

FLU BITES

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

Published May 7, 2010

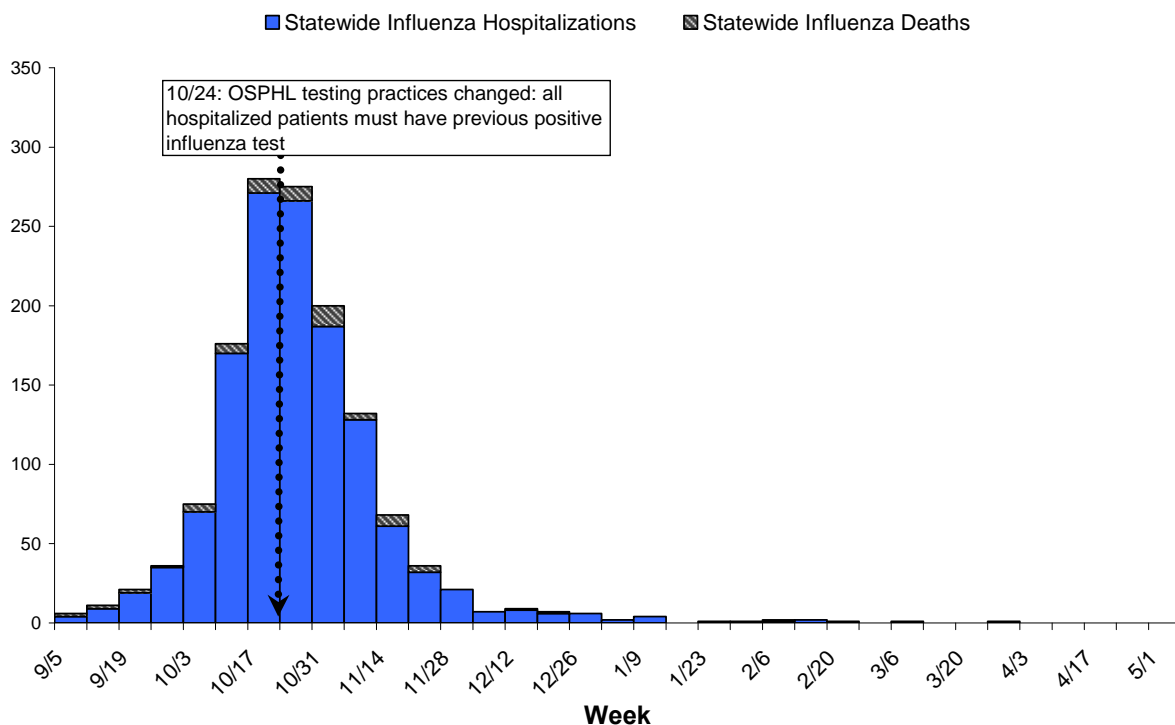


Summary

- No states reported regional or widespread influenza activity and only four states (Maine, Hawaii, Alabama, & South Carolina) reported local activity for the week ending May 1, 2010.
- No hospitalizations or deaths were reported in Oregon for the month of April.
- ILINet rates of influenza-like illness (ILI) continue to stay at rates well below the threshold of epidemic activity.
- Respiratory syncytial virus (RSV) activity in Oregon decreased from 19% to 14% positivity* for the week ending May 1st.
- Due to the low amount of influenza activity, this will be the last weekly report. We will continue to conduct surveillance for persons hospitalized with influenza and rely on ILINet to monitor trends that might suggest a resurgence of pandemic H1N1; we promise to resume weekly reporting if there is a substantial increase in activity.

* Percent positivity based on data from Oregon's RSV Laboratory Surveillance System (number of positive RSV tests ÷ number of RSV tests performed)

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09



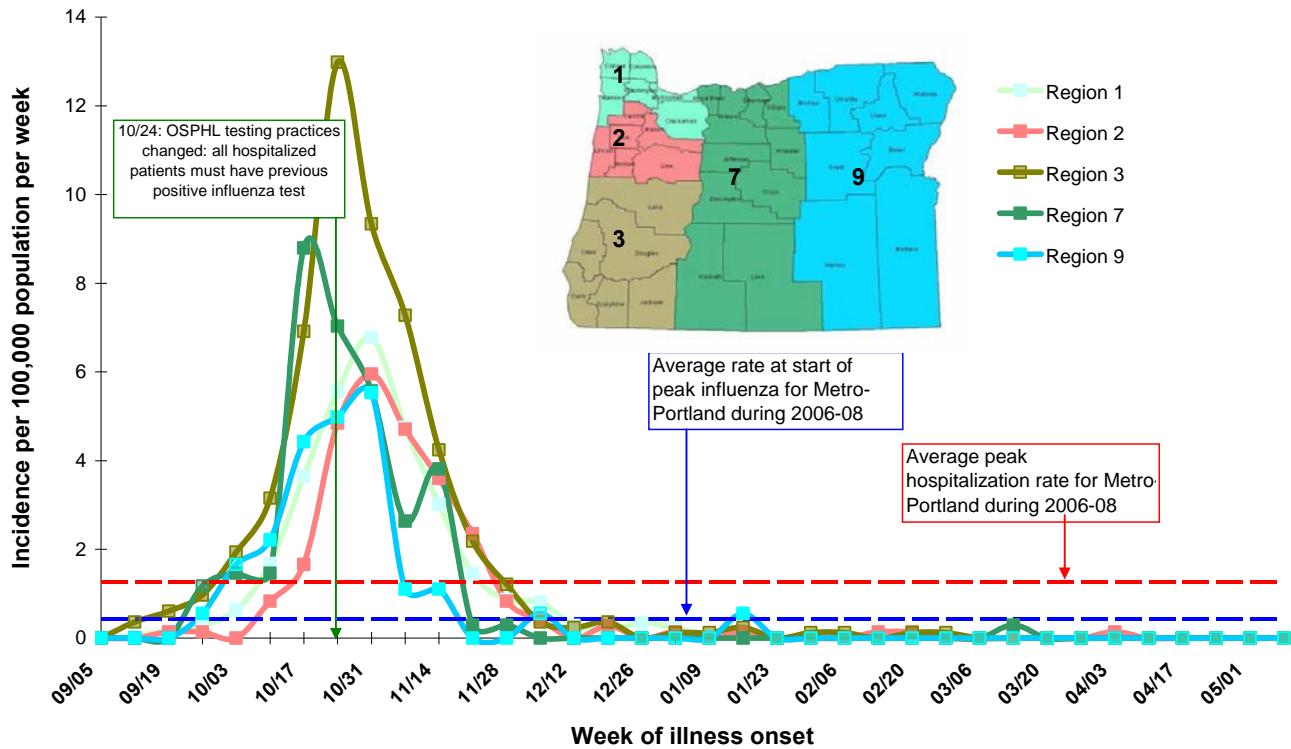
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 713 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	22	2	3	3	5	5	4	0	25.5
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	53	6	9	3	19	6	10	0	31.7
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	18	92	68	28	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1314	187	186	93	392	319	136	1	34.7
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.9	26.5	29.9	29.8	43.0	27.8		34.7

Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



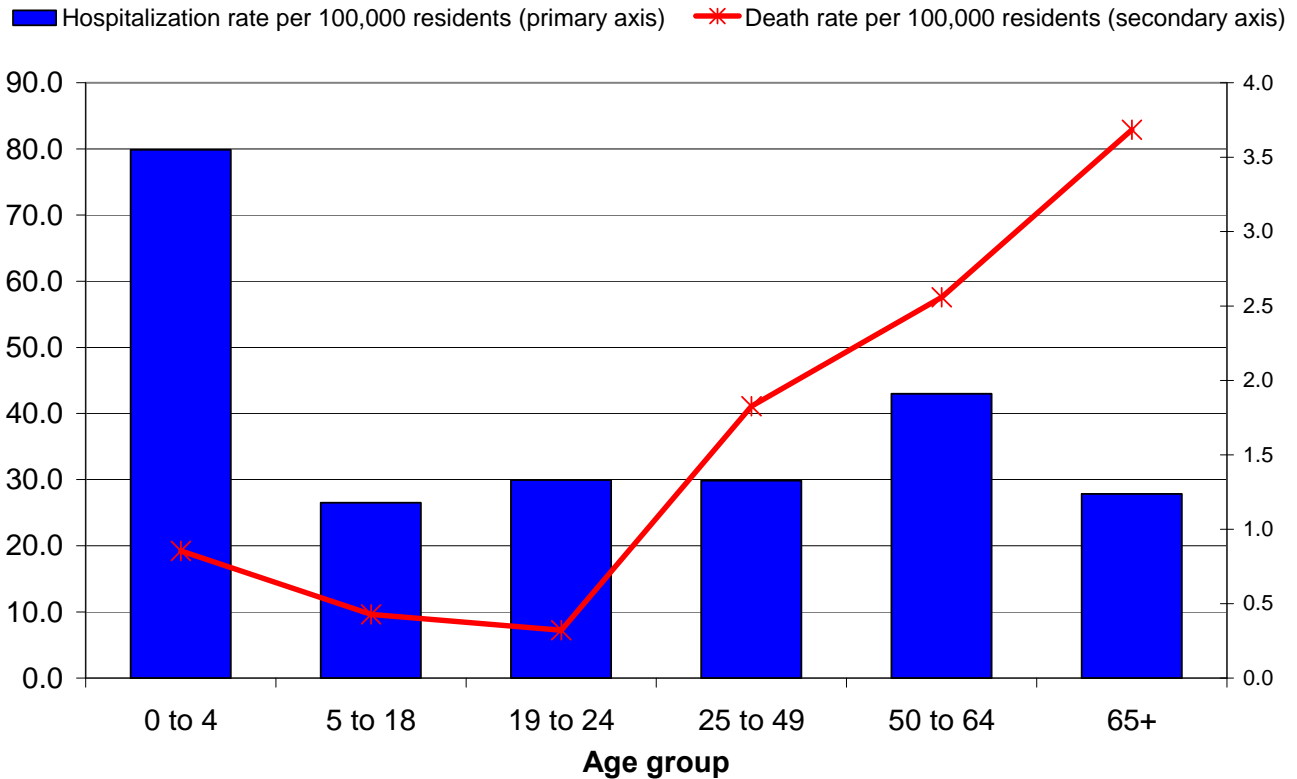
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The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8

Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

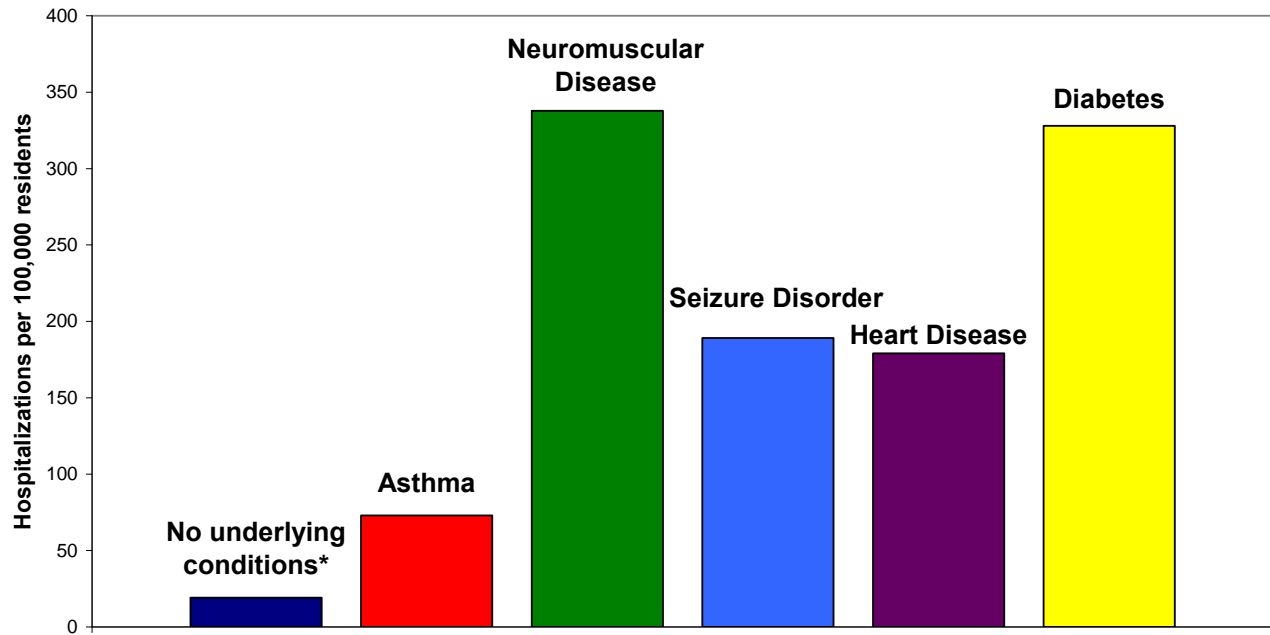
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties).

