

2009 CDC Week 45 (11/8–11/14)

Please note that all data are preliminary and may change as more reports are received.

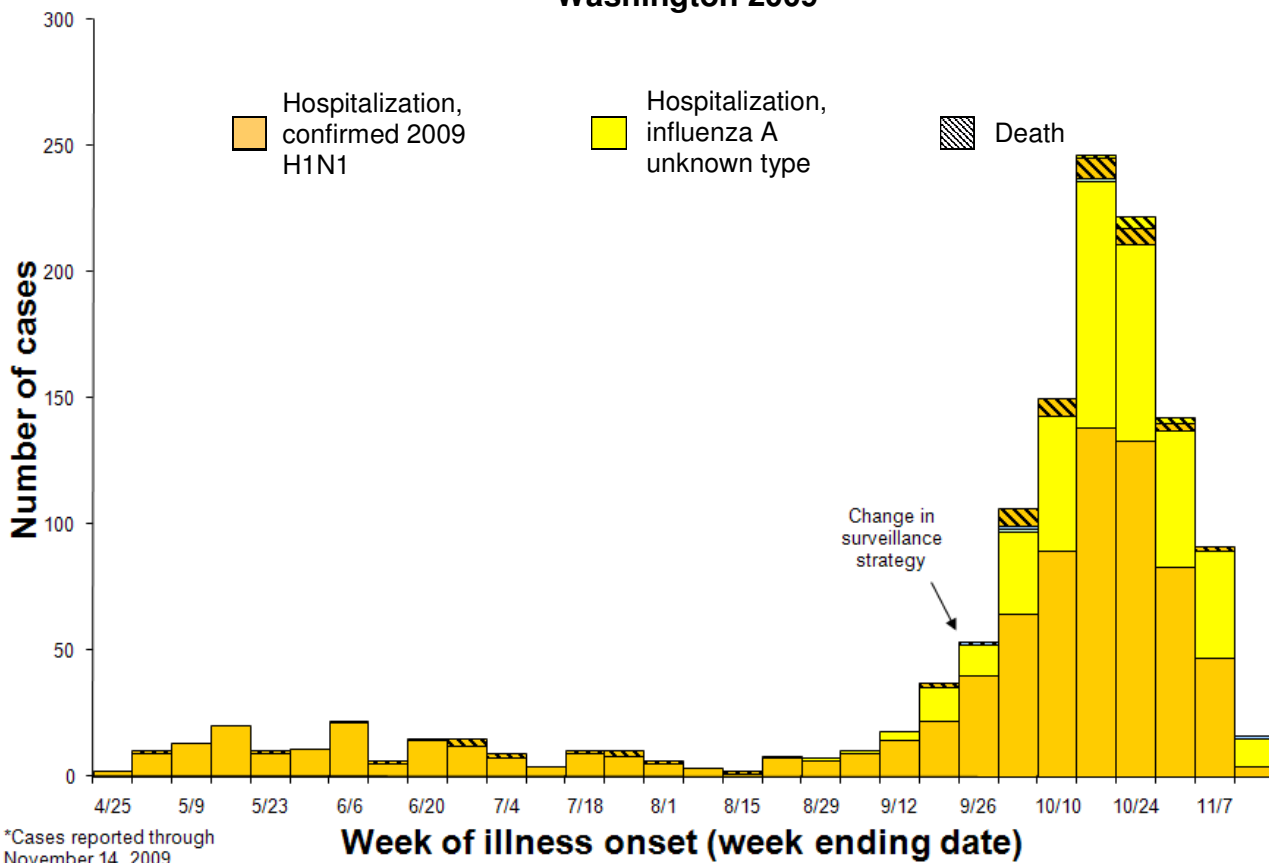
Summary:

- During September 19–November 14, the Department of Health (DOH) received reports of 1041 hospitalized and 44 fatal cases of laboratory-confirmed influenza.
- During November 8–14 (week 45), 16 fatal and 123 hospitalized laboratory-confirmed influenza cases were reported to DOH. Of these 139 hospitalized and fatal cases, 20 reside east and 119 reside west of the Cascade Mountains.
- Almost all circulating influenza viruses in Washington are 2009 H1N1 viruses.
- Overall, influenza activity remains elevated in Washington. Influenza activity is decreasing on both sides of the Cascade Mountains.
- The geographic distribution of influenza activity is widespread which means influenza activity is elevated in over half of the regions in Washington.

