

2009-2010 Influenza Season Week 50 ending December 19, 2009

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

Synopsis: During week 50 (December 13-19, 2009), influenza activity continued to decrease in the U.S.

- 306 (6.9%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division were positive for influenza.
- All subtyped influenza A viruses being reported to CDC were 2009 influenza A (H1N1) viruses.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- Nine influenza-associated pediatric deaths were reported. Eight of these deaths were associated with 2009 influenza A (H1N1) virus infection and one was associated with an influenza A virus for which the subtype was undetermined.
- The proportion of outpatient visits for influenza-like illness (ILI) was 2.3% which is at the national baseline of 2.3%. Seven of the 10 regions (1, 3, 5, 6, 7, 8 and 10) reported ILI below region-specific baseline levels.
- Seven states reported geographically widespread influenza activity, 18 states reported regional influenza activity, the District of Columbia, Puerto Rico, and 13 states reported local influenza activity, the U.S. Virgin Islands and 11 states reported sporadic influenza activity, Guam and one state reported no influenza activity.

National and Regional Summary of Select Surveillance Components

HHS Surveillance Regions**	Data for current week			Data cumulative since August 30, 2009 (Week 35)*						
	Out-patient ILI†	% positive for flu‡	Number of jurisdictions reporting regional or widespread activity§	A (H1)	A (H3)	2009 A (H1N1)	A (unable to subtype)¶	A (Subtyping not performed)	B	Pediatric Deaths
Nation	Elevated	6.9%	25 of 54	28	49	60,113	311	18,810	206	221
Region 1	Normal	10.9%	5 of 6	6	4	3,249	14	462	12	5
Region 2	Elevated	11.1%	2 of 4	2	4	1,302	0	1,055	4	9
Region 3	Normal	6.0%	3 of 6	3	7	10,501	48	1,430	14	13
Region 4	Elevated	10.8%	5 of 8	0	4	7,002	88	4,061	57	42
Region 5	Normal	9.8%	1 of 6	6	19	9,247	52	1,305	11	29
Region 6	Normal	3.3%	2 of 5	0	3	3,307	45	4,657	39	63
Region 7	Normal	3.5%	1 of 4	3	1	3,265	3	754	2	8
Region 8	Normal	7.7%	1 of 6	6	2	9,671	0	3,671	57	13
Region 9	Elevated	11.5%	4 of 5	0	4	8,088	47	1,101	8	30
Region 10	Normal	10.8%	1 of 4	2	1	4,481	14	314	2	9

*Influenza season officially begins each year at week 40. This season data from week 35 will be included to show the trend of influenza activity before the official start of the 2009-10 influenza season.

**HHS regions (Region 1 CT, ME, MA, NH, RI, VT; Region 2: NJ, NY, Puerto Rico, US Virgin Islands; Region 3: DE, DC, MD, PA, VA, WV; Region 4: AL, FL, GA, KY, MS, NC, SC, TN; Region 5: IL, IN, MI, MN, OH, WI; Region 6: AR, LA, NM, OK, TX; Region 7: IA, KS, MO, NE; Region 8: CO, MT, ND, SD, UT, WY; Region 9: AZ, CA, Guam, HI, NV; and Region 10: AK, ID, OR, WA).

† Elevated means the % of visits for ILI is at or above the national or region-specific baseline.

‡ National data are for current week; regional data are for the most recent three weeks.

§ Includes all 50 states, the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands.

¶ Subtyping results for the majority of specimens in this category were inconclusive because of low virus titers.

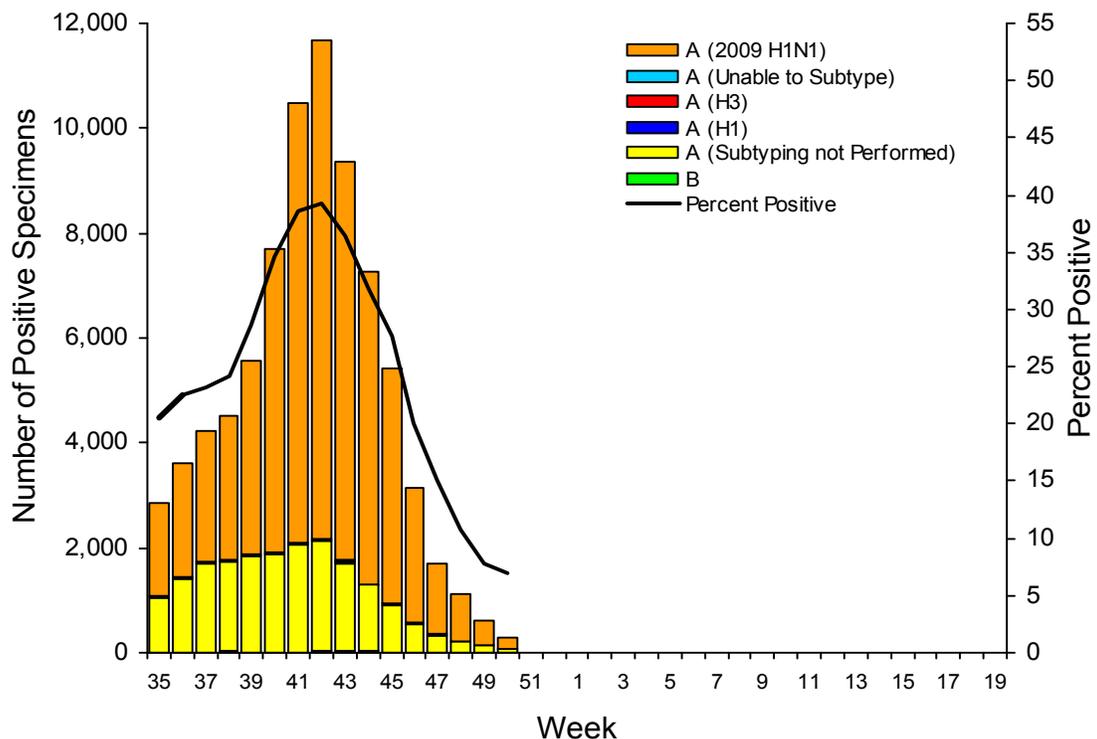
U.S. Virologic Surveillance: WHO and NREVSS collaborating laboratories located in all 50 states and Washington D.C., report to CDC the number of respiratory specimens tested for influenza and the number positive by influenza type and subtype. The results of tests performed during the current week are summarized in the table below.

	Week 50
No. of specimens tested	4,440
No. of positive specimens (%)	306 (6.9%)
Positive specimens by type/subtype	
Influenza A	303 (99.0%)
A (2009 H1N1)	233 (76.9%)
A (subtyping not performed)	66 (21.8%)
A (unable to subtype)*	4 (1.3%)
A (H3)	0 (0.0%)
A (H1)	0 (0.0%)
Influenza B	3 (1.0%)

*Subtyping results for all four specimens in this category were inconclusive because of low levels of viral RNA.

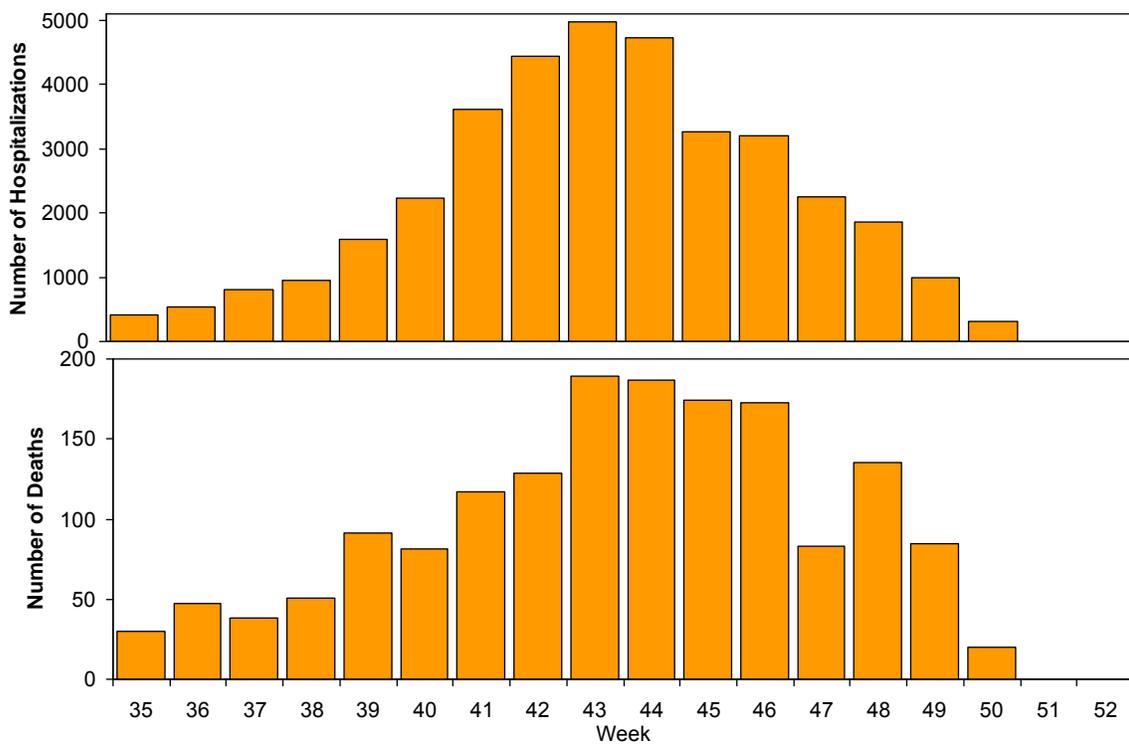
During week 50, influenza B viruses co-circulated at low levels with 2009 influenza A (H1N1) viruses. All subtyped influenza A viruses reported to CDC this week were 2009 influenza A (H1N1) viruses.

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, August 30-December 19, 2009



Pneumonia and Influenza Hospitalization and Death Tracking: This new system was implemented on August 30, 2009, and replaces the weekly report of laboratory confirmed 2009 H1N1-related hospitalizations and deaths that began in April 2009. Jurisdictions can now report to CDC counts of hospitalizations and deaths resulting from all types or subtypes of influenza, not just those from 2009 H1N1 influenza virus. To allow jurisdictions to implement the new case definition, counts were reset to zero on August 30, 2009. From August 30 – December 19, 2009, 36,163 laboratory-confirmed influenza-associated hospitalizations and 1,630 laboratory-confirmed influenza-associated deaths were reported to CDC. CDC will continue to use its traditional surveillance systems to track the progress of the 2009-10 influenza season.

