

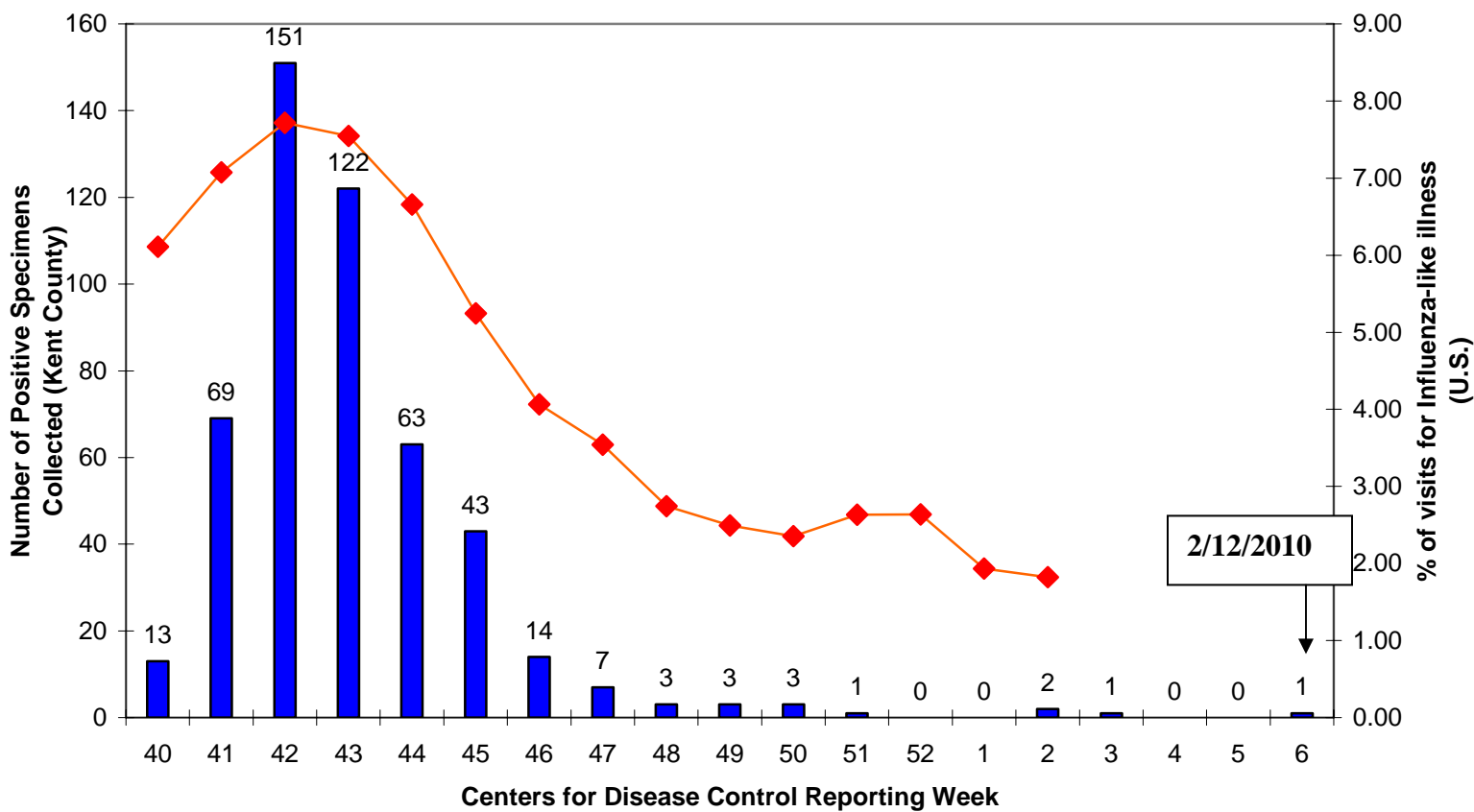
Kent County Influenza Surveillance Report, 2009 -2010

Overview of Influenza Activity in Kent County as of 2/12/2010



Kent County Influenza Cases vs. Percentage of Visits for Influenza-like-illness in the United States 2009 Flu Season

■ Number of Positive Specimens Collected (Kent) ◆ % of Visits for Influenza-like Illness(U.S)