Laboratory-confirmed Influenza Hospitalizations and Deaths

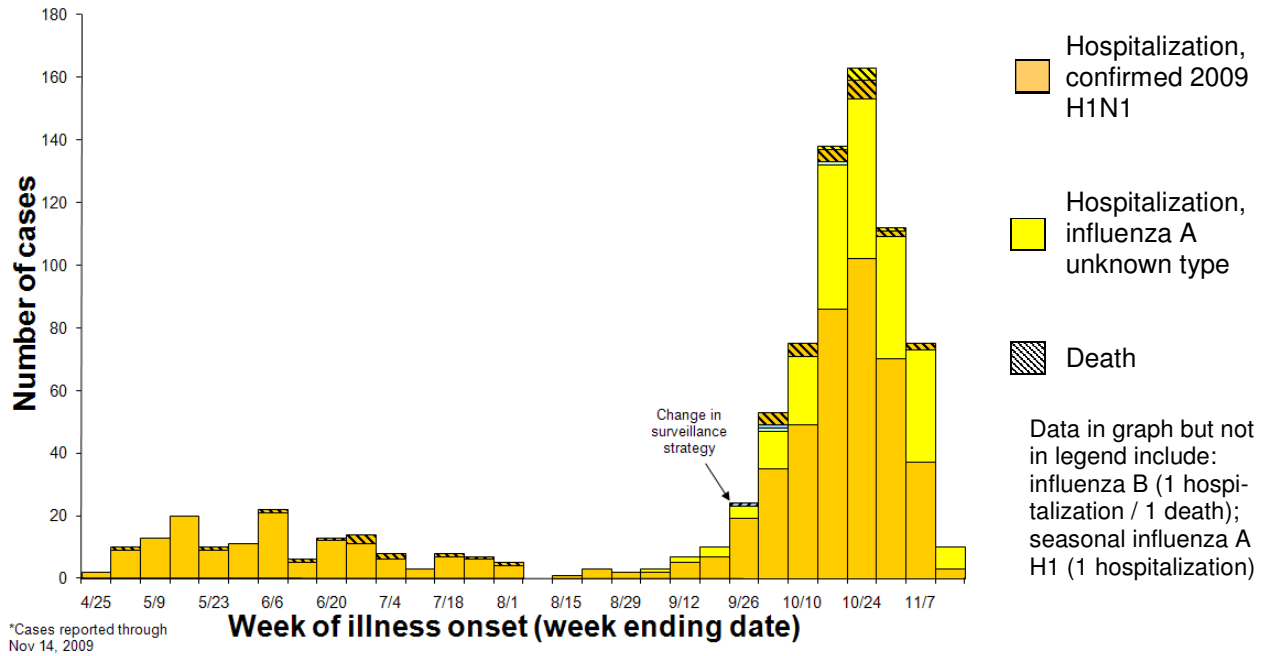
On September 18, 2009, the Department of Health (DOH) adopted an emergency rule requiring healthcare providers and hospitals to report hospitalized and deceased persons with any type of influenza to their local health jurisdictions. From September 19–November 14, 2009, DOH received reports of 1041 hospitalized and 44 deceased patients with laboratory-confirmed influenza. Influenza hospitalizations and deaths are plotted by week of onset and influenza subtype in the graph below. The tables that follow provide additional information about the residence and age of hospitalized and deceased patients with lab-confirmed influenza.

Hospitalized and Fatal Laboratory-Confirmed Influenza Cases by Week of Illness Onset, Washington 2009