Weekly Laboratory-Confirmed Influenza-Associated Hospitalizations and Deaths, National Summary, August 30 – December 19, 2009



Antigenic Characterization: CDC has antigenically characterized one seasonal influenza A (H1N1), six influenza A (H3N2), five influenza B, and 632 2009 influenza A (H1N1) viruses collected since September 1, 2009.

One seasonal influenza A (H1N1) virus was tested and is related to the influenza A (H1N1) component of the 2009-10 Northern Hemisphere influenza vaccine (A/Brisbane/59/2007).

The six influenza A (H3N2) viruses tested showed reduced titers with antisera produced against A/Brisbane/10/2007, the 2009-2010 Northern Hemisphere influenza A (H3N2) vaccine component, and were antigenically related to A/Perth/16/2009, the WHO recommended influenza A (H3N2) component of the 2010 Southern Hemisphere vaccine formulation.

Influenza B viruses currently circulating globally can be divided into two distinct lineages represented by the B/Yamagata/16/88 and B/Victoria/02/87 viruses. The influenza B component of the 2009-10 vaccine belongs to the B/Victoria lineage. The five influenza B viruses tested belong to the B/Victoria lineage and are related to the influenza vaccine component for the 2009-10 Northern Hemisphere influenza vaccine (B/Brisbane/60/2008).

Six hundred thirty (99.7%) of 632 2009 influenza A (H1N1) viruses tested are related to the A/California/07/2009 (H1N1) reference virus selected by WHO as the 2009 H1N1 vaccine virus and two viruses (0.3%) tested showed reduced titers with antiserum produced against A/California/07/2009.

Annual influenza vaccination is expected to provide the best protection against those virus strains that are related to the vaccine strains, but limited to no protection may be expected when the vaccine and circulating virus strains are so different as to be from different lineages. Antigenic characterization of 2009 influenza A (H1N1) viruses indicates that these viruses are only distantly related antigenically and genetically to seasonal influenza A (H1N1) viruses, suggesting that little to no protection would be expected from vaccination with seasonal influenza vaccine. It is too early in the influenza season to determine if seasonal influenza viruses will circulate widely or how well the seasonal vaccine and circulating strains will match.

Antiviral Resistance: Since September 1, 2009, one seasonal influenza A (H1N1), eight influenza A (H3N2), one influenza B, and 631 2009 influenza A (H1N1) virus isolates have been tested for resistance to the neuraminidase inhibitors (oseltamivir and zanamivir), and 1,753 2009 influenza A (H1N1) original clinical samples were tested for a single known mutation in the virus that confers oseltamivir resistance. In addition, one seasonal influenza A (H1N1), six influenza A (H3N2), and 620 2009 influenza A (H1N1) virus isolates have been tested for resistance to the adamantanes (amantadine and rimantadine). The results of antiviral resistance testing performed on these viruses are summarized in the table below. Additional laboratories perform antiviral testing and report their results to CDC and positive results from that testing are included in the footnote.

Antiviral Resistance Testing Results on Samples Collected Since September 1, 2009.

	Viruses tested (n)	Resistant Viruses, Number (%)	Viruses tested (n)	Resistant Viruses, Number (%)	Isolates tested (n)	Resistant Viruses, Number (%)
		Oseltamivir		Zanamivir		Adamantanes
Seasonal Influenza A (H1N1)	1	1 (100.0)	0	0 (0)	1	0 (0)
Influenza A (H3N2)	8	0 (0)	0	0 (0)	6	5 (83.3)
Influenza B	1	0 (0)	0	0 (0)	N/A*	N/A*
2009 Influenza A (H1N1)	2,384	34 ^{†‡} (1.4)	631	0 (0)	620	619 (99.8)

*The adamantanes (amantadine and rimantadine) are not effective against influenza B viruses.

[†]Two screening tools were used to determine oseltamivir resistance: sequence analysis of viral genes and a neuraminidase inhibition assay.

[‡]Additional laboratories perform antiviral resistance testing and report their results to CDC. Two additional oseltamivir resistant 2009 influenza A (H1N1) virus has been identified by these laboratories since September 1, 2009, bringing the total number to 36.

All of the subtyped influenza A viruses reported during week 50 were 2009 influenza A (H1N1) viruses, and the majority of 2009 H1N1 viruses tested since April 2009 have been resistant to the adamantanes (amantadine and rimantadine).

Antiviral treatment with oseltamivir or zanamivir is recommended for all patients with confirmed or suspected influenza virus infection who are hospitalized or who are at higher risk for influenza complications. Additional information on antiviral recommendations for treatment and chemoprophylaxis of influenza virus infection is available at <http://www.cdc.gov/H1N1flu/recommendations.htm>.

2009 influenza A (H1N1) viruses were tested for oseltamivir resistance by a neuraminidase inhibition assay and/or detection of genetic sequence mutation, depending on the type of specimen tested. Original clinical samples were examined for a single known mutation in the virus that confers oseltamivir resistance in currently circulating seasonal influenza A (H1N1) viruses, while influenza virus isolates were tested using a neuraminidase inhibition assay that determines the presence or absence of neuraminidase inhibitor resistance, followed by neuraminidase gene sequence analysis of resistant viruses.

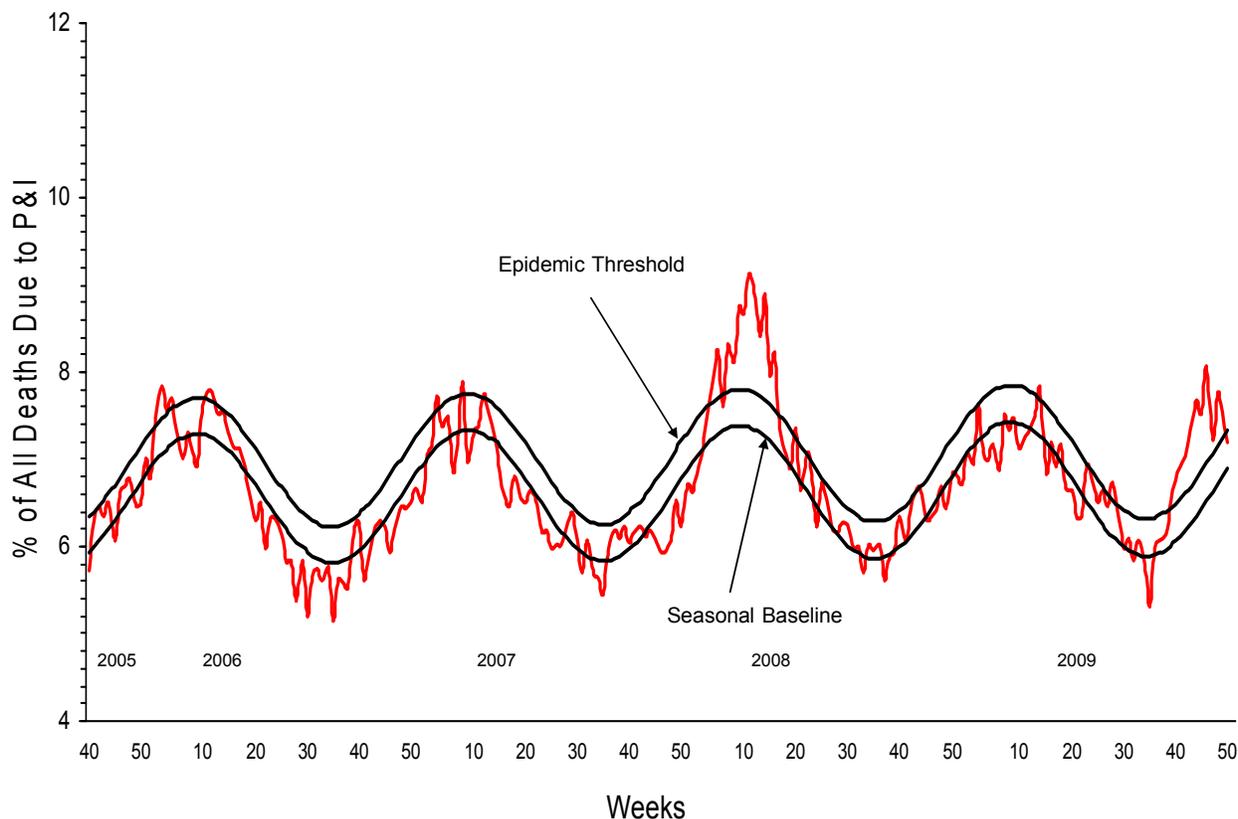
The majority of 2009 influenza A (H1N1) viruses are susceptible to the neuraminidase inhibitor antiviral medication oseltamivir; however, rare sporadic cases of oseltamivir resistant 2009 influenza A (H1N1) viruses have been detected worldwide. A total of 46 cases of oseltamivir resistant 2009 influenza A (H1N1) viruses have been identified in the United States since April 2009, including 2 newly identified cases since last week. In specimens collected since September 1, 2009, 36 cases have been identified in the United States. The proportion of oseltamivir-resistant

2009 H1N1 viruses does not represent the prevalence of oseltamivir-resistant 2009 H1N1 in the U.S. Most cases were tested because drug resistance was suspected. All tested viruses retain their sensitivity to the neuraminidase inhibitor zanamivir. Of the 46 total cases identified, 33 patients had documented exposure to oseltamivir through either treatment or chemoprophylaxis, 11 patients are under investigation to determine exposure to oseltamivir, and two patients had no documented oseltamivir exposure. Occasional development of oseltamivir resistance during treatment or prophylaxis is not unexpected. Enhanced surveillance, an increased availability of testing performed at CDC, and an increasing number of public health and other clinical laboratories performing antiviral resistance testing increase the number of cases of oseltamivir resistant 2009 influenza A (H1N1) viruses detected. All cases are investigated to assess the spread of resistant strains in the community.

