

FLU BITES

Oregon's Weekly Surveillance Report for Influenza and other Respiratory Viruses

Published November 20th, 2009

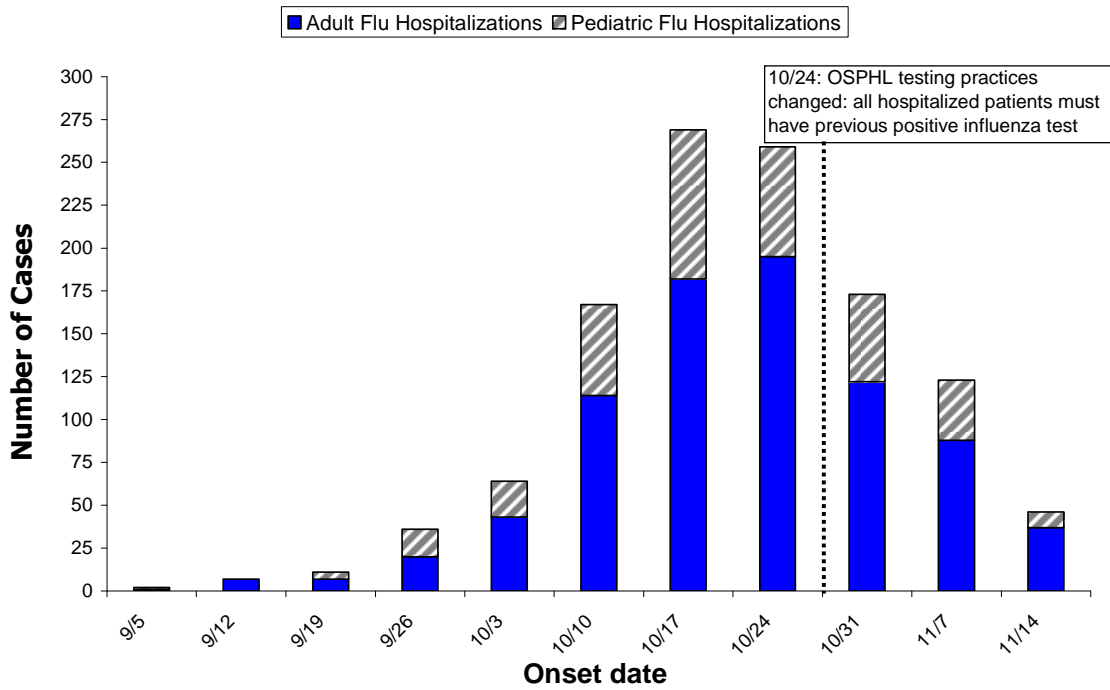


Summary

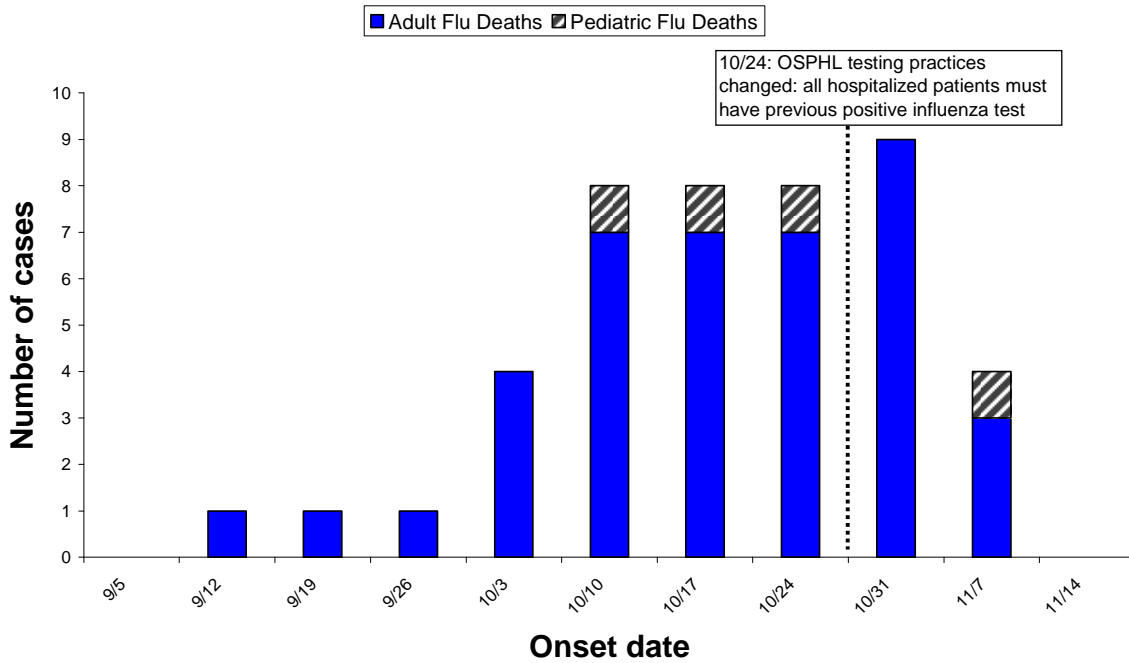
- Since September 1, 2009, 1,161 patients were hospitalized with laboratory-confirmed influenza statewide (819 adults and 342 children). Rates of hospitalization are substantially higher among individuals with underlying conditions that put them in a vaccine priority group, including pregnant women, children with developmental disabilities, children and adults with asthma, and adults with chronic cardiovascular or lung disease.
- Between November 8th and 14th, 46 hospitalizations were reported (1.2 per 100,000 Oregonians). This represents a 62% decrease in hospitalizations from the previous week. Rates of hospitalizations have decreased for the past three consecutive weeks, but overall are still two times higher than rates of hospitalizations during seasonal influenza epidemics.
- Forty-five people have died from influenza (41 adults and 4 children). Of the 43 adults for whom information about underlying conditions is known, 98% had one or more underlying conditions. All 4 of the children who died had neuro-developmental disease.
- All three of our influenza-like illness (ILI) syndromic surveillance systems showed a decrease in ILI this week, and rates are beginning to look more like what we would expect during a typical influenza season in February and March, when influenza typically peaks in Oregon.