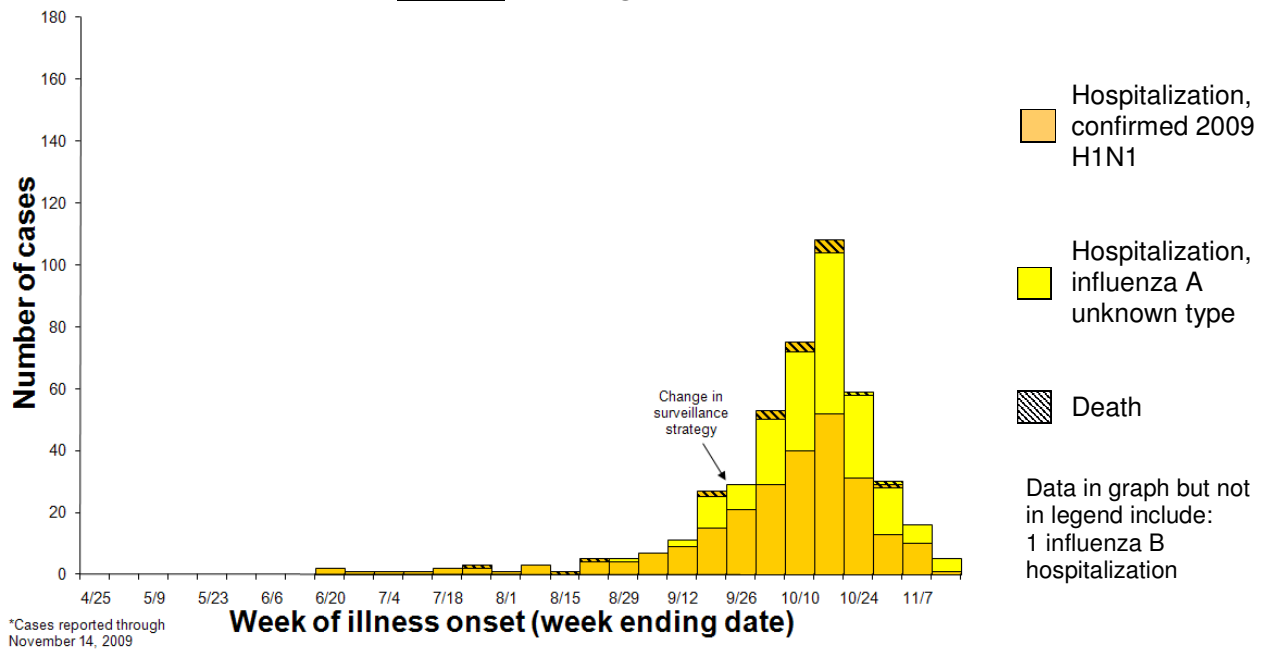


Data in graph but not in legend include: influenza B (2 hospitalizations and 1 death); seasonal influenza A H1 (1 hospitalization)

Hospitalized and Fatal Laboratory-Confirmed Influenza Cases by Week of Illness Onset, Western Washington, 2009



Hospitalized and Fatal Laboratory-Confirmed Influenza Cases by Week of Illness Onset, Eastern Washington, 2009



Hospitalized and Fatal Laboratory-Confirmed Influenza Cases by Reporting Week and Region of Residence, Washington 2009

Week of Reporting	# Hospitalizations	# Deaths	# Severe Cases from Western WA*	# Severe Cases from Eastern WA*
9/19/09–9/26/09	42	0	14	28
9/27/09–10/3/09	54	0	18	36
10/4/09–10/10/09	67	0	38	29
10/11/09–10/17/09	168	8	74	102
10/18/09–10/24/09	209	5	124	90
10/25/09–10/31/09	196	6	160	42
11/1/09–11/7/09	182	9	123	68
11/8/09–11/14/09	123	16	119	20
Total	1041	44	670	415

* Western Washington and eastern Washington are defined as residing west or east of the Cascade Mountains. Approximately, two thirds of Washington residents reside in western Washington.

Number and Rates of Hospitalized and Fatal Influenza A Cases by Age Group, Washington, September 19 – November 14, 2009

Age Group (years)	No. Hospitalizations*	Hospitalization Rate (per 100,000 population)	No. Deaths**	Death Rate (per 100,000 population)
0–4	192	43.5	3	0.7
5–24	286	15.7	1	0.1
25–49	269	11.5	15	0.6
50–64	193	15.0	16	1.2
65+	95	11.9	8	1.0
Total	1035	15.5	43	0.6

*Excluded 1 influenza case with unknown species, 3 influenza A cases with no age, and 2 influenza B cases