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=126 N (%)	Adult (age >17 years), N=366 N (%)
Treatment		
Received antivirals	101 (80)	324 (89)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (15)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

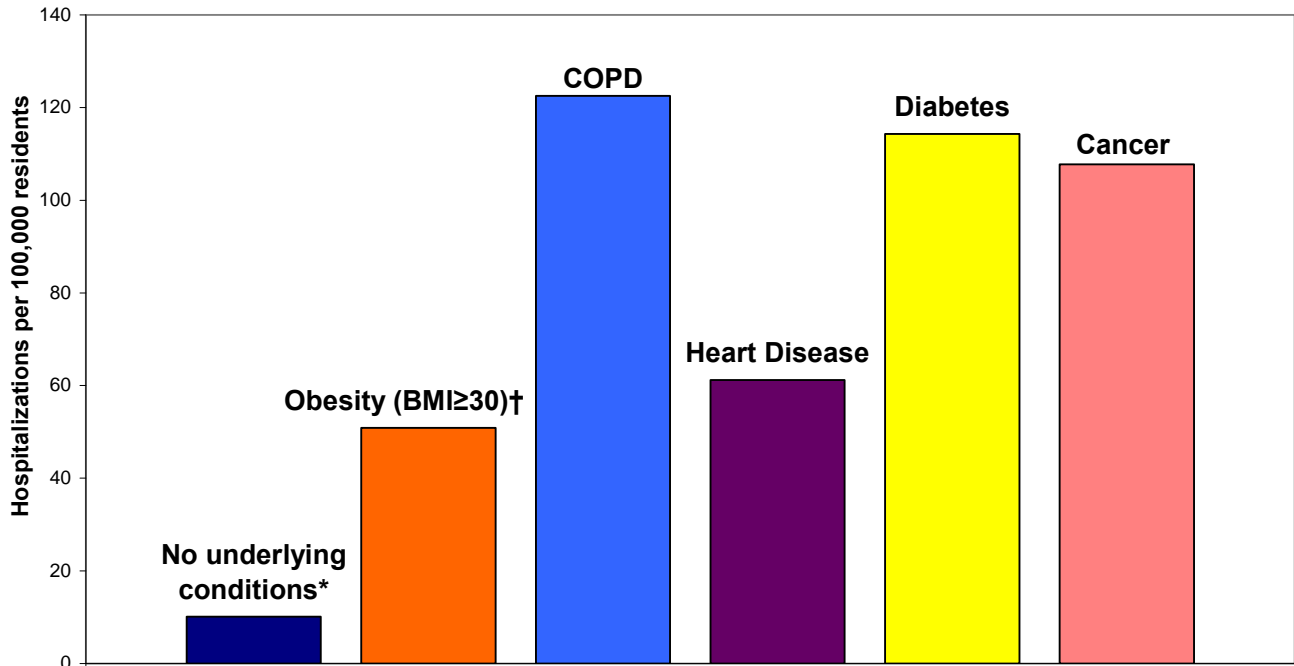
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions

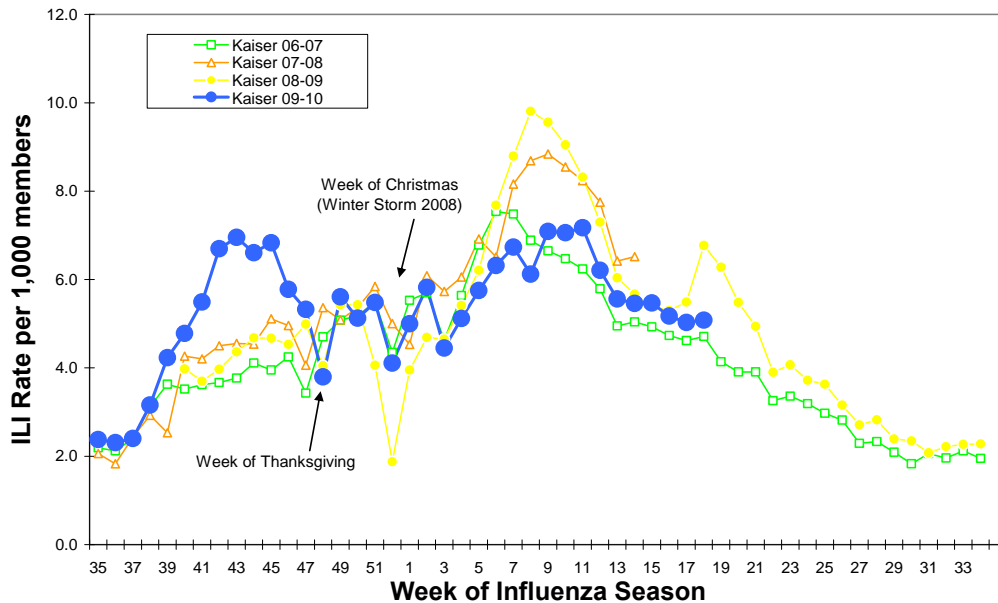
† Based on 80% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