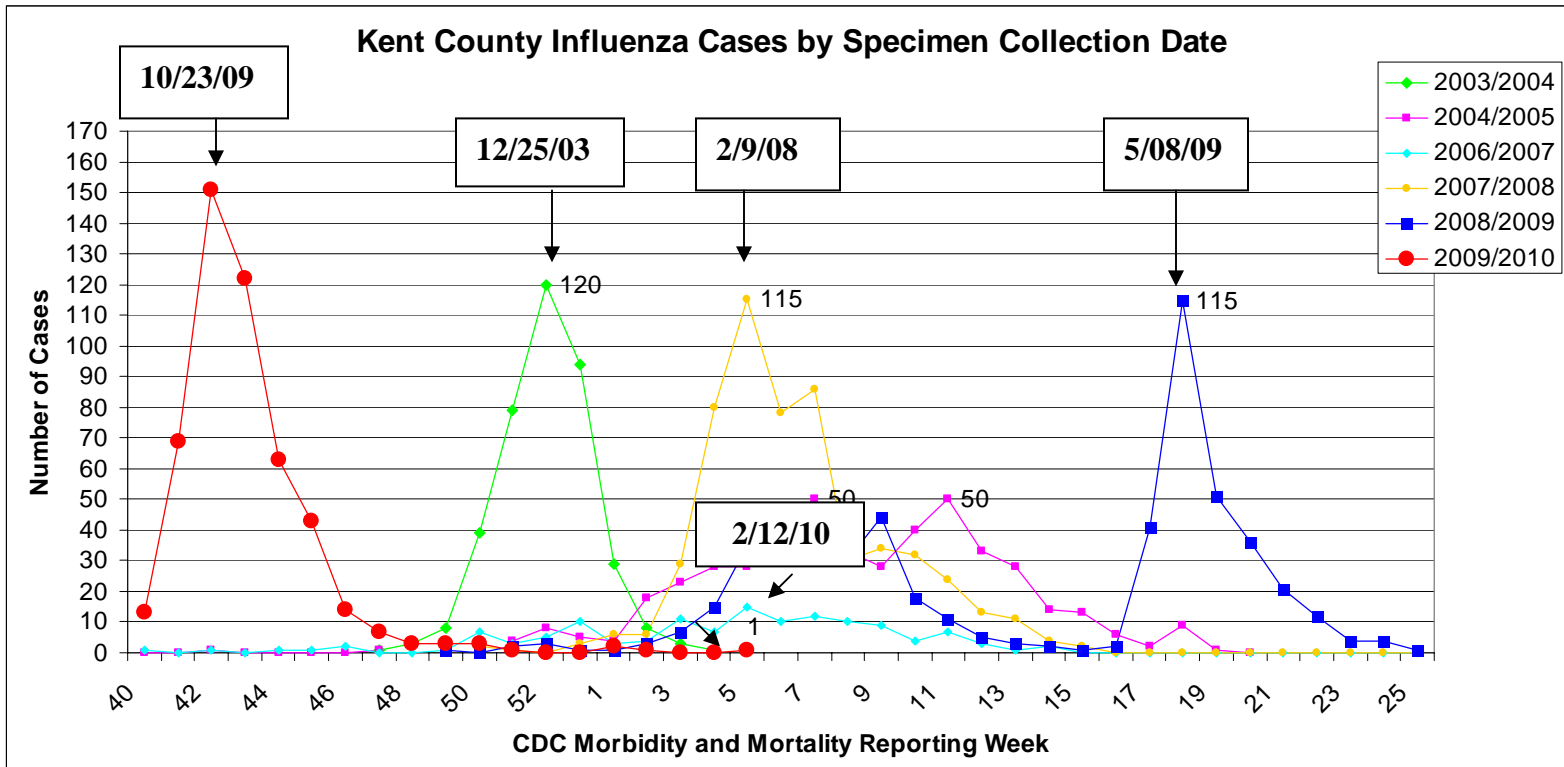


The Kent County data trend resembles the US data trend. Kent County data is available one week prior to national data. The data shown begins at Week 40, the week ending 10/10/2009. Kent County influenza data represents cases that are reported to the Kent County Health Department. The data under represents the true level of flu activity in Kent County.

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Influenza Peaks over the last 6 Influenza Seasons in Kent County as of 2/12/10



Flu activity this season has begun earlier than the preceding five flu seasons. Week 40 is the week ending 10/10/09. Seasonal influenza activity usually peaks December-February (see above).

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Influenza Activity Indicators

Reported Influenza Cases in Kent County, By Type of Influenza, September 1, 2009 – February 12, 2010

		Frequency	Percent
	Type A	462	89.9%
	Type B	2	.39 %
	Type A &B	5	.97 %
Not	Typed	45	8.8 %
Total		514	100.0 %

Reported Influenza Cases in Kent County, by Age Group, September 1, 2008 – February 12, 2010

		Frequency	Percent
	0-5	125	24.3 %
	6-17	185	36.1 %
	18-64	177	34.4 %
	65+	19	3.7 %
	Missing	8	1.6 %
Total		514	100.0 %

