



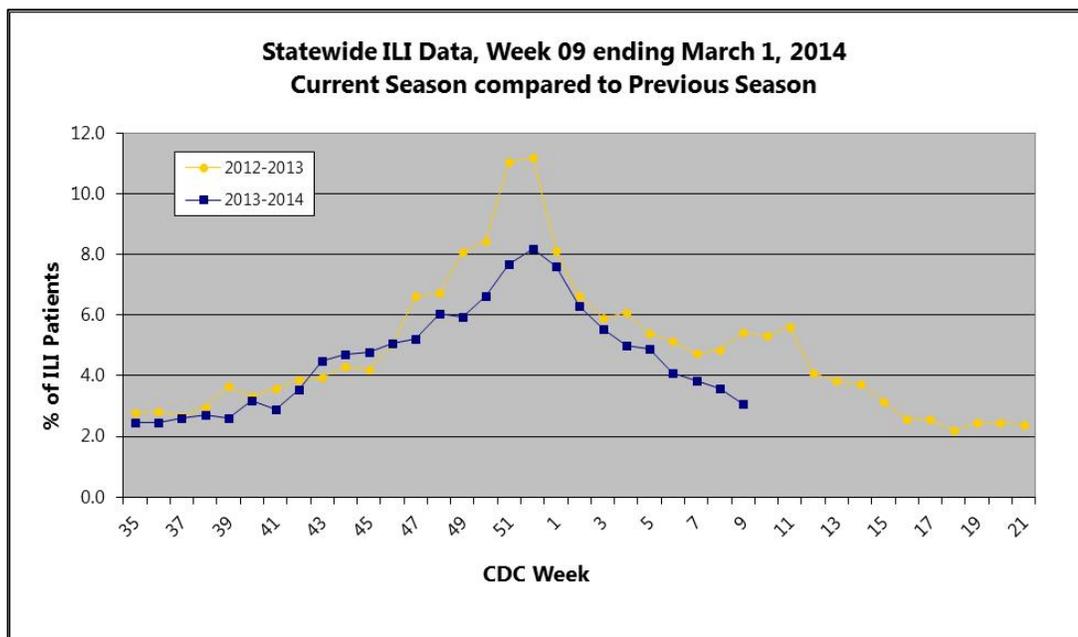
2013-2014 Influenza Report Week 09

February 23 – March 1, 2014

About our flu activity reporting

MSDH relies upon selected sentinel health practitioners across the state to report the percentage of total patient visits consistent with an influenza-like illness (ILI: fever of 100°F or higher AND cough and/or sore throat). Also, providers are supplied with specimen collection kits. Samples are submitted to the Mississippi Public Health Laboratory for influenza PCR testing. Reports are used to estimate the state's ILI rate and the magnitude of the state's influenza activity. Reports represent only the distribution of flu in the state, not an actual count of all flu cases statewide. **Information is provisional only and may change depending on additional reporting from sentinel providers.**

State ILI Surveillance



The state ILI rate had been slowly, but steadily increasing since week 41. However, beginning in week 01, the overall state ILI rate began to decrease.

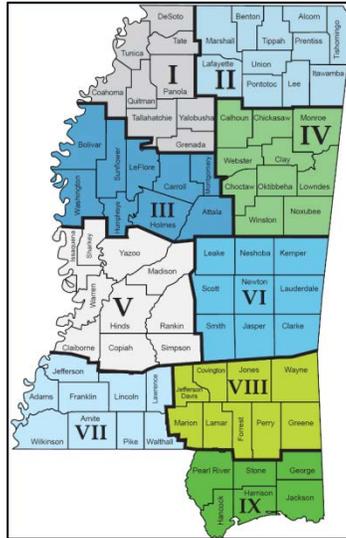
During week **09**

(02/23/14-03/01/14), the overall state ILI rate (**3.1%**) **decreased** from the previous week (**3.6%**) and was lower than this time last year (**5.4%**). | [Figure 1](#)

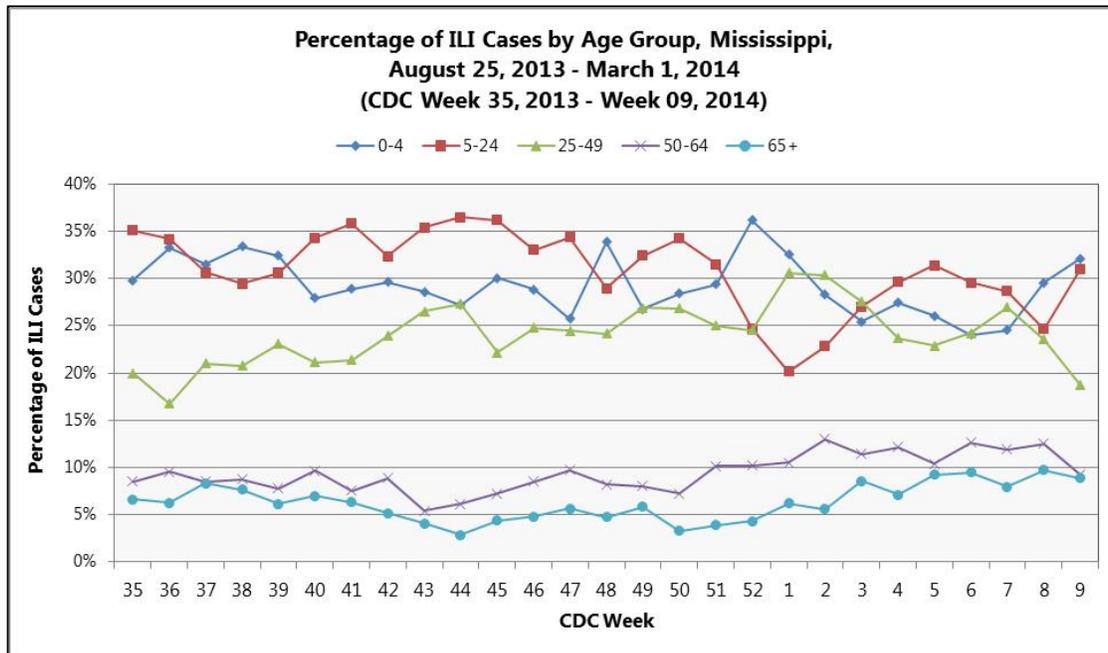
Total number of patients treated by sentinel providers in the last three weeks. | **Table 1**

2013-2014 Influenza Season				
CDC Week	Week Ending	Total patients	ILI symptoms	ILI Rate (%)
09	March 1	17160	529	3.1%
08	Feb. 22	17931	640	3.6%
07	Feb. 15	16781	641	3.8%

During week **09**, **six** districts (3, 4, 5, 6, 7, and 9) had a decrease in ILI activity, while **three** districts (1, 2, and 8) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