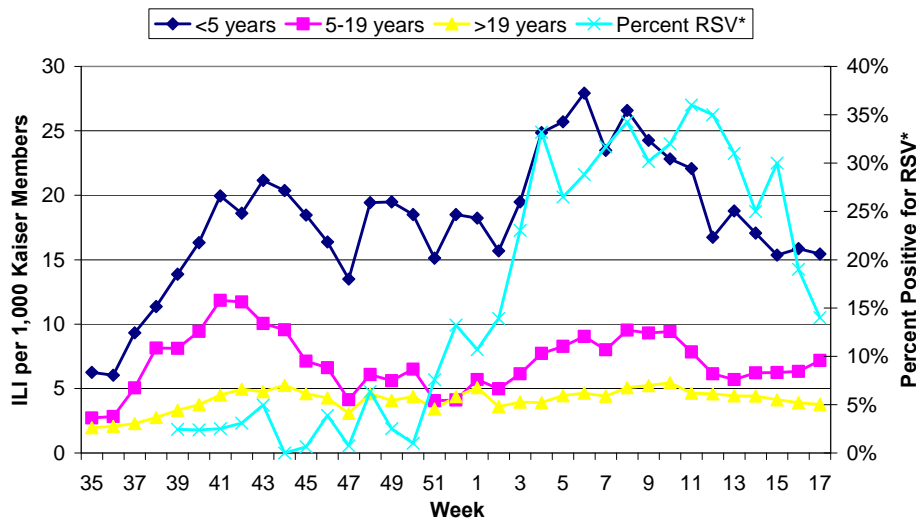
Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits increased slightly from 5.03 to 5.08 per 1,000 Kaiser members for the week ending May 1, 2010. The increase in ILI among Kaiser Permanent patients from January to mid-March was driven by the 0-4 year old age group and parallels the increases observed for RSV activity in Oregon.

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



**Kaiser Syndromic ILI per 1,000 by Age Group
and RSV Laboratory Surveillance Percent Positivity**



*Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System. It is calculated by dividing the number of positive RSV tests by the total number of RSV test performed.

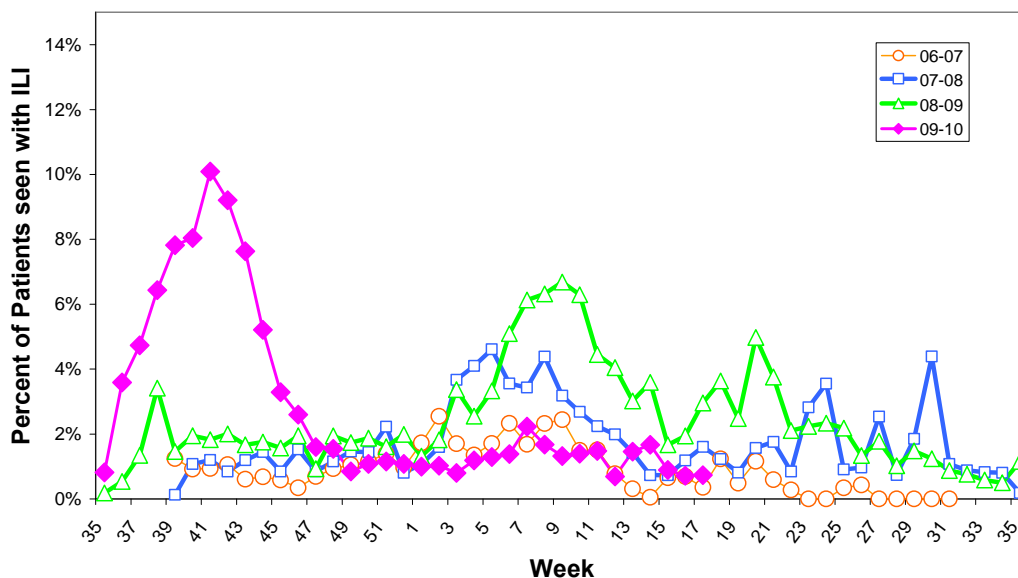
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending May 1st, 0.73% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending May 1 st	1776	0.73	8
Week ending April 24 th	2234	0.72	10
Week ending April 17 th	2591	0.89	10

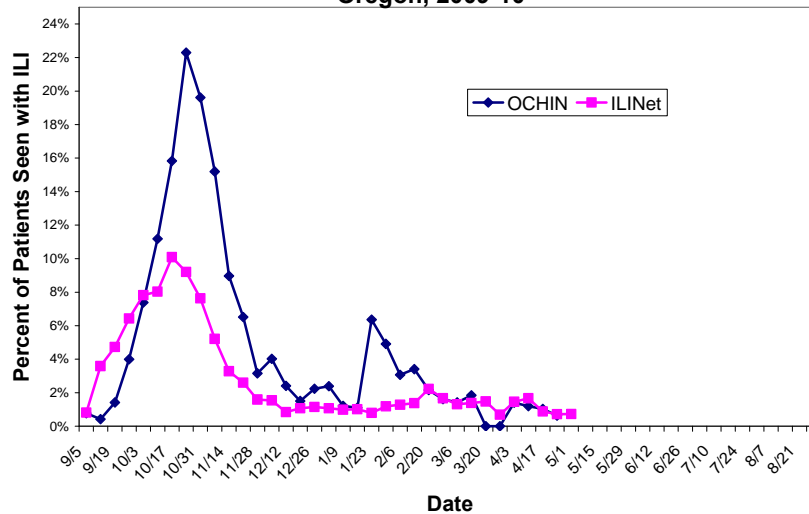
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending May 1st was 0.64.

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



Laboratory Surveillance

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

- Sentinel providers submissions (ILINet & CSTE)
- 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
- Lab-confirmation for seasonal influenza

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1. No seasonal influenza has been identified since October 2009.

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 (%)	CSTE N %	Total N (%)	Total N(%)
Influenza A						
Pandemic H1N1	153 (51)	1,089 (62)	23 (39)	14 (8)	1,279 (56)	0
Seasonal A (H1)	1 (0)	1 (0)	0	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	0	1 (0)	0
Influenza B	1 (0)	0	0	0	1 (0)	0
Respiratory Syncytial Virus (RSV)	0	0	0	7 (4)	7 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (2)	6 (0)	0
Parainfluenza type 2	0	0	0	1 (1)	1 (0)	0
Adenovirus	3 (1)	0	0	8 (4)	11 (0)	1 (8)
Pending	2 (1)	1	10 (17)	9 (5)	22 (1)	16 (64)
Undetected	141 (47)	665 (38)	26 (44)	140 (77)	972 (42)	8 (32)
Total Tested	303	1,758	59	182	2,302	25

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. Due to the low amount of influenza activity, this will be the last weekly report. We will continue to conduct surveillance for persons hospitalized with influenza and rely on ILINet to monitor trends that might suggest a resurgence of pandemic H1N1; we will resume weekly reporting if there is a substantial change or increase in activity.