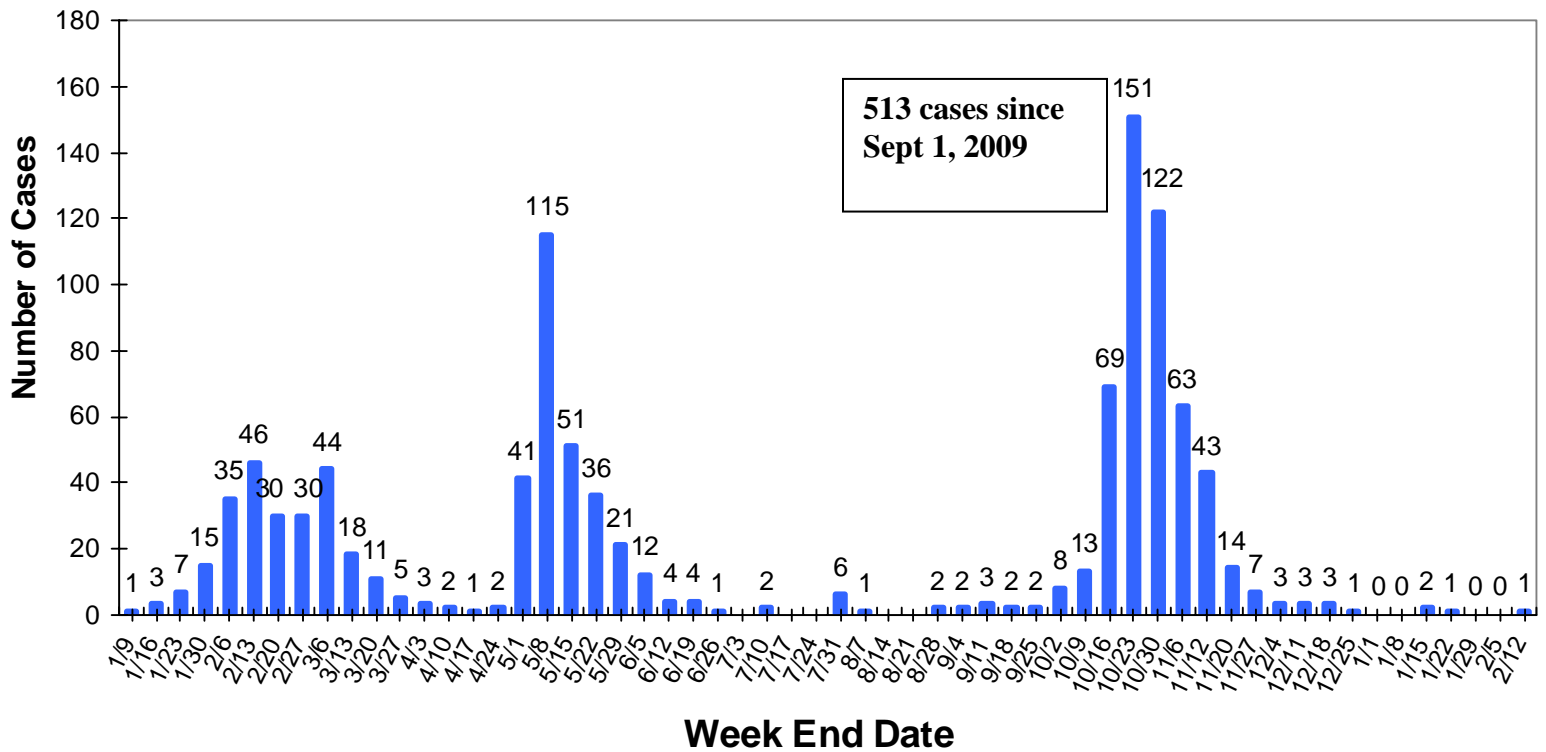
Reported Influenza Cases in Kent County, by Sex, September 1, 2009 – February 12, 2010

		Frequency	Percent
Valid	Female	252	49.0 %
	Male	258	50.2 %
	Unknown	4	.78 %
Total		514	100.0 %

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Number of Reported Cases of Influenza in Kent County, by Specimen Collection Date, September 1, 2009 - February 12, 2010



513 cases since Sept 1, 2009

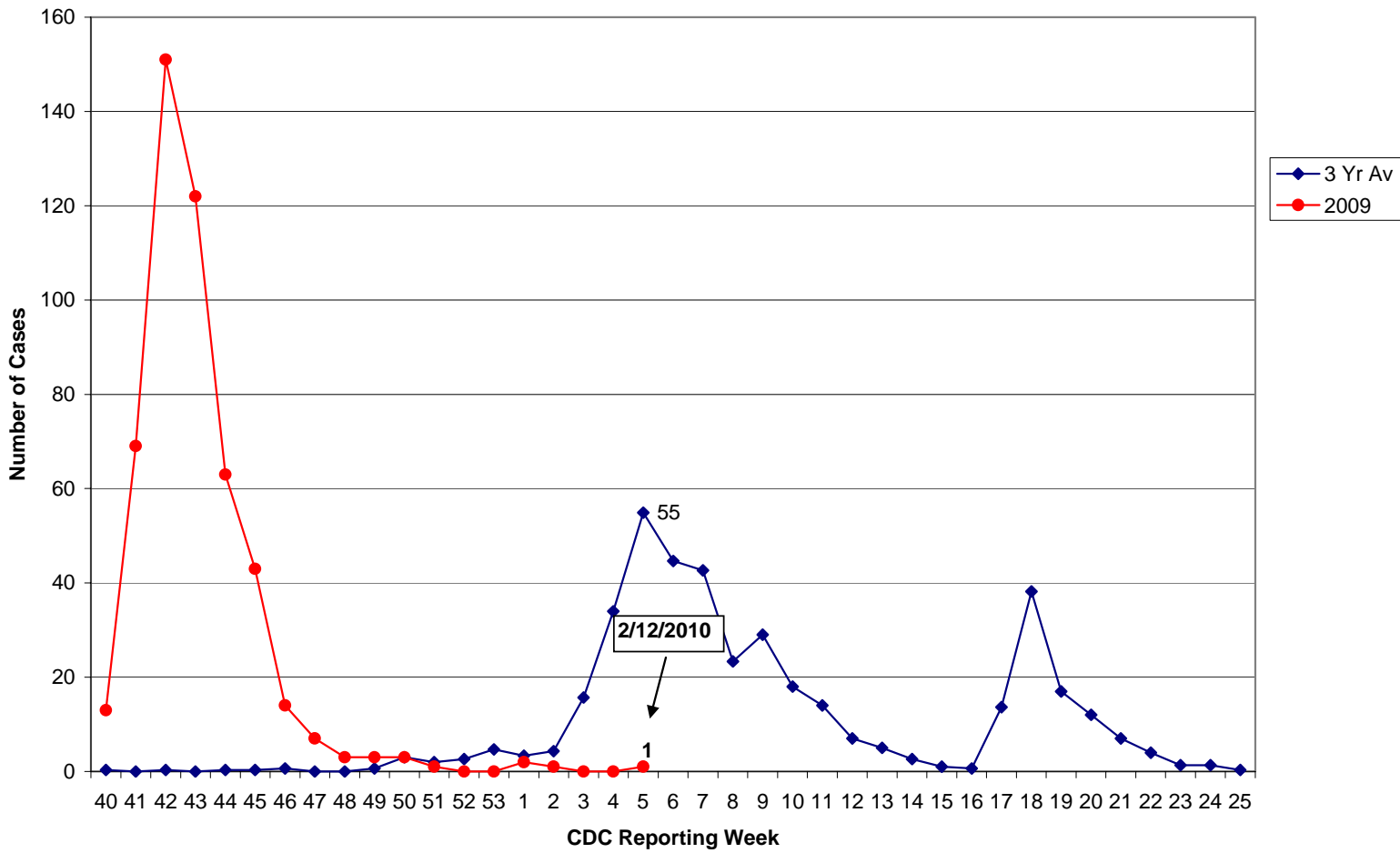
These results include rapid antigen testing, immunofluorescence assays, viral culture, serology, and PCR.