**Excluded 1 influenza B death

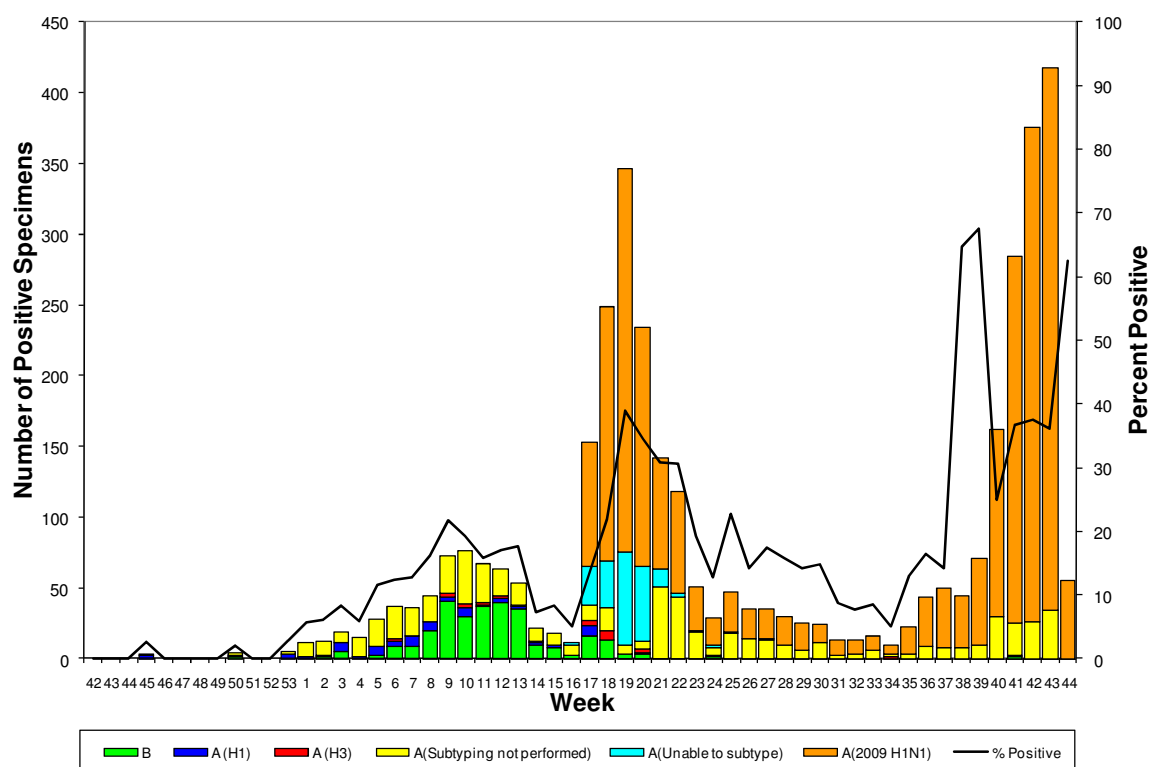
Laboratory Data

Three laboratories in Washington, the Washington State Public Health Laboratories, the Seattle & King County Public Health Laboratory and the University of Washington/Children’s Hospital Laboratory, participate in the World Health Organization/National Respiratory and Enteric Virus Surveillance System (WHO/NREVSS). WHO/NREVSS laboratory data from Washington for weeks 41–44 are shown in the following table and figure.

Washington Influenza Specimens — Weekly

Time Period	No. Labs Reporting	A(H1)	A (2009 H1N1)	A (H3)	A (Unable to subtype)	A (Subtyping not performed)	B	Total Influenza	Total # Tested	% Influenza Positive
Week 41	3	1	259	0	0	23	1	284	771	36.8
Week 42	3	0	350	0	0	26	0	376	1000	37.6
Week 43	3	0	384	0	0	34	0	418	1157	36.1
Week 44	1	0	55	0	0	0	0	55	88	62.5

WHO/NREVSS Laboratory Data, Washington, 2008–2009



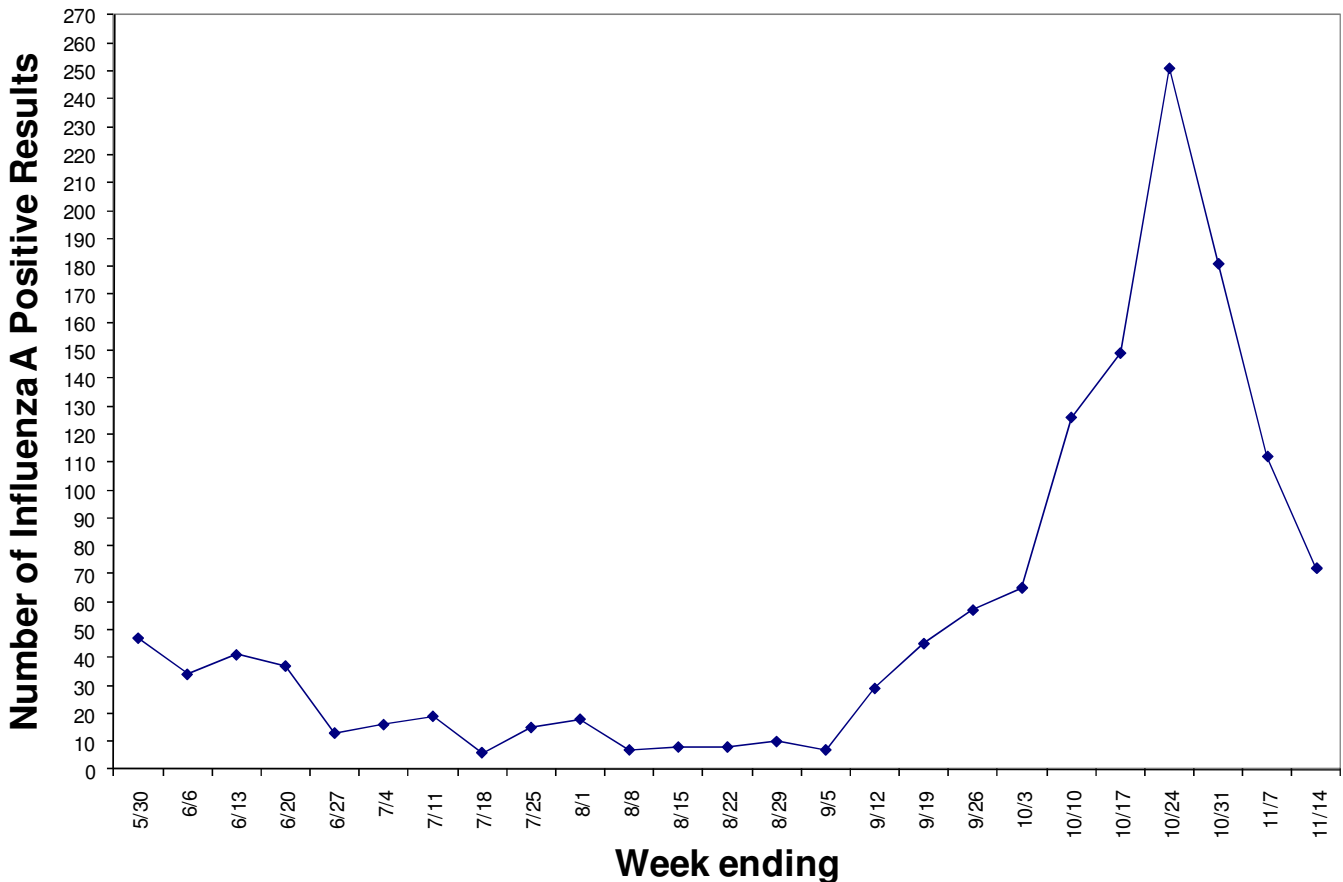
Of 1126 specimens tested at four HHS Region 10 WHO/NREVSS collaborating laboratories during CDC Week 44, 367 (32.6%) were positive for influenza A virus. These data are in the following table.