For more information please see:

http://www.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/>.

Additional resources:

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

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

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

Published April 30, 2010

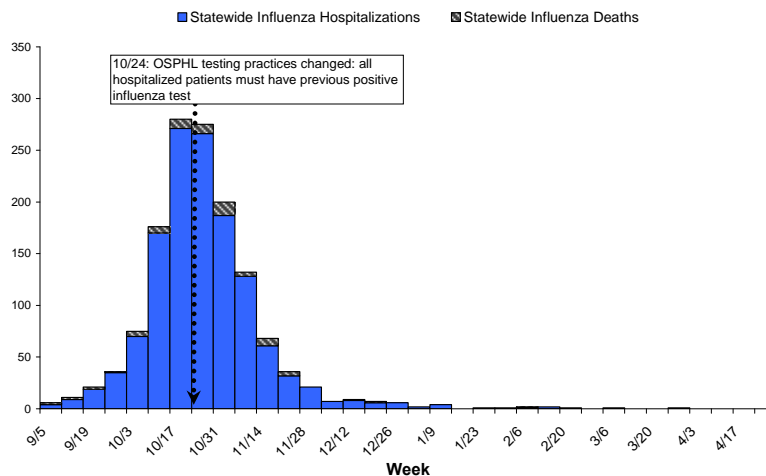


Summary

- Nationally, all states are reporting low levels of activity. No states reported regional or widespread influenza activity and only two states (Alabama and S. Carolina) reported local activity for the week of April 18-24, 2010.
- No hospitalizations or deaths have been reported to date in Oregon for the month of April.
- Since September 1, 2009, 1,314 patients have been hospitalized with laboratory-confirmed influenza statewide (957 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, 67 people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 65 deaths for whom information about medical conditions is known, 59 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April, 2009 – March 13th, 2010 to be 4.0 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year. Kaiser Permanente NW ILI levels decreased for the week ending April 24th.
- Respiratory syncytial virus (RSV) activity in Oregon decreased from 30% to 20% positivity* for the week ending April 24th.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

* Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System and is calculated by dividing the number of positive tests for RSV by the total number of tests performed

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



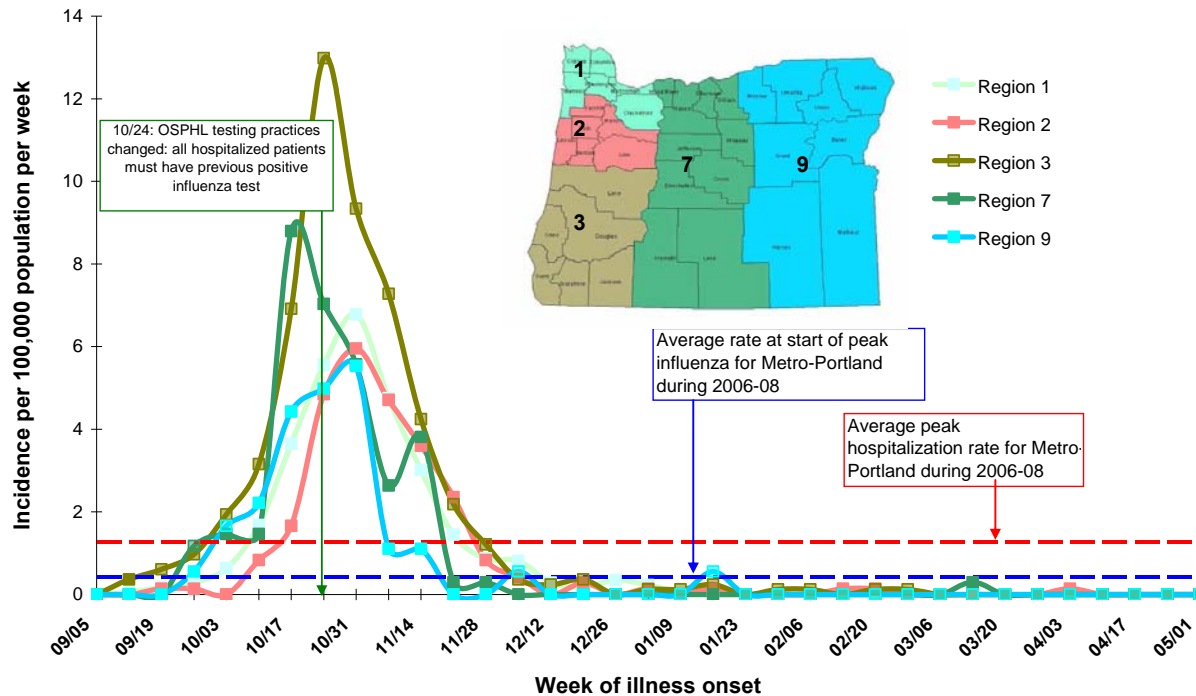
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Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



