

2007-2008 Influenza Season
Week 48, ending December 1, 2007

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

Synopsis: During week 48 (November 25-December 1, 2007), a low level of influenza activity was reported in the United States.

- Eighty-five (3.4%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories were positive for influenza.
- The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold.
- The proportion of outpatient visits for influenza-like illness (ILI) and acute respiratory illness (ARI) was below national and region-specific baseline levels.
- Four states reported local influenza activity; 33 states and the District of Columbia reported sporadic influenza activity; and 13 states reported no influenza activity.

National and Regional Summary of Select Surveillance Components

	Data for current week				Data cumulative for the season				
	Sentinel Provider ILI*	DoD and VA ARI*	% pos. for flu†	# jurisdictions reporting regional or widespread activity‡	A (H1)	A (H3)	A Unsub-typed	B	Pediatric Deaths
Nation	Normal	Normal	3.4%	0 of 51	112	23	380	44	1
New England	Normal	Normal	0.4%	0 of 6	4	0	3	2	0
Mid-Atlantic	Normal	Normal	0.4%	0 of 3	1	0	6	1	0
East North Central	Normal	Normal	2.5%	0 of 5	1	1	4	2	0
West North Central	Normal	Normal	0.6%	0 of 7	2	1	10	2	0
South Atlantic	Normal	Normal	4.1%	0 of 9	2	7	134	17	0
East South Central	Normal	Normal	0.0%	0 of 4	1	1	0	0	0
West South Central	Normal	Normal	5.7%	0 of 4	3	11	176	6	1
Mountain	Normal	Normal	9.7%	0 of 8	68	0	11	10	0
Pacific	Normal	Normal	1.8%	0 of 5	30	2	36	4	0

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

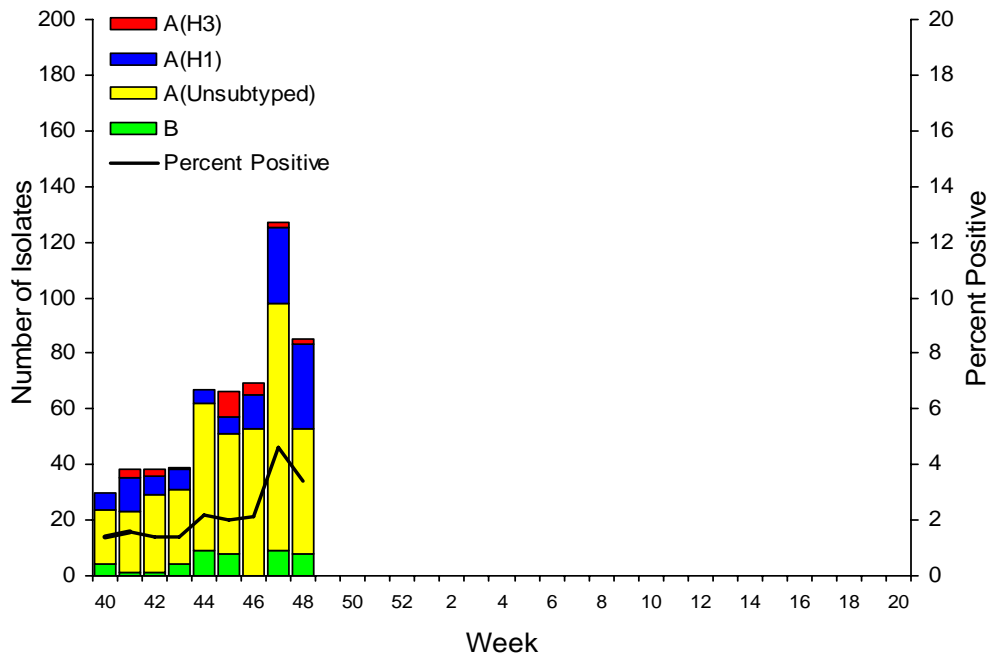
† National data are for current week; regional data are for the most recent 3 weeks.