To prevent the spread of antiviral resistant virus strains, CDC reminds clinicians and the public of the need to continue hand and cough hygiene measures for the duration of any symptoms of influenza, even while taking antiviral medications (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5832a3.htm>).

Pneumonia and Influenza (P&I) Mortality Surveillance: During week 50, 7.2% of all deaths reported through the 122-Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 7.3% for week 50.

Pneumonia and Influenza Mortality for 122 U.S. Cities
Week ending 12/19/2009



Influenza-Associated Pediatric Mortality: Nine influenza-associated pediatric deaths were reported to CDC during week 50 (Iowa [3], New Jersey, New York [2], Ohio, South Carolina, and West Virginia). Eight of these deaths were associated with 2009 influenza A (H1N1) virus infection and one was associated with an influenza A virus for which the subtype is undetermined. The deaths reported during week 50 occurred between October 11 and December 12, 2009.

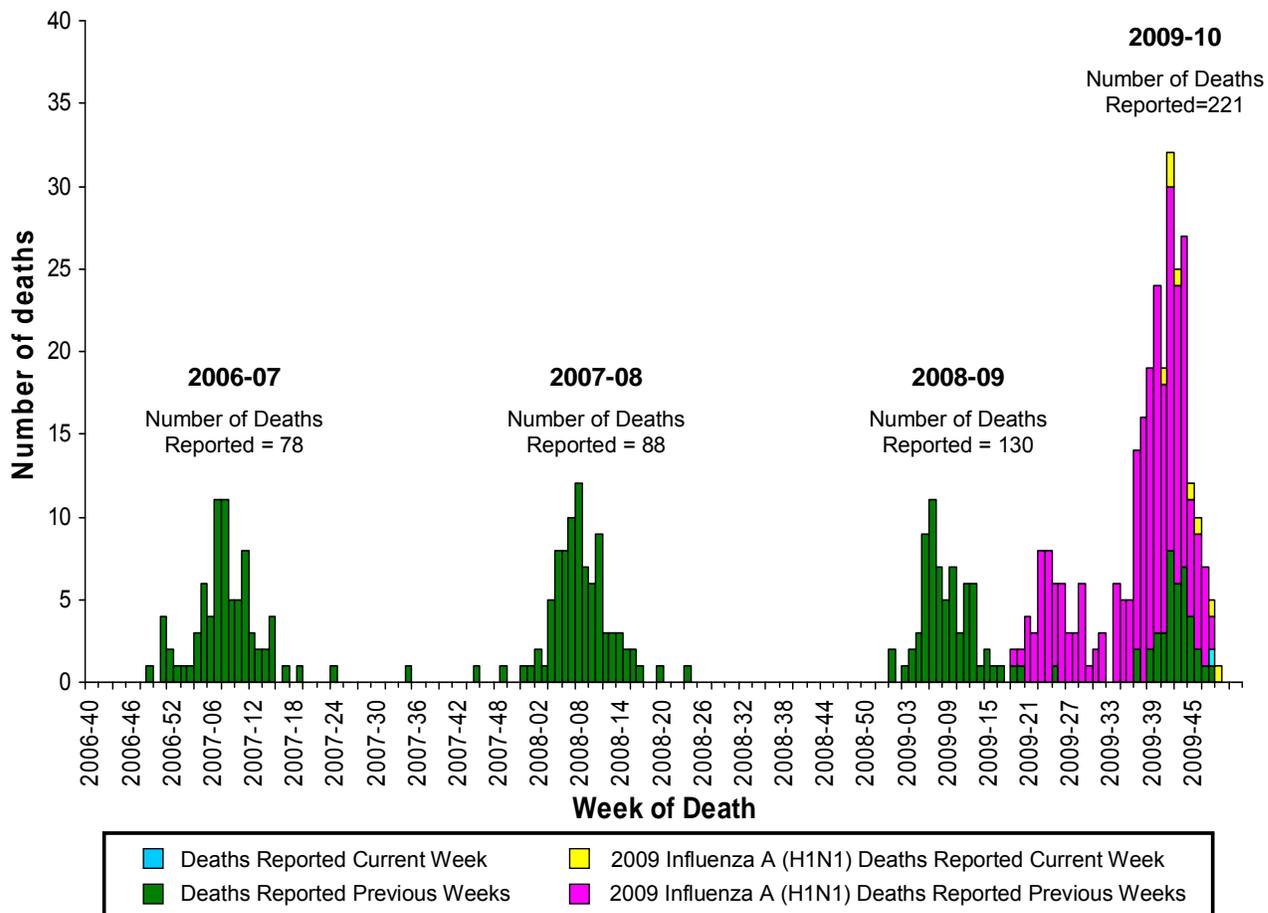
Since August 30, 2009, CDC has received 221 reports of influenza-associated pediatric deaths that occurred during the current influenza season (40 deaths in children less than 2 years old, 25 deaths in children 2-4 years old, 81 deaths in children 5-11 years old, and 75 deaths in children 12-17 years old). One hundred eighty-one (82%) of the 221 deaths were due to 2009 influenza A (H1N1) virus infections, 39 were associated with influenza A virus for which the subtype is undetermined, and one was associated with an influenza B virus infection. A total of 241 deaths in children associated with 2009 influenza A (H1N1) virus infection have been reported to CDC.

Among the 221 deaths in children, 104 children had specimens collected for bacterial culture from normally sterile sites and 33 (31.7%) of the 104 were positive; *Streptococcus pneumoniae* was identified in 10 (30.3%) of the 33 children and *Staphylococcus aureus* was identified in eight (24.2%) of the 33 children. One *S. aureus* isolate was sensitive to methicillin, six were methicillin resistant, and one did not have sensitivity testing performed. Twenty-two (66.7%) of the 33 children with bacterial coinfections were five years of age or older, and 10 (30.3%) of the 33 children were 12 years of age or older.

Laboratory-Confirmed Influenza-Associated Pediatric Deaths by Date and Type/Subtype of Influenza.

Date	2009 H1N1 Influenza	Influenza A-Subtype Unknown	Seasonal Influenza	Total
Number of Deaths REPORTED for Current Week – Week 50 (Week ending December 19, 2009)	8	1	0	9
Number of Deaths OCCURRED since August 30, 2009	181	39	1	221
Number of Deaths OCCURRED since April 26, 2009	241	42	2	285

Number of Influenza-Associated Pediatric Deaths by Week of Death: 2006-07 season to present

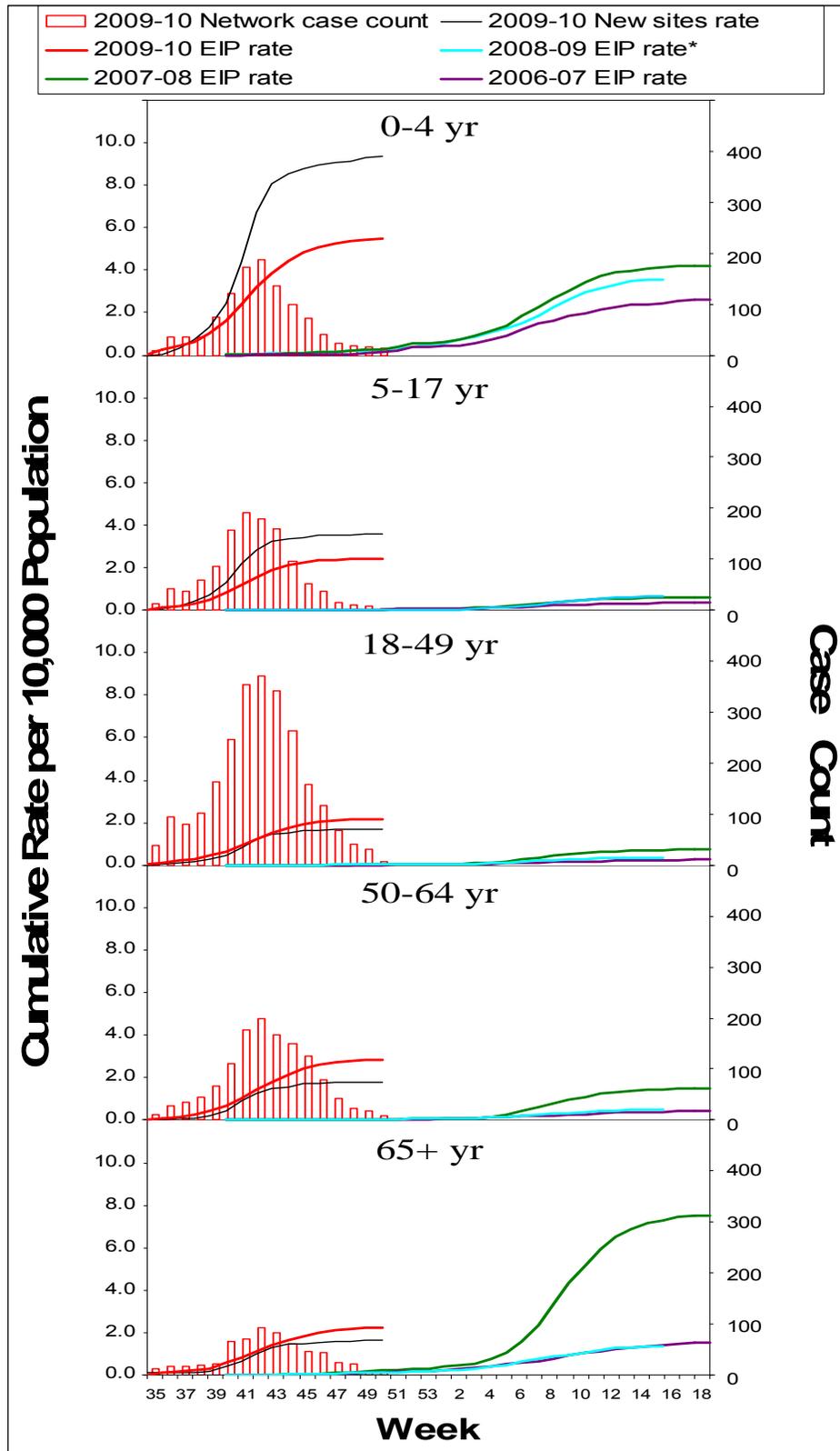


Influenza-Associated Hospitalizations: Laboratory-confirmed influenza-associated hospitalizations are monitored using a population-based surveillance network that includes the 10 Emerging Infections Program (EIP) sites (CA, CO, CT, GA, MD, MN, NM, NY, OR and TN) and 6 new sites (IA, ID, MI, ND, OK and SD).