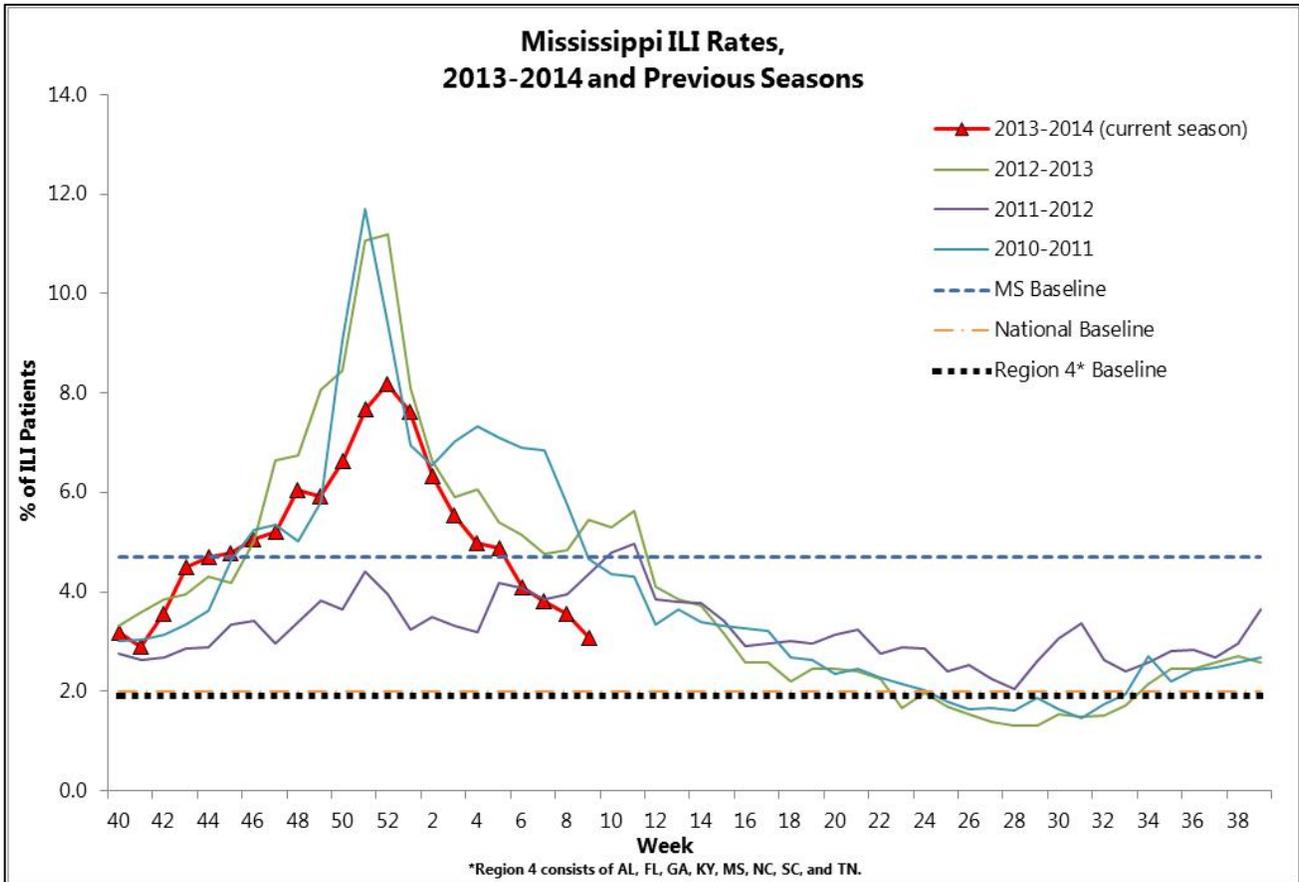
MSDH District ILI Rates (%) 2013-2014		
District	Week 08	Week 09
State	3.6	3.1
I	1.3	1.4
II	2.5	2.4
III	12.1	5.7
IV	3.5	2.6
V	2.8	2.0
VI	10.7	8.0
VII	3.5	2.8
VIII	2.0	1.7
IX	4.1	3.7



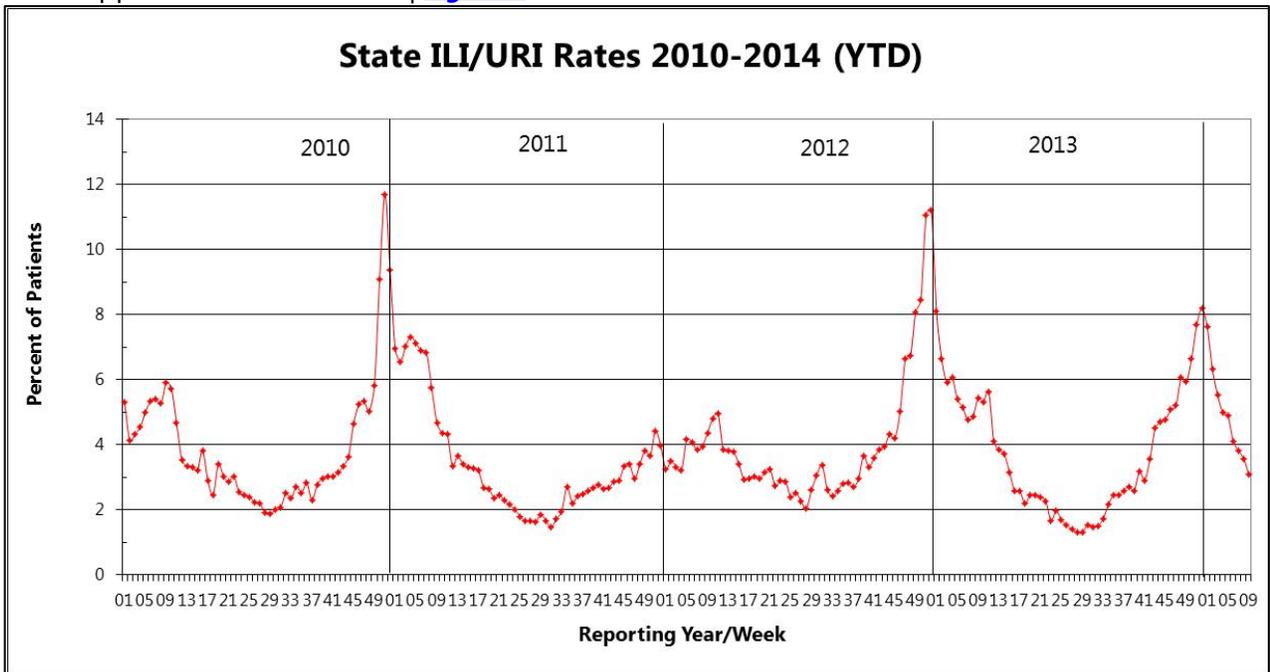
Since week 35, the percentage of reported ILI cases has been highest among those in the **0-4** and **5-24** years of age groups. This trend

continued into week **09**. | [Figure 2](#)

The 2013-14 state ILI rate was **above** the national and Region 4 baselines, but was **below** the state baseline for week **09**. | [Figure 3](#)



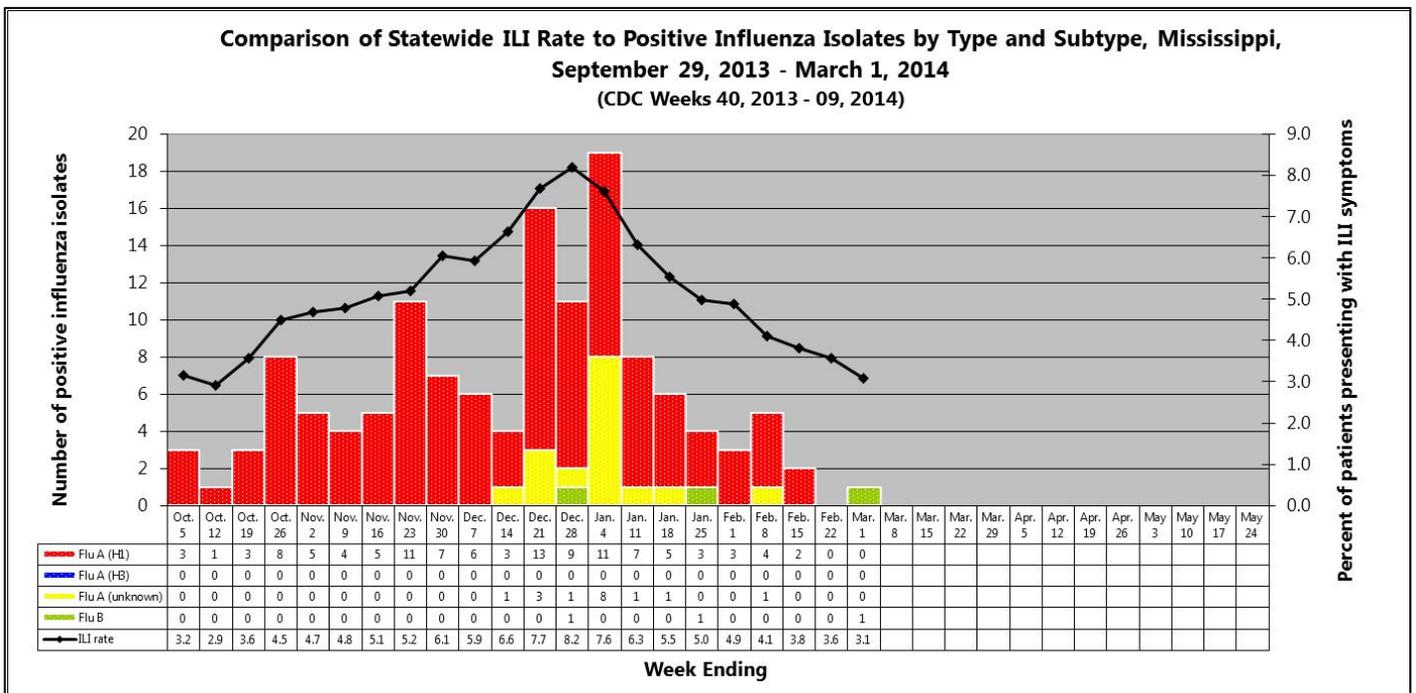
Mississippi ILI Rates 2010-2014 | [Figure 4](#)