There have been 510 cases reported since September 1, 2009. These numbers exceed the number of cases typically reported for an entire flu season October- April.

Kent County Influenza Surveillance Report, 2009 -2010



2009-2010 Influenza Season VS. 2006-2008 Influenza Seasons 3 YR Average



Note: 2009 flu activity significantly exceeds the prior three year average of flu activity.

Kent County Influenza Surveillance Report, 2009 -2010



Influenza A H1N1 by Specimen Collection Date
Kent County 4/27/09- 2/12/2010
Influenza A (H1N1) by Sex

		Frequency	Percent
sex	Female	112	56.6 %
	Male	85	43.0 %
	Unknown	1	.51 %
	Total	198	100 %

Influenza A H1N1 by Specimen Collection Date
Kent County 4/27/09-2/12/2010
Influenza A (H1N1) by Age Group

		Frequency	Percent
Age (years)	0-5	34	17.17 %
	6-17	52	26.2 %
	18-64	100	50.5 %
	65+	8	4.04 %
	Missing	4	2.02 %
	Total	198	%

Influenza A H1N1 by Specimen Collection Date
Kent County 4/27/09-2/12/2010
Influenza A (H1N1) by race

		Frequency	Percent
	Black	4	%
	White	12	%
	Asian	2	%
	Unknown/ Missing	180	91.3 %
	Total	198	100 %

Influenza A H1N1 by Specimen Collection Date
Kent County 4/27/09- 2/12/2010
Influenza A (H1N1) by Ethnicity

		Frequency	Percent
	Hispanic or Latino	47	%
	Unknown/Missing	151	%
	Total	198	%

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Influenza A H1N1 Deaths 4/27/2009-2/12/2010

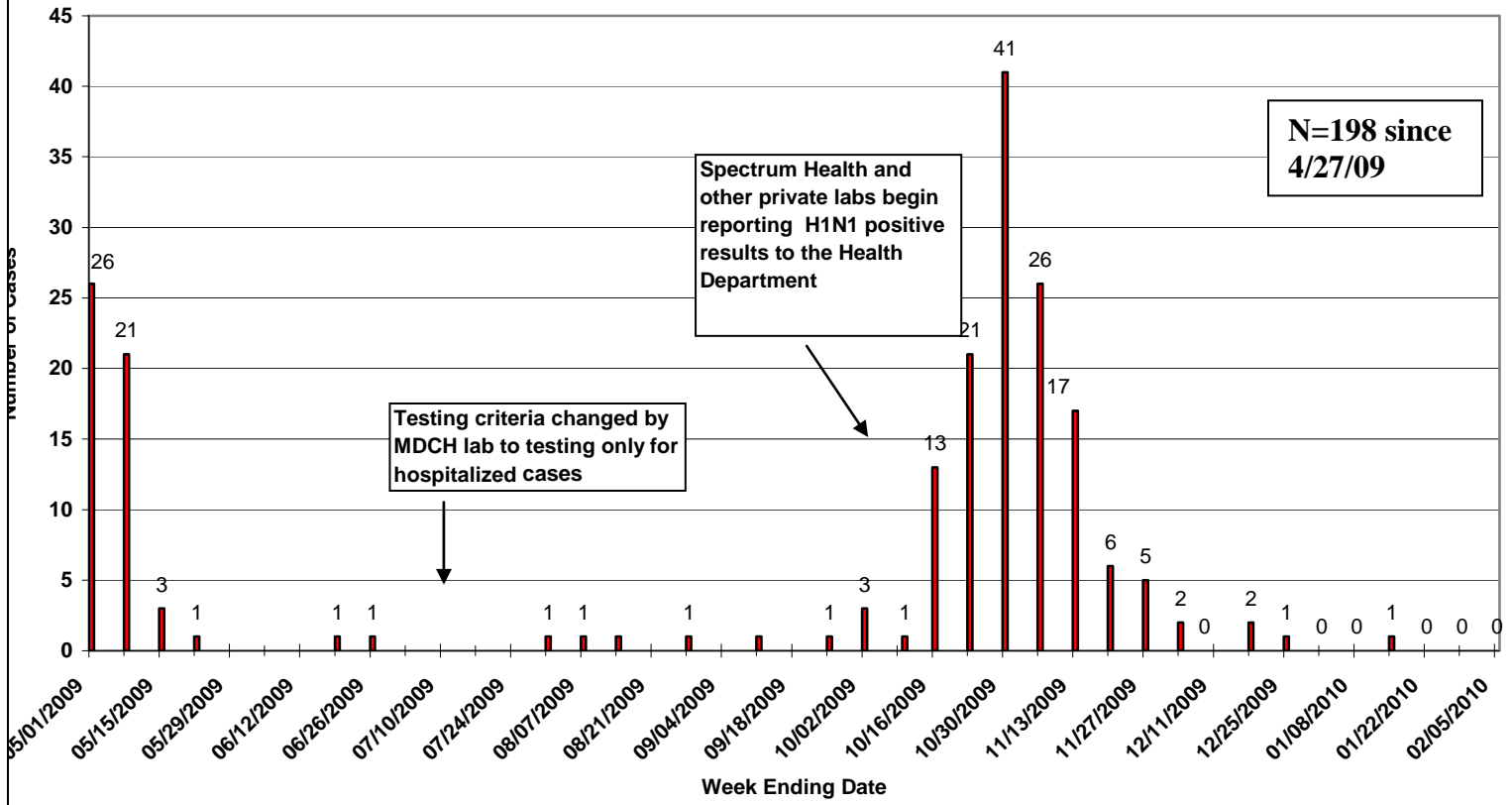
Deaths By Sex		Frequency	Percent
Sex	Female	3	60%
	Male	2	40 %
	Total	5	100.0%