Influenza Hospitalizations and Deaths

Adult and Pediatric Lab-confirmed Influenza Hospitalizations Oregon, Since 09/01/09



Adult and Pediatric Lab-confirmed Influenza Deaths Oregon, Since 09/01/09



Distribution of Hospitalized Influenza Cases by County and Age Group Since September 1, 2009

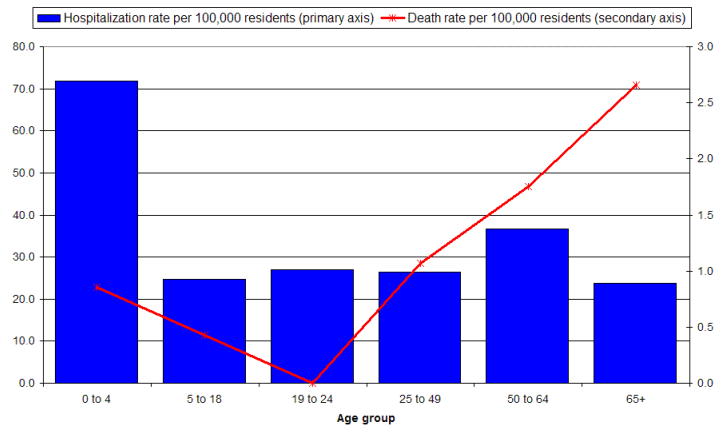
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	16	1	3	3	5	2	2	0	18.6
Clackamas	101	14	20	9	34	18	6	0	26.8
Clatsop	4	0	0	1	1	1	1	0	10.6
Columbia	1	0	0	0	0	1	0	0	2.1
Coos	31	2	4	3	12	7	3	0	49.0
Crook	1	0	1	0	0	0	0	0	3.7
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	50	6	9	3	18	5	9	0	29.9
Douglas	37	3	3	4	7	16	4	0	35.2
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	98	13	13	7	20	30	15	0	47.7
Jefferson	11	3	2	1	5	0	0	0	49.0
Josephine	49	8	4	2	15	12	8	0	58.8
Klamath	24	1	7	0	4	8	4	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	182	28	34	9	50	48	13	0	52.6
Lincoln	6	2	1	0	1	2	0	0	13.4
Linn	28	3	2	3	8	8	4	0	25.4
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	82	22	18	7	14	14	7	0	26.0
Morrow	3	1	1	0	0	1	0	0	24.0
Multnomah	232	26	22	14	81	63	26	0	32.3
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	3	0	1	0	0	1	1	0	11.5
Umatilla	16	3	4	4	3	2	0	0	22.1
Union	6	1	2	0	1	2	0	0	23.7
Wallowa	4	0	3	0	0	0	1	0	56.2
Wasco	3	1	0	0	1	1	0	0	12.4
Washington	115	23	12	9	42	22	7	0	22.1
Wheeler	0	0	0	0	0	0	0	0	0.0
TOTAL	1161	168(14%)	173(15%)	84(7%)	346(30%)	273(24%)	116(10%)	1 (0)	
Age group rate per 100,000 pop		71.7	24.7	27.0	26.3	36.8	23.7		30.6