Flu Testing Reports

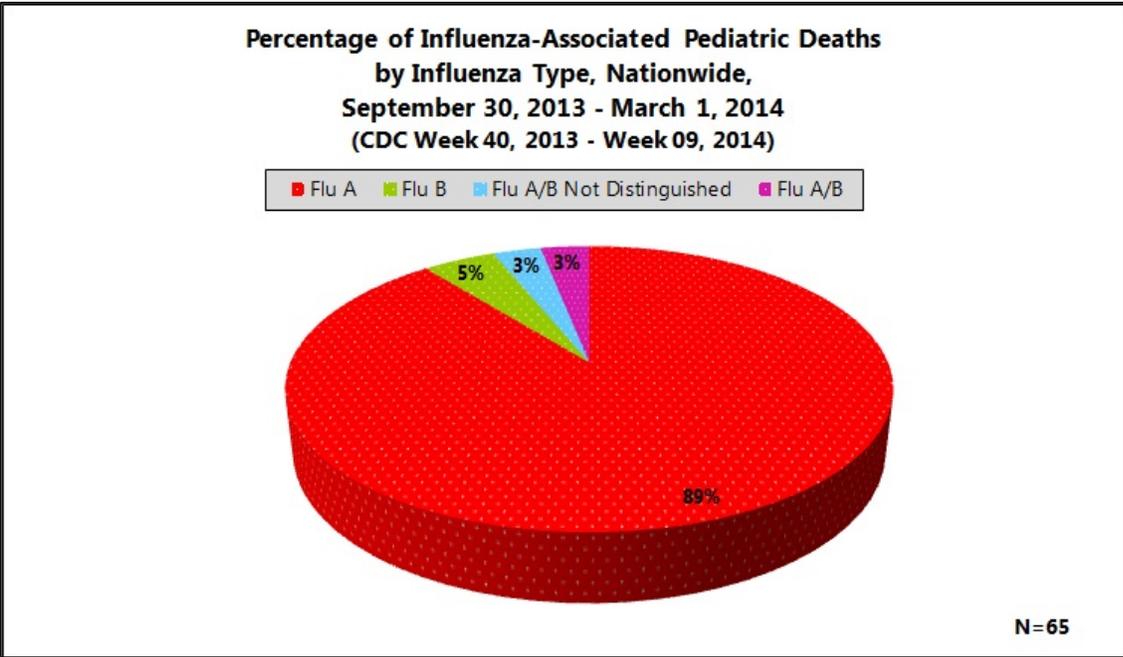
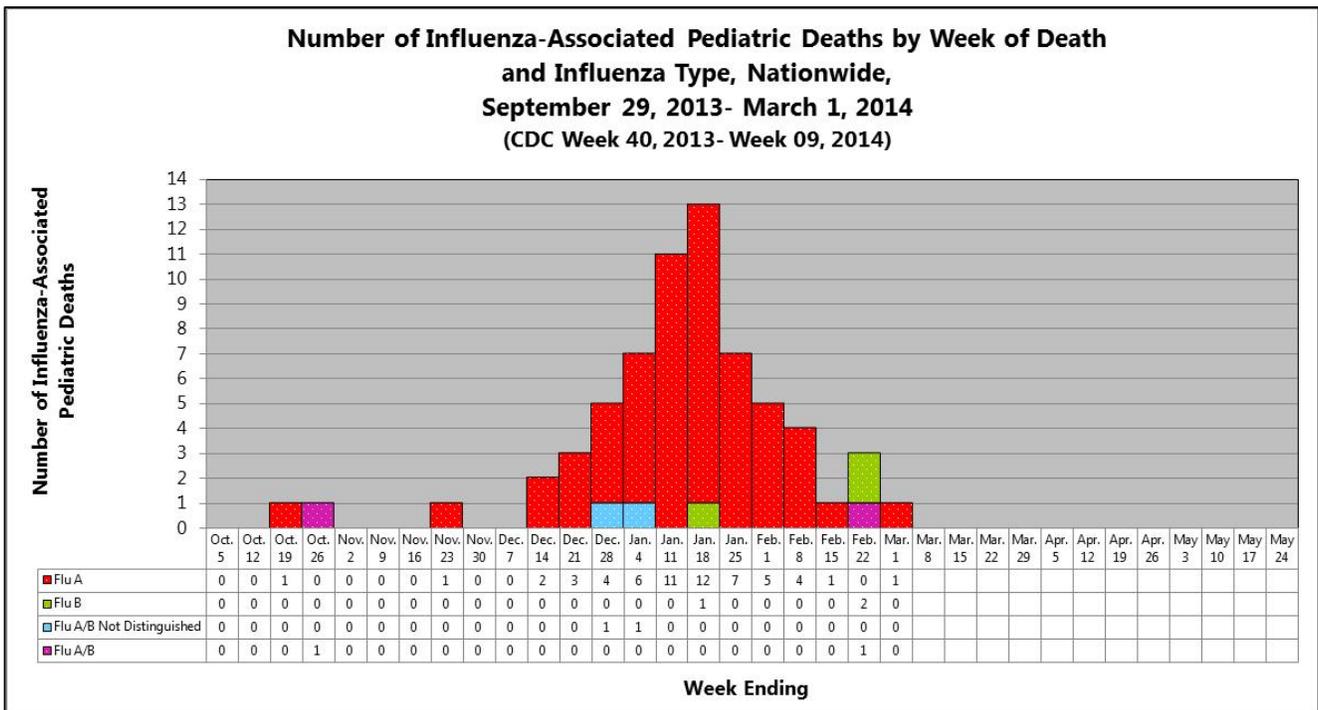
From week **40** (week ending October 5th) through week **09** (week ending March 1st), **132** positive influenza samples were identified by MSDH. One hundred thirteen (113) of the samples were identified as influenza A (2009 H1N1). Sixteen samples were identified as influenza A (subtype not performed) and three were identified as influenza B.