‡ Includes all 50 states and the District of Columbia

Laboratory Surveillance: During week 48, WHO and NREVSS laboratories reported 2,504 specimens tested for influenza viruses, 85 (3.4%) of which were positive, including 30 influenza A (H1) viruses, two influenza A (H3) viruses, 45 influenza A viruses that were not subtyped, and eight influenza B viruses. The District of Columbia and 32 states from all nine surveillance regions have reported laboratory-confirmed influenza this season.

Since September 30, 2007, WHO and NREVSS laboratories have tested a total of 24,897 specimens for influenza viruses and 559 (2.2%) were positive. Among the 559 influenza viruses, 515 (92.1%) were influenza A viruses and 44 (7.9%) were influenza B viruses. One hundred thirty-five (26.2%) of the 515 influenza A viruses have been subtyped: 112 (83.0%) were influenza A (H1) viruses and 23 (17.0%) were influenza A (H3) viruses.

U.S. WHO/NREVSS Collaborating Laboratories National Summary, 2007-08



Antigenic Characterization: CDC has antigenically characterized 27 influenza viruses [19 influenza A (H1), five influenza A (H3), and three influenza B viruses] collected by U.S. laboratories since September 30, 2007.

Influenza A (H1) [19]

- All 19 viruses were characterized as A/Solomon Islands/3/2006, the influenza A (H1) component of the 2007-08 influenza vaccine for the Northern Hemisphere and the 2008 influenza A (H1) component for the Southern Hemisphere. A/Solomon Islands/3/2006 is a recent minor antigenic variant of A/New Caledonia/20/99.

Influenza A (H3) [5]

- Two viruses were characterized as A/Wisconsin/67/2005-like, the influenza A (H3) component of the 2007-08 influenza vaccine

- Three viruses were characterized as A/Brisbane/10/2007-like. A/Brisbane/10/2007 is a recent antigenic variant which evolved from A/Wisconsin/67/2005-like. A/Brisbane/10/2007-like virus is the recommended influenza A (H3) component for the 2008 Southern Hemisphere vaccine.

Influenza B (B/Victoria/02/87 and B/Yamagata/16/88 lineages) [3]

Victoria lineage [0]

- The recommended influenza B component for the 2007-08 influenza vaccine is a B/Malaysia/2506/2004-like virus, belonging to the B/Victoria lineage.

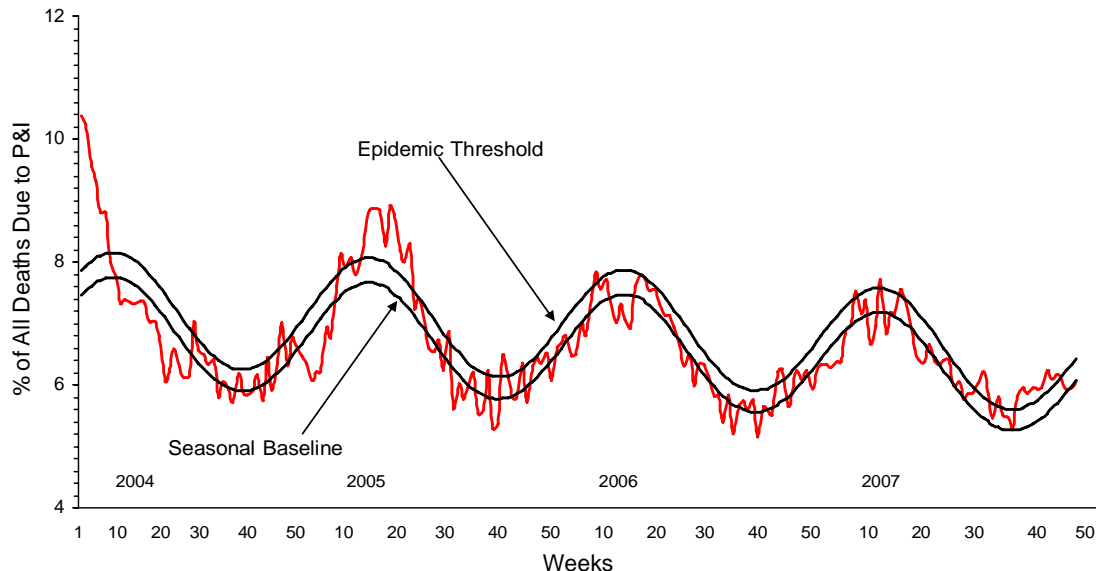
Yamagata lineage [3]

