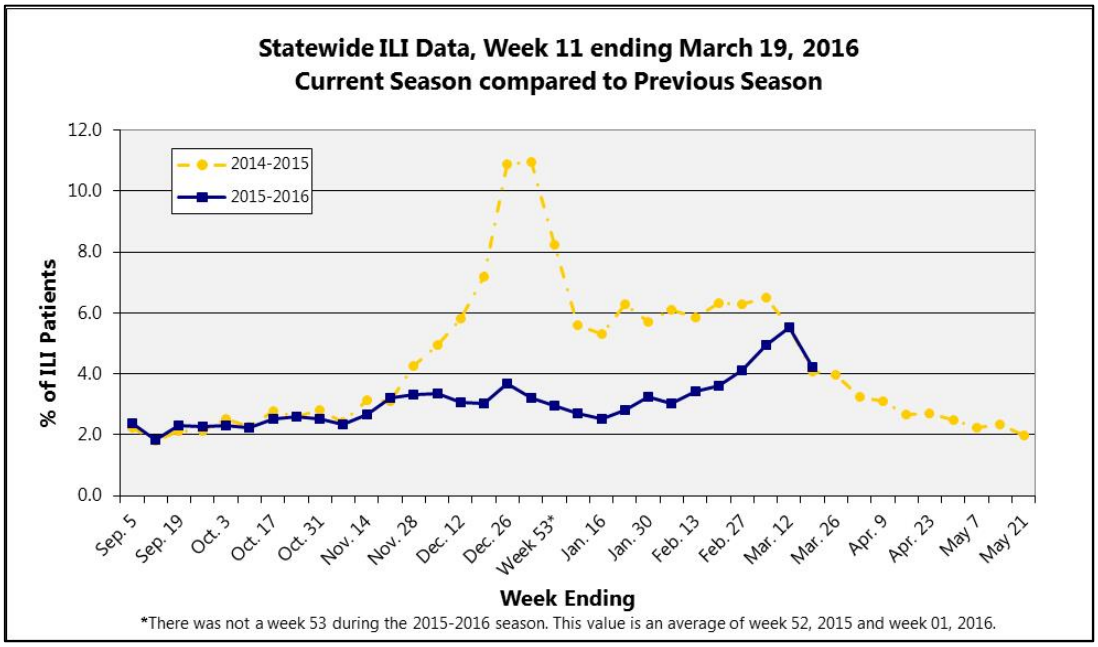
State ILI Surveillance



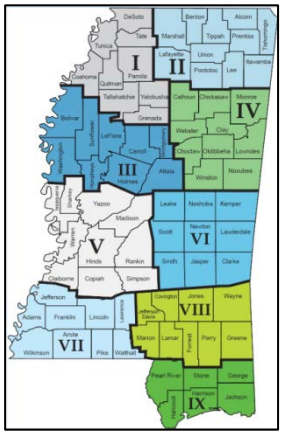
During week **11** (03/13/16-03/19/16), the overall state ILI rate (**4.2%**) **decreased** from the previous week (**5.5%**), but was comparable to this time last year (**4.1%**).

| **Figure 1**

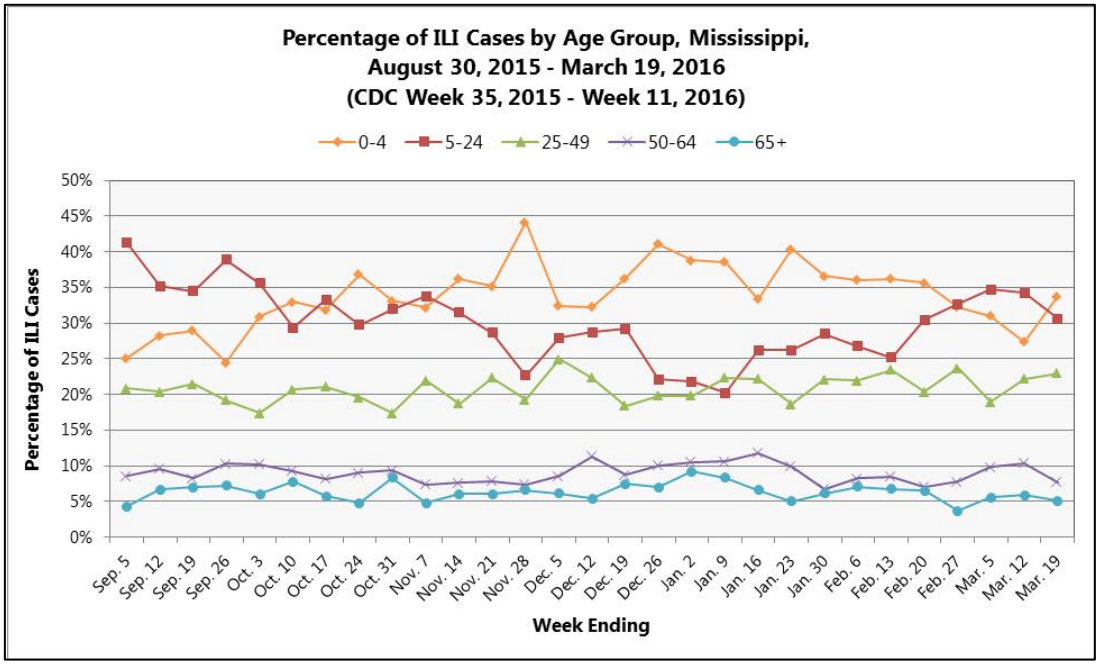
Total number of patients treated by sentinel providers in the last three weeks.| **Table 1**

2015-2016 Influenza Season					
CDC Week	**Week Ending**	**Number of ILI Reports**	**Total patients**	**ILI symptoms**	**ILI Rate (%)**
11	**Mar. 19**	**138**	**16341**	**693**	**4.2%**
10	Mar. 12	134	19416	1072	5.5%
09	Mar. 05	152	20832	1029	4.9%

During week **11**, **one** district (3) had an increase in ILI activity, while **six** districts (1, 2, 4, 5, 6, and 8) had a decrease. **Two** districts (7 and 9) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**

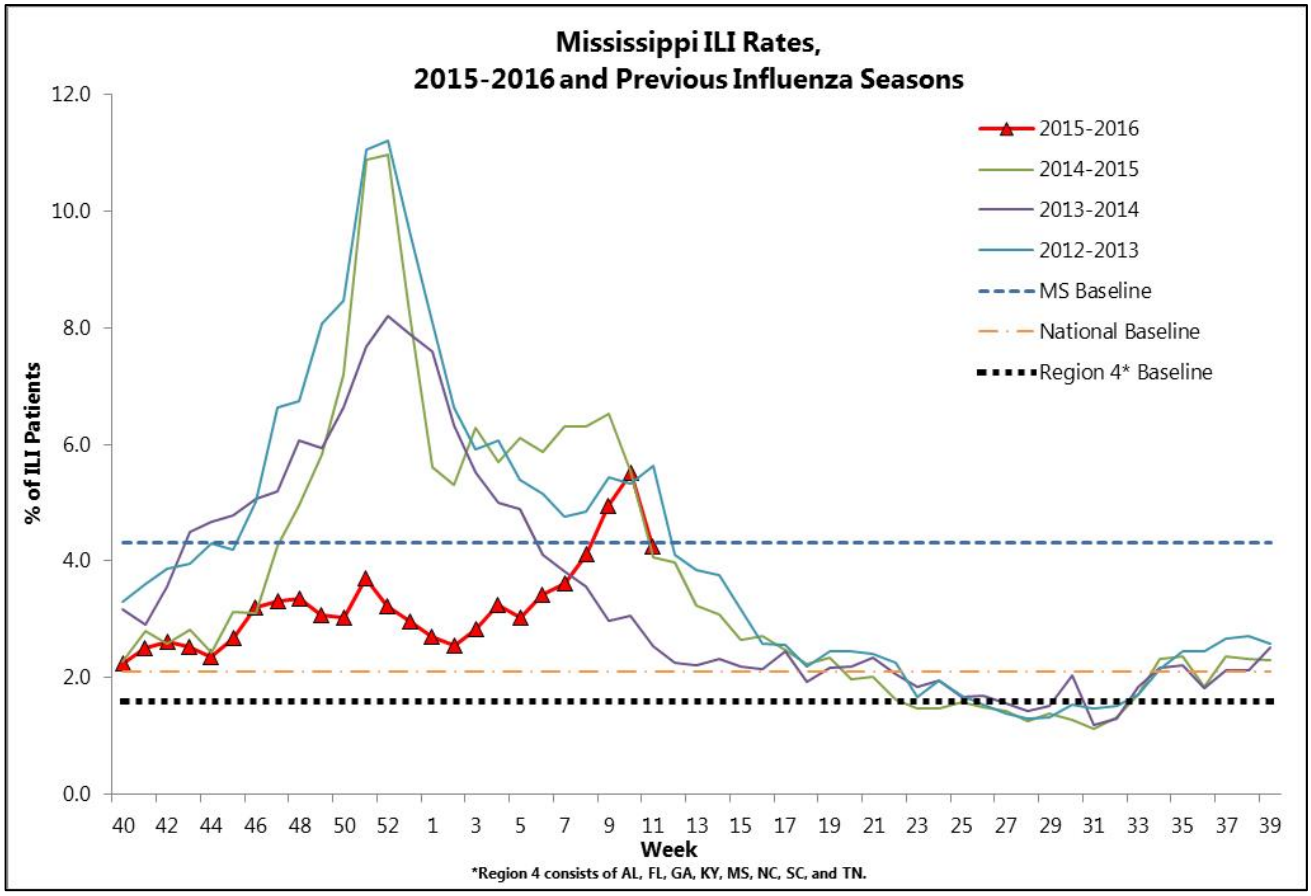


MSDH District ILI Rates (%) 2015-2016		
District	**Week 10**	**Week 11**
State	*5.5*	*4.2*
I	5.0	4.0
II	13.3	8.8
III	8.8	9.7
IV	6.7	5.5
V	3.8	2.9
VI	5.5	3.8
VII	3.6	3.3
VIII	5.7	3.4
IX	5.9	5.6

