emergency Room Visits with Chief Complaint of Influenza-like Illness (ILI), ESSENCE Participating Hospitals in Missouri, 2011-2015†

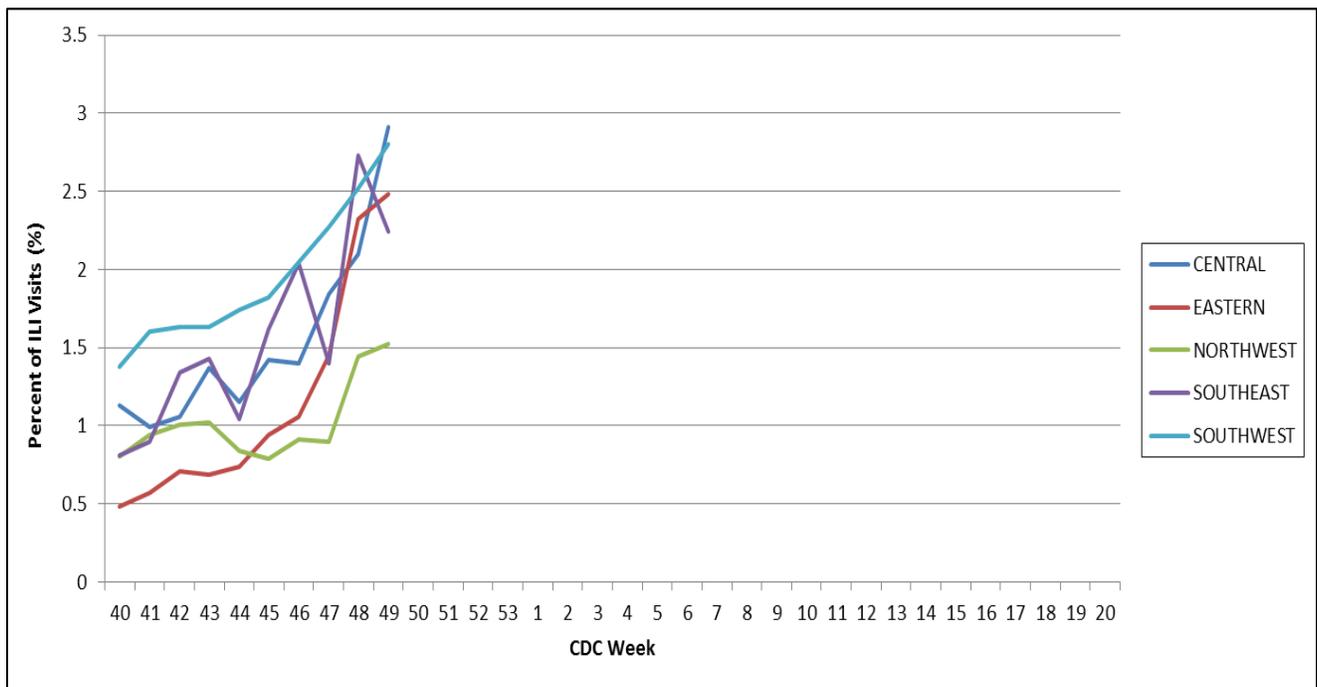


† Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE. Includes data from 95 reporting facilities in Missouri (<http://health.mo.gov/data/essence/pdf/moilmap.pdf>).
 *ESSENCE ILI Baseline is the mean of the values during previous influenza seasons (week 40-20, 2006-07, 2008-09 and 2010-2011) when influenza activity was low.