- All three viruses were identified as belonging to the B/Yamagata lineage.

It is too early in the influenza season to determine which influenza viruses will predominate or how well the vaccine and circulating strains will match.

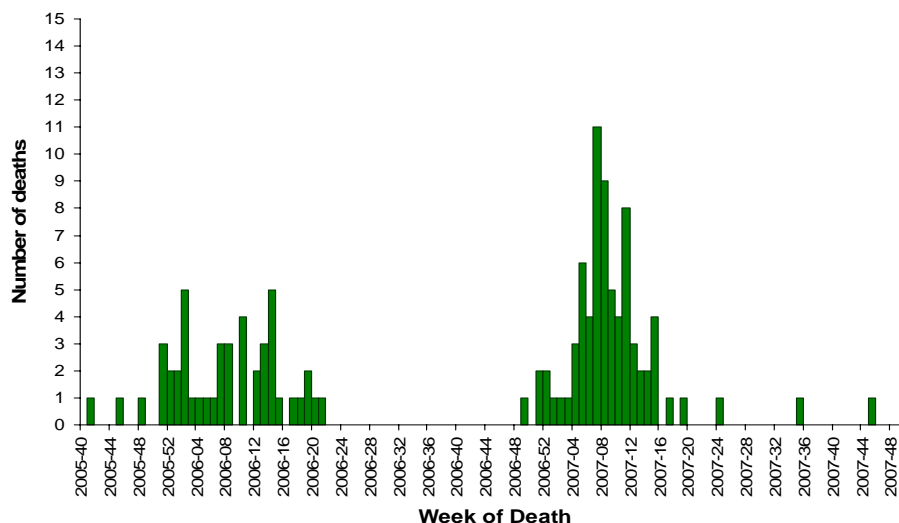
Pneumonia and Influenza (P&I) Mortality Surveillance: During week 48, 6.1% of all deaths reported through the 122-Cities Mortality Reporting System were reported as due to P&I. This percentage is below the epidemic threshold of 6.4% for week 48.

Pneumonia and Influenza Mortality for 122 U.S. Cities Week Ending 12/01/2007



Influenza-Associated Pediatric Mortality: One influenza-associated pediatric death was reported from Texas during week 48. This was the first reported influenza-associated pediatric death during the current season.