HHS Region 10 Influenza Specimens — Weekly

Time Period	No. Labs Reporting	A(H1)	A (2009 H1N1)	A (H3)	A (Unable to subtype)	A (Subtyping not performed)	B	Total Influenza	Total # Tested	% Influenza Positive
Week 40	5	0	242	0	0	30	1	273	884	30.9
Week 41	5	1	332	0	1	23	1	358	1040	34.4
Week 42	5	0	445	0	2	26	0	471	1300	36.4
Week 43	5	0	477	0	2	34	0	513	1420	36.1
Week 44	4	0	356	0	1	10	0	367	1126	32.6

Five commercial laboratories in Washington report the number of influenza A positive results obtained each week to the Department of Health. During CDC week 45, these five labs reported 72 positive influenza A specimens. Last week, these labs reported 112 positive influenza A specimens.

Positive Influenza A Specimens Reported by Five Commercial Labs, Washington, 2009



Influenza-like Illness Data

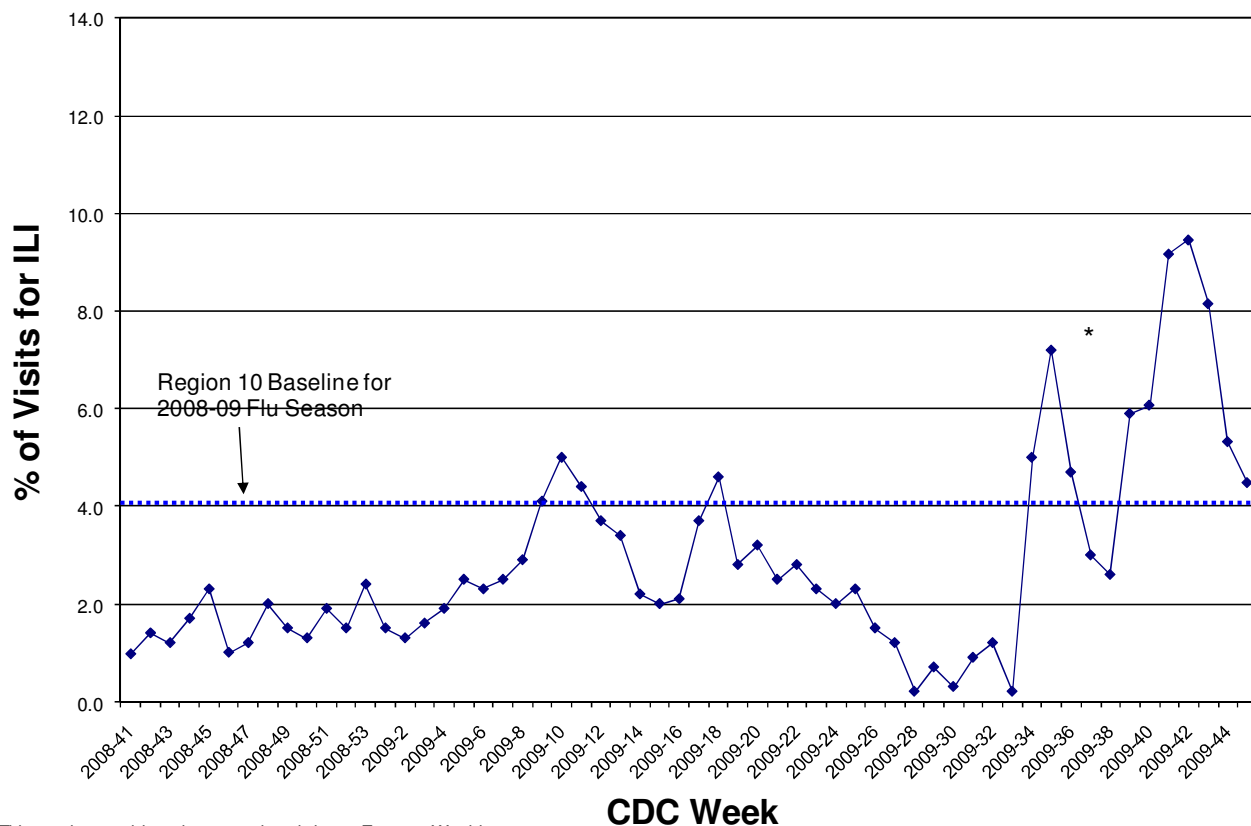
Outpatient Influenza-like Illness Surveillance Network (ILINet) Data

During CDC Week 45, 9 sentinel providers in Washington reported data to CDC. Of 1763 patient visits, 79 patients (4.5%) met the case definition for influenza-like illness (ILI; defined as fever $\geq 100^{\circ}\text{F}$ or 37.8°C [oral or equivalent] AND cough and/or sore throat [in the absence of a known cause other than influenza]). Most patients being seen for ILI during week 45 were under 25 years old.