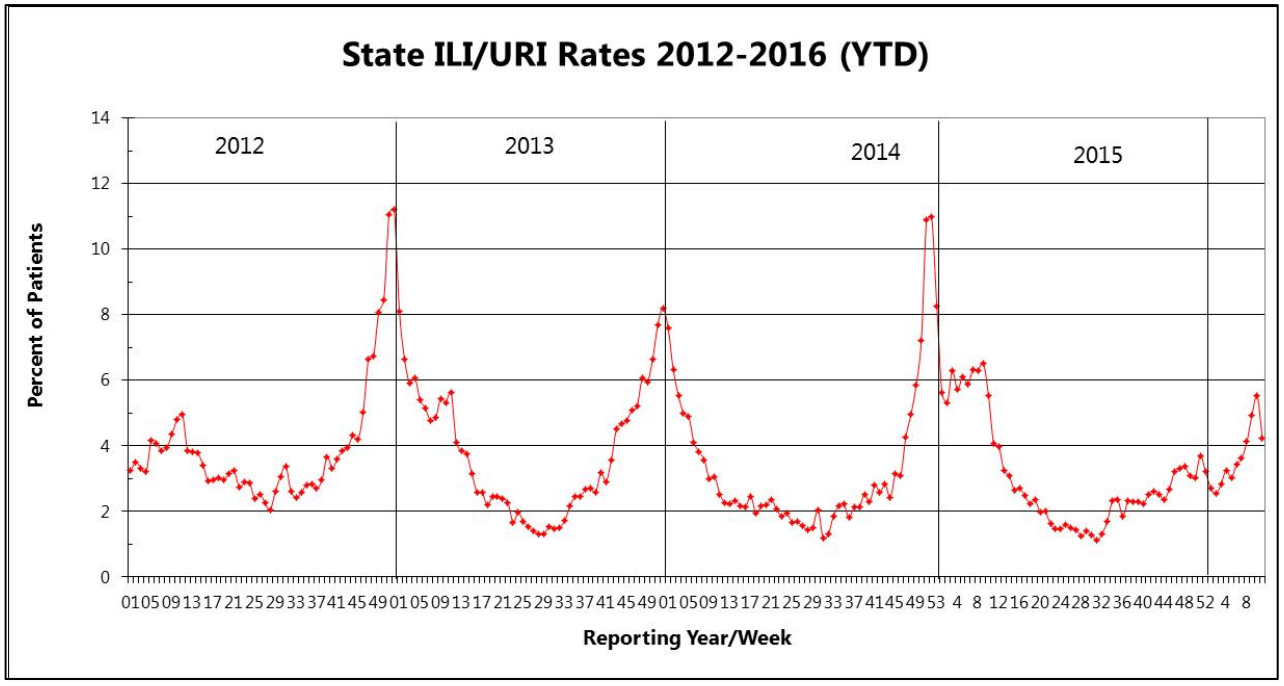


Overall, the percentage of reported ILI cases has been highest among those in the **0-4** and **5-24 years** of age groups. This trend continued during week **11**. | **Figure 2**

The 2015-16 state ILI rate was **above** the national and Region 4 baselines, but was **comparable** to the state baseline, for week **11**. | **Figure 3**



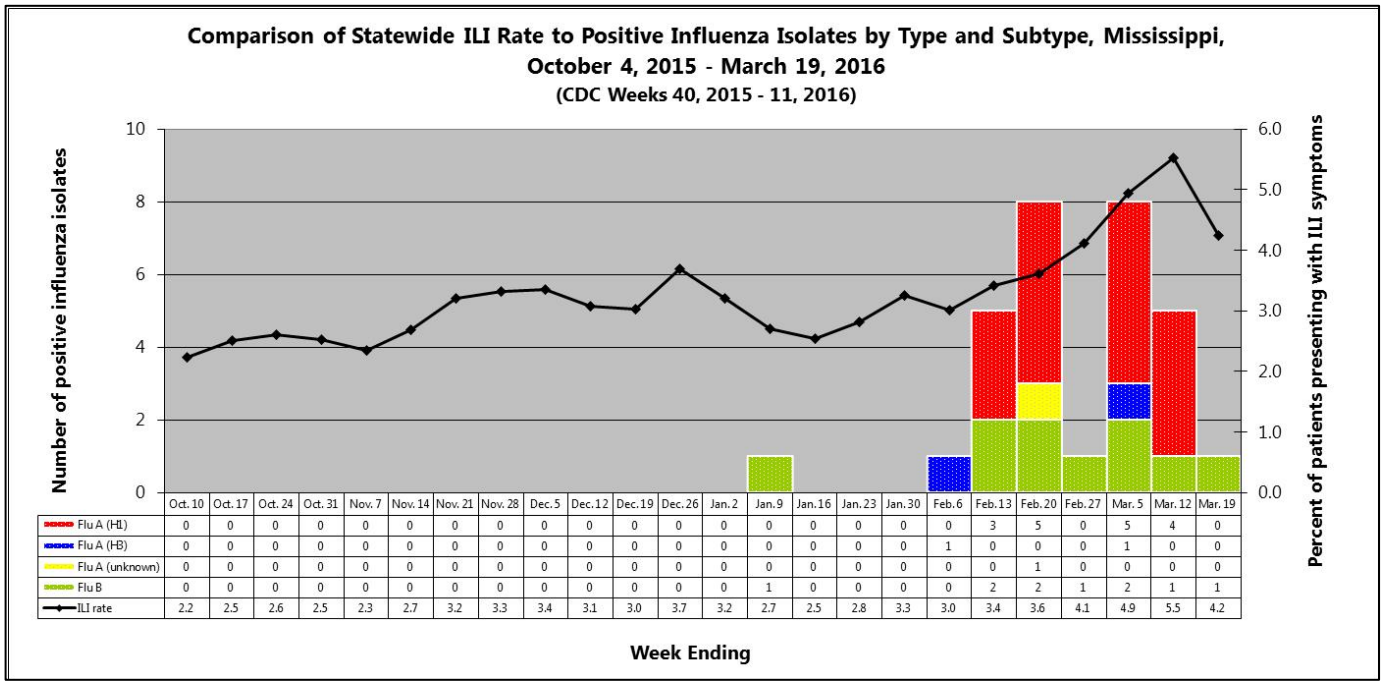
Mississippi ILI Rates 2012-2016 | **Figure 4**



Flu Testing Reports

From week **40** (week ending October 10th) through week **11** (week ending March 19th), 30 positive influenza samples were identified by MSDH. Seventeen (57%) samples were identified as influenza A (H1), two (7%) as influenza A (H3), one as influenza A (unknown) (3%), and ten (33%) were identified as influenza B. | **Figure 5**