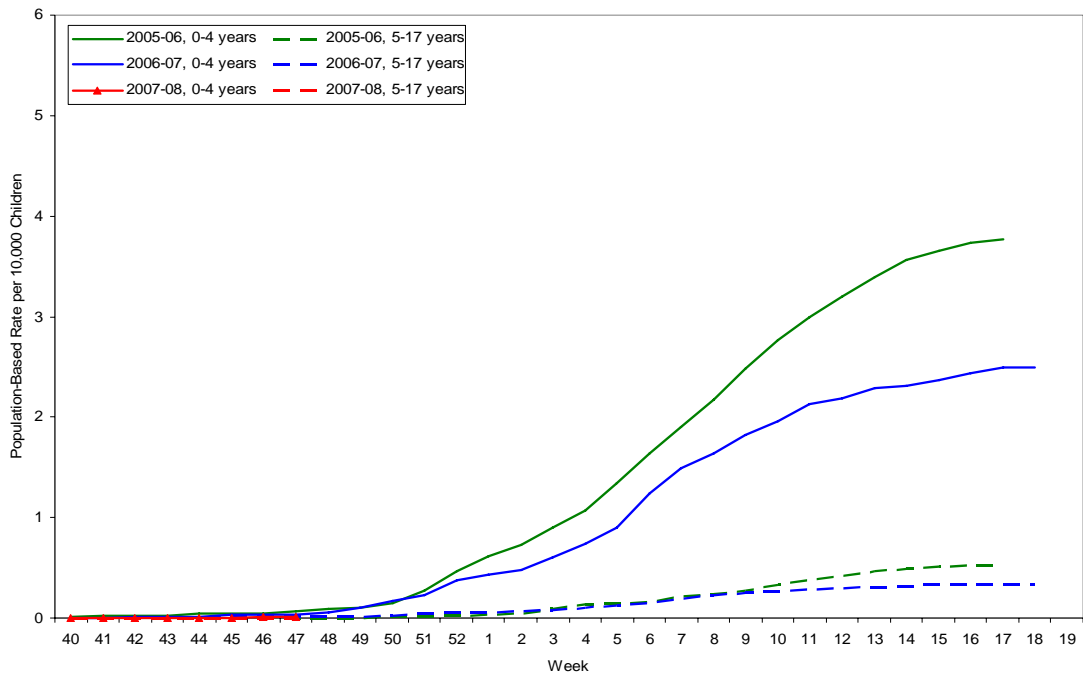
**Number of Influenza-Associated Pediatric Deaths
by Week of Death:
2005-06 season to present**



Influenza-Associated Pediatric Hospitalizations: Laboratory-confirmed influenza-associated pediatric hospitalizations are monitored in two population-based surveillance networks: the Emerging Infections Program (EIP) and the New Vaccine Surveillance Network (NVSN). No influenza-associated pediatric hospitalizations have been reported from the NVSN.

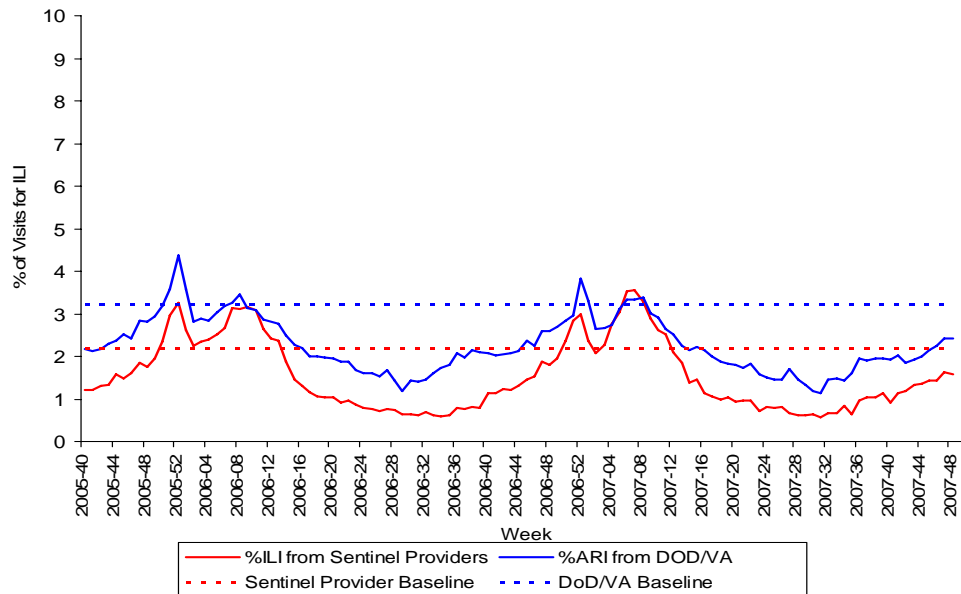
During September 30–November 24, 2007, the preliminary laboratory-confirmed influenza-associated hospitalization rate reported by the EIP for children 0–17 years old was 0.006 per 10,000. For children aged 0–4 years and 5–17 years, the rate was 0.01 per 10,000 and 0.003 per 10,000, respectively.

