

## Missouri Weekly Influenza Surveillance Report 2014-2015 Influenza Season<sup>1</sup>

## **Week 48: November 23 – November 29, 2014**

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

## **Summary:**

- The estimated influenza activity in Missouri is Local<sup>2</sup>.
- Two laboratory-confirmed cases, including one influenza A (H3) and one influenza B, were reported from the State Public Health Laboratory during week 48. A season-to-date total of 1,104 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 2.97% and 2.1% through ILINet and ESSENCE respectively<sup>3</sup>.
- No confirmed outbreaks of influenza or ILI were reported during Week 48 in Missouri. No ILI-associated school closures were reported during Week 48.
- 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 64 deaths during Week 47, resulting in a season-to-date total of 576 P&I associated deaths in Missouri<sup>4</sup>.
- 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 <a href="http://www.cdc.gov/flu/weekly/fluactivitysurv.htm">http://www.cdc.gov/flu/weekly/fluactivitysurv.htm</a>.

<sup>&</sup>lt;sup>1</sup>The 2014-2015 influenza season in Missouri began CDC Week 40 (Week ending October 4, 2014) through CDC Week 20 (week ending May 23, 2015).

<sup>&</sup>lt;sup>2</sup>Local is defined as: Increased ILI in 1 region; ILI activity in other regions is not increased And recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI. OR Two or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased And recent (within the past 3 weeks) lab evidence of influenza in region with the outbreak and virus activity is no greater than sporadic in other regions..

<sup>&</sup>lt;sup>3</sup>Influenza-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.

<sup>&</sup>lt;sup>4</sup>The 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 46-48 (November 9 – November 29, 2014)

Influenza Type	Week 46	Week 47	Week 48	2014-2015 Season-to-Date*
Influenza A	130	378	281	931
Influenza B	24	36	16	159
Influenza Unknown Or Untyped	2	3	3	14
Total	156	417	300	1,104

<sup>\*</sup>Influenza Season begins Week Ending October 4, 2014 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSury).

Table 2. Number of Laboratory-positive Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 48 (November 23 – November 29, 2014)

Age Group	Week 48 Cases	Week 48 Rate*	2014-2015 <sup>†</sup> Season-to-Date	2014-2015 <sup>†</sup> Season-to-Date Rate*
00-04	41	11	168	44
05-14	117	15	366	47
15-64	121	3	470	12
65+	21	2	100	11
Total	300	5	1,104	18

<sup>\*</sup>Incidence Rate per 100,000 population

Data Source: Missouri Health Information Surveillance System (WebSurv)

Table 3. Number of Laboratory-positive Influenza Cases and Case Rates by Region, Missouri, CDC Week 48 (November 23 – November 29, 2014)

District	Week 48 Cases	Week 48 Rate*	2014-2015 <sup>†</sup> Season-to-Date	2014-2015 <sup>†</sup> Season-to-Date Rate*
CE	42	6	214	32
EA	173	8	482	22
NW	33	2	241	15
SE	46	10	130	27
SW	6	1	37	4
Total	300	5	1,104	18

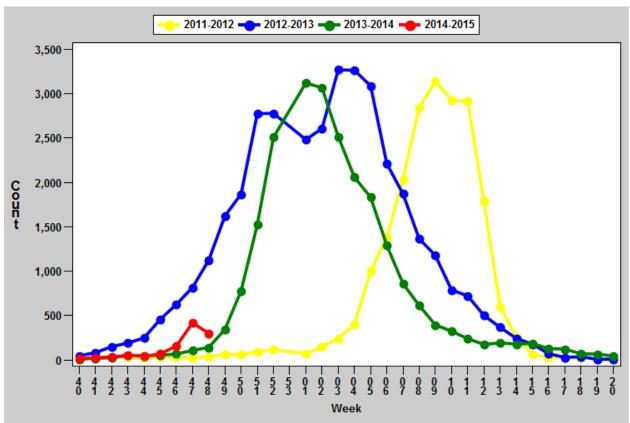
<sup>\*</sup>Incidence Rate per 100,000 population

Data Source: Missouri Health Information Surveillance System (WebSurv)

<sup>†</sup>Influenza Season begins Week Ending October 4, 2014 (CDC Week 40)

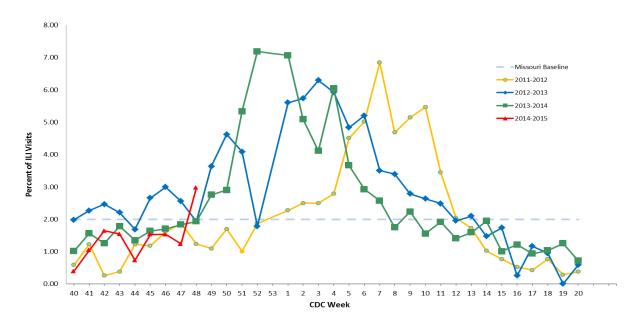
<sup>†</sup>Influenza Season begins Week Ending October 4, 2014 (CDC Week 40)