Deaths by Age Group		Frequency	Percent
Age Group	0-5	0	0 %
	6-17	0	0 %
	18-64	4	80 %
	65+	1	20 %
		5	100 %

Influenza A H1N1 Cases Reported by Week Specimen Collected
Kent County
4/27/2009-2/12/2009

■ H1N1 Cases

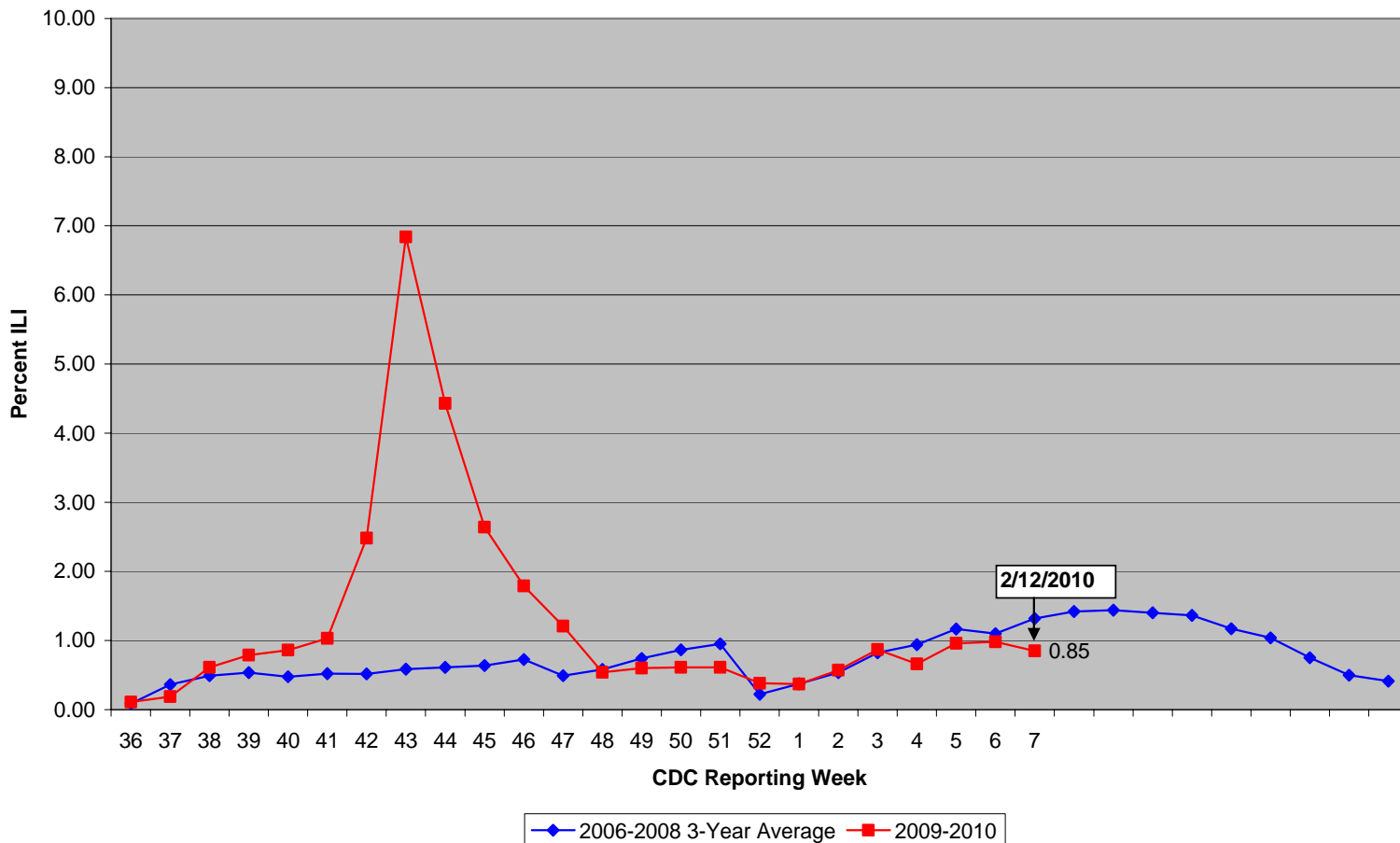
**N=198 since
4/27/09**



Kent County Influenza Surveillance Report, 2009 -2010



Percentage of School and Daycare Center Attendees with Influenza-Like Illness (ILI) Reported to the Kent County Health Department as of 2/12/2010



Michigan

Laboratory Surveillance (as of February 6): During January 31-February 6, MDCH Bureau of Laboratories identified three 2009 Influenza A (H1N1) isolates. For the 2009-2010 season (starting on October 4, 2009), MDCH BOL has identified 604 influenza isolates:

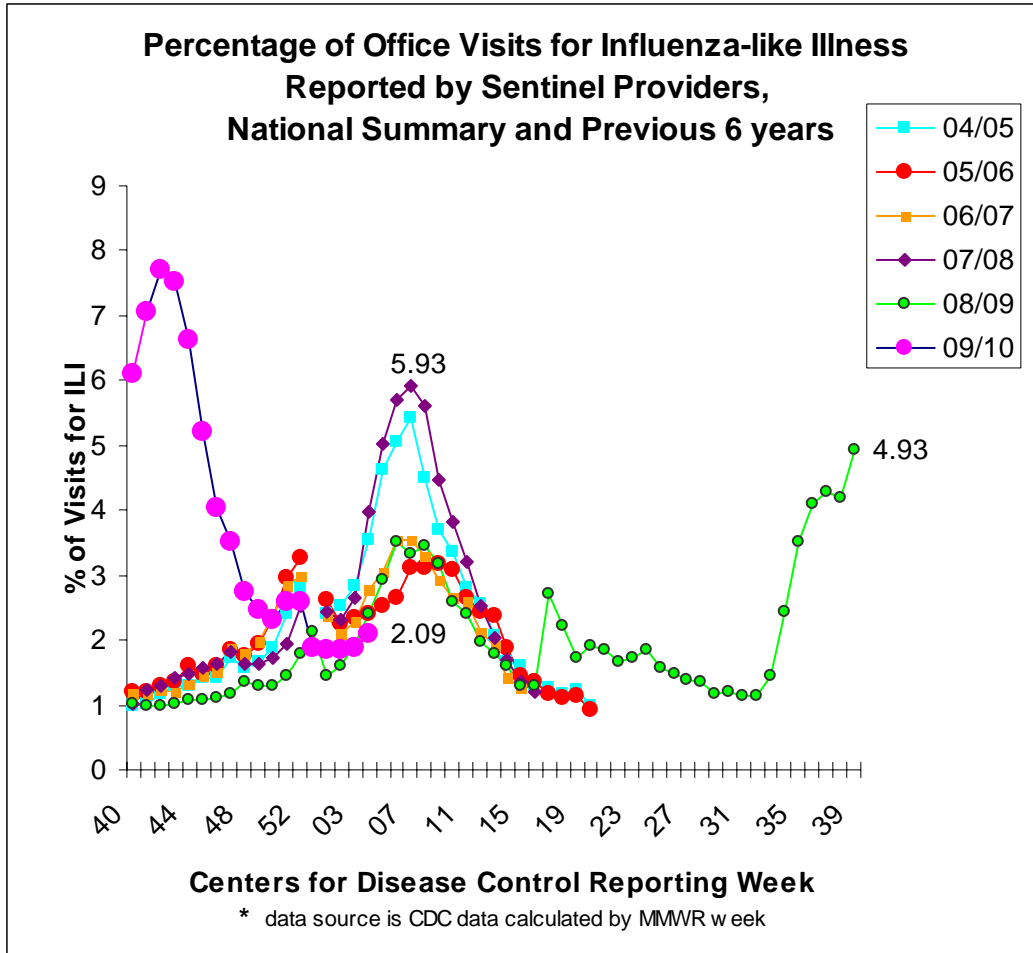
- 2009 Influenza A (H1N1): 603
- Influenza B: 1

15 sentinel labs reported for the week ending February 6, 2010. 4 labs reported sporadic influenza A activity (SE, C); 11 labs reported no influenza A positives (SE, SW, C, N). 1 lab reported influenza B activity (SE). 10 labs reported low or increasing RSV positives (SE, SW, C, N), 3 labs had moderately elevated RSV positives (SE, SW, C), and 1 lab reported highly elevated numbers of RSV positives (SE)

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United States



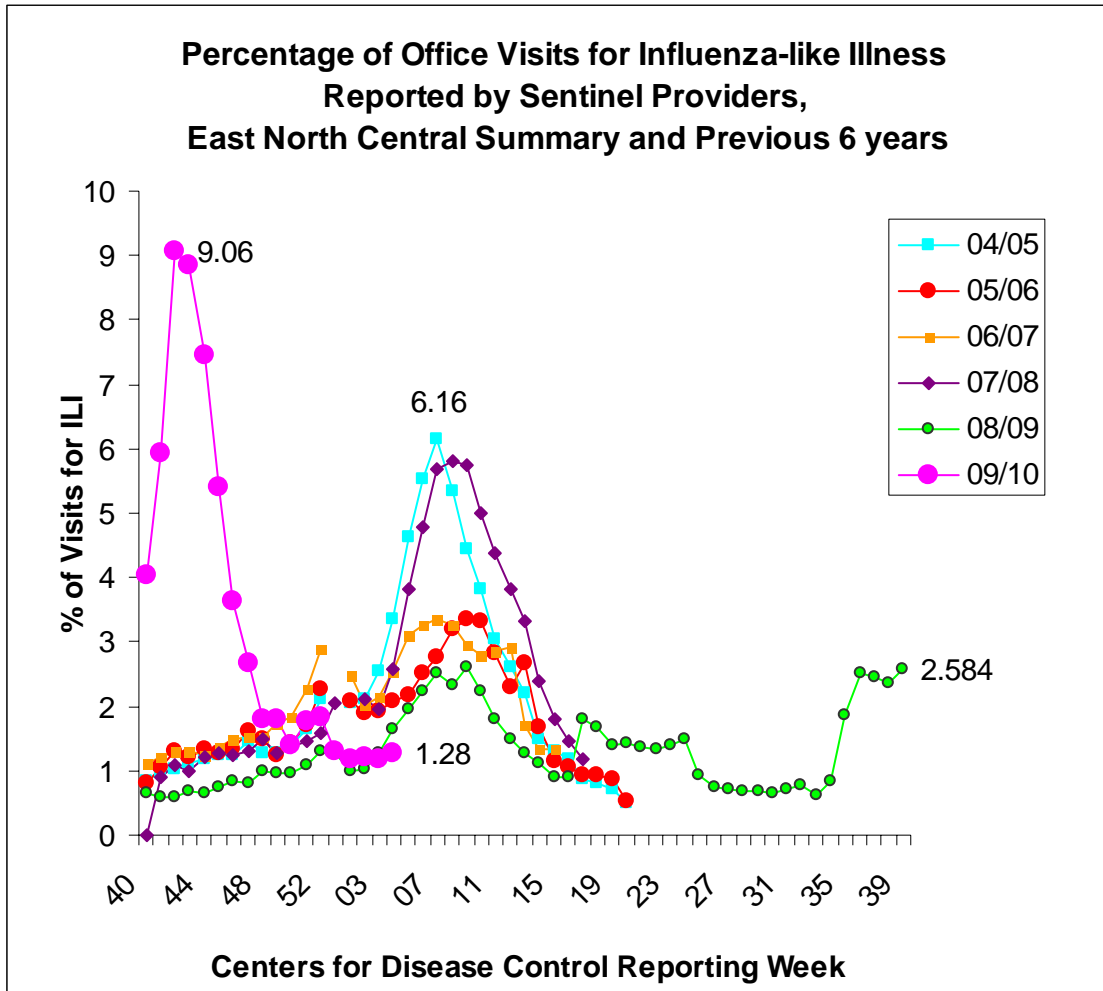
MMWR Week	MMWR Week	09/10
Ending	Ending	
40	10/10/2009	6.10
41	10/17/2009	7.05
42	10/24/2009	7.69
43	10/31/2009	7.52
44	11/07/2009	6.62
45	11/14/2009	5.21
46	11/21/2009	4.04