EIP Influenza Laboratory-Confirmed Cumulative Hospitalization Rates for Children Aged 0-4 and 5-17 yrs, 2007-08 and Previous 2 Seasons

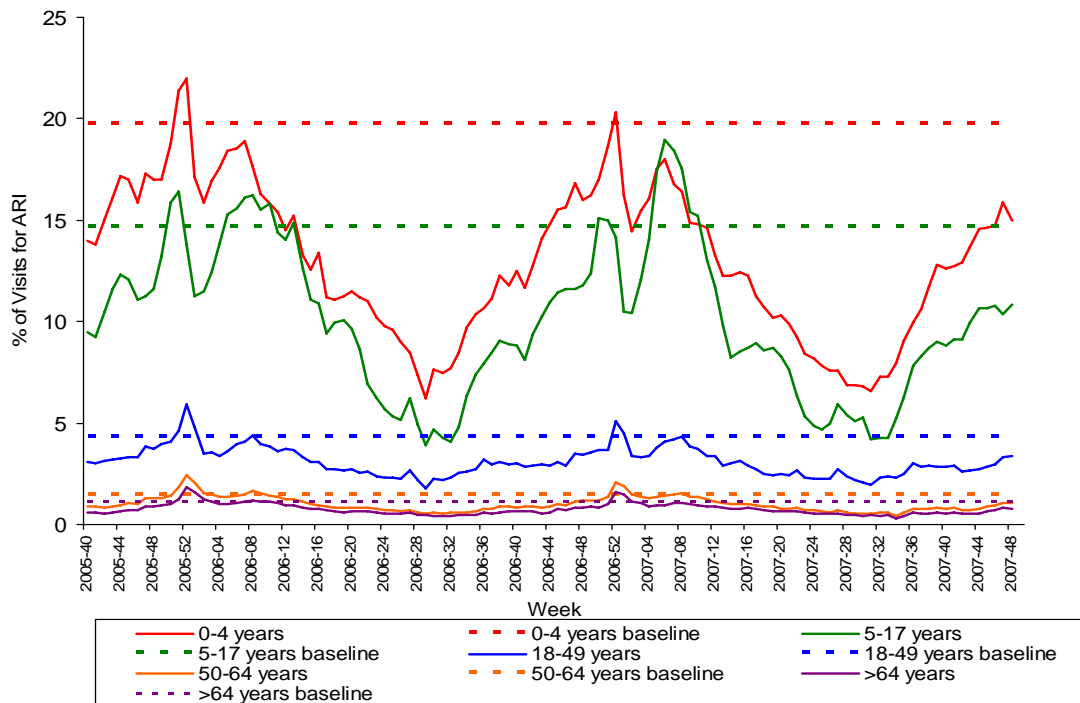


Outpatient Illness Surveillance: Nationwide during week 48, 1.6% of patient visits reported through the U.S. Influenza Sentinel Provider Surveillance Network were due to influenza-like illness (ILI) and 2.4% of patient visits to Department of Veteran’s Affairs (VA) and Department of Defense (DoD) outpatient treatment facilities were for acute respiratory illness (ARI). These percentages are less than the national baselines of 2.2% and 3.2%, respectively. On a regional level, the percentage of visits for ILI ranged from 0.8% to 4.1% and the percentage of visits for ARI ranged from 1.2% to 2.9%. All nine regions reported percentages of visits for ILI and ARI below their respective region-specific baselines. All five age groups reported percentages of visits for ARI below their respective age-specific baselines.