During September 1, 2009 – December 19, 2009, the following preliminary laboratory-confirmed overall influenza associated hospitalization rates were reported by EIP and the new sites (*rates include influenza A, influenza B, and 2009 influenza A (H1N1)*):

Rates [EIP (new sites)] for children aged 0-4 years and 5-17 years were 5.5 (9.4) and 2.4 (3.6) per 10,000, respectively. Rates [EIP (new sites)] for adults aged 18-49 years, 50-64 years, and ≥ 65 years were 2.2 (1.7), 2.8 (1.8) and 2.2 (1.6) per 10,000, respectively.

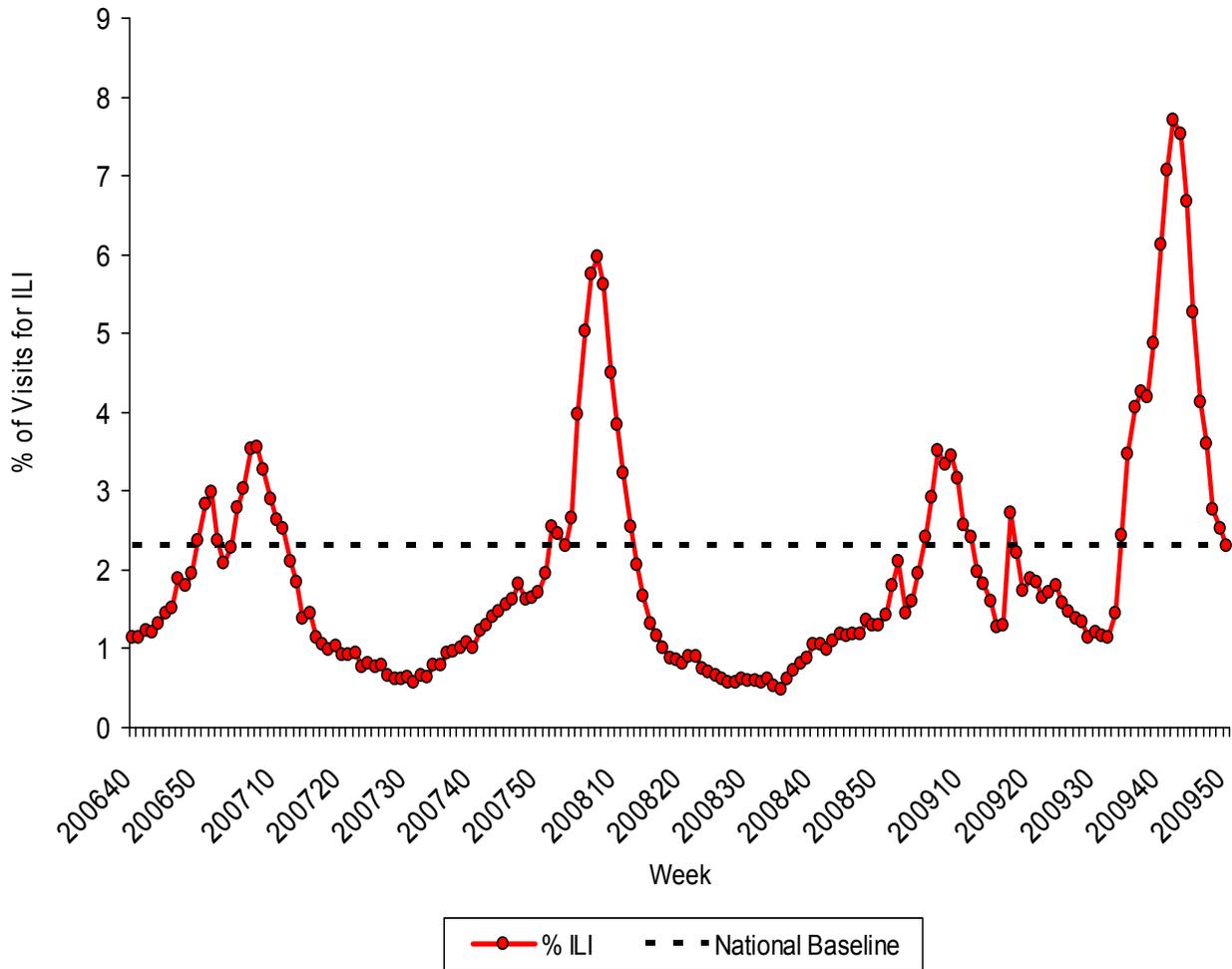
EIP Influenza Laboratory-Confirmed Cumulative Hospitalization Rates, 2009-10 and Previous Three Seasons*



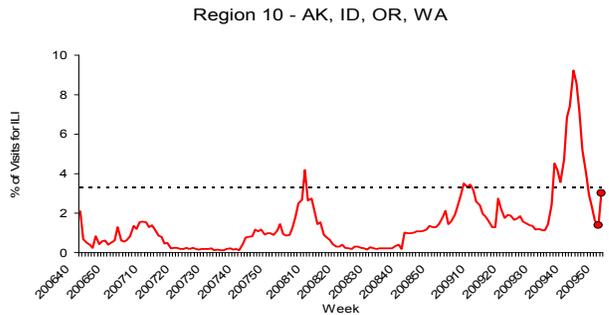
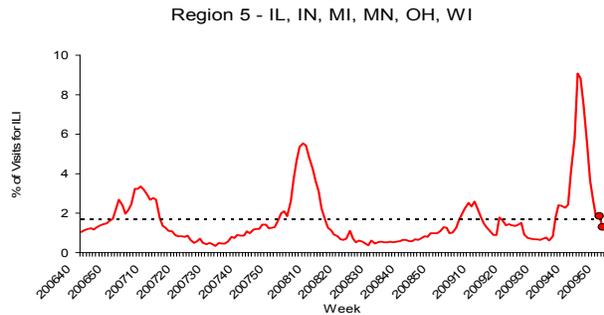
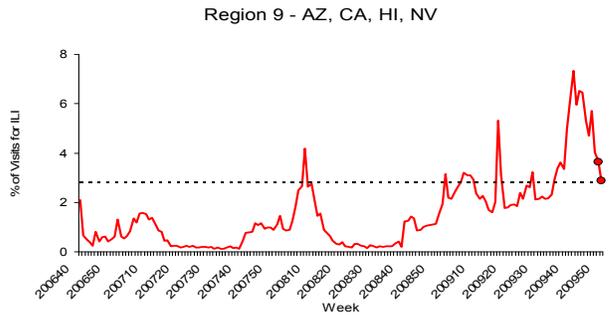
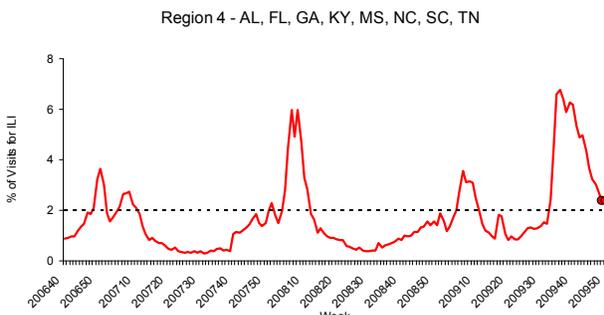
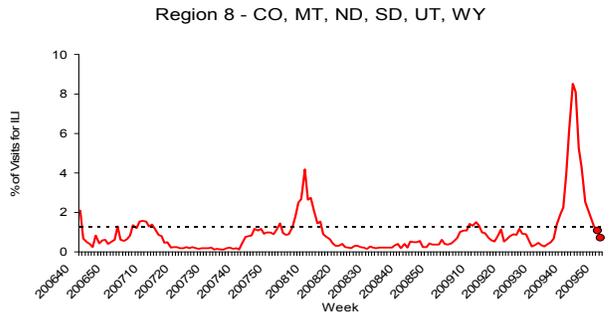
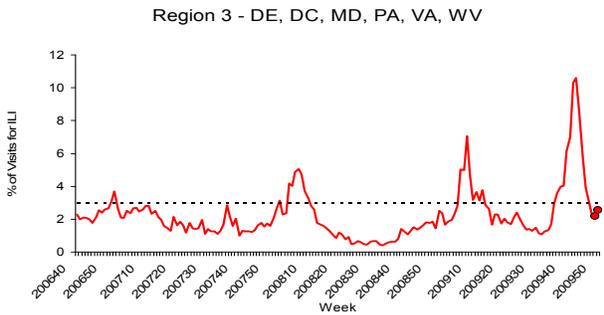
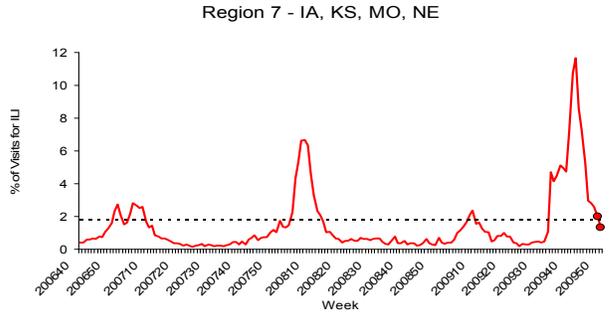
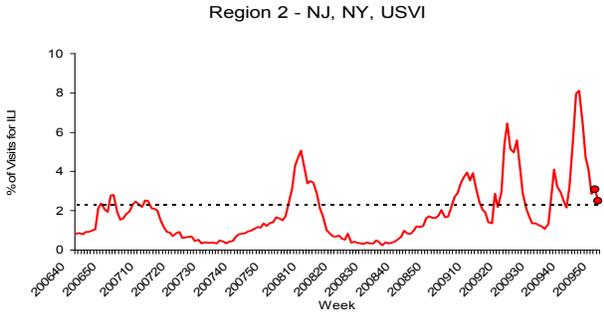
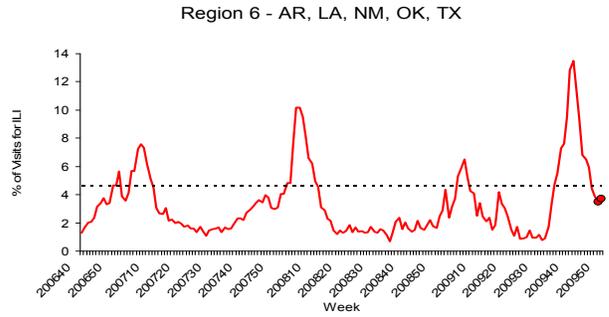
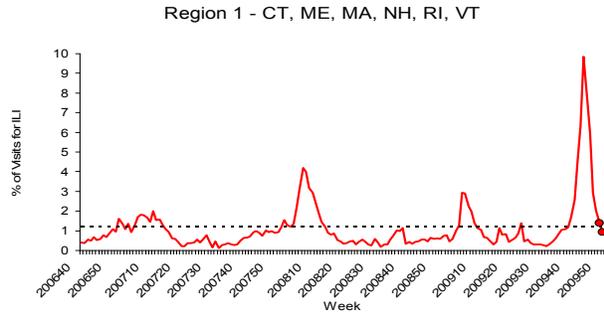
* The 2008-09 EIP rate ended as of April 14, 2009 due to the onset of the 2009 H1N1 season.