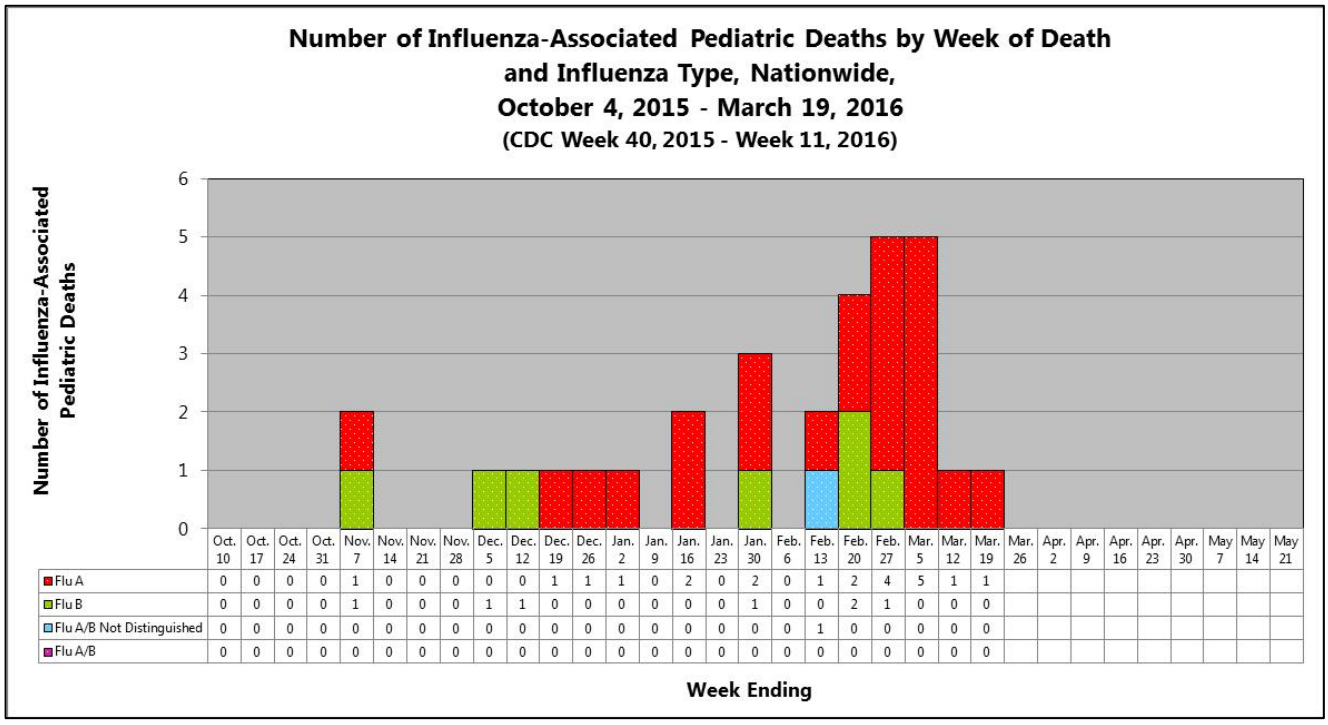
The influenza cases were identified from the following counties: Chickasaw (1), Covington (1), Forrest (1), Humphreys (3), Jones (2), Lafayette (6), Lawrence (1), Leake (2), Lee (1), Marshall (5), Monroe (2), Oktibbeha (1), Pontotoc (3), and Washington (1).



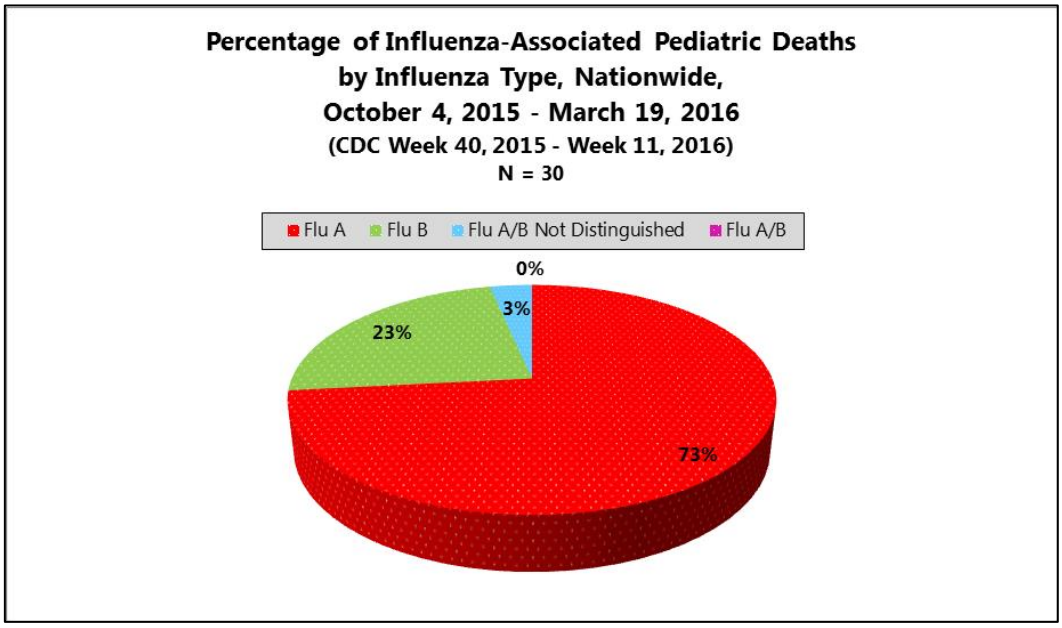
	Oct. 10	Oct. 17	Oct. 24	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	Feb. 6	Feb. 13	Feb. 20	Feb. 27	Mar. 5	Mar. 12	Mar. 19
Flu A (H1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	5	4	0
Flu A (H3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Flu A (unknown)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Flu B	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2	1	2	1	1
ILI rate	2.2	2.5	2.6	2.5	2.3	2.7	3.2	3.3	3.4	3.1	3.0	3.7	3.2	2.7	2.5	2.8	3.3	3.0	3.4	3.6	4.1	4.9	5.5	4.2

National and Mississippi Pediatric Mortality Surveillance

Nationally, **two** influenza-associated pediatric deaths were reported to CDC during week **11**. One death was associated with an influenza A (H3) virus and occurred during week 11 (week ending March 19th) and one death was associated with an influenza A (H1N1)pdm09 virus and occurred during week 09 (week ending March 5th). **Thirty** influenza-associated pediatric deaths have been reported during the 2015-2016 season. | **Figure 6**



	Oct. 10	Oct. 17	Oct. 24	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	Feb. 6	Feb. 13	Feb. 20	Feb. 27	Mar. 5	Mar. 12	Mar. 19	Mar. 26	Apr. 2	Apr. 9	Apr. 16	Apr. 23	Apr. 30	May 7	May 14	May 21
Flu A	0	0	0	0	1	0	0	0	0	0	1	1	1	0	2	0	2	0	1	2	4	5	1	1								
Flu B	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	2	1	0	0	0								
Flu A/B Not Distinguished	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0								
Flu A/B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								

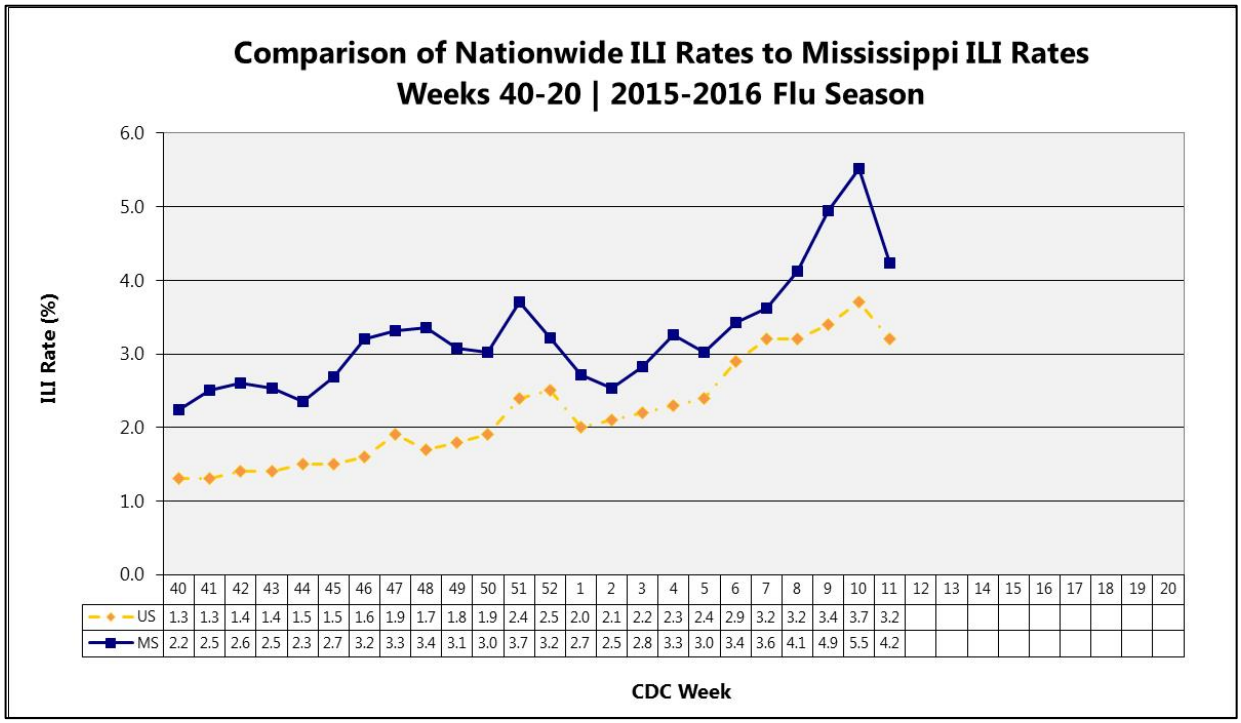


Of the **30** influenza-associated pediatric deaths reported nationally during the 2015-2016 season, 22 (73%) have been attributed to influenza A viruses, 7 (23%) to influenza B viruses, and one (3%) to an influenza A/B virus. | **Figure 7**

Mississippi has had **one** influenza-associated pediatric death reported during this influenza season. For additional information on influenza-associated pediatric deaths, please refer to the CDC's FluView.