47	11/28/2009	3.53
48	12/05/2009	2.73
49	12/12/2009	2.47
50	12/19/2009	2.32
51	12/26/2009	2.59
52	01/02/2009	2.60
1	01/09/2010	1.87
2	01/16/2010	1.86
3	01/23/2010	1.86
4	01/30/2010	1.89
5	02/06/2010	2.09



Kent County Influenza Surveillance Report, 2009 -2010

East North Central Summary (IL, IN, MI, MN, OH, WI)



MMWR Week	MMWR Week	09/10
Ending	Ending	
40	10/10/2009	4.05
41	10/17/2009	5.94
42	10/24/2009	9.06
43	10/31/2009	8.86
44	11/07/2009	7.44
45	11/14/2009	5.39
46	11/21/2009	3.64

47	11/28/2009	2.68
48	12/05/2009	1.81
49	12/12/2009	1.81
50	12/19/2009	1.40
51	12/26/2009	1.78
52	01/02/2009	1.84
1	01/09/2010	1.32
2	01/16/2010	1.17
3	01/23/2010	1.22
4	01/30/2010	1.17
5	02/06/2010	1.28

Kent County Influenza Surveillance Report, 2009 -2010

Kent County Influenza Syndromic Surveillance Trends

02/13/2009 through 02/12/2010



The week ending February 12, 2010 saw indicators of influenza like illness (ILI) decrease slightly compared to the previous week. These indicators were also lower than levels seen at this time last year. Details of the influenza activity indicators (represented graphically in **Figures 1-3**) are listed below.

- **Constitutional %** - The weekly average percentage of emergency department visits for constitutional complaints (including chief complaints of fever, weakness, dizziness, temp, flu, lightheaded, and chills) decreased slightly from 9.4% to 8.5%. This level was below the level seen at this time last year (9.0%), and remains below the seasonal influenza peak of 10.6% from the week ending February 27, 2009.
- **Constitutional % by age** - Emergency department (ED) visits for constitutional complaints by children 0-17 years of age decreased from 5.3% to 4.7% of all emergency department visits for the week ending February 12, 2010. Visits for constitutional complaints by adults 18 years of age and older decreased slightly from 4.1% to 3.8% of all ED visits. Both of these levels are slightly lower than those seen at this time last year.
- **ED ILI %** - The percentage of visits to a sentinel Kent County Emergency Department for influenza like illness was not available at the time of posting.
- **School ILI %** - School/daycare absences due to influenza like illness decreased from 0.98% to 0.85%. This level is lower than that seen at this time last year (1.5%).



Kent County Influenza Surveillance Report, 2009 -2010

Figure 1: Three Indicators of Influenza Activity, Kent County 02/13/2009 through 02/12/2010