The influenza cases were identified from the following counties: Adams (4), Alcorn (1), Amite (2), Benton (2), Chickasaw (1), Clay (1), Coahoma (5), Copiah (2), Covington (1), Forrest (4), George (2), Grenada (2), Hancock (2), Harrison (17), Hinds (2), Itawamba (1), Jackson (16), Jones (2), Lamar (1), Lauderdale (1), Lawrence (3), Leake (2), Lee (16), Lincoln (1), Marion (1), Marshall (7), Monroe (7), Neshoba (1), Oktibbeha (5), Pearl River (2), Pike (1), Prentiss (1), Stone (1), Tallahatchie (1), Tate (4), Tunica (1), Washington (3), Wayne (1), and Yalobusha (1). The counties of four influenza cases were unknown. | [Figure 5](#)



National and Mississippi Pediatric Mortality Surveillance

Nationally, **four** influenza-associated pediatric deaths were reported to CDC during week **09**. Two deaths were associated with an influenza A virus for which no subtyping was performed and occurred during weeks 03 (week ending January 18th) and 09 (week ending March 1st). One death was associated with an influenza B virus and occurred during week 08 (week ending February 22nd) and one death was associated with an influenza A and B virus co-infection and occurred during week 08 (week ending February 22nd). | [Figure 6](#)



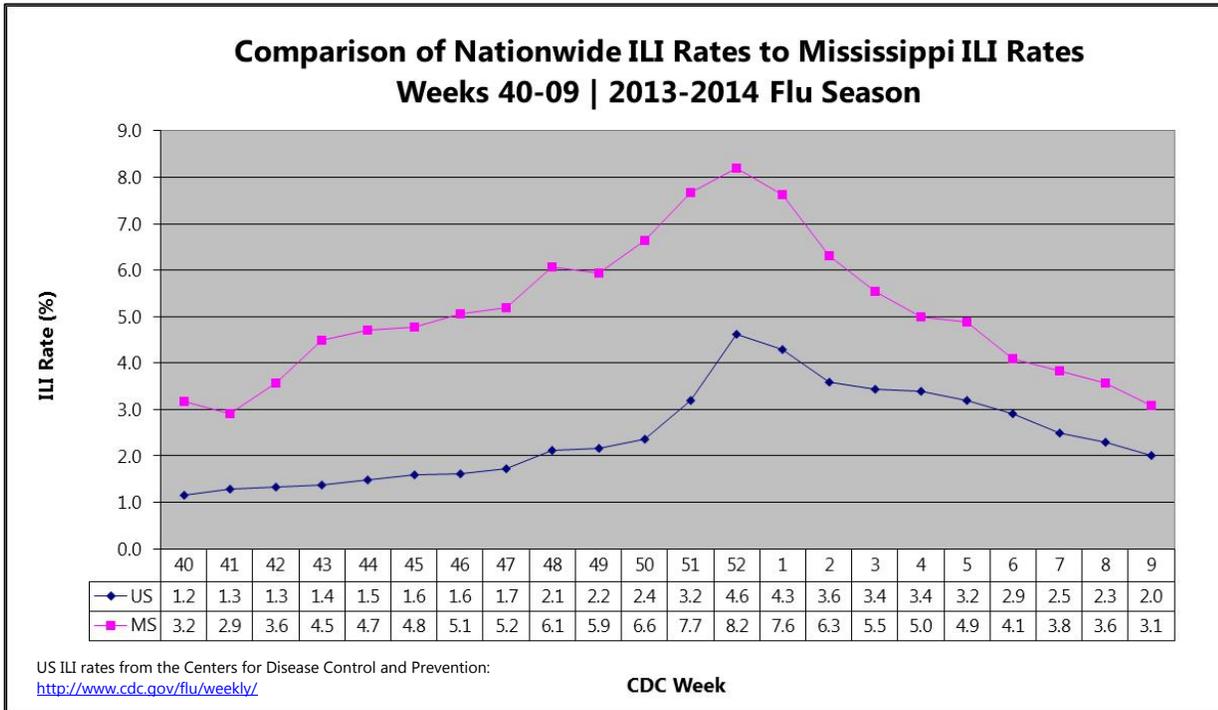
Sixty-five influenza-associated pediatric deaths have been reported nationally during the 2013-2014 season. Of the 65 deaths, 58 (89%) have been attributed to influenza A

viruses, three (5%) to an influenza B virus, two (3%) to an influenza A/B virus not distinguished, and two (3%) to an influenza A and B virus co-infection. | [Figure 7](#)

Mississippi has had **one** influenza-associated pediatric death reported during this influenza season.

National ILI Surveillance

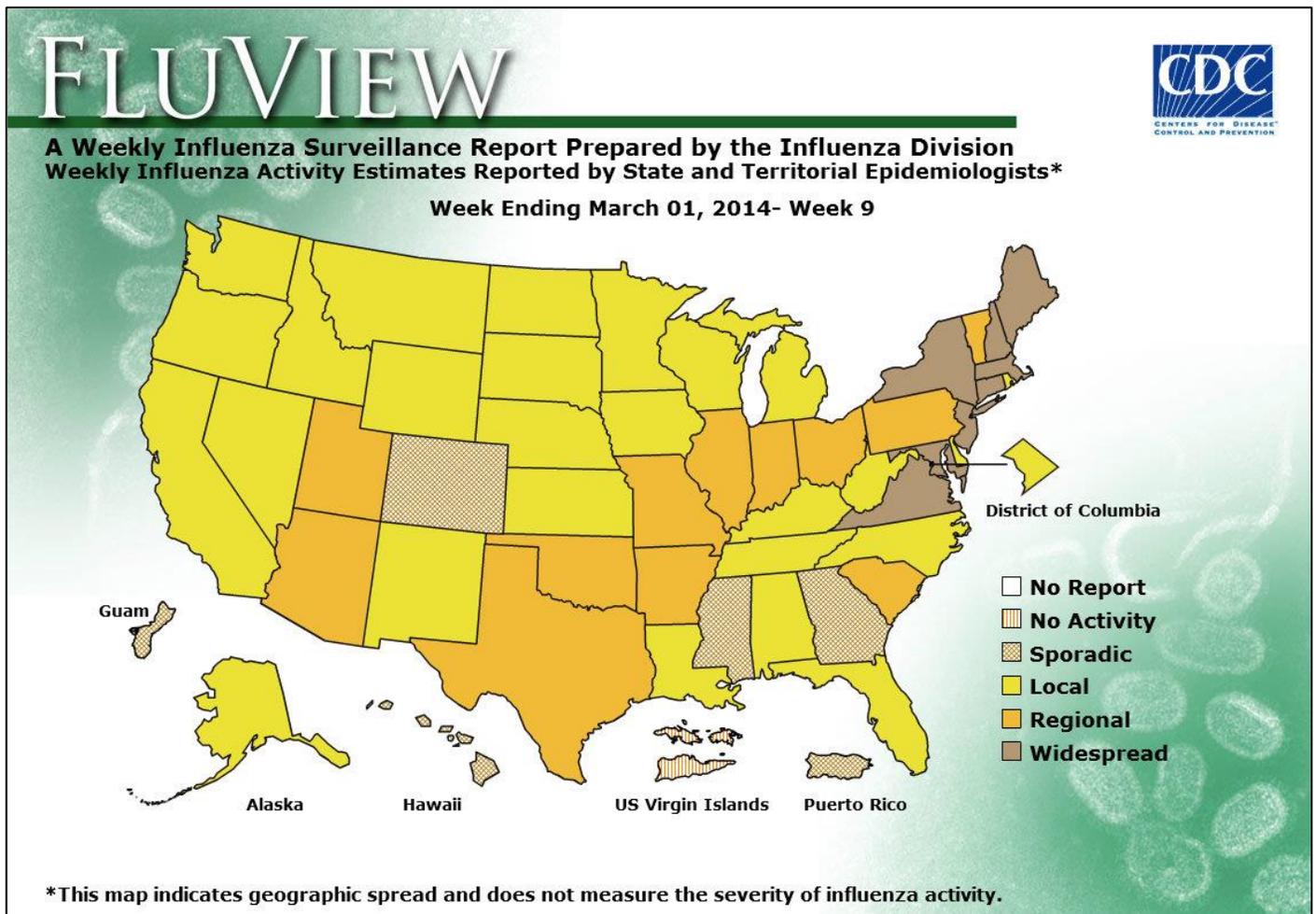
For week **09**, the MS ILI rate (3.1%) continued to remain **above** the national ILI rate (2.0%), but continued to follow national trends. | [Figure 8](#)



Mississippi reported **“Sporadic”** flu activity for week **09**. | [Table 3](#)

Level of Flu Activity	Definition
No Activity	Overall clinical activity remains low and there are no lab confirmed cases.
Sporadic	Isolated cases of lab confirmed influenza in the state; ILI activity is not increased <u>OR</u> A lab-confirmed outbreak in a single institution in the state; ILI activity is not increased.
Local	Increased ILI within a single region AND recent (within the past 3 weeks) laboratory evidence of influenza in that region. ILI activity in other regions is not increased <u>OR</u> two of more institutional outbreaks (ILI or lab confirmed) within a single region AND recent (within the past 3 weeks) lab confirmed influenza in that region. Other regions do not have increased ILI and virus activity is no greater than sporadic in those regions
Regional	Increased ILI in at least 2 regions but fewer than half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions <u>OR</u> 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.
Widespread	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state.