Outpatient Illness Surveillance: Nationwide during week 50, 2.3% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is at the national baseline of 2.3%.

Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, October 1, 2006 – December 19, 2009



On a regional level, the percentage of outpatient visits for ILI ranged from 0.7% to 3.7% during week 50. Three of the 10 regions reported a proportion of outpatient visits for ILI above their region-specific baseline levels. Regions 1, 3, 5, 6, 8, 7, and 10 reported ILI below their region-specific baselines.

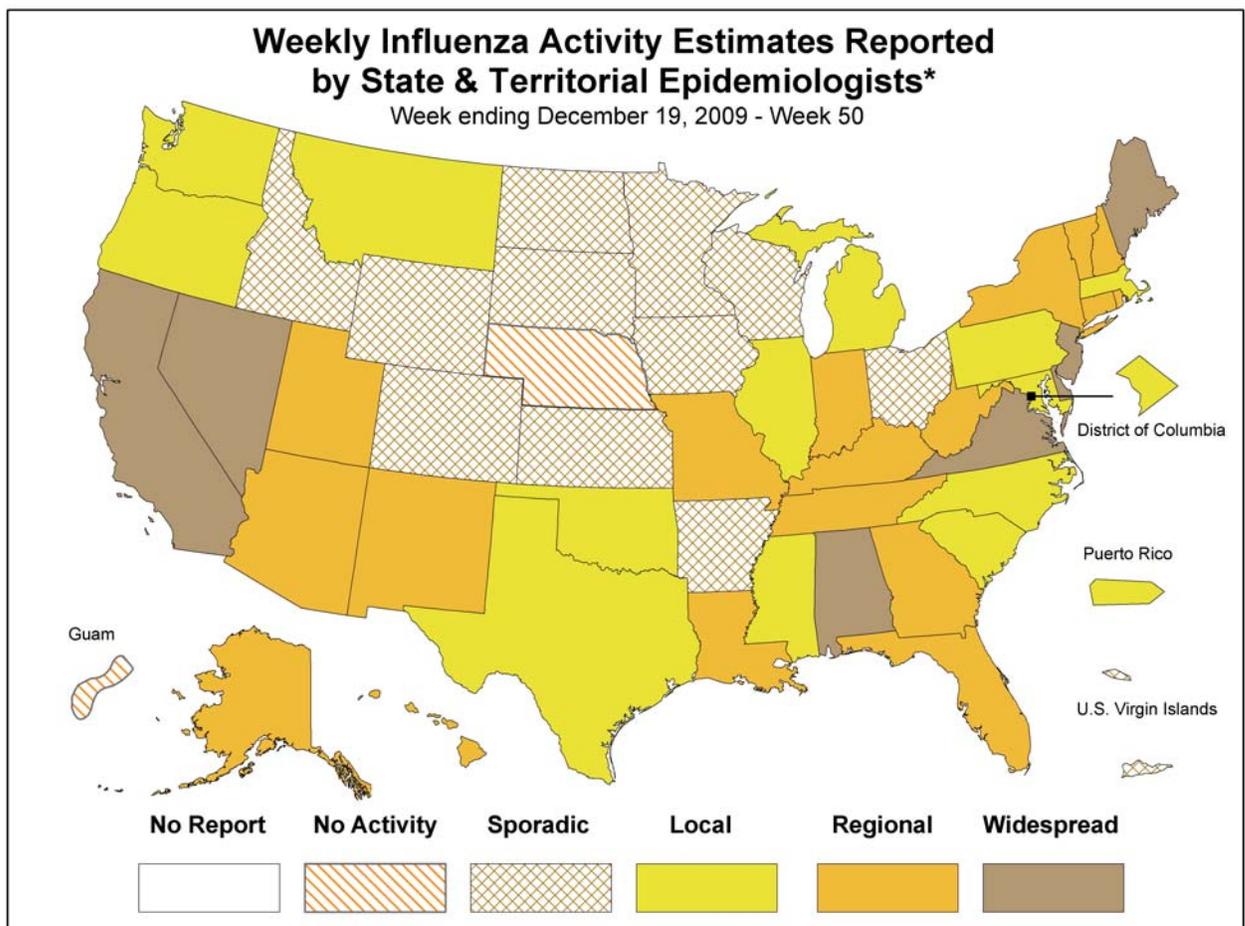


NOTE: Scales differ between regions

Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists: The influenza activity reported by state and territorial epidemiologists indicates geographic spread of both seasonal influenza and 2009 influenza A (H1N1) viruses and does not measure the severity of influenza activity.

During week 50, the following influenza activity was reported:

- Widespread influenza activity was reported by seven states (Alabama, California, Delaware, Maine, Nevada, New Jersey, and Virginia).
- Regional influenza activity was reported by 18 states (Alaska, Arizona, Connecticut, Florida, Georgia, Hawaii, Indiana, Kentucky, Louisiana, Missouri, New Hampshire, New Mexico, New York, Rhode Island, Tennessee, Utah, Vermont, and West Virginia).
- Local influenza activity was reported by the District of Columbia, Puerto Rico, and 13 states (Illinois, Maryland, Massachusetts, Michigan, Mississippi, Montana, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, and Washington).
- Sporadic influenza activity was reported by the U.S. Virgin Islands, and 11 states (Arkansas, Colorado, Idaho, Iowa, Kansas, Minnesota, North Dakota, Ohio, South Dakota, Wisconsin, and Wyoming).
- Guam and one state (Nebraska) reported no influenza activity.



* This map indicates geographic spread & does not measure the severity of influenza activity

A description of surveillance methods is available at: <http://www.cdc.gov/flu/weekly/fluactivity.htm>
Report prepared: December 24, 2009.

**WHO Collaborating Laboratory Reports
2009-2010 Influenza Season
Update: Thursday, December 24, 2009
Summary for All Regions**

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type/Subtype					
				A(H1)	A(H3)	AH1SWINE	AUNSUB	A-Unk	B
200935	132	13892	2847 (20.49)	3	13	1749	16	1063	3
200936	132	16177	3632 (22.45)	1	4	2191	13	1412	11
200937	131	18228	4229 (23.20)	5	3	2512	10	1694	5
200938	127	18663	4509 (24.16)	6	8	2749	24	1703	19
200939	126	19354	5561 (28.73)	4	6	3693	24	1819	15
200940	124	22162	7689 (34.69)	1	2	5778	26	1864	18
200941	127	27104	10474 (38.64)	1	0	8387	22	2046	18
200942	127	29676	11675 (39.34)	2	1	9518	26	2102	24
200943	122	25698	9364 (36.44)	1	2	7609	36	1695	21
200944	123	22805	7248 (31.78)	0	3	5931	20	1265	28
200945	122	19519	5408 (27.71)	1	1	4484	22	891	9
200946	120	15755	3162 (20.07)	1	0	2596	20	532	13
200947	116	11178	1685 (15.07)	1	3	1324	28	321	8
200948	111	10410	1116 (10.72)	1	0	884	12	210	9
200949	104	7954	615 (7.73)	0	3	475	8	127	2
200950	61	4440	306 (6.89)	0	0	233	4	66	3
Totals	1905	283015	79520 (28.10)	28	49	60113	311	18810	206

**WHO Collaborating Laboratory Reports
2009-2010 Influenza Season
Update: Thursday, December 24, 2009
Summary by Region**

HHS Region 1 (CT, ME, MA, NH, RI, VT)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	10	460	12 (2.61)	0	0	11	0	1	0
200936	10	489	28 (5.73)	1	1	23	0	3	0
200937	10	678	48 (7.08)	3	0	43	0	2	0
200938	10	764	51 (6.68)	2	2	37	2	6	2
200939	10	758	48 (6.33)	0	0	41	0	5	2
200940	10	780	50 (6.41)	0	1	46	0	3	0
200941	10	916	176 (19.21)	0	0	159	0	15	2
200942	10	1301	386 (29.67)	0	0	349	1	33	3
200943	10	1680	622 (37.02)	0	0	537	2	81	2
200944	10	1894	739 (39.02)	0	0	639	3	97	0
200945	9	1768	686 (38.80)	0	0	594	0	92	0
200946	9	1526	468 (30.67)	0	0	399	2	66	1
200947	9	909	241 (26.51)	0	0	207	1	33	0
200948	9	927	152 (16.40)	0	0	132	3	17	0
200949	8	495	25 (5.05)	0	0	20	0	5	0
200950	6	334	15 (4.49)	0	0	12	0	3	0
Totals	150	15679	3747 (23.90)	6	4	3249	14	462	12