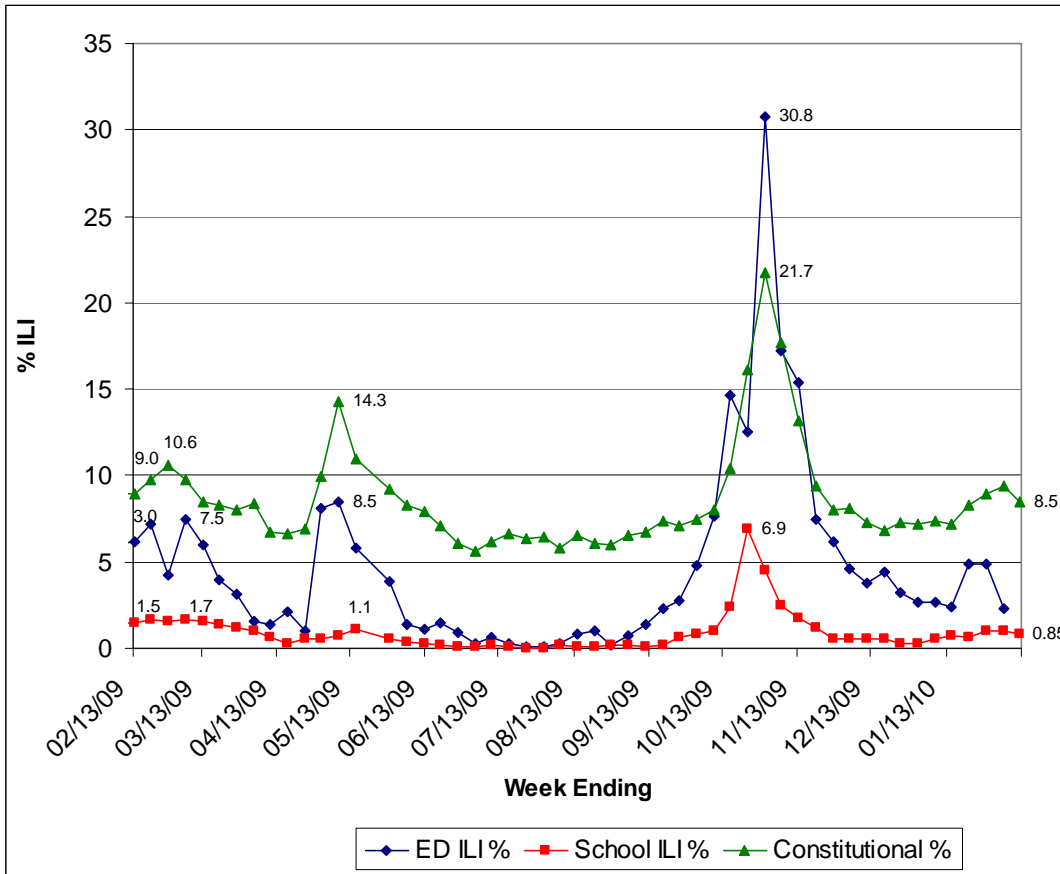
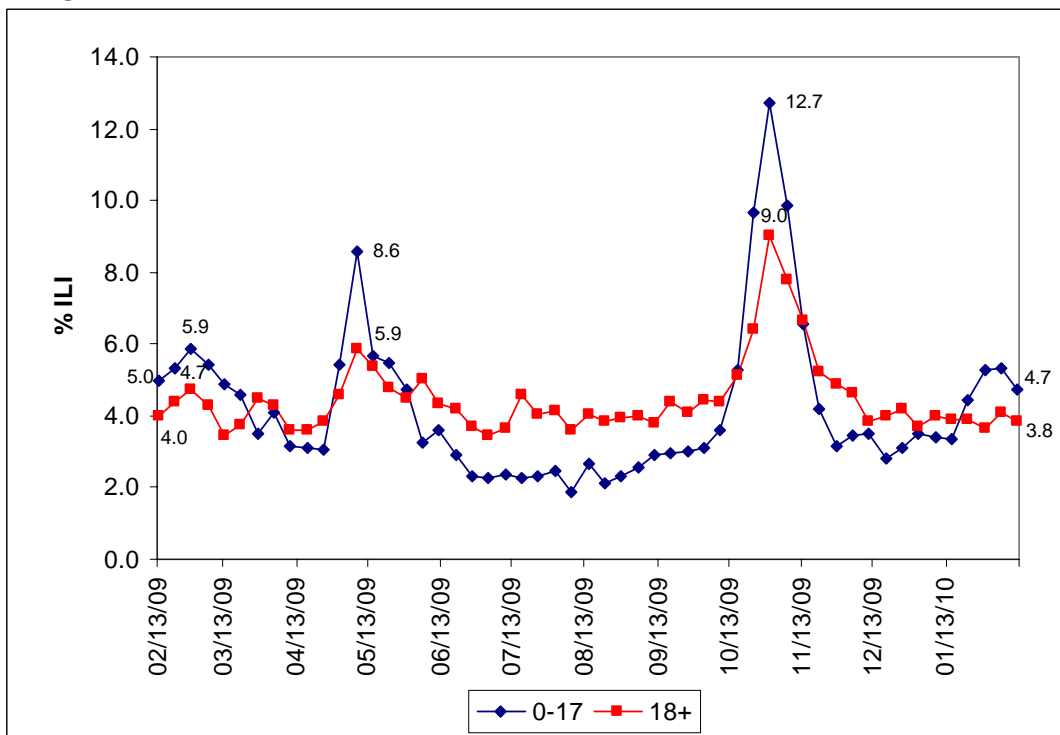


Figure 2: Constitutional Complaints as a Percentage of Total Emergency Department Visits by Age Group, Kent County 02/13/2009 through 02/12/2010



Source: MDSS Syndromic Surveillance System

Kent County Influenza Surveillance Report, 2009 -2010



Figure 3 plots influenza activity for the current 2009/2010 season compared to the average activity over the previous three influenza seasons. For comparison purposes, weeks are numbered 1-53, with week 1 being the first week ending in the month of January and week 53 the last week in the month of December (week ending day is Friday). For this analysis, the influenza season is considered to begin with week 36, the first week ending in the month of September (week ending 09/04 for 2009). This graph presents the percentage of emergency department visits for constitutional complaints and the percentage of students absent due to influenza like illness through week 6 (week ending 02/12/2010 for 2010). This graph indicates that both emergency department visits and school absences for ILI are lower than normal levels.

Figure 3: Comparison of Current Influenza Activity to the Average over the Previous Three Seasons