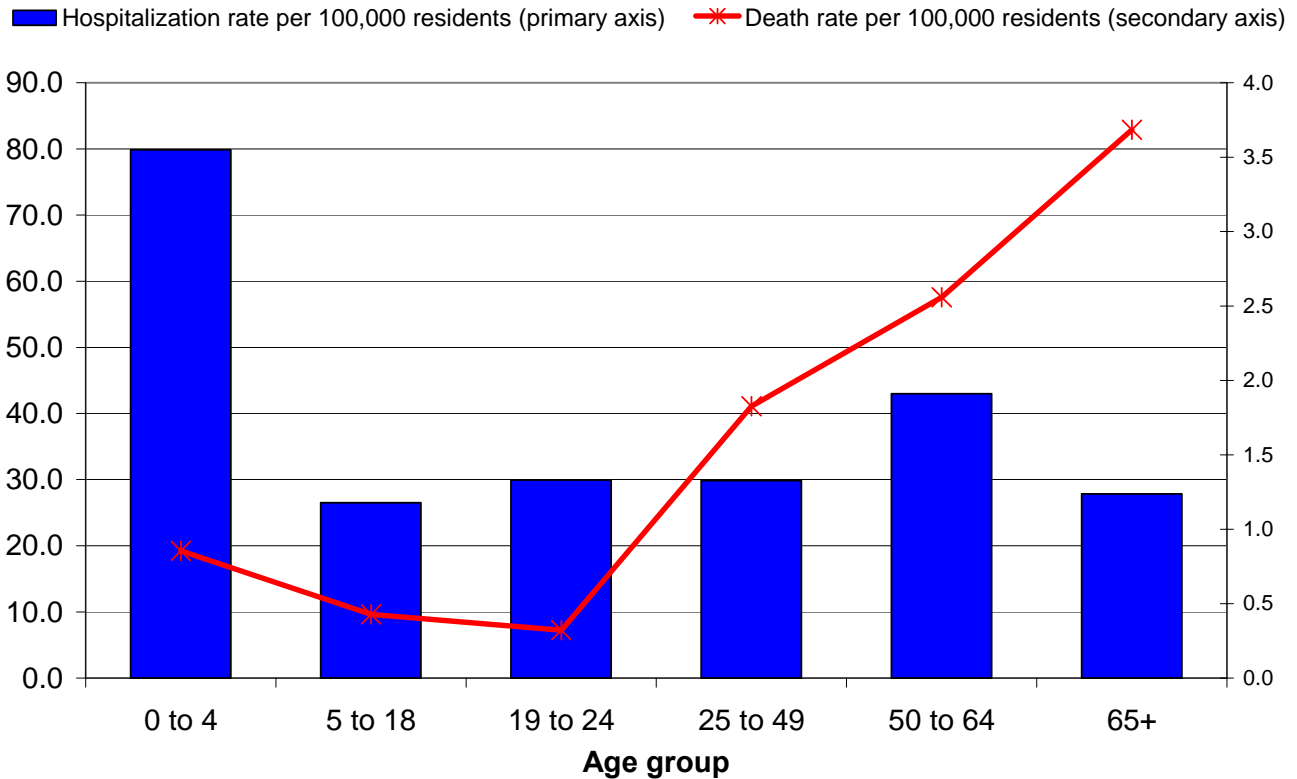
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Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

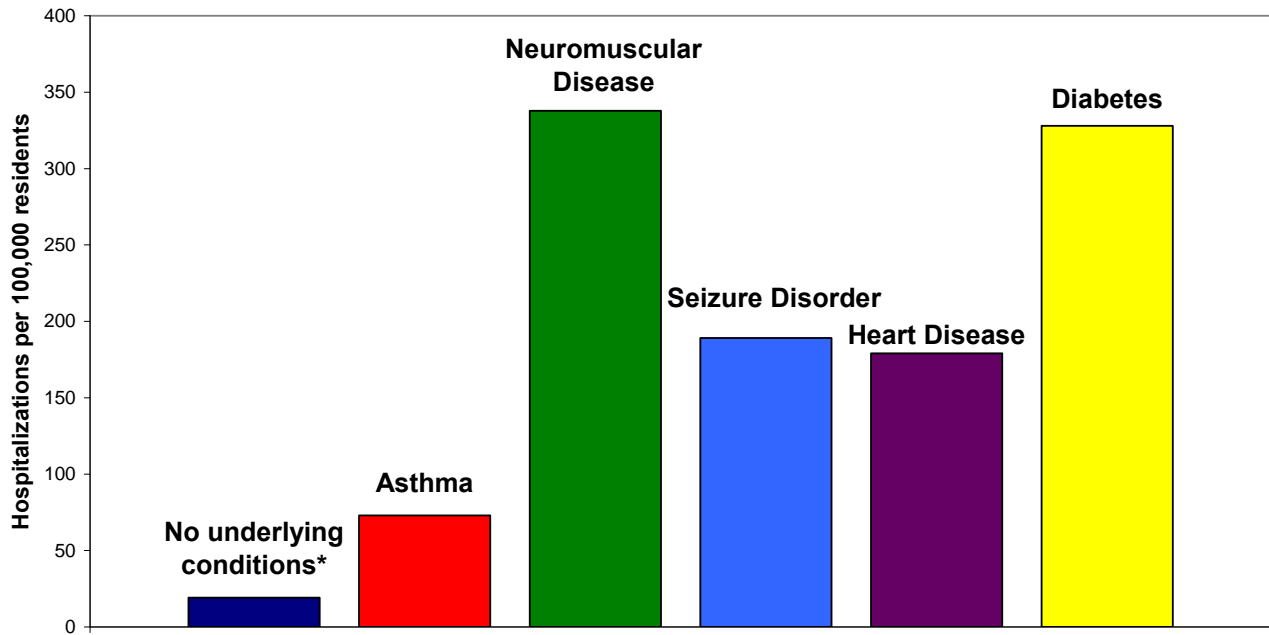
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ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