Characteristics of Hospitalized Influenza Cases

Age	
Median	36
Range	0-92
Sex	
N (%)	
Male	525 (45)
Female	634 (54)
Unknown	2 (0)
Severity	
Admitted to ICU*	39 of 187 (21)
Pregnant	48 of 634 (8)

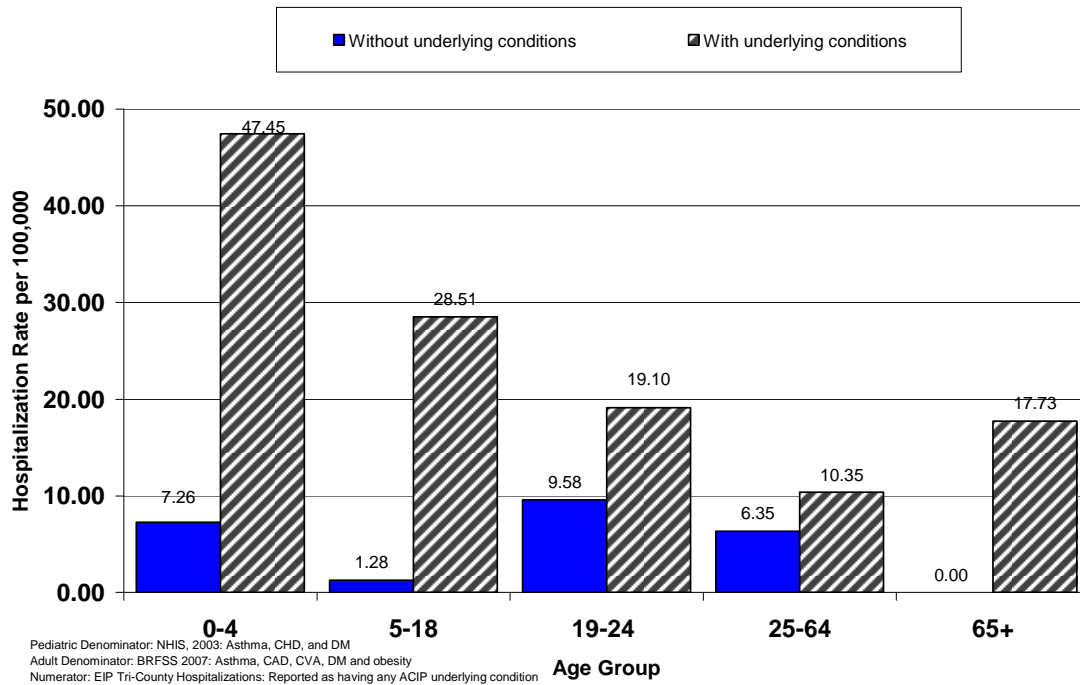
*ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties whose charts have been reviewed as a component of EIP hospitalization surveillance

Influenza Hospitalizations and Deaths, Rates per 100,000 Oregon Residents
September 1, 2009 - November 19, 2009



- Comprehensive chart reviews have been conducted for 42% of the cases hospitalized in the Emerging Infections Program surveillance area (Clackamas, Multnomah and Washington counties).