Table 4. Percentage of Emergency Room Visits with Chief Complaint of Influenza-like Illness (ILI) from ESSENCE Participating Hospitals by Age Group, Missouri, CDC Week 49 (November 30 – December 6, 2014)

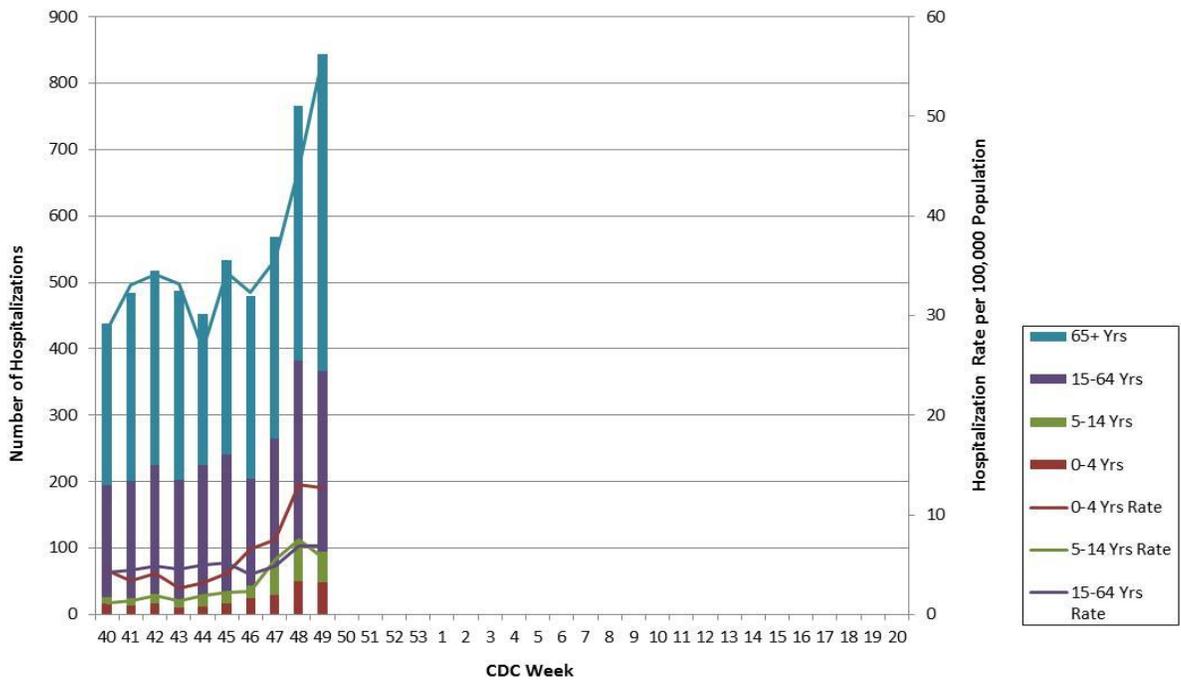
District	Age 0-4	Age 5-17	Age 18-44	Age 45-64	Age 65+	Total Percentage
Northwest	2.1%	3.5%	1.4%	0.9%	0.9%	1.5%
Central	6.3%	6.6%	2.1%	2.2%	1.4%	2.9%
Eastern	3.2%	4.4%	2.6%	2.0%	1.3%	2.5%
Southeast	8.0%	3.9%	1.4%	1.1%	1.6%	2.2%
Southwest	8.4%	7.7%	1.8%	0.9%	1.3%	2.8%
Statewide	4.3%	5.1%	2.0%	1.5%	1.2%	2.3%

Graph 5. Percentage of Emergency Room Visits with the Chief Complaint of Influenza-like Illness (ILI) for each District by CDC Week, ESSENCE Participating Hospitals in Missouri, 2014-2015*



*2014-2015 Season-to-Date through the week ending December 6, 2014 (Week 49)

Graph 6. Number and Rate of Patients by Age Group Hospitalized with Influenza and/or Pneumonia Syndromes at Participating Missouri Hospitals, by CDC Week, 2014-2015*



*2014-2015 Season-to-Date through the week ending December 6, 2014 (Week 49)

Data Source: Hospitalization data from Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE HL7 messaging portal. Includes data from 98 reporting facilities in Missouri (<http://health.mo.gov/data/essence/pdf/moimlmap.pdf>). Population data from DHSS Population MICA 2012 (<http://health.mo.gov/data/mica/mica/population.php>).