HHS Region 2 (NJ, NY)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	11	293	15 (5.12)	1	1	8	0	5	0
200936	11	366	21 (5.74)	0	0	20	0	1	0
200937	12	467	20 (4.28)	0	0	15	0	5	0
200938	11	516	13 (2.52)	0	0	6	0	7	0
200939	11	554	17 (3.07)	0	1	9	0	7	0
200940	10	694	53 (7.64)	0	1	32	0	18	2
200941	10	771	96 (12.45)	0	0	65	0	31	0
200942	11	1115	278 (24.93)	1	0	140	0	137	0
200943	10	1265	446 (35.26)	0	0	221	0	225	0
200944	9	1205	398 (33.03)	0	0	213	0	183	1
200945	10	1221	358 (29.32)	0	1	192	0	165	0
200946	10	1233	267 (21.65)	0	0	159	0	108	0
200947	10	895	149 (16.65)	0	0	75	0	73	1
200948	10	889	121 (13.61)	0	0	75	0	46	0
200949	10	683	78 (11.42)	0	0	47	0	31	0
200950	7	564	38 (6.74)	0	0	25	0	13	0
Totals	163	12731	2368 (18.60)	2	4	1302	0	1055	4

**WHO Collaborating Laboratory Reports
2009-2010 Influenza Season
Update: Thursday, December 24, 2009
Summary by Region**

HHS Region 3 (DE, DC, MD, PA, VA, WV)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	12	1073	131 (12.21)	1	1	122	0	7	0
200936	12	1465	184 (12.56)	0	1	169	0	14	0
200937	12	1646	271 (16.46)	0	0	253	0	16	2
200938	11	1708	344 (20.14)	0	3	294	6	38	3
200939	10	1474	509 (34.53)	0	0	457	0	52	0
200940	11	1847	800 (43.31)	0	0	693	2	105	0
200941	12	3796	1703 (44.86)	0	0	1540	3	159	1
200942	13	4892	2736 (55.93)	0	0	2347	2	385	2
200943	12	4097	1995 (48.69)	0	1	1679	4	308	3
200944	12	3266	1381 (42.28)	0	0	1212	0	168	1
200945	13	2756	1240 (44.99)	1	0	1135	3	101	0
200946	11	1739	413 (23.75)	1	0	356	14	41	1
200947	11	1131	173 (15.30)	0	0	147	5	21	0
200948	10	919	62 (6.75)	0	0	51	1	9	1
200949	10	714	35 (4.90)	0	1	25	5	4	0
200950	9	416	26 (6.25)	0	0	21	3	2	0
Totals	181	32939	12003 (36.44)	3	7	10501	48	1430	14

HHS Region 4 (AL, FL, GA, KY, MS, NC, SC, TN)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	22	3995	982 (24.58)	0	0	497	9	475	1
200936	22	4063	1106 (27.22)	0	0	482	6	611	7
200937	22	3660	973 (26.58)	0	0	508	4	460	1
200938	23	3624	1014 (27.98)	0	0	560	5	449	0
200939	23	3775	1145 (30.33)	0	1	689	17	436	2
200940	21	3617	1119 (30.94)	0	0	748	9	358	4
200941	22	3454	1039 (30.08)	0	0	698	9	329	3
200942	22	4382	963 (21.98)	0	0	674	8	278	3
200943	21	3257	799 (24.53)	0	0	572	8	217	2
200944	21	3099	685 (22.10)	0	2	521	9	140	13
200945	20	2496	482 (19.31)	0	0	388	1	91	2
200946	22	2356	357 (15.15)	0	0	270	2	78	7
200947	20	1567	149 (9.51)	0	1	96	0	48	4
200948	20	1678	209 (12.46)	0	0	152	1	51	5
200949	18	1317	112 (8.50)	0	0	91	0	21	0
200950	8	716	78 (10.89)	0	0	56	0	19	3
Totals	327	47056	11212 (23.83)	0	4	7002	88	4061	57

**WHO Collaborating Laboratory Reports
2009-2010 Influenza Season
Update: Thursday, December 24, 2009
Summary by Region**

HHS Region 5 (IL, IN, MI, MN, OH, WI)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	17	1123	237 (21.10)	0	8	168	6	55	0
200936	16	1358	260 (19.15)	0	1	213	6	40	0
200937	17	1708	284 (16.63)	0	2	222	1	59	0
200938	15	1728	390 (22.57)	2	1	296	2	87	2
200939	15	1994	482 (24.17)	2	3	356	3	117	1
200940	15	2240	822 (36.70)	0	0	693	4	124	1
200941	15	3119	1564 (50.14)	0	0	1435	0	127	2
200942	14	3906	2045 (52.36)	1	1	1759	6	272	4
200943	12	3471	1673 (48.20)	1	1	1457	17	197	0
200944	14	2853	1099 (38.52)	0	0	987	2	109	1
200945	13	2631	792 (30.10)	0	0	720	3	69	0
200946	11	1902	503 (26.45)	0	0	476	0	27	0
200947	13	1394	265 (19.01)	0	1	248	1	15	0
200948	10	1007	129 (12.81)	0	0	126	0	3	0
200949	12	832	71 (8.53)	0	1	65	1	4	0
200950	7	465	26 (5.59)	0	0	26	0	0	0
Totals	216	31731	10642 (33.54)	6	19	9247	52	1305	11

HHS Region 6 (AR, LA, NM, OK, TX)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	18	3292	711 (21.60)	0	2	375	1	331	2
200936	18	4027	862 (21.41)	0	0	348	1	512	1
200937	18	4694	1124 (23.95)	0	1	326	0	797	0
200938	18	5126	1192 (23.25)	0	0	352	1	832	7
200939	16	4465	946 (21.19)	0	0	286	0	658	2
200940	17	3552	819 (23.06)	0	0	347	9	461	2
200941	16	3120	690 (22.12)	0	0	315	5	370	0
200942	16	2918	614 (21.04)	0	0	368	1	242	3
200943	16	2342	338 (14.43)	0	0	209	1	123	5
200944	17	1968	324 (16.46)	0	0	183	0	134	7
200945	18	1871	183 (9.78)	0	0	102	0	79	2
200946	18	1819	128 (7.04)	0	0	52	0	73	3
200947	16	1348	53 (3.93)	0	0	16	20	15	2
200948	13	1107	33 (2.98)	0	0	14	4	13	2
200949	12	651	25 (3.84)	0	0	9	2	13	1
200950	5	283	9 (3.18)	0	0	5	0	4	0
Totals	252	42583	8051 (18.91)	0	3	3307	45	4657	39

**WHO Collaborating Laboratory Reports
2009-2010 Influenza Season
Update: Thursday, December 24, 2009
Summary by Region**

HHS Region 7 (IA, KS, MO, NE)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	7	407	128 (31.45)	0	0	100	0	28	0
200936	9	423	126 (29.79)	0	0	109	0	17	0
200937	7	542	161 (29.70)	1	0	120	2	38	0
200938	6	611	202 (33.06)	1	1	172	1	27	0
200939	7	734	302 (41.14)	1	0	251	0	50	0
200940	5	727	482 (66.30)	0	0	459	0	23	0
200941	7	1301	704 (54.11)	0	0	557	0	147	0
200942	8	1478	794 (53.72)	0	0	641	0	152	1
200943	8	1203	479 (39.82)	0	0	361	0	117	1
200944	7	1120	303 (27.05)	0	0	238	0	65	0
200945	7	860	167 (19.42)	0	0	117	0	50	0
200946	7	704	79 (11.22)	0	0	65	0	14	0
200947	6	512	55 (10.74)	0	0	42	0	13	0
200948	7	519	25 (4.82)	0	0	17	0	8	0
200949	4	450	12 (2.67)	0	0	10	0	2	0
200950	4	362	9 (2.49)	0	0	6	0	3	0
Totals	106	11953	4028 (33.70)	3	1	3265	3	754	2

HHS Region 8 (CO, MT, ND, SD, UT, WY)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	16	1634	227 (13.89)	1	1	107	0	118	0
200936	15	1975	426 (21.57)	0	0	256	0	167	3
200937	14	2541	566 (22.27)	1	0	276	0	288	1
200938	15	2601	544 (20.92)	1	0	333	0	206	4
200939	15	3174	1075 (33.87)	1	0	643	0	424	7
200940	15	4983	1883 (37.79)	0	0	1219	0	656	8
200941	15	6538	2691 (41.16)	0	0	1965	0	718	8
200942	14	5619	2222 (39.54)	0	0	1775	0	439	8
200943	14	4373	1523 (34.83)	0	0	1252	0	263	8
200944	14	3598	1025 (28.49)	0	0	848	0	173	4
200945	14	2661	574 (21.57)	0	0	489	0	81	4
200946	13	1898	268 (14.12)	0	0	231	0	36	1
200947	13	1449	179 (12.35)	1	1	130	0	47	0
200948	13	1326	120 (9.05)	1	0	90	0	28	1
200949	12	1103	76 (6.89)	0	0	55	0	21	0
200950	4	232	8 (3.45)	0	0	2	0	6	0
Totals	216	45705	13407 (29.33)	6	2	9671	0	3671	57

**WHO Collaborating Laboratory Reports
2009-2010 Influenza Season
Update: Thursday, December 24, 2009
Summary by Region**

HHS Region 9 (AZ, CA, HI, NV)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	13	1187	314 (26.45)	0	0	274	0	40	0
200936	13	1475	491 (33.29)	0	0	453	0	38	0
200937	13	1573	590 (37.51)	0	0	565	3	21	1
200938	13	1584	582 (36.74)	0	1	531	6	43	1
200939	14	1959	803 (40.99)	0	1	739	2	60	1
200940	14	2610	1263 (48.39)	0	0	1174	2	86	1
200941	14	2756	1249 (45.32)	0	0	1119	3	127	0
200942	13	2251	860 (38.21)	0	0	716	6	138	0
200943	13	2231	761 (34.11)	0	0	608	2	151	0
200944	13	2418	752 (31.10)	0	1	577	5	168	1
200945	12	2055	493 (23.99)	0	0	382	15	95	1
200946	12	1553	422 (27.17)	0	0	379	0	43	0
200947	12	1284	305 (23.75)	0	0	267	0	37	1
200948	13	1341	173 (12.90)	0	0	147	3	23	0
200949	12	1140	118 (10.35)	0	1	97	0	19	1
200950	8	662	72 (10.88)	0	0	60	0	12	0
Totals	202	28079	9248 (32.94)	0	4	8088	47	1101	8

HHS Region 10 (AK, ID, OR, WA)