EIP Surveillance Area Influenza Hospitalization Rates Underlying Conditions by Age

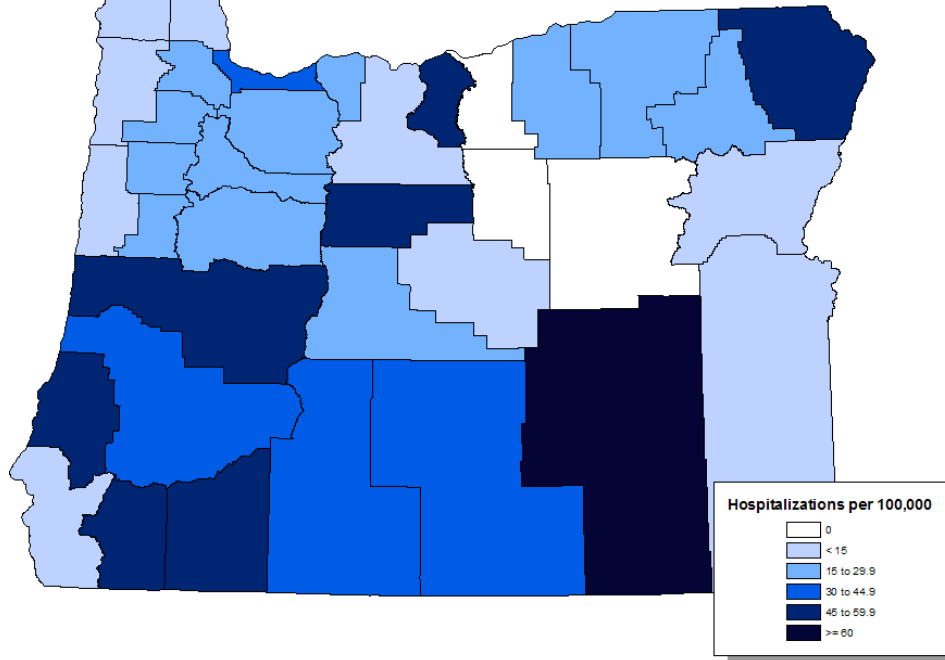


The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. We are currently updating the number of hospitalizations and deaths daily on our web page:

http://www.flu.oregon.gov/DHS/ph/acd/swineflu_investigation.shtml.

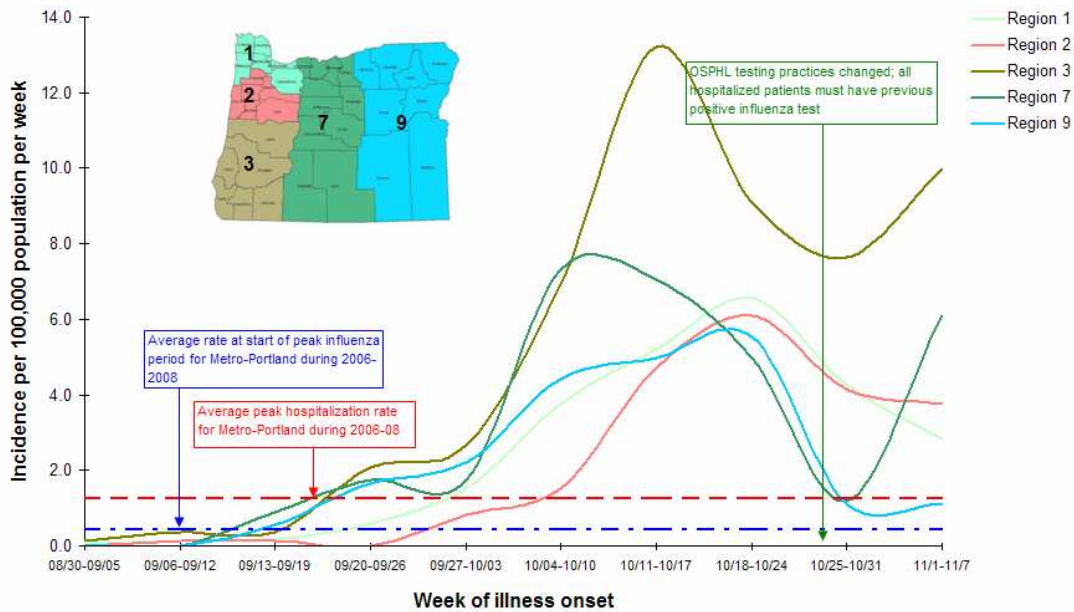
For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>.