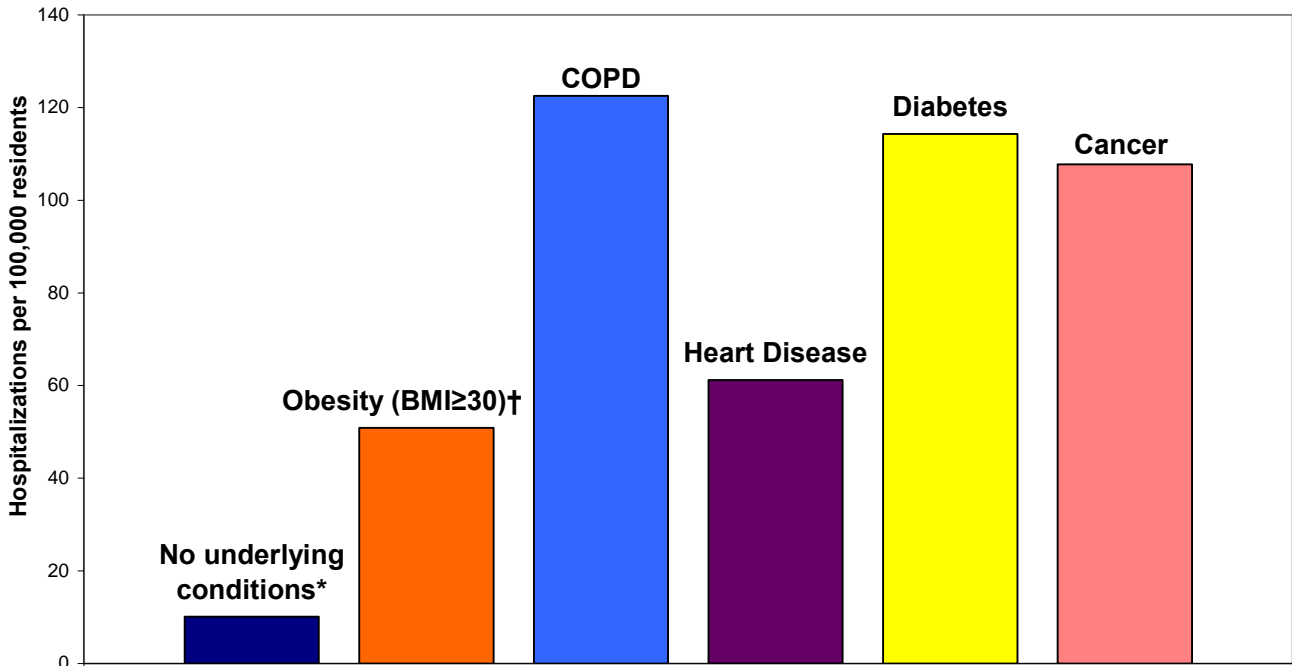
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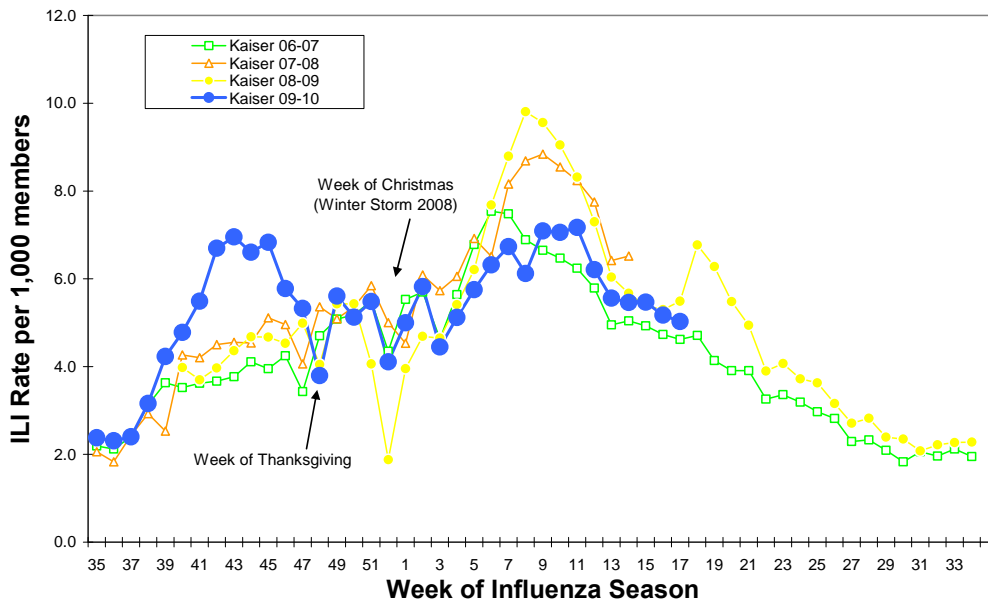
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Outpatient Influenza-like Illness (ILI)

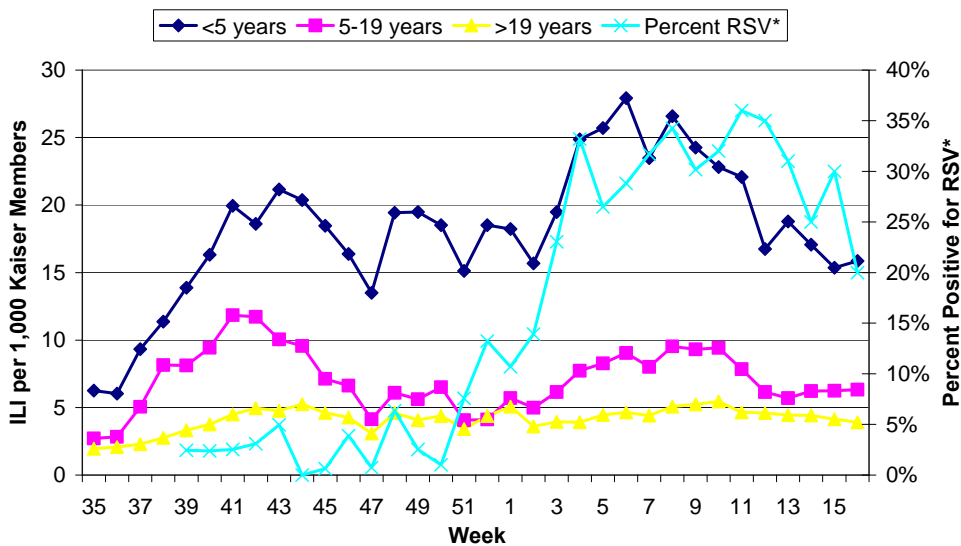
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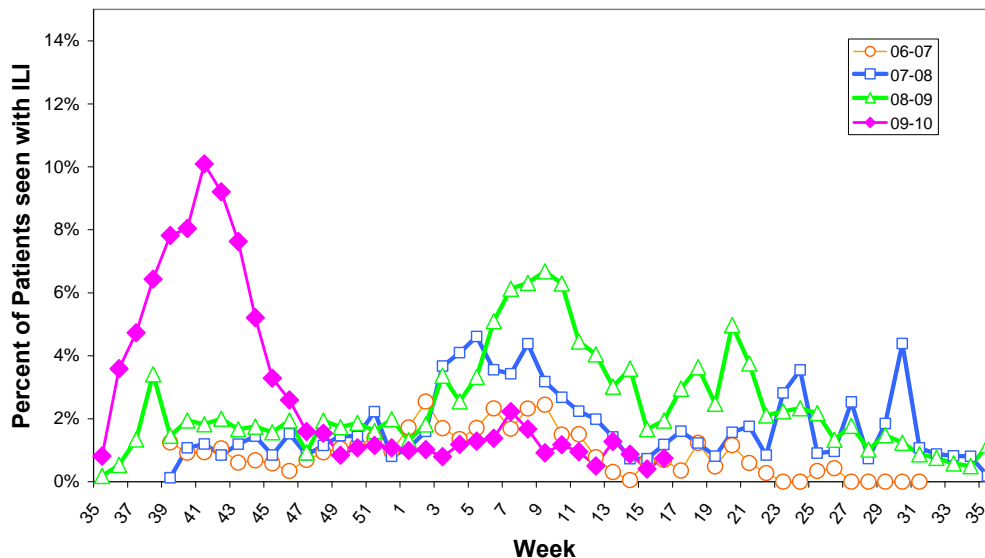
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending April 24, 2010, 0.75% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending April 24 th	2139	0.75	16
Week ending April 17 th	2217	0.41	9
Week ending April 10 th	2297	0.87	20