National ILI Surveillance

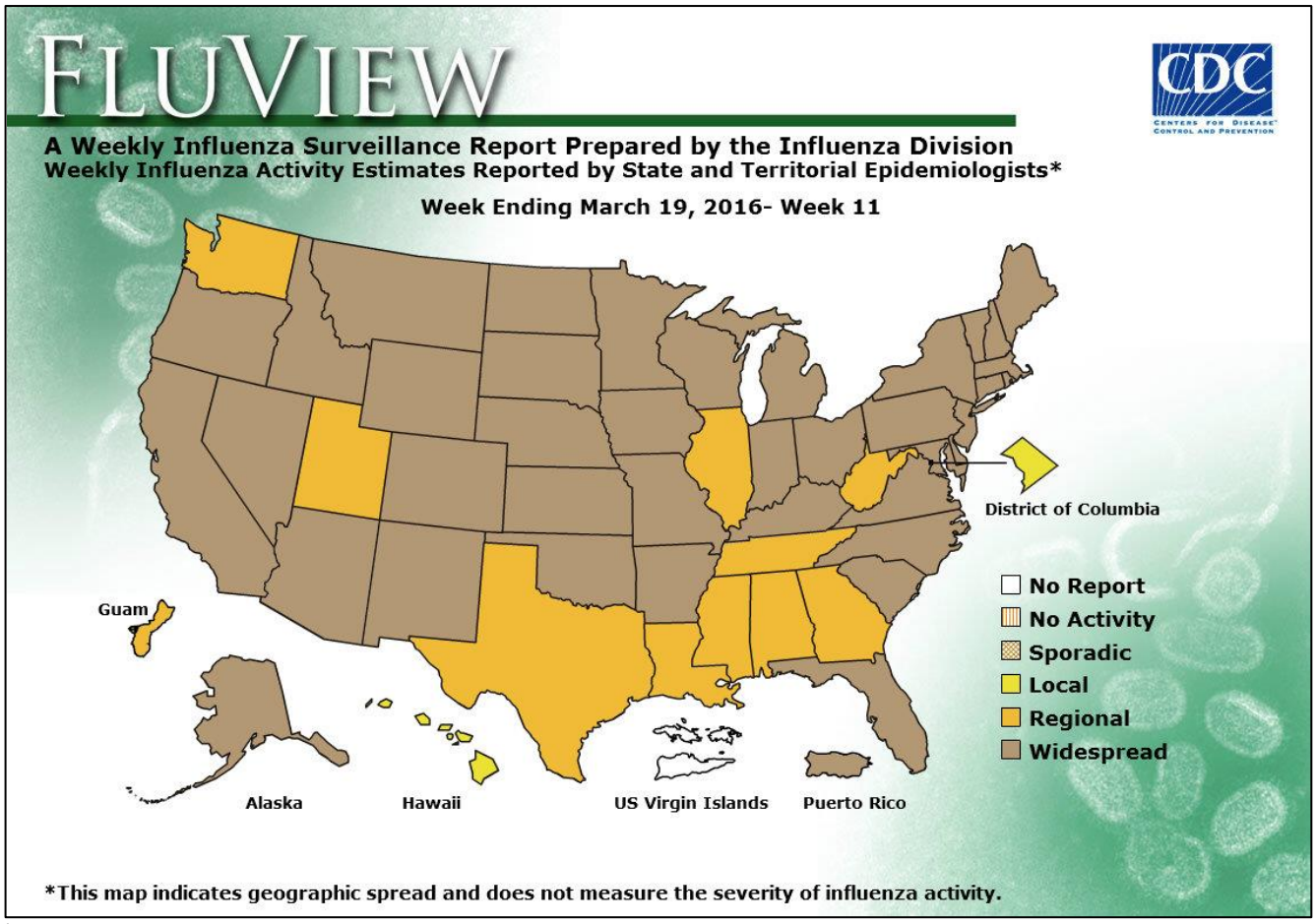
For week **11**, the MS ILI rate (4.2%) was **above** the national ILI rate (3.2%), but followed the national trend. | **Figure 8**



	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
US	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.9	1.7	1.8	1.9	2.4	2.5	2.0	2.1	2.2	2.3	2.4	2.9	3.2	3.2	3.4	3.7	3.2									
MS	2.2	2.5	2.6	2.5	2.3	2.7	3.2	3.3	3.4	3.1	3.0	3.7	3.2	2.7	2.5	2.8	3.3	3.0	3.4	3.6	4.1	4.9	5.5	4.2									

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

During week **11**, influenza activity **decreased slightly**, but **remained elevated** in the United States.[1] | **Figure 9**



[1]For up-to-date information on flu activity nationwide, please refer to the CDC's website: http://www.cdc.gov/flu/weekly/fluactivitysurv.htm.

Mississippi reported "**Regional**" for the influenza activity during week **11**. | **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 OR 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 OR 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 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.
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.

Additional influenza 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**
World Health Organization FluNet	**http://www.who.int/influenza/gisrs_laboratory/flunet/en/**