During week **09**, influenza activity continued to **decrease** in the United States.¹ | [Figure 9](#)



¹For up-to-date information on flu activity nationwide, please refer to the CDC’s website: <http://www.cdc.gov/flu/weekly/fluactivitiesurv.htm>.

Additional information:

Centers for Disease Control and Prevention	http://cdc.gov/flu/
Centers for Disease Control and Prevention FluView	http://www.cdc.gov/flu/weekly/
Flu.gov	http://www.flu.gov/
MSDH Flu and Pneumonia	http://msdh.ms.gov/msdhsite/ static/14,0,199.html
Google Flu Trends	http://www.google.org/flutrends/
World Health Organization FluNet	http://www.who.int/influenza/gisrs_laboratory/flunet/en/

Appendix

Figure 1

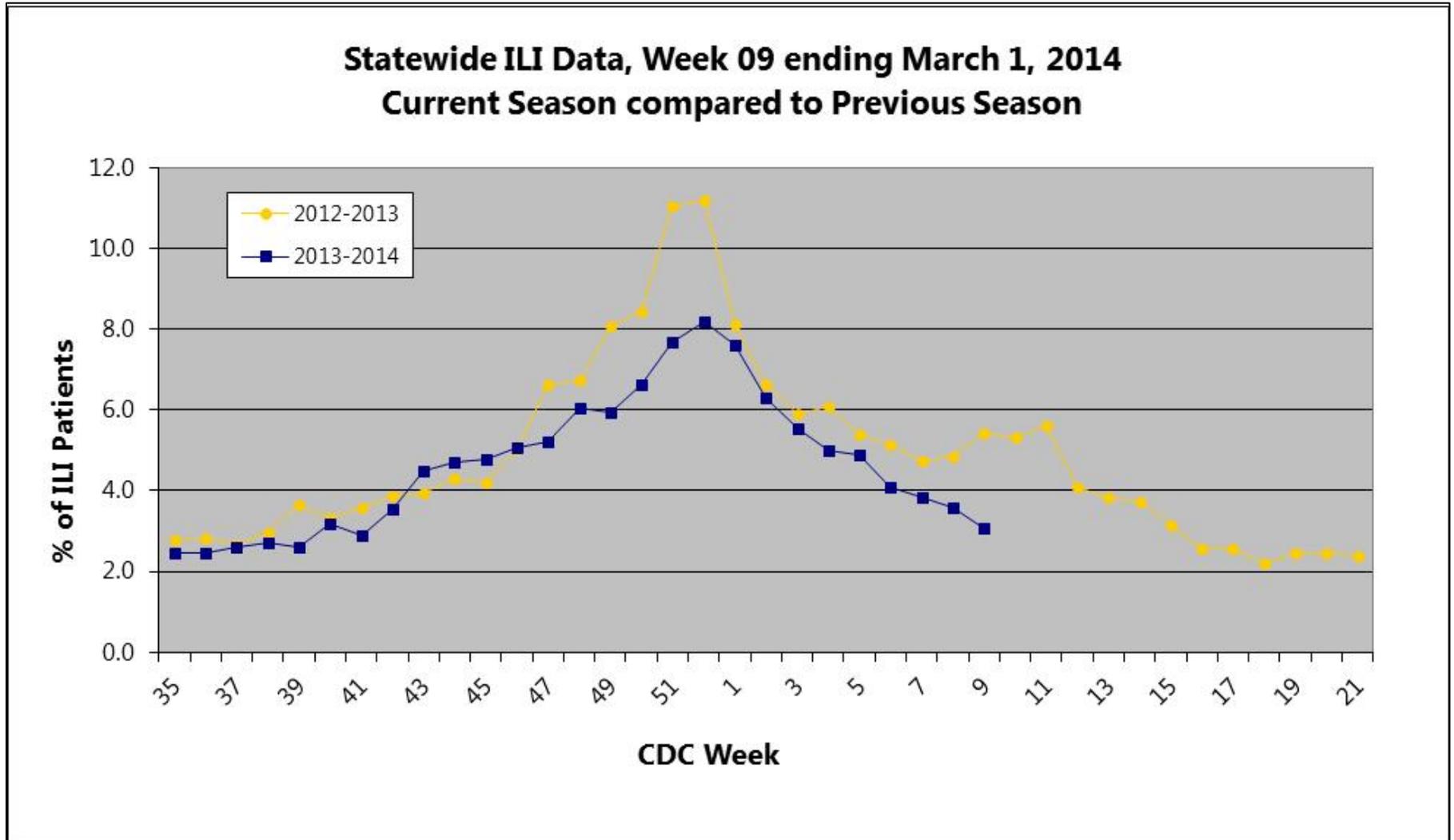


Figure 2

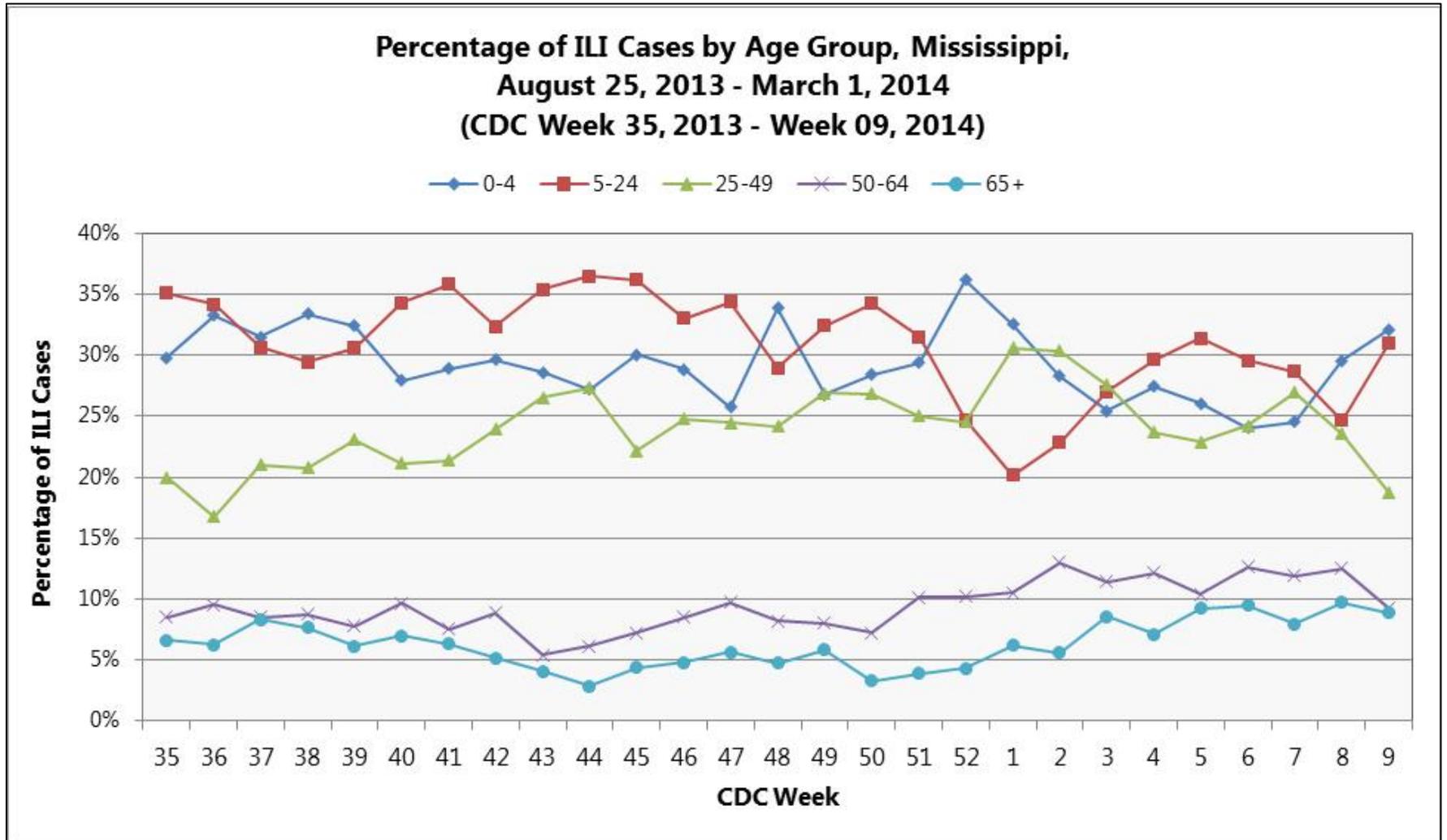