CDC Week	No. of Reporting Laboratories	No. of Specimens Tested	No. (%) of Specimens Positive for Influenza	Positive specimens by Type / Subtype					
				A(H1)	AH3	AH1SWINE	AUNSUB	AUNK	B
200935	6	428	90 (21.03)	0	0	87	0	3	0
200936	6	536	128 (23.88)	0	1	118	0	9	0
200937	6	719	192 (26.70)	0	0	184	0	8	0
200938	5	401	177 (44.14)	0	0	168	1	8	0
200939	5	467	234 (50.11)	0	0	222	2	10	0
200940	6	1112	398 (35.79)	1	0	367	0	30	0
200941	6	1333	562 (42.16)	1	0	534	2	23	2
200942	6	1814	777 (42.83)	0	0	749	2	26	0
200943	6	1779	728 (40.92)	0	0	713	2	13	0
200944	6	1384	542 (39.16)	0	0	513	1	28	0
200945	6	1200	433 (36.08)	0	0	365	0	68	0
200946	7	1025	257 (25.07)	0	0	209	2	46	0
200947	6	689	116 (16.84)	0	0	96	1	19	0
200948	6	697	92 (13.20)	0	0	80	0	12	0
200949	6	569	63 (11.07)	0	0	56	0	7	0
200950	3	406	25 (6.16)	0	0	20	1	4	0
Totals	92	14559	4814 (33.07)	2	1	4481	14	314	2

PNEUMONIA AND INFLUENZA MORTALITY
(Reported from 122 U.S. Cities)
For the Week Ending December 19, 2009
(Week 50)

YEAR	WEEK	% OF DEATHS	EXPECTED	THRESH.	TOTAL DEATHS	PNEUMONIA DEATHS	INFLUENZA DEATHS
2009	35	5.32	5.89	6.32	10304	539	9
2009	36	5.98	5.90	6.33	9249	548	5
2009	37	6.07	5.93	6.36	11250	674	9
2009	38	6.14	5.96	6.39	10848	659	7
2009	39	6.51	6.01	6.44	9878	631	12
2009	40	6.76	6.06	6.49	10766	700	28
2009	41	6.92	6.12	6.55	10175	680	24
2009	42	7.03	6.19	6.62	11068	731	47
2009	43	7.43	6.27	6.70	11205	782	50
2009	44	7.67	6.35	6.78	10805	766	63
2009	45	7.52	6.44	6.87	10565	736	58
2009	46	8.06	6.53	6.96	11293	840	70
2009	47	7.21	6.62	7.05	8351	569	33
2009	48	7.78	6.71	7.14	11866	874	49
2009	49	7.54	6.81	7.24	11786	849	40
2009	50	7.20	6.90	7.33	11052	771	25

**U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)
2008-2009 Influenza Season
Thursday, December 24, 2009
National Summary**

National Baseline: 2.3%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	1360	612017	20903	3.41543	3.47487
200936	1376	602502	22401	3.71800	4.06052
200937	1390	689231	26170	3.79699	4.24917
200938	1325	654352	24400	3.72888	4.19073
200939	1345	655994	28026	4.27230	4.87757
200940	1968	817003	46405	5.67991	6.13218
200941	2032	824000	54804	6.65097	7.06132
200942	2070	871246	65382	7.50442	7.70388
200943	2086	867010	63324	7.30372	7.53689
200944	2095	858688	54074	6.29728	6.67962
200945	2072	814206	40599	4.98633	5.25732
200946	2044	805293	31214	3.87610	4.13686
200947	2011	615357	21468	3.48871	3.59048
200948	1904	749556	20437	2.72655	2.76210
200949	1703	668205	16854	2.52228	2.51899
200950	1152	473128	11140	2.35454	2.30969

**U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)
2008-2009 Influenza Season
Thursday, December 24, 2009
Summary by Region**

HHS Region 1 (CT, ME, MA, NH, RI, CT) Baseline: 1.2%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	96	64093	257	0.40098	0.62755
200936	96	53552	265	0.49485	0.83766
200937	99	73590	478	0.64954	1.04911
200938	101	76099	622	0.81736	1.06889
200939	102	73743	614	0.83262	1.16454
200940	132	39802	664	1.66826	1.66345
200941	143	37682	926	2.45741	2.55337
200942	144	40854	1879	4.59930	4.58576
200943	146	44421	3217	7.24207	6.33249
200944	149	46966	4682	9.96891	9.85346
200945	145	43817	3355	7.65685	7.67232
200946	151	44905	2602	5.79445	5.96608
200947	146	26887	854	3.17626	2.92205
200948	142	38101	747	1.96058	2.05067
200949	134	35809	536	1.49683	1.39597
200950	89	24050	257	1.06861	0.92812

HHS Region 2 (NY, NJ, USVI) Baseline: 2.3%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	53	89896	1426	1.58628	2.68987
200936	59	91248	1775	1.94525	4.10787
200937	56	95006	1828	1.92409	3.25281
200938	56	100622	2133	2.11981	2.91961
200939	58	94551	1904	2.01373	2.49142
200940	162	117235	2406	2.05229	2.17497
200941	173	109705	2738	2.49578	3.28455
200942	192	124938	4754	3.80509	5.72977
200943	196	127873	6251	4.88844	7.95246
200944	200	125812	6195	4.92401	8.12500
200945	200	128084	5948	4.64383	6.37359
200946	191	125516	4912	3.91345	4.71871
200947	190	106123	4240	3.99536	4.09800
200948	179	117520	3744	3.18584	2.87313
200949	117	102018	3163	3.10043	3.07671
200950	76	92269	2835	3.07254	2.48863

**U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)
2008-2009 Influenza Season
Thursday, December 24, 2009
Summary by Region**

HHS Region 3 (DE, DC, MD, PA, VA, WV) Baseline: 3.0%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	169	82952	1318	1.5889	1.7003
200936	176	90900	2156	2.3718	2.9572
200937	177	101841	2959	2.9055	3.5789
200938	169	94745	3346	3.5316	3.9968
200939	171	87751	3576	4.0752	4.0408
200940	209	109427	6460	5.9035	6.1341
200941	227	126545	9291	7.3421	6.9836
200942	241	131411	15918	12.1131	10.2879
200943	244	132860	16463	12.3912	10.5986
200944	247	123076	11422	9.2804	8.5853
200945	244	115196	7432	6.4516	5.7927
200946	246	114813	4817	4.1955	3.9395
200947	241	84690	2865	3.3829	3.1746
200948	227	97239	2576	2.6491	2.3808
200949	218	95851	2385	2.4882	2.1694
200950	163	78252	2122	2.7118	2.5578

HHS Region 4 (AL, FL, GA, KY, MS, NC, SC, TN) Baseline: 2.0%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	344	130948	9723	7.42508	6.59527
200936	341	127745	9621	7.53141	6.76886
200937	356	151133	9874	6.53332	6.40100
200938	333	136135	8403	6.17255	5.88956
200939	346	135882	8377	6.16491	6.25994
200940	444	168895	10700	6.33530	6.19055
200941	439	175726	9755	5.55126	5.32883
200942	441	175047	9081	5.18775	4.87784
200943	450	177119	9321	5.26256	4.97101
200944	436	173335	7789	4.49361	4.35037
200945	429	164395	6344	3.85900	3.66890
200946	432	165046	5553	3.36452	3.22185
200947	423	124754	4244	3.40189	3.04138
200948	395	153483	4391	2.86090	2.71495
200949	355	134205	3340	2.48873	2.38887
200950	284	106270	2948	2.77407	2.36780

**U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)
2008-2009 Influenza Season
Thursday, December 24, 2009
Summary by Region**

HHS Region 5 (IL, IN, MI, MN, OH, WI) Baseline: 1.7%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	202	82442	1583	1.92014	1.80771
200936	211	84386	2150	2.54782	2.40345
200937	210	93464	2307	2.46833	2.36861
200938	209	91887	2279	2.48022	2.27272
200939	200	90291	2519	2.78987	2.44207
200940	281	110457	4971	4.50039	4.12309
200941	277	109903	6792	6.18000	5.77288
200942	283	119467	11112	9.30131	9.07343
200943	289	119465	10823	9.05956	8.83926
200944	289	113816	8687	7.63249	7.46616
200945	292	108915	6261	5.74852	5.44417
200946	280	103891	3982	3.83286	3.65378
200947	272	75727	2250	2.97120	2.70841
200948	243	90786	1720	1.89457	1.81029
200949	218	78409	1551	1.97809	1.84425
200950	161	55616	732	1.31617	1.28065

HHS Region 6 (AR, LA, NM, OK, TX) Baseline: 4.6%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	143	51585	3982	7.7193	4.7238
200936	135	49049	3365	6.8605	5.5030
200937	142	57754	5142	8.9033	7.2944
200938	132	41479	3445	8.3054	7.6043
200939	136	54235	5353	9.8700	9.4622
200940	208	76388	9123	11.9430	12.8330
200941	212	68266	9039	13.2409	13.4639
200942	204	71092	7782	10.9464	11.3784
200943	203	66815	5841	8.7420	9.2947
200944	217	83796	5627	6.7151	6.7852
200945	205	67978	4183	6.1535	6.5182
200946	199	62588	3517	5.6193	5.9570
200947	205	58894	2725	4.6270	4.4444
200948	196	72316	2911	4.0254	3.8707
200949	187	68616	2574	3.7513	3.4982
200950	100	23118	793	3.4302	3.6874

**U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)
2008-2009 Influenza Season
Thursday, December 24, 2009
Summary by Region**

HHS Region 7 (IA, KS, MO, NE) Baseline: 1.8%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	55	13610	516	3.7913	4.1403
200936	60	15278	610	3.9927	4.4792
200937	56	13911	652	4.6869	5.1207
200938	60	17778	933	5.2481	4.9454
200939	61	19431	1002	5.1567	4.7287
200940	125	35311	2612	7.3971	7.1511
200941	125	36084	3891	10.7832	10.7531
200942	128	37993	4394	11.5653	11.6813
200943	129	36416	3082	8.4633	8.5830
200944	127	34913	2442	6.9945	7.3013
200945	122	33336	1662	4.9856	5.2475
200946	123	31895	952	2.9848	2.9754
200947	124	25225	664	2.6323	2.8290
200948	118	32183	711	2.2092	2.6061
200949	111	26456	458	1.7312	2.0048
200950	72	14974	214	1.4291	1.3435