Appendix

Figure 1

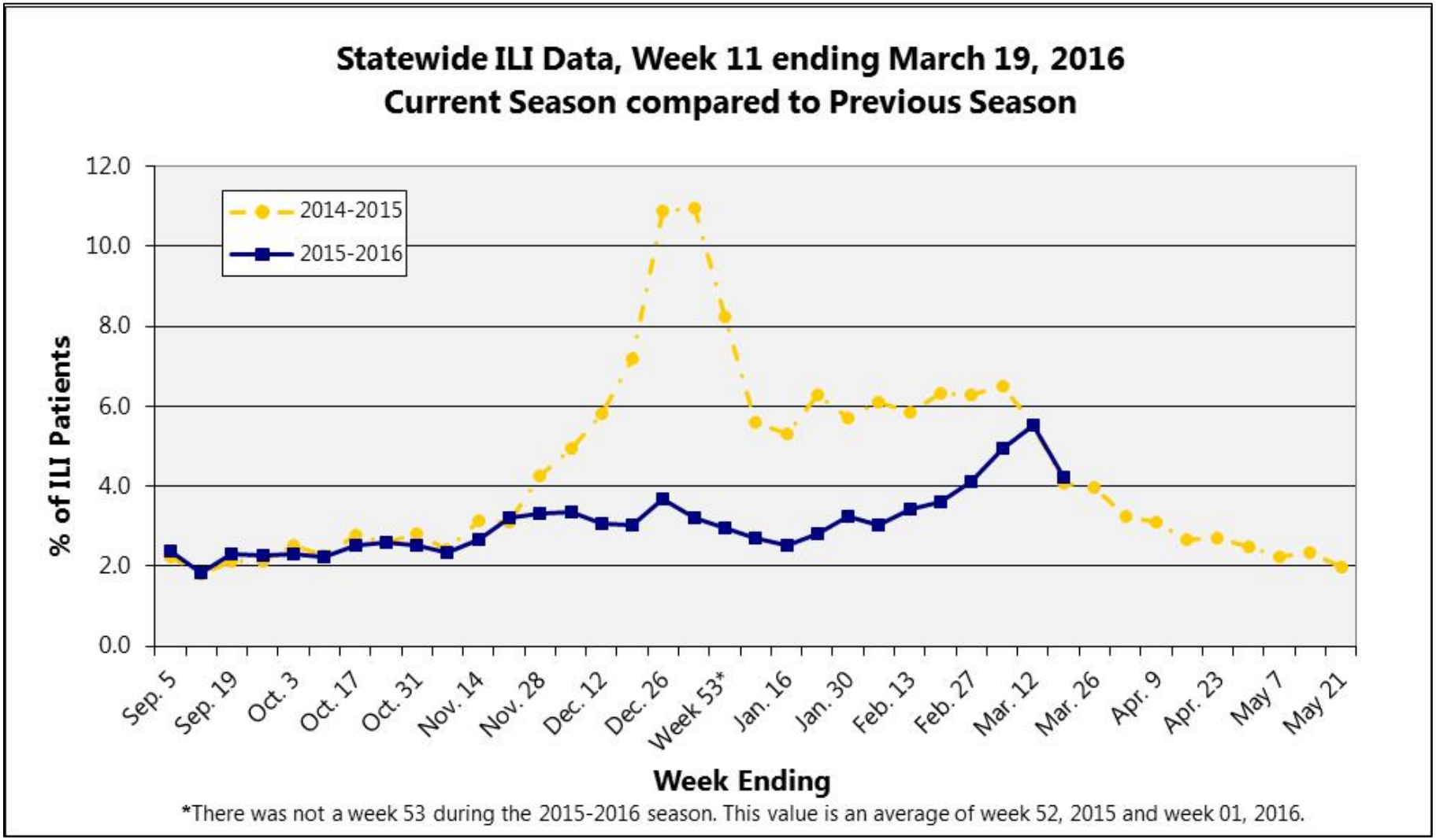


Figure 2

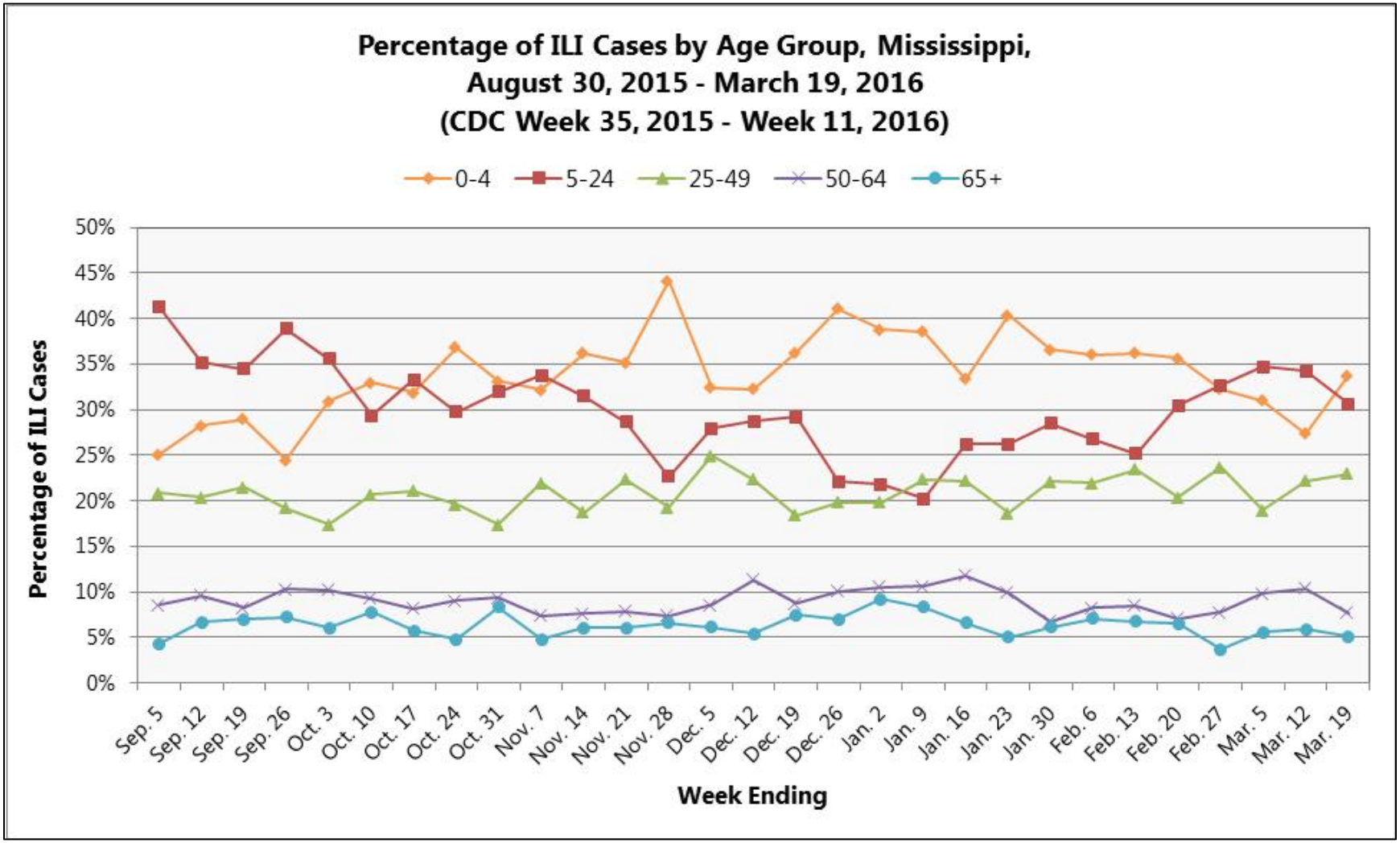

Percentage of ILI Cases by Age Group, Mississippi,
August 30, 2015 - March 19, 2016
(CDC Week 35, 2015 - Week 11, 2016)
0-4
5-24
25-49
50-64
65+
Percentage of ILI Cases
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Sep. 5
Sep. 12
Sep. 19
Sep. 26
Oct. 3
Oct. 10
Oct. 17
Oct. 24
Oct. 31
Nov. 7
Nov. 14
Nov. 21
Nov. 28
Dec. 5
Dec. 12
Dec. 19
Dec. 26
Jan. 2
Jan. 9
Jan. 16
Jan. 23
Jan. 30
Feb. 6
Feb. 13
Feb. 20
Feb. 27
Mar. 5
Mar. 12
Mar. 19
Week Ending

Figure 3

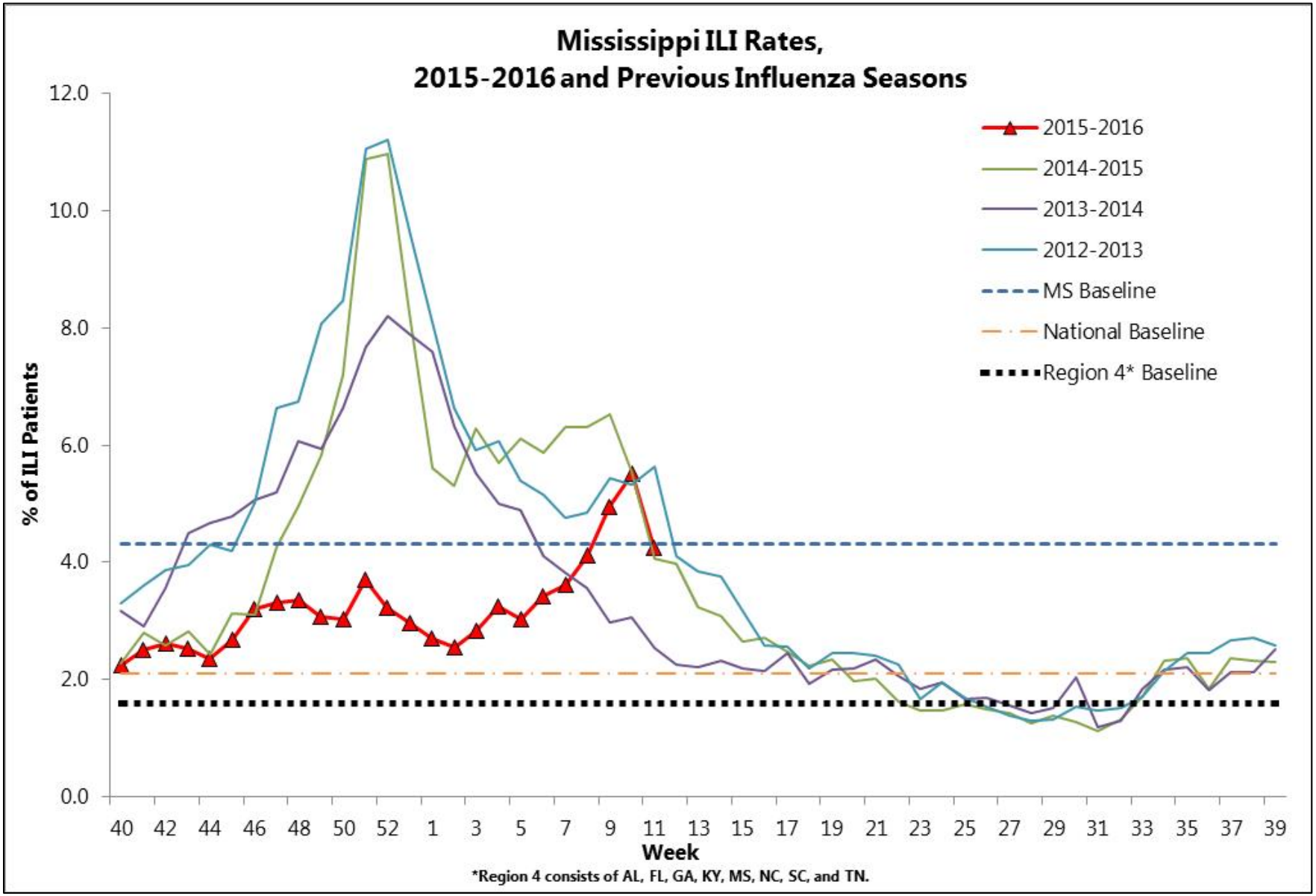

Mississippi ILI Rates,
2015-2016 and Previous Influenza Seasons
% of ILI Patients
12.0
10.0
8.0
6.0
4.0
2.0
0.0
40 42 44 46 48 50 52 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39
Week
2015-2016
2014-2015
2013-2014
2012-2013
MS Baseline
National Baseline
Region 4* Baseline
*Region 4 consists of AL, FL, GA, KY, MS, NC, SC, and TN.