Oregon Influenza* Hospitalizations Rates per 100,000 by County since 09/01/09



*Counts and rates represent hospitalizations of laboratory-confirmed seasonal and pandemic H1N1 influenza.

Influenza-related hospitalizations by region, Oregon, September 1, 2009 to November 7, 2009*

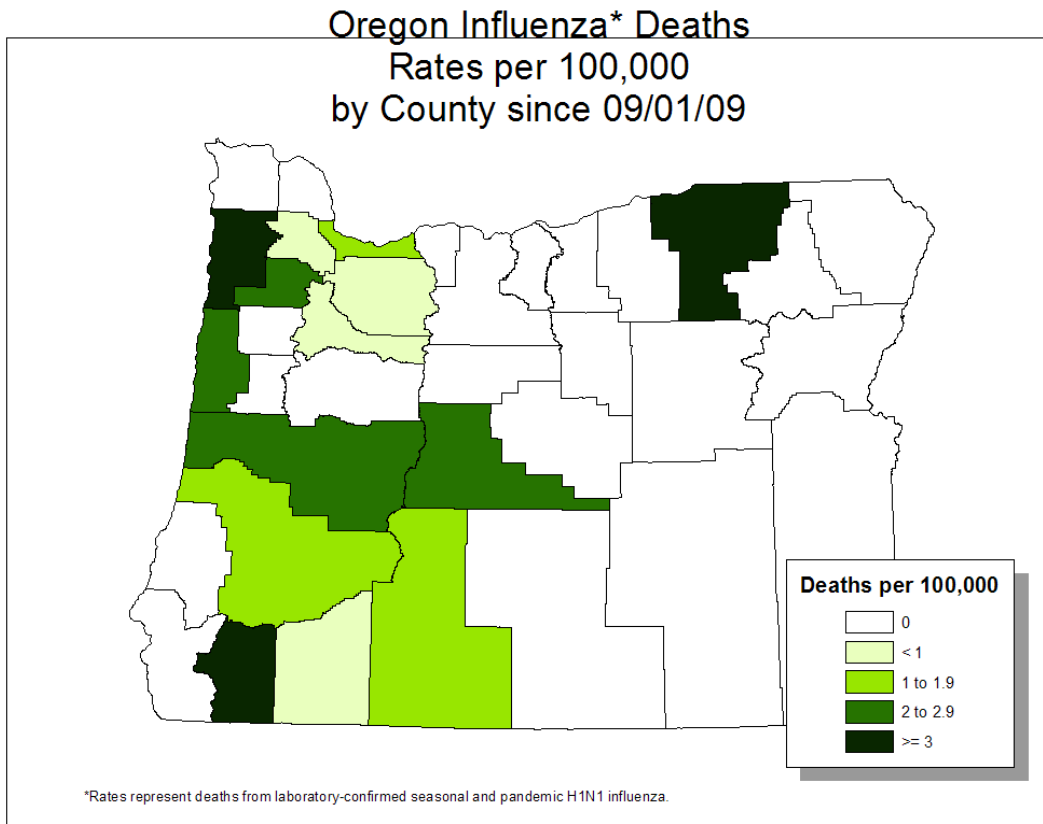


*Data current as of 1200 November 19th, 2009.
Numbers are provisional and may fluctuate due to reporting delays