Washington Sentinel Provider ILI Net Data

CDC Week	No. of Sentinel Providers	Age					Total ILI	Total Patients	% ILI
		0–4	5–24	25–49	50–64	Over 64			
43 (2009)	20	81	158	34	10	3	286	3510	8.15
44 (2009)	16	64	106	13	2	2	187	3513	5.32
45 (2009)	9	28	41	8	2	0	79	1763	4.48

Percentage of Patient Visits for Influenza-Like Illness (ILI) Reported by Sentinel Providers in Washington, 2008–2009



*This peak was driven by an outbreak in an Eastern Washington community.

For this reporting week, providers from the Health and Human Services (HHS) Region 10 (Alaska, Idaho, Oregon, and Washington) as a whole reported 3.9% of visits for ILI. (See table below.)

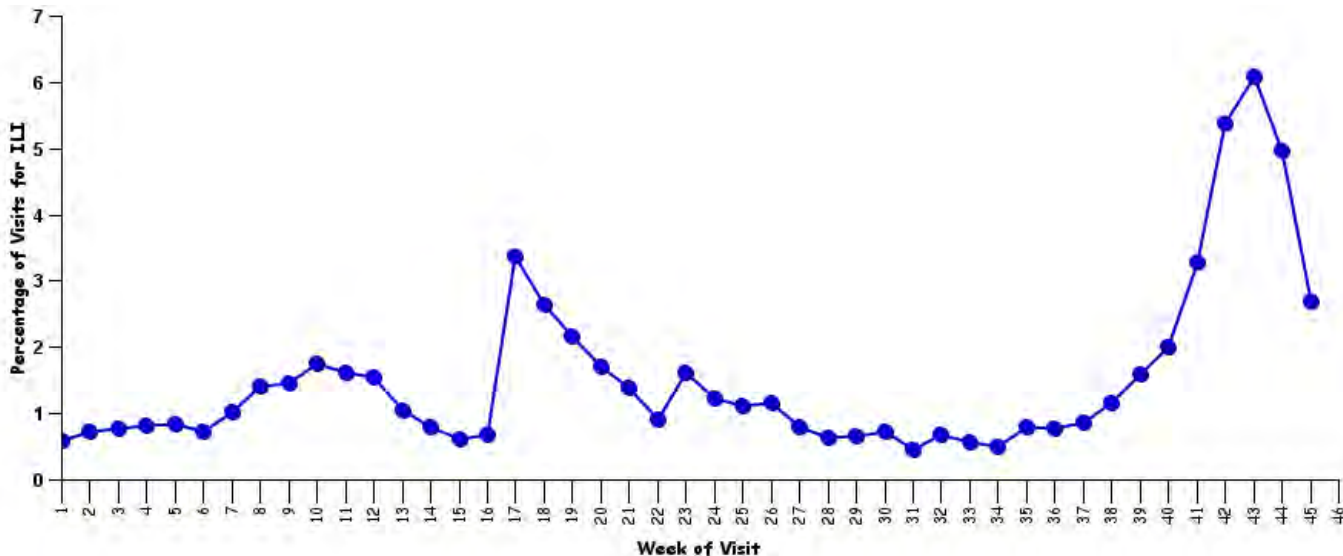
HHS Region 10 Sentinel Provider ILI Data

CDC Week	No. of Sentinel Providers	Age					Total ILI	Total Patients	% ILI
		0–4	5–24	25–49	50–64	Over 64			
43 (2009)	60	219	593	247	92	15	1166	14647	8.0
44 (2009)	53	120	299	125	45	12	601	13176	4.6
45 (2009)	29	40	135	46	18	3	242	6222	3.9