Figure 4

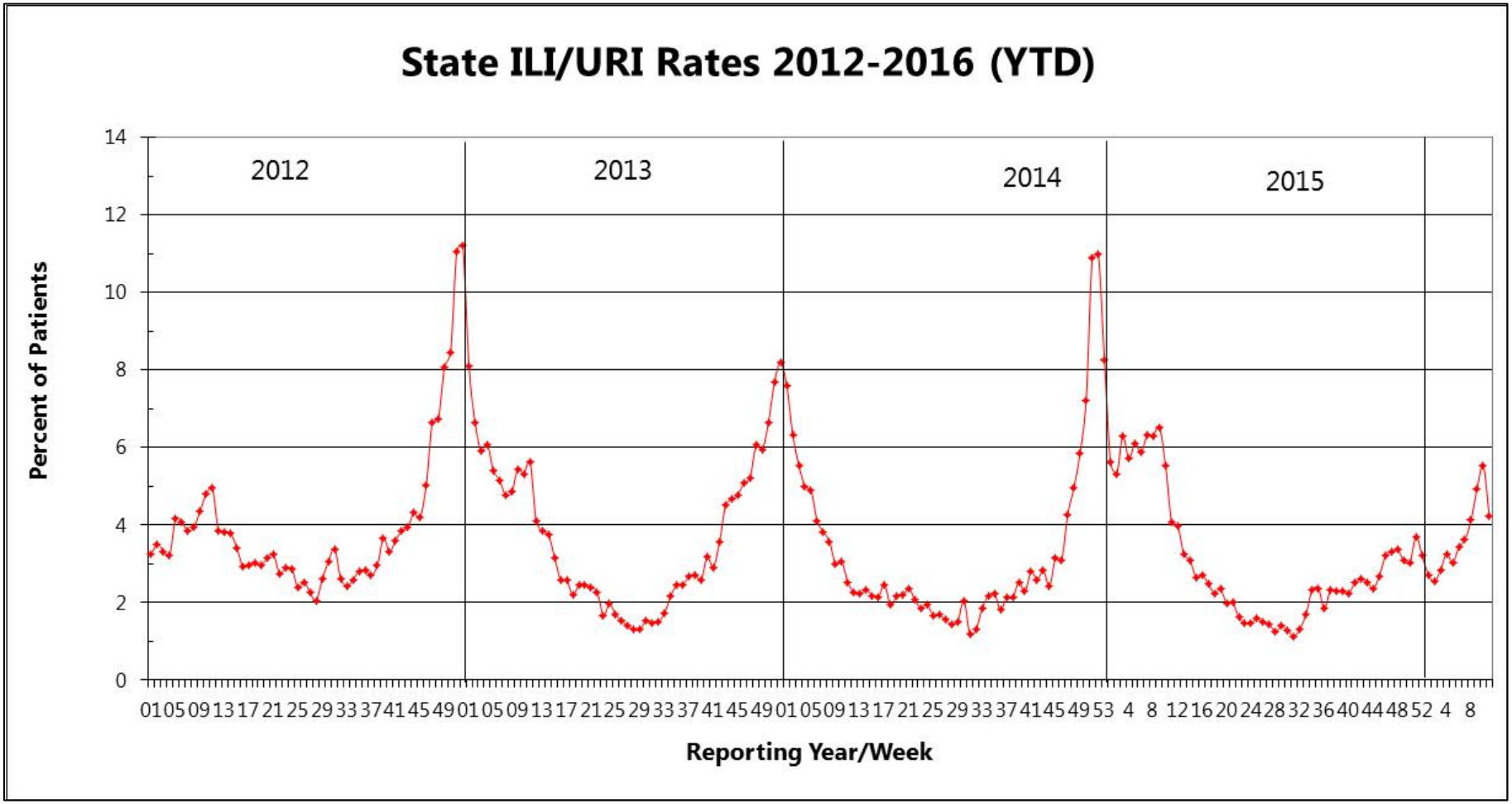
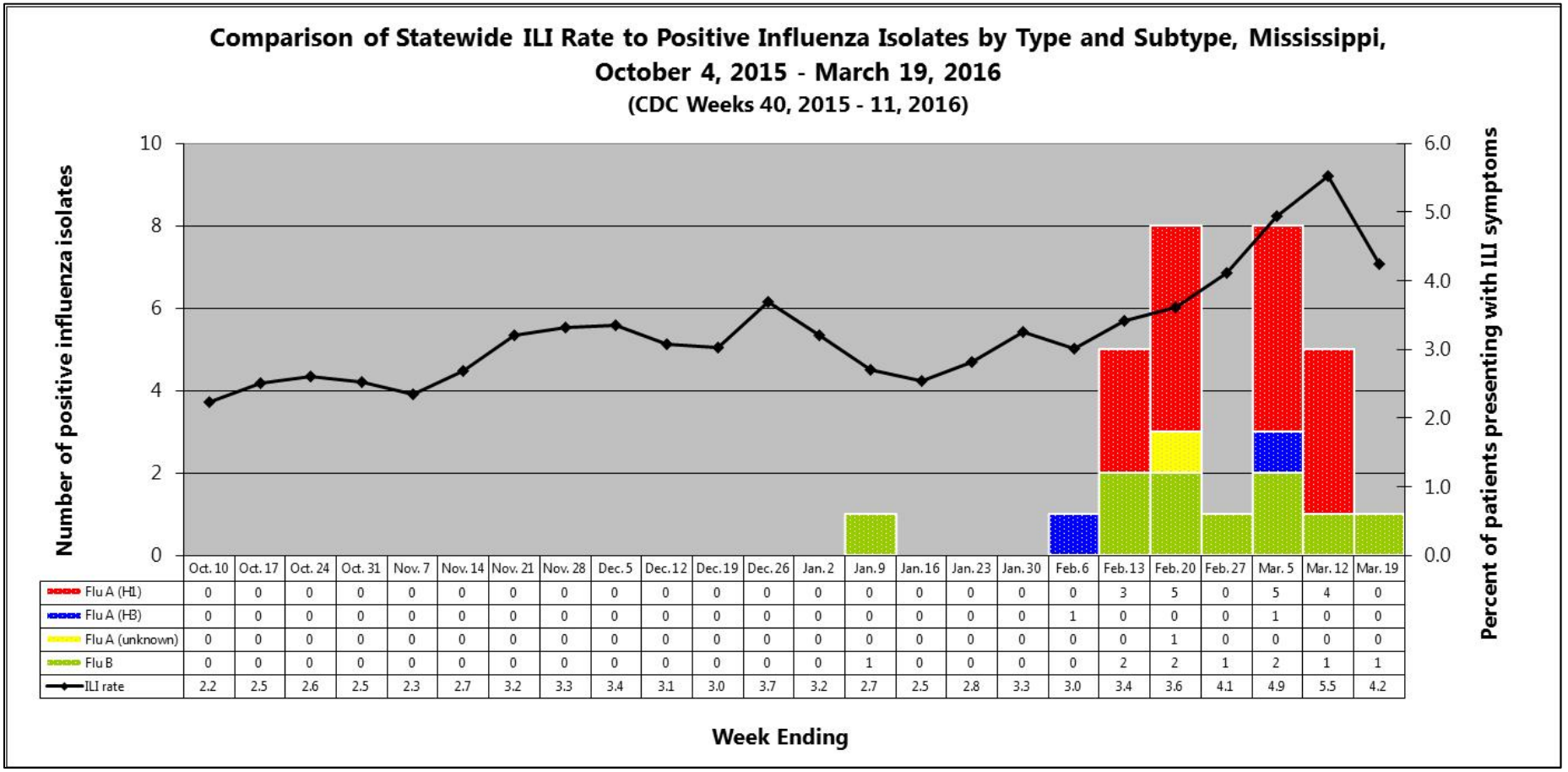
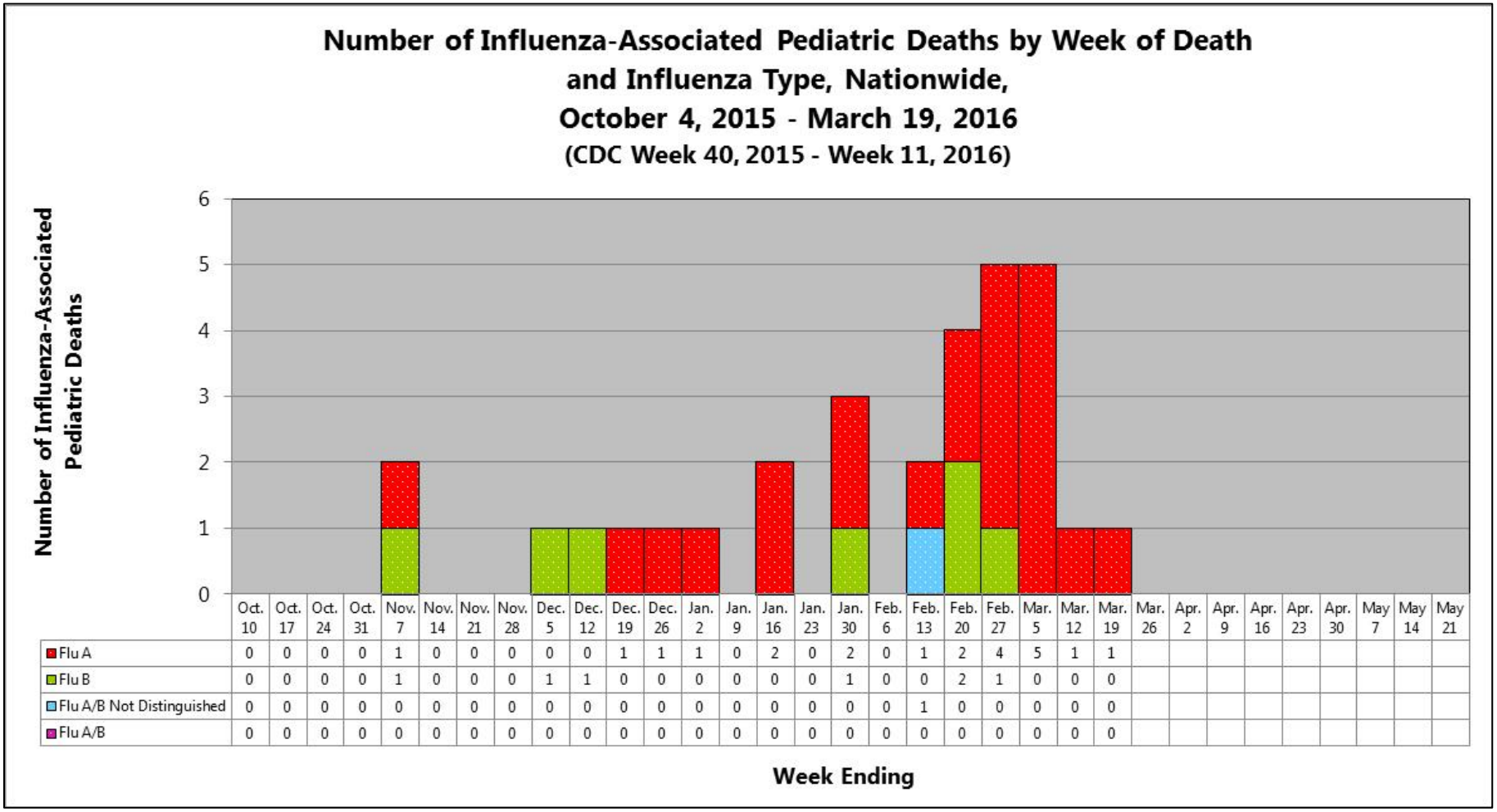