Percentage of Visits for ILI & ARI Reported by Sentinel Providers and BioSense Outpatient Facilities, National Summary

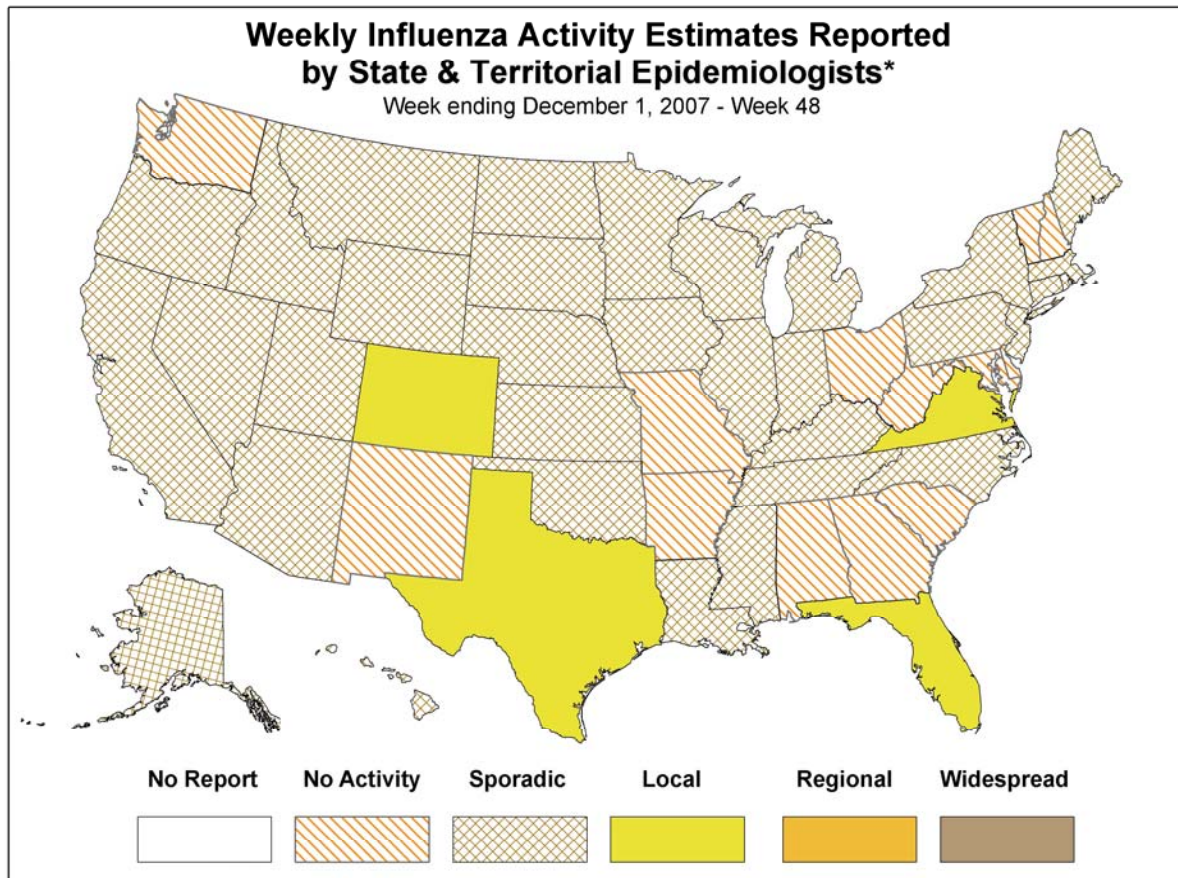


Percentage of Visits for ARI by Age Group Reported by DoD/VA Outpatient Clinics - National Summary



Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:

Influenza activity was reported as local in four states (Colorado, Florida, Texas, and Virginia) and as sporadic in the District of Columbia and 33 states (Alaska, Arizona, California, Connecticut, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Jersey, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Wisconsin, and Wyoming). Thirteen states 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 7, 2007.