Syndromic Surveillance Data

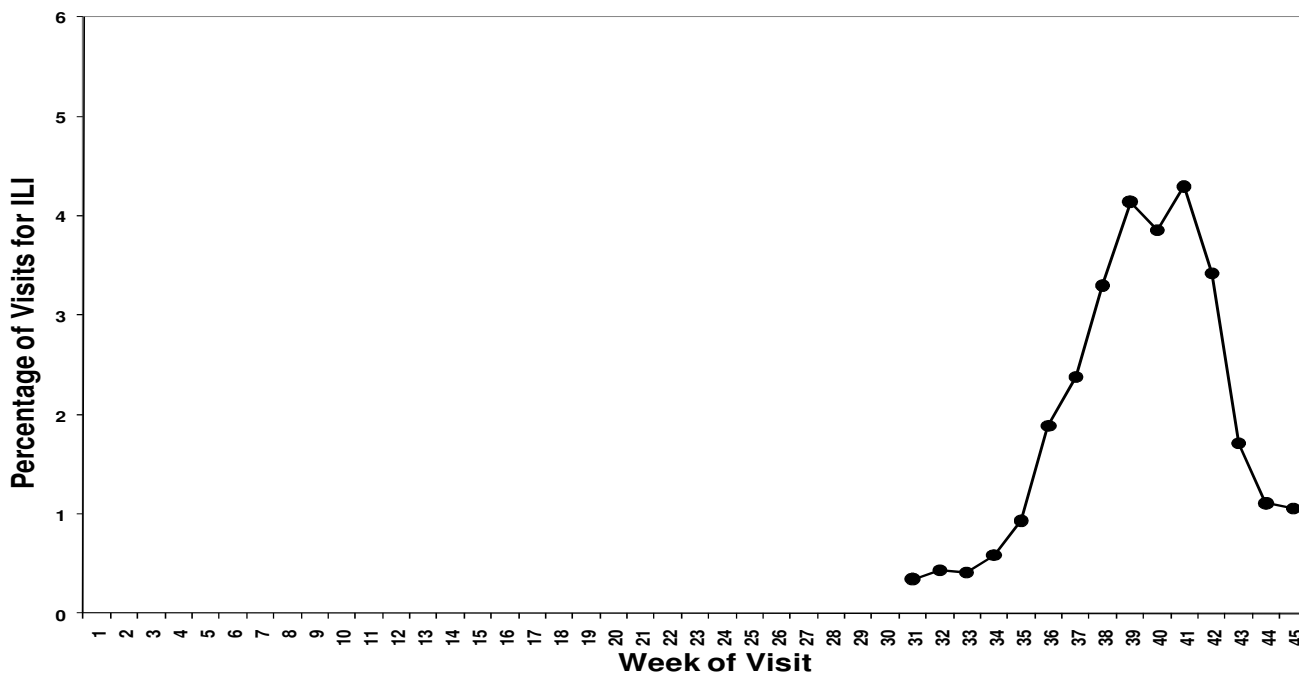
ESSENCE (Early Notification of Community-based Epidemics) WA: Currently, this syndromic surveillance system collects data from 10 emergency departments in western Washington. Previous graphs displayed data from 26 hospitals. The following graph shows the proportion of emergency department visits in 2009, by CDC week, that had a syndrome of influenza-like-illness (ILI). A syndrome of ILI is derived from the chief complaint and is defined as “influenza” OR fever with cough or sore throat. For week 45, emergency departments reported 168 ILI visits (2.7%) out of 6255 total patient visits.

Percentage of ER Visits for ILI by CDC Week, Western Washington, 2009



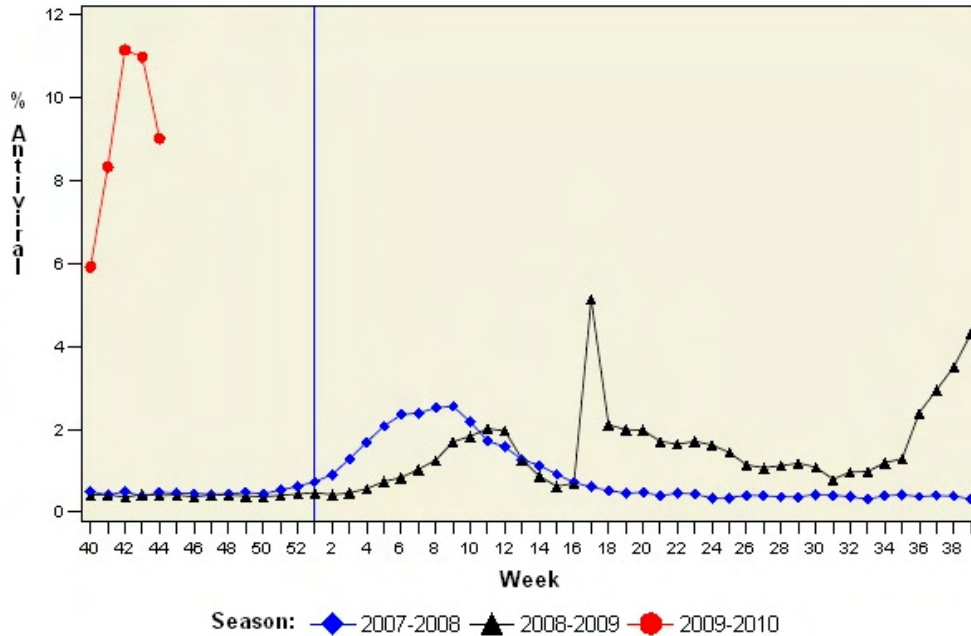
Health Information Exchange Data: This syndromic surveillance system collects data from 12 emergency departments in Washington east of the Cascade Mountains. The following graph shows the proportion of emergency department visits that had a syndrome of influenza-like-illness during CDC week 31 through 45. A syndrome of ILI is derived from the chief complaint and is defined as “influenza” OR fever with cough or upper respiratory infection. For week 45, emergency departments reported 62 ILI visits (1.1%) out of 5872 total patient visits.