State ILI/URI Rates 2012-2016 (YTD)
Percent of Patients
0
2
4
6
8
10
12
14
2012
2013
2014
2015
01 05 09 13 17 21 25 29 33 37 41 45 49 01 05 09 13 17 21 25 29 33 37 41 45 49 01 05 09 13 17 21 25 29 33 37 41 45 49 53 4 8 12 16 20 24 28 32 36 40 44 48 52 4 8
Reporting Year/Week

Figure 5



	Oct. 10	Oct. 17	Oct. 24	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	Feb. 6	Feb. 13	Feb. 20	Feb. 27	Mar. 5	Mar. 12	Mar. 19
Flu A (H1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	5	4	0
Flu A (H3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Flu A (unknown)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Flu B	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2	1	2	1	1
ILI rate	2.2	2.5	2.6	2.5	2.3	2.7	3.2	3.3	3.4	3.1	3.0	3.7	3.2	2.7	2.5	2.8	3.3	3.0	3.4	3.6	4.1	4.9	5.5	4.2

Figure 6



	Oct. 10	Oct. 17	Oct. 24	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	Feb. 6	Feb. 13	Feb. 20	Feb. 27	Mar. 5	Mar. 12	Mar. 19	Mar. 26	Apr. 2	Apr. 9	Apr. 16	Apr. 23	Apr. 30	May 7	May 14	May 21
Flu A	0	0	0	0	1	0	0	0	0	0	1	1	1	0	2	0	2	0	1	2	4	5	1	1								
Flu B	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	2	1	0	0	0								
Flu A/B Not Distinguished	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0								
Flu A/B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								