Distribution of Influenza Deaths, by County of Residence and Age Group Since September 1, 2009

County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Rate per 100,000 pop
Clackamas	1	0	0	0	0	0	1	0.3
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	2	0	0	0	0	1	1	1.9
Jackson	2	0	0	0	1	0	1	1.0
Josephine	4	0	0	0	2	1	1	4.8
Klamath	1	0	0	0	0	1	0	1.5
Lane	9	0	0	0	3	3	3	2.6
Lincoln	1	0	0	0	1	0	0	2.2
Marion	1	0	0	0	0	0	1	0.3
Multnomah	10	1	0	0	1	6	2	1.4
Tillamook	2	0	1	0	0	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL	45	2 (4%)	3 (7%)	0	14 (31%)	13 (29%)	13 (29%)	
Age group rate per 100,000 pop		0.9	0.4	0	1.1	1.8	2.7	1.2

Last updated 11/20/09

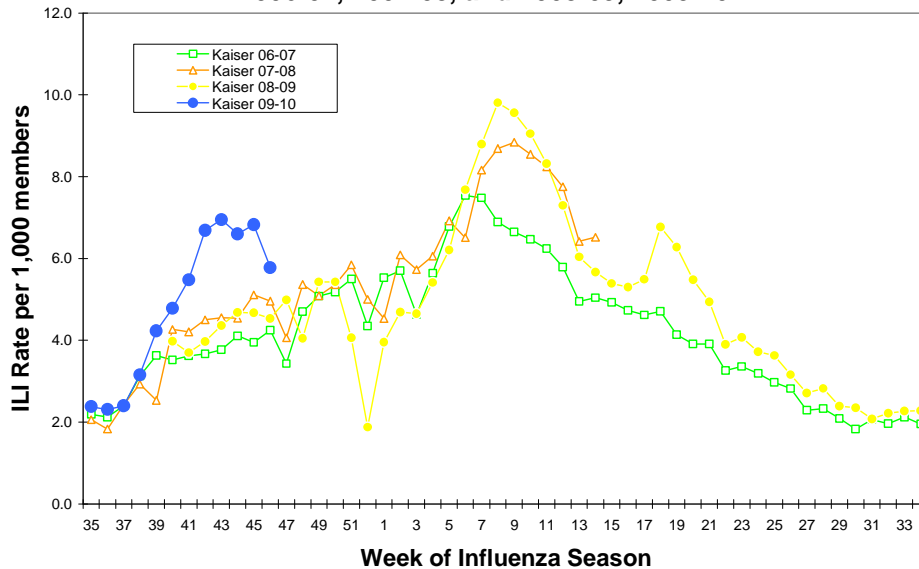


Outpatient Influenza-like Illness

Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of influenza-like illness outpatient visits decreased to 5.78 per 1,000 Kaiser members during the week ending November 14th. These rates have declined nearly to seasonal influenza

**Respiratory Illness Surveillance
Kaiser Permanente Northwest
2006-07, 2007-08, and 2008-09, 2009-10**



levels.