Percentage of ER Visits for ILI by CDC Week, Eastern Washington, 2009



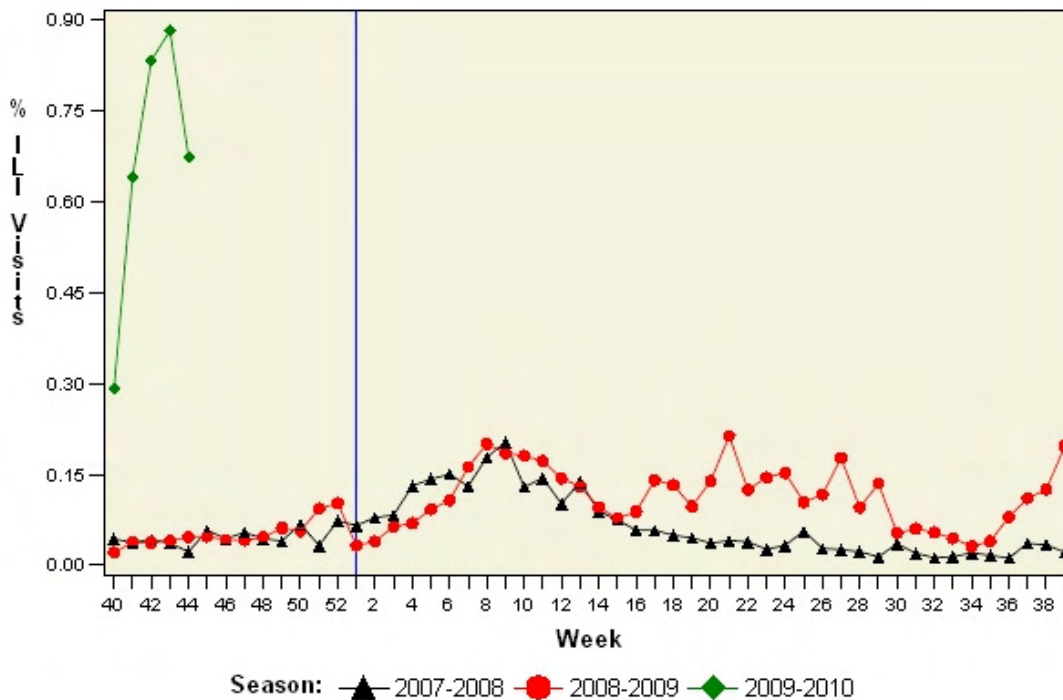
BioSense Antiviral Prescriptions Data: Data about anti-infective prescriptions from over 500 pharmacies in Washington are collected by BioSense (a CDC maintained syndromic surveillance system) and plotted over time. The graph below reflects the ratio of influenza antiviral drug prescriptions (amantadine, rimantadine, oseltamivir, and zanamivir) to all anti-infective medication (e.g., antibiotics, antivirals, antifungals, antimycobacterials) prescriptions ordered. For CDC Week 44, 524 pharmacies in Washington reported 4406 (9.0%) of 48,921 anti-infective prescriptions to be for influenza-specific antiviral medications.

Ratio of Antiviral Drug Prescriptions to all Anti-infective Medication Prescriptions, Washington 2007–2009



BioSense Department of Defense (DoD)/Veterans Affairs (VA) Influenza Diagnoses: BioSense receives ambulatory care data from DoD outpatient medical treatment facilities and VA outpatient clinics. The influenza measure is based on ICD-9-CM codes for an individual visit using BioSense sub-syndromes in the following combination: influenza or (fever and [cough or URI]). For week 44, there were 25 DoD/VA facilities in Washington reporting 405 ILI visits (0.67%) out of 60,152 total patient visits.

Percentage of DoD/VA Outpatient Visits for Influenza-like Illness (ILI) Syndrome, Washington 2007–2009



Mortality Data

Pneumonia and Influenza (P&I) Mortality

Three cities in Washington take part in the national 122-Cities Mortality Reporting System.

City	P&I Deaths	Total Deaths	% P&I	% P&I – Previous Week
Seattle	4	99	4.0	3.2
Spokane	11	78	14.1	16.2
Tacoma	7	119	5.9	7.7
Total	22	296	7.4	7.7

During CDC Week 44, 22 (7.4%) of 296 deaths in Seattle, Spokane and Tacoma were due to pneumonia and influenza (P&I). Nationally, in CDC Week 44, 7.7% of deaths were due to pneumonia or influenza.

Influenza-associated Pediatric Mortality

One influenza-associated pediatric deaths was reported in Washington in week 45. This death was associated with 2009 H1N1.

Feedback Requested

In an effort to make the influenza update as useful as possible, we would like to collect your comments. Please email Kathy Lofy (kathy.lofy@doh.wa.gov) with your comments regarding which aspects of the update are most useful to you, and which aspects may benefit from modification.