Figure 7

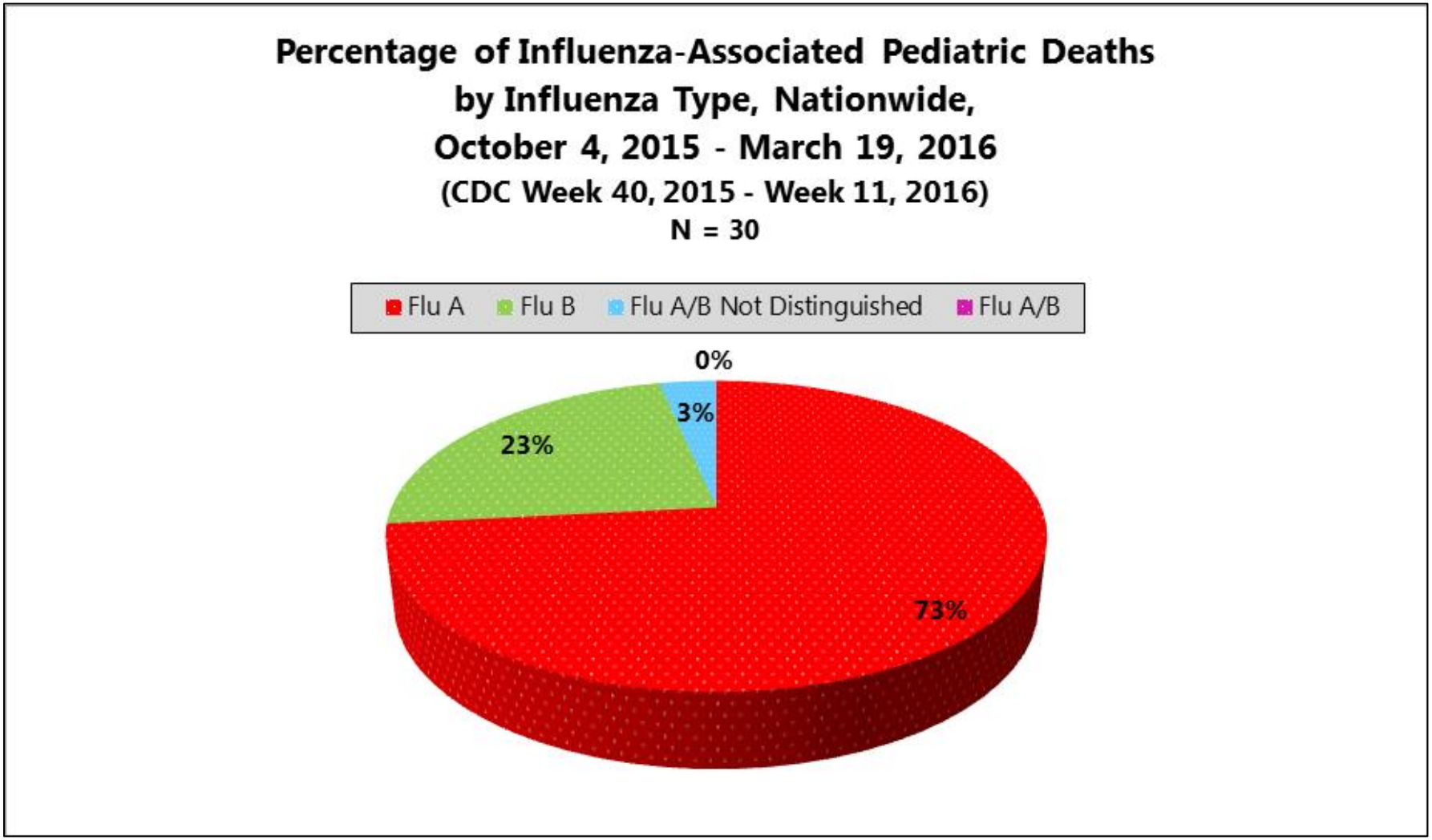
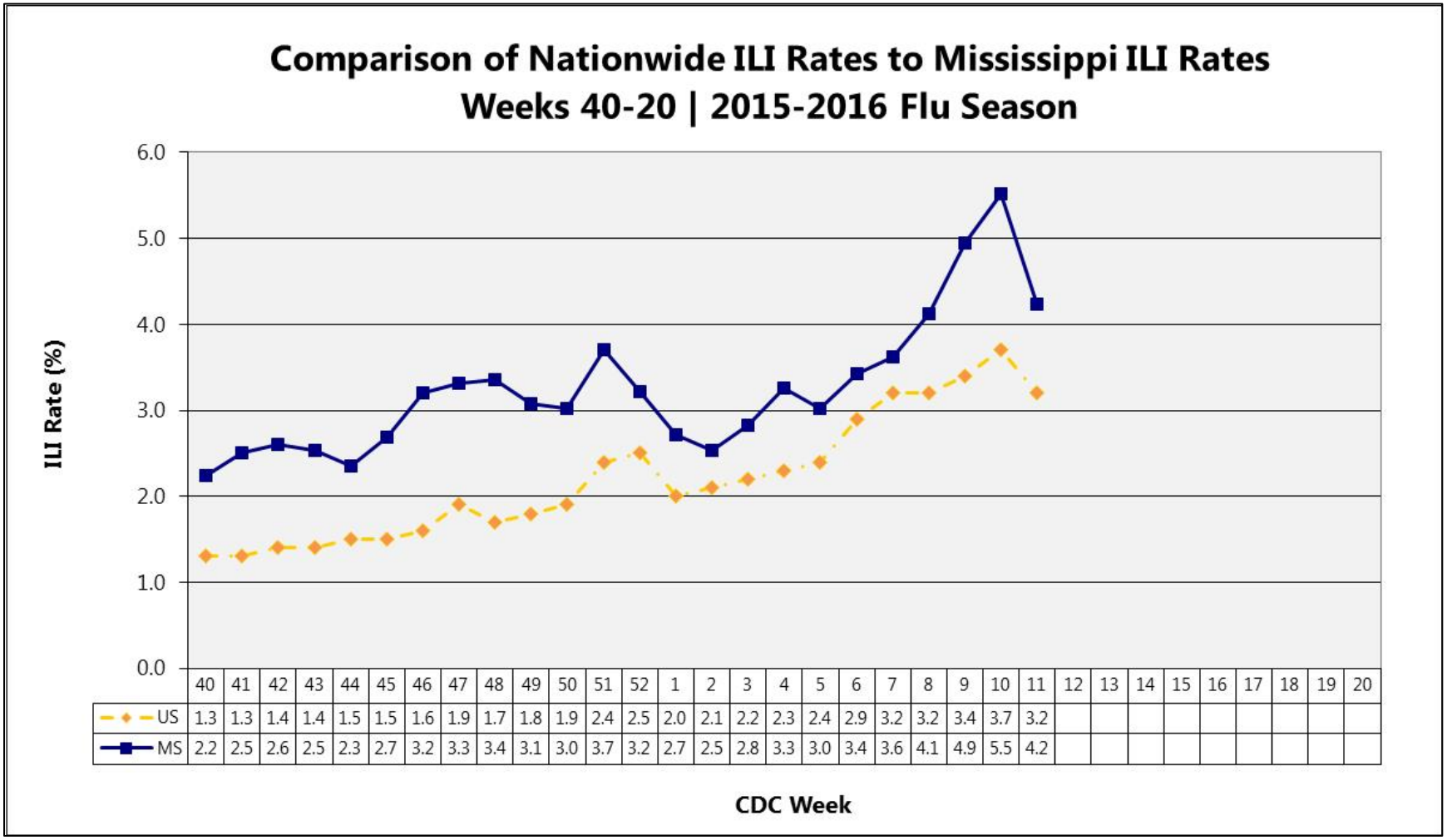
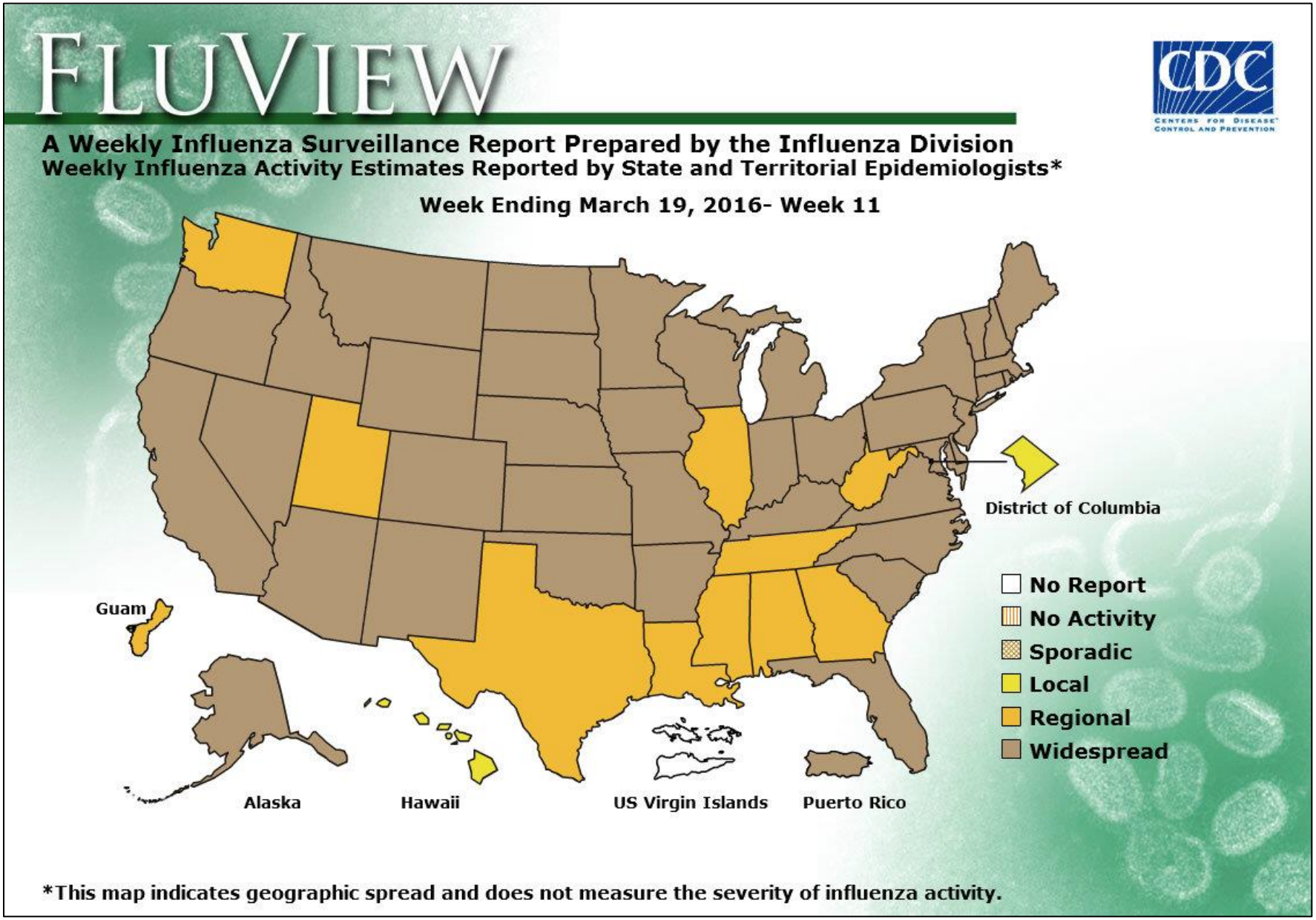

Percentage of Influenza-Associated Pediatric Deaths
by Influenza Type, Nationwide,
October 4, 2015 - March 19, 2016
(CDC Week 40, 2015 - Week 11, 2016)
N = 30
Flu A
Flu B
Flu A/B Not Distinguished
Flu A/B
0%
3%
23%
73%

Figure 8



	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
US	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.9	1.7	1.8	1.9	2.4	2.5	2.0	2.1	2.2	2.3	2.4	2.9	3.2	3.2	3.4	3.7	3.2									
MS	2.2	2.5	2.6	2.5	2.3	2.7	3.2	3.3	3.4	3.1	3.0	3.7	3.2	2.7	2.5	2.8	3.3	3.0	3.4	3.6	4.1	4.9	5.5	4.2									

Figure 9


FLUVIEW
CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION
A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
Week Ending March 19, 2016- Week 11
District of Columbia
Guam
Alaska
Hawaii
US Virgin Islands
Puerto Rico
No Report
No Activity
Sporadic
Local
Regional
Widespread
*This map indicates geographic spread and does not measure the severity of influenza activity.