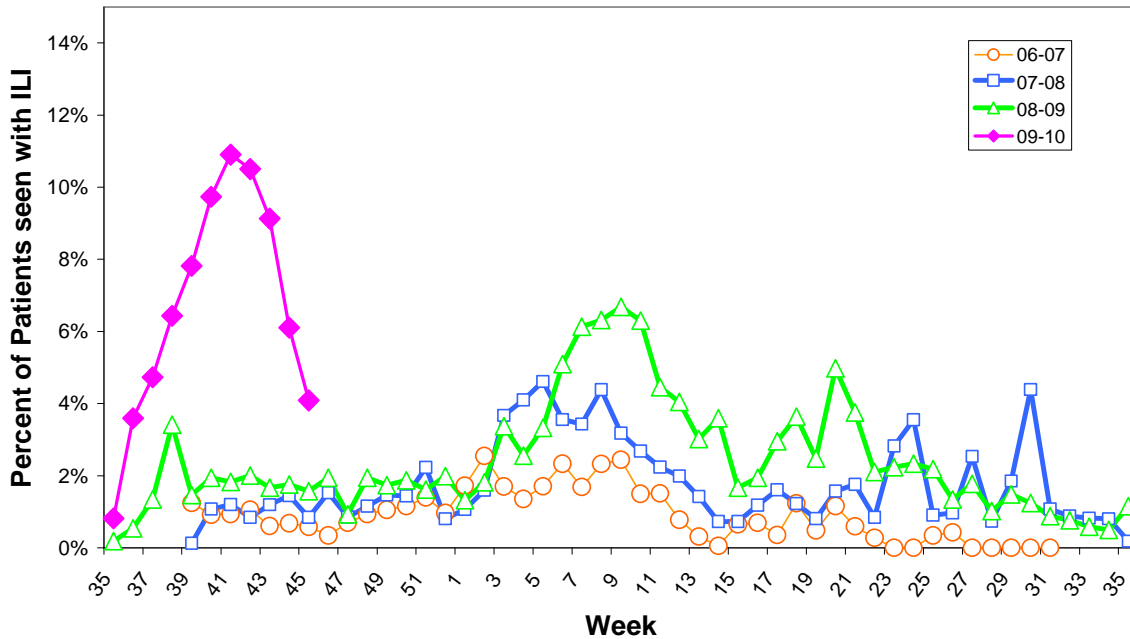
ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network

Oregon’s outpatient influenza-like illness network is comprised of 30 voluntary healthcare providers from all across Oregon who report the number of patients with influenza-like illness (ILI) as well as total number of patient visits for each week during the surveillance season.

Influenza-like illness (ILI) is defined as fever ($\geq 100^{\circ}\text{F}$) and cough and/or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. For the week ending November 14, 4.09% of patients seen had ILI, which marks a drop from recent weeks but well above levels normally seen in Oregon in November.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending November 14th	2470	4.09	13
Week ending November 7th	3995	6.11	18
Week ending October 31st	5324	9.13	21

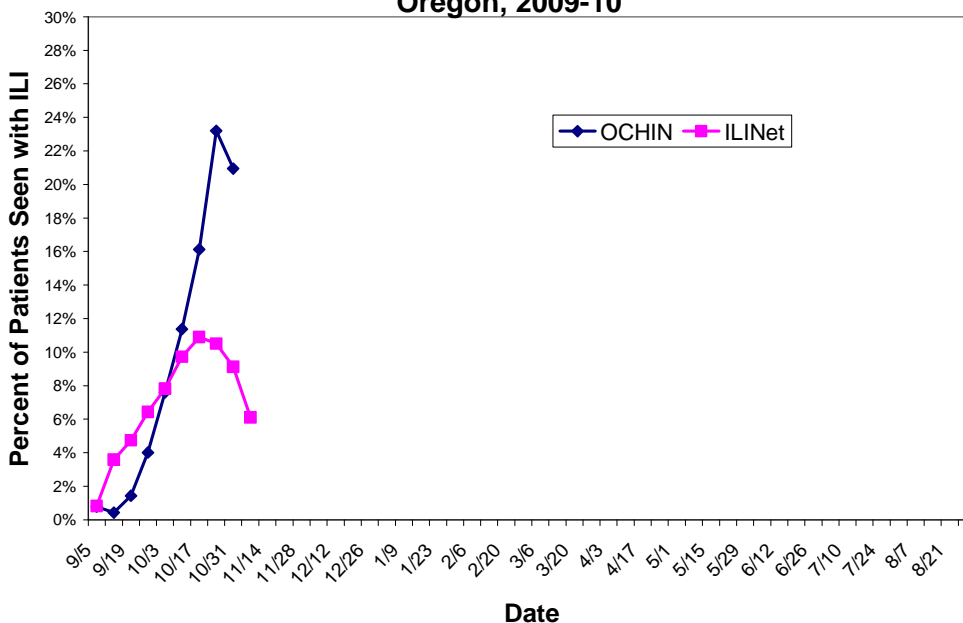
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN, a health information technology and service organization that serves community health centers. The percent of OCHIN patients with ILI during the week ending October 31st was 20.9%.