HHS Region 8 (CO, MT, ND, SD, UT, WY) Baseline: 1.3%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	73	37704	320	0.84872	0.69158
200936	70	34102	522	1.53070	1.38416
200937	70	37783	779	2.06177	1.89509
200938	70	37425	922	2.46359	2.23432
200939	70	39445	1570	3.98023	3.88557
200940	103	53883	3513	6.51968	6.19607
200941	110	54263	5103	9.40420	8.52994
200942	113	55667	4514	8.10893	8.10621
200943	107	46343	2451	5.28882	5.27494
200944	105	49110	2175	4.42883	4.28813
200945	103	48748	1240	2.54369	2.52870
200946	100	47505	993	2.09031	2.12957
200947	103	37459	642	1.71387	1.69369
200948	101	46270	624	1.34861	1.30679
200949	92	40287	456	1.13188	1.08502
200950	72	32716	220	0.67245	0.71975

**U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)
2008-2009 Influenza Season
Thursday, December 24, 2009
Summary by Region**

HHS Region 9 (AZ, CA, HI, NV) Baseline: 2.8%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	187	50225	1397	2.78148	2.91781
200936	186	48339	1497	3.09688	3.37123
200937	182	54904	1743	3.17463	3.60835
200938	156	49087	1810	3.68733	3.35156
200939	158	50606	2332	4.60815	4.96627
200940	240	87172	4395	5.04176	6.03896
200941	260	87946	5551	6.31183	7.32342
200942	259	96816	4389	4.53334	5.95535
200943	257	98672	4632	4.69434	6.51237
200944	263	91722	4245	4.62812	6.44140
200945	266	87134	3527	4.04779	5.28943
200946	263	93588	3436	3.67141	4.70839
200947	251	66176	2768	4.18279	5.71312
200948	249	87508	2745	3.13686	4.04692
200949	223	76027	2215	2.91344	3.64303
200950	113	42431	914	2.15409	2.87720

HHS Region 10 (AK, ID, OR, WA) Baseline: 3.3%

CDC Week	Number Reporting	Patient Visits	Total ILI	%Unweighted ILI	%Weighted ILI
200935	38	8562	381	4.44989	4.53417
200936	42	7903	440	5.56751	4.17263
200937	42	9845	408	4.14424	3.56886
200938	39	9095	507	5.57449	4.70946
200939	43	10059	779	7.74431	6.86862
200940	64	18433	1561	8.46851	7.41628
200941	66	17880	1718	9.60850	9.22531
200942	65	17961	1559	8.67992	8.57669
200943	65	17026	1243	7.30060	7.16465
200944	62	16142	810	5.01797	5.19509
200945	66	16603	647	3.89689	4.01621
200946	59	15546	450	2.89464	2.95378
200947	56	9422	216	2.29251	2.34079
200948	54	14150	268	1.89399	1.63349
200949	48	10527	176	1.67189	1.39328
200950	22	3432	105	3.05944	3.02953

WEEKLY INFLUENZA ACTIVITY ESTIMATE
 REPORTED BY STATE AND TERRITORIAL HEALTH DEPARTMENTS
 UNITED STATES INFLUENZA SURVEILLANCE SEASON 2008-09

UPDATE - Week 50 (December 13-19, 2009)

REPORTING AREA	WEEK 46	WEEK 47	WEEK 48	WEEK 49	WEEK 50
REGION 1					
MAINE	WIDESPR	WIDESPR	WIDESPR	WIDESPR	WIDESPR
N.H.	WIDESPR	WIDESPR	WIDESPR	WIDESPR	REGIONAL
VERMONT	WIDESPR	WIDESPR	WIDESPR	REGIONAL	REGIONAL
MASS.	WIDESPR	WIDESPR	REGIONAL	LOCAL	LOCAL
R.I.	WIDESPR	WIDESPR	WIDESPR	REGIONAL	REGIONAL
CONN.	WIDESPR	WIDESPR	WIDESPR	REGIONAL	REGIONAL
REGION 2					
NEW YORK	WIDESPR	WIDESPR	WIDESPR	WIDESPR	REGIONAL
NEW JERSEY	WIDESPR	WIDESPR	WIDESPR	WIDESPR	WIDESPR
PUERTO RICO	REGIONAL	LOCAL	REGIONAL	LOCAL	LOCAL
VIRGIN IS.	SPORADIC	SPORADIC	SPORADIC	SPORADIC	SPORADIC
REGION 3					
PENN.	WIDESPR	WIDESPR	REGIONAL	LOCAL	LOCAL
DELAWARE	WIDESPR	WIDESPR	WIDESPR	WIDESPR	WIDESPR
MARYLAND	WIDESPR	WIDESPR	LOCAL	LOCAL	LOCAL
D.C.	LOCAL	LOCAL	LOCAL	LOCAL	LOCAL
VIRGINIA	WIDESPR	WIDESPR	WIDESPR	WIDESPR	WIDESPR
W. VIRGINIA	WIDESPR	LOCAL	REGIONAL	REGIONAL	REGIONAL
REGION 4					
N. CAROLINA	WIDESPR	WIDESPR	REGIONAL	REGIONAL	LOCAL
S. CAROLINA	REGIONAL	REGIONAL	REGIONAL	REGIONAL	LOCAL
GEORGIA	REGIONAL	REGIONAL	REGIONAL	REGIONAL	REGIONAL
FLORIDA	WIDESPR	WIDESPR	REGIONAL	REGIONAL	REGIONAL
KENTUCKY	WIDESPR	WIDESPR	WIDESPR	WIDESPR	REGIONAL
TENNESSEE	WIDESPR	REGIONAL	REGIONAL	REGIONAL	REGIONAL
ALABAMA	WIDESPR	WIDESPR	WIDESPR	WIDESPR	WIDESPR
MISSISSIPPI	REGIONAL	REGIONAL	LOCAL	LOCAL	LOCAL
REGION 5					
OHIO	WIDESPR	WIDESPR	REGIONAL	REGIONAL	SPORADIC
INDIANA	WIDESPR	WIDESPR	REGIONAL	REGIONAL	REGIONAL
ILLINOIS	WIDESPR	REGIONAL	REGIONAL	REGIONAL	LOCAL
MICHIGAN	WIDESPR	WIDESPR	REGIONAL	LOCAL	LOCAL
WISCONSIN	REGIONAL	LOCAL	LOCAL	LOCAL	SPORADIC
MINNESOTA	REGIONAL	LOCAL	LOCAL	LOCAL	SPORADIC
REGION 6					
ARKANSAS	REGIONAL	REGIONAL	REGIONAL	LOCAL	SPORADIC
LOUISIANA	REGIONAL	REGIONAL	REGIONAL	REGIONAL	REGIONAL
OKLAHOMA	WIDESPR	REGIONAL	REGIONAL	LOCAL	LOCAL
TEXAS	REGIONAL	REGIONAL	REGIONAL	REGIONAL	LOCAL
NEW MEXICO	WIDESPR	WIDESPR	REGIONAL	REGIONAL	REGIONAL

REGION 7					
IOWA	REGIONAL	LOCAL	LOCAL	SPORADIC	SPORADIC
MISSOURI	REGIONAL	REGIONAL	REGIONAL	REGIONAL	REGIONAL
NEBRASKA	REGIONAL	LOCAL	SPORADIC	SPORADIC	NONE
KANSAS	WIDESPR	REGIONAL	LOCAL	SPORADIC	SPORADIC
REGION 8					
NORTH DAKOTA	REGIONAL	REGIONAL	LOCAL	SPORADIC	SPORADIC
SOUTH DAKOTA	REGIONAL	LOCAL	SPORADIC	SPORADIC	SPORADIC
MONTANA	REGIONAL	REGIONAL	REGIONAL	LOCAL	LOCAL
WYOMING	LOCAL	SPORADIC	SPORADIC	SPORADIC	SPORADIC
COLORADO	REGIONAL	SPORADIC	SPORADIC	SPORADIC	SPORADIC
UTAH	WIDESPR	WIDESPR	REGIONAL	REGIONAL	REGIONAL
REGION 9					
ARIZONA	WIDESPR	WIDESPR	WIDESPR	REGIONAL	REGIONAL
NEVADA	WIDESPR	WIDESPR	REGIONAL	WIDESPR	WIDESPR
CALIFORNIA	WIDESPR	WIDESPR	WIDESPR	WIDESPR	WIDESPR
HAWAII	REGIONAL	REGIONAL	REGIONAL	REGIONAL	REGIONAL
GUAM	SPORADIC	SPORADIC	SPORADIC	NONE	NONE
REGION 10					
IDAHO	WIDESPR	REGIONAL	REGIONAL	SPORADIC	SPORADIC
WASHINGTON	REGIONAL	REGIONAL	REGIONAL	LOCAL	LOCAL
OREGON	WIDESPR	REGIONAL	REGIONAL	REGIONAL	LOCAL
ALASKA	WIDESPR	WIDESPR	WIDESPR	WIDESPR	REGIONAL

Activity Level	ILI activity*/Outbreaks		Laboratory data
No activity	Low	And	No lab confirmed cases [†]
Sporadic	Not increased	And	Isolated lab-confirmed cases
	OR		
Local	Not increased	And	Lab confirmed outbreak in one institution [‡]
	OR		
Regional (doesn't apply to states with ≤4 regions)	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		
Regional (doesn't apply to states with ≤4 regions)	2 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 outbreaks; virus activity is no greater than sporadic in other regions
	OR		
Regional (doesn't apply to states with ≤4 regions)	Increased ILI in ≥2 but less than half of the regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions
	OR		
Regional (doesn't apply to states with ≤4 regions)	Institutional outbreaks (ILI or lab confirmed) in ≥2 and less than half of the regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions
	OR		
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.

* ILI activity can be assessed using a variety of data sources including ILINet providers, school/workplace absenteeism, and other syndromic surveillance systems that monitor influenza-like illness.

[†] Lab confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR.

[‡] Institution includes nursing home, hospital, prison, school, etc.

**Region: population under surveillance in a defined geographical subdivision of a state.