Figure 3

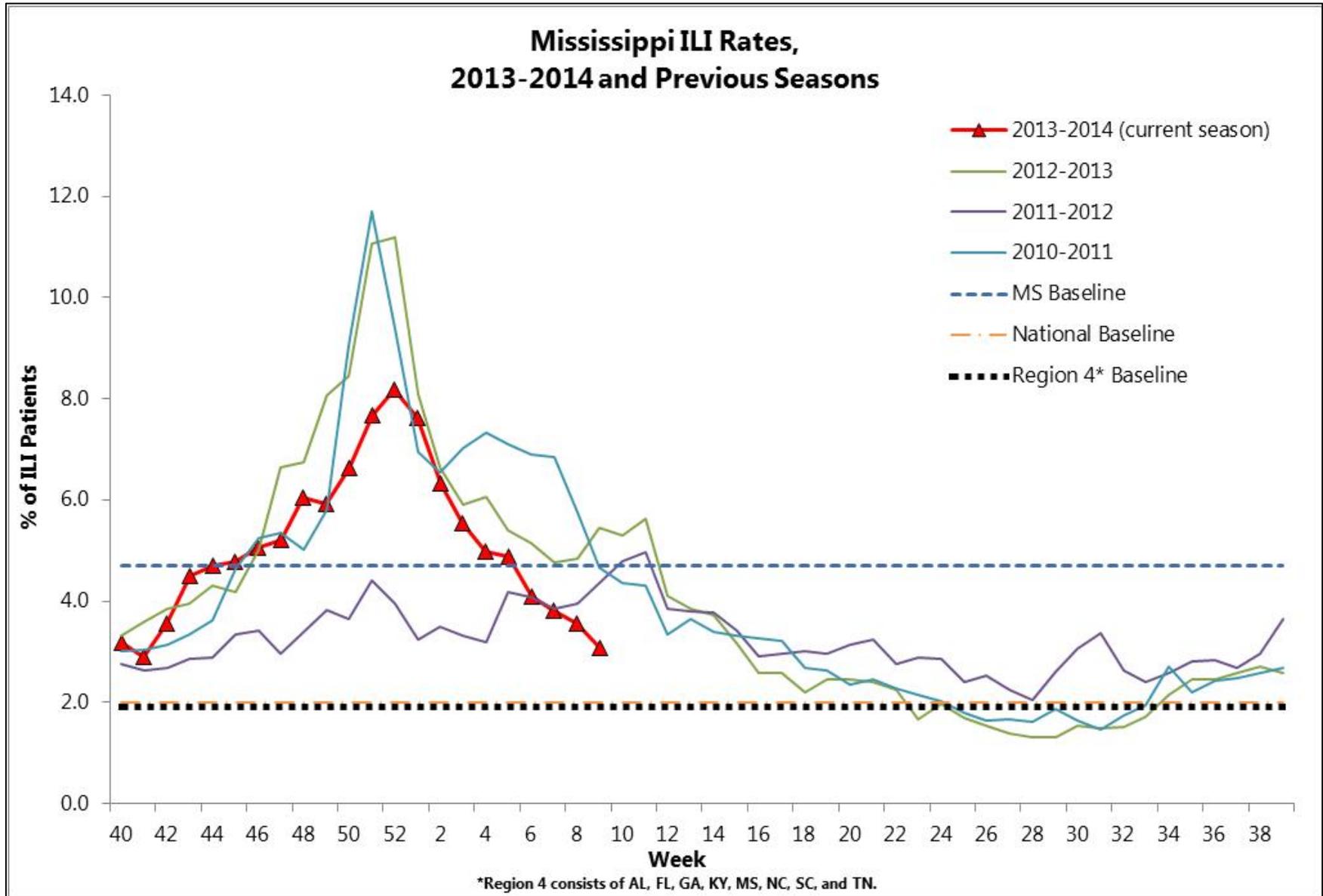


Figure 4

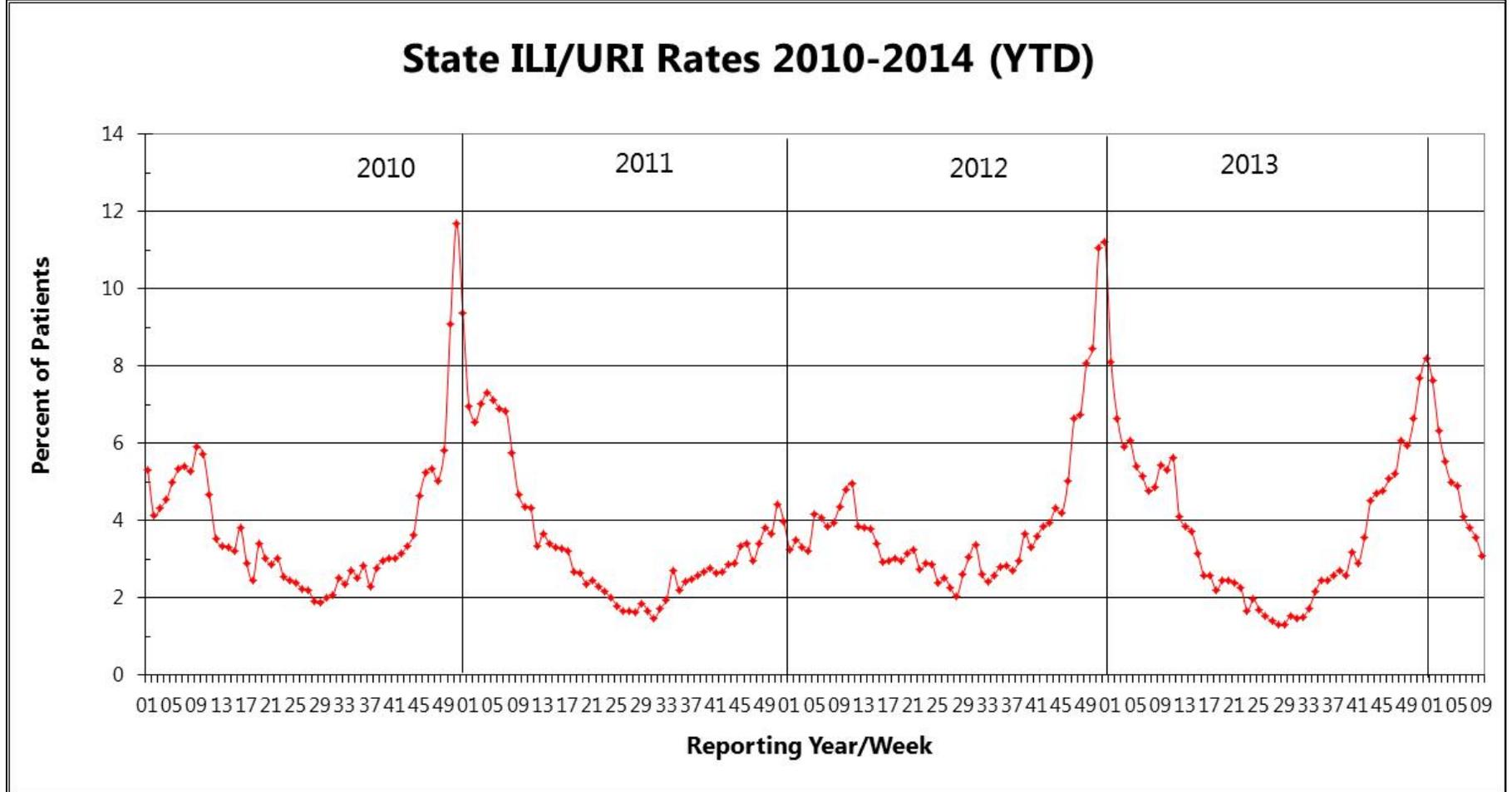


Figure 5

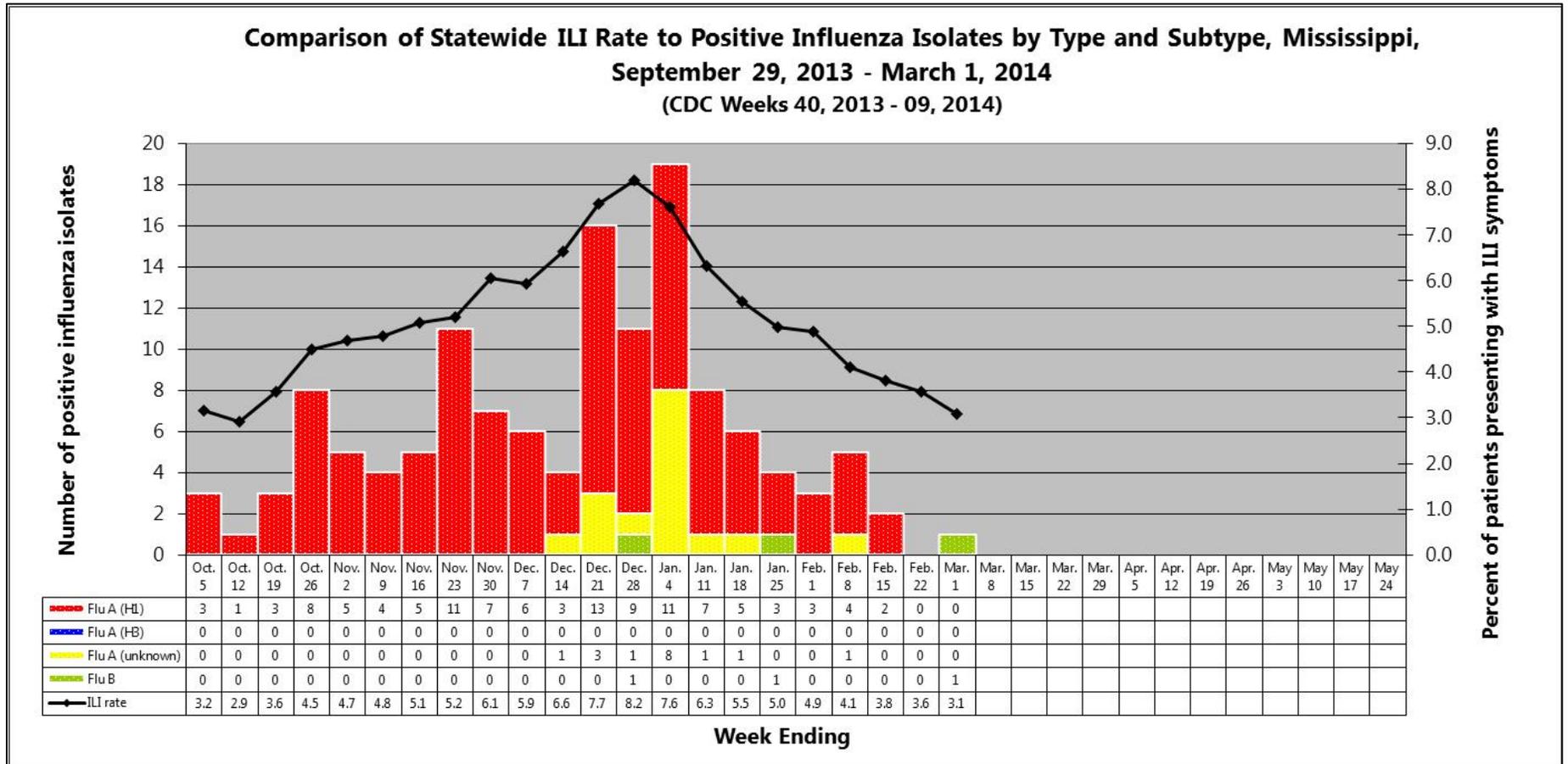


Figure 6

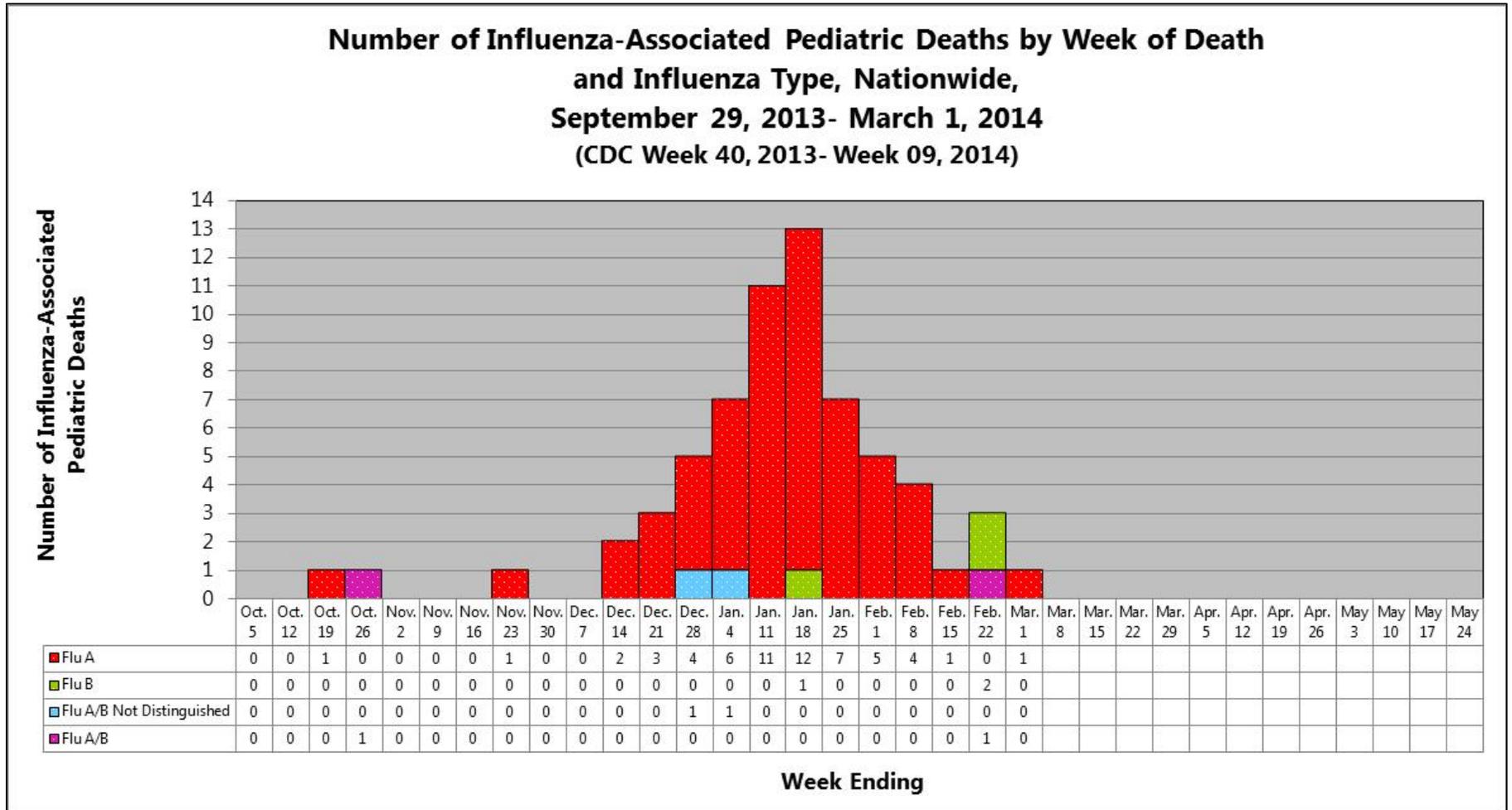
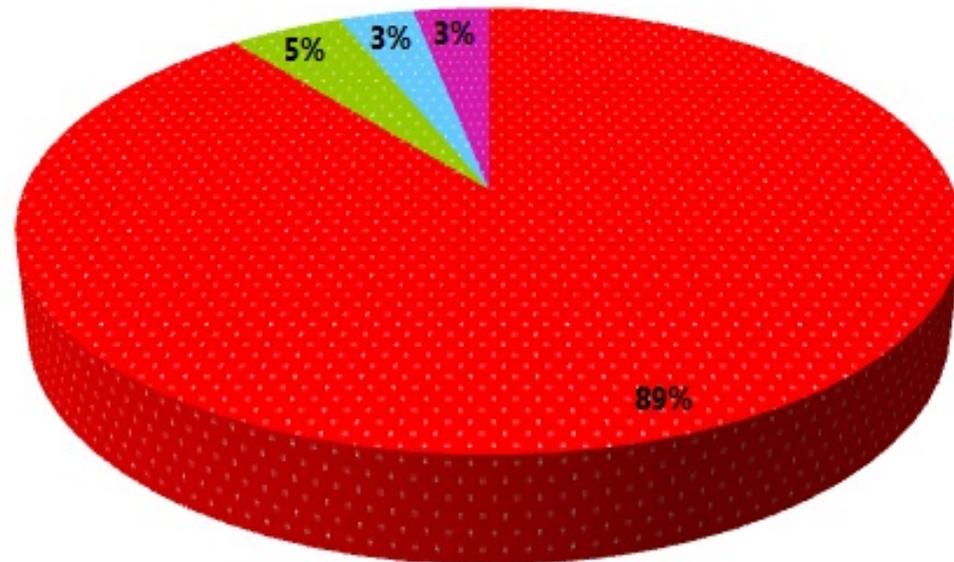


Figure 7

**Percentage of Influenza-Associated Pediatric Deaths
by Influenza Type, Nationwide,
September 30, 2013 - March 1, 2014