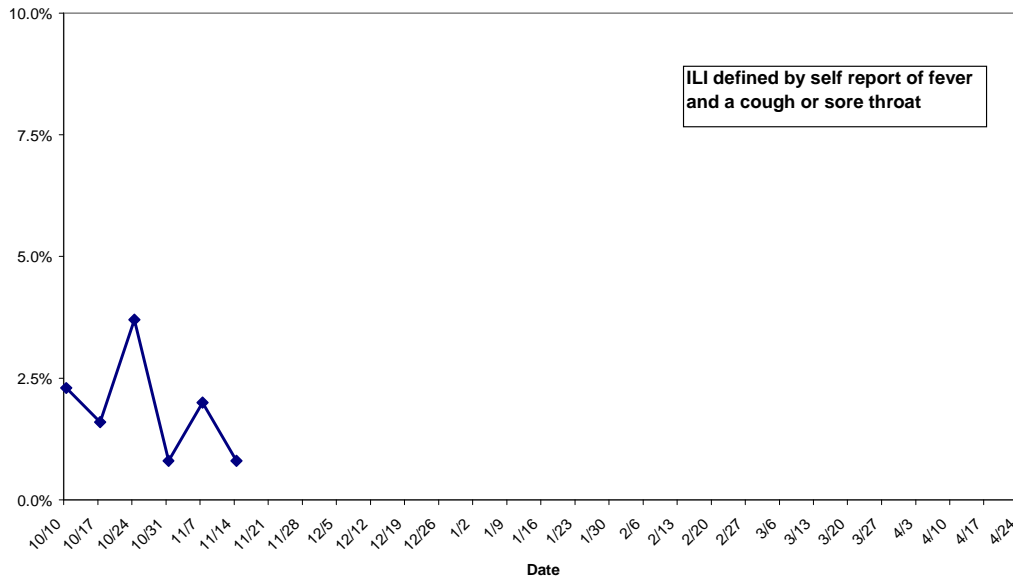
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects community level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). During the week ending November 14th, 0.8% of respondents statewide reported having symptoms of ILI with an onset in the last 7 days.

**BRFSS Influenza-Like Illness (ILI) Surveillance
Percent Reporting ILI with Onset in Last 7 Days**



Laboratory Surveillance

The Oregon State Public Health Laboratory is performing the following surveillance activities for subtype specific influenza testing:

- Sentinel providers submissions (ILINet)
- Lab-confirmed hospitalization surveillance among individuals with a previous positive influenza test (viral culture, DFA, PCR or any commercially available rapid test).
- Lab-confirmed death surveillance
- Outbreak investigations

Specimens will only be tested if submitted for the above-mentioned activities.

OSPHL will NOT be accepting specimens for 'rule out influenza' submissions for the 2009-10 influenza season in order to allocate public health laboratory resources to H1N1 surveillance.

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1.

**Oregon State Public Health Laboratory
Specimen Type and Subtype, 2009-10**

	Cumulative since September 1st, 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N(%)	Total N (%)	Total N(%)
Influenza A					
Pandemic H1N1	142 (58)	1,000 (60)	11 (79)	1028 (56)	59 (80)
Seasonal A (H1)	1 (0)	1 (0)	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	1 (0)	0
Influenza B	0	0	0	0	0
Pending	6 (3)	17 (1)	0	70 (4)	10 (13)
Undetected	95 (39)	649 (39)	3 (21)	731 (40)	5 (7)
Total Tested	244	1,668	14	1832	74

Additional resources:

More Oregon influenza surveillance data is available at:

<http://egov.oregon.gov/DHS/ph/acd/flu/surveil.shtml>

CDC Weekly Surveillance Report: <http://www.cdc.gov/flu/weekly/>