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



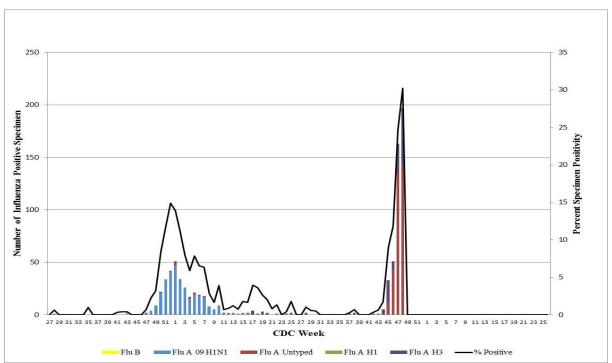
\*2014-2015 Season-to-Date through the week ending November 29, 2014 (Week 48) Data Source: Missouri Health Information Surveillance System (WebSurv).

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 November 29, 2014 (Week 48)

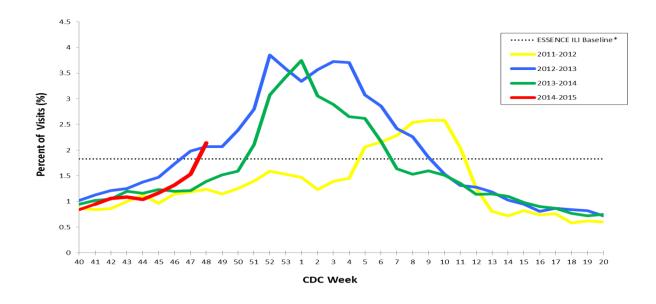
Graph 3. St. Louis Children's Hospital Season-to-Date PCR (+) Influenza Test by CDC Week



\*Data Source: St. Louis Children's Hospitals

\*†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<sup>†</sup>



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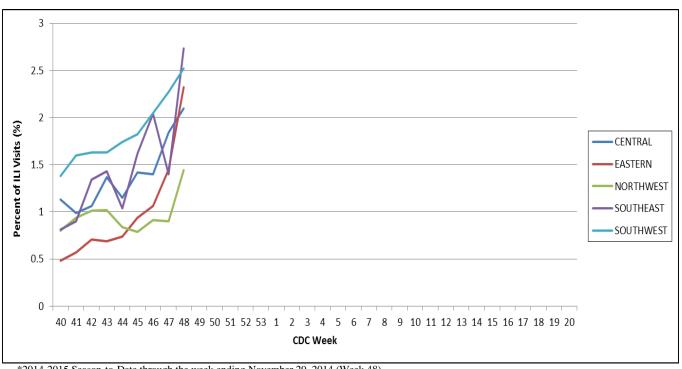
\*ESSENCE ILI Baseline is the mean of the values during previous influenza seasons (week 40-20, 2006-07, 2008-09 and 2010-2011) when influenza activity was low.

<sup>\*</sup>This data is based on testing in all age groups in St Louis metro and SE Missouri

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 48 (November 23 – November 29, 2014)

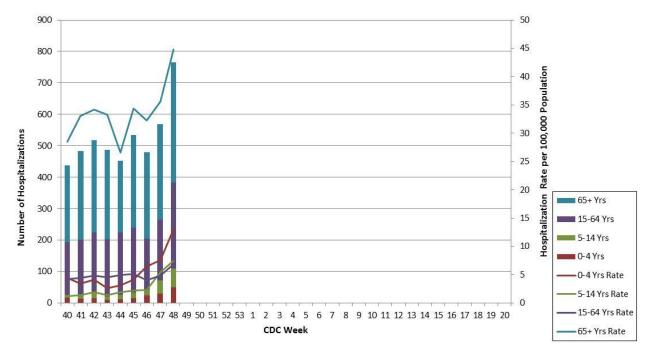
District	Age 0-4	Age 5-17	Age 18-44	Age 45-64	Age 65+	Total Percentage
Northwest	2.5%	3.5%	1.2%	1%	0.5%	1.4%
Central	6.6%	5.7%	1.1%	1.7%	0.3%	2.1%
Eastern	3%	5.3%	2.1%	1.5%	1.1%	2.3%
Southeast	7.6%	11.1%	1.6%	1%	0.2%	2.7%
Southwest	8.4%	8%	1.4%	1.1%	0.4%	2.5%
Statewide	4.4%	5.7%	1.6%	1.3%	0.7%	2.1%

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 November 29, 2014 (Week 48)

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 November 29, 2014 (Week 48)

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 95 reporting facilities in Missouri (<a href="http://health.mo.gov/data/essence/pdf/moilmap.pdf">http://health.mo.gov/data/essence/pdf/moilmap.pdf</a>). Population data from DHSS Population MICA 2012 (<a href="http://health.mo.gov/data/mica/population.php">http://health.mo.gov/data/mica/population.php</a>).