(CDC Week 40, 2013 - Week 09, 2014)**

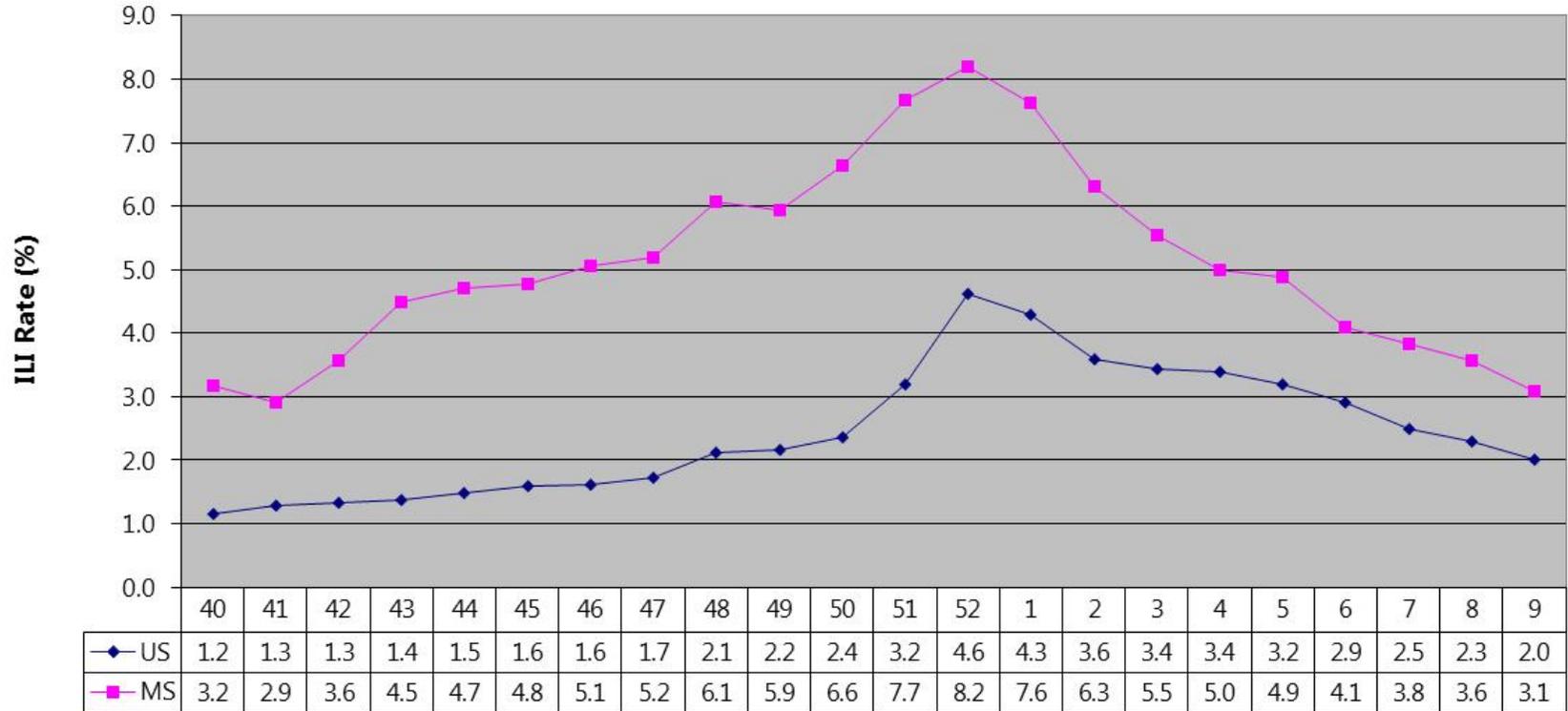
■ Flu A ■ Flu B ■ Flu A/B Not Distinguished ■ Flu A/B



N=65

Figure 8

Comparison of Nationwide ILI Rates to Mississippi ILI Rates Weeks 40-09 | 2013-2014 Flu Season



US ILI rates from the Centers for Disease Control and Prevention: <http://www.cdc.gov/flu/weekly/>

CDC Week

Figure 9