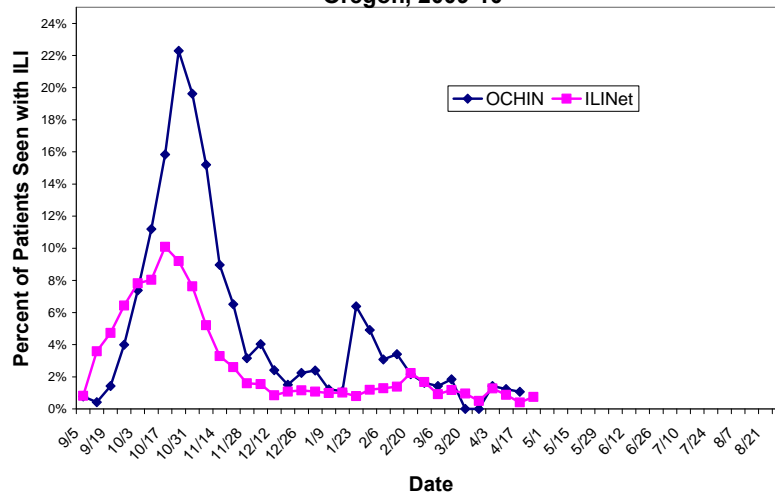
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending April 24th was 1.06.

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



Laboratory Surveillance

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

- Sentinel providers submissions (ILINet & CSTE)
- 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
- Lab-confirmation for seasonal influenza

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1. No seasonal influenza has been identified since October, 2009.

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 (%)	CSTE N %	Total N (%)	Total N(%)
Influenza A						
Pandemic H1N1	153 (51)	1,089 (62)	23 (46)	14 (8)	1,279 (56)	0
Seasonal A (H1)	1 (0)	1 (0)	0	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	0	1 (0)	0
Influenza B	1 (0)	0	0	0	1 (0)	0
Respiratory Syncytial Virus (RSV)	0	0	0	7 (4)	7 (0)	1 (8)
Parainfluenza type 1	2 (1)	1 (0)	0	3 (2)	6 (0)	0
Parainfluenza type 2	0	0	0	1 (1)	1 (0)	0
Adenovirus	2 (1)	0	0	8 (5)	10 (0)	1 (8)
Pending	6 (2)	0	1 (2)	6 (3)	13 (1)	3 (25)
Undetected	136 (45)	665 (38)	26 (52)	134 (77)	961 (42)	7 (58)
Total Tested	301	1,757	50	173	2,281	12

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

FLU BITES

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

Published April 23, 2010

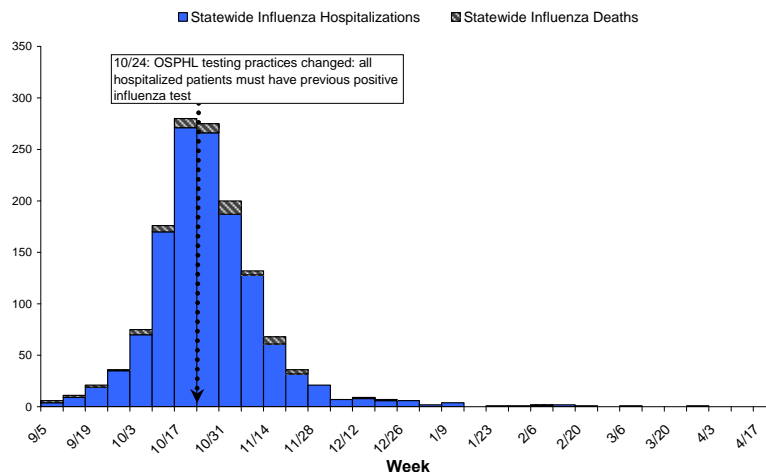


Summary

- Nationally, all states are reporting low levels of activity. No states reported regional or widespread influenza activity for the week of April 11-17, 2010.
- No hospitalizations or deaths have been reported to date in Oregon for the month of April.
- Since September 1, 2009, 1,314 patients have been hospitalized with laboratory-confirmed influenza statewide (957 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, 67 people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 65 deaths for whom information about medical conditions is known, 59 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April, 2009 – March 13th, 2010 to be 4.0 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year. Kaiser Permanente NW ILI levels decreased for the week ending April 17th.
- Respiratory syncytial virus (RSV) activity in Oregon increased to 30% positivity* for the week ending April 17th. RSV activity is higher for this time of year compared to the previous four seasons.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

* Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System and is calculated by dividing the number of positive tests for RSV by the total number of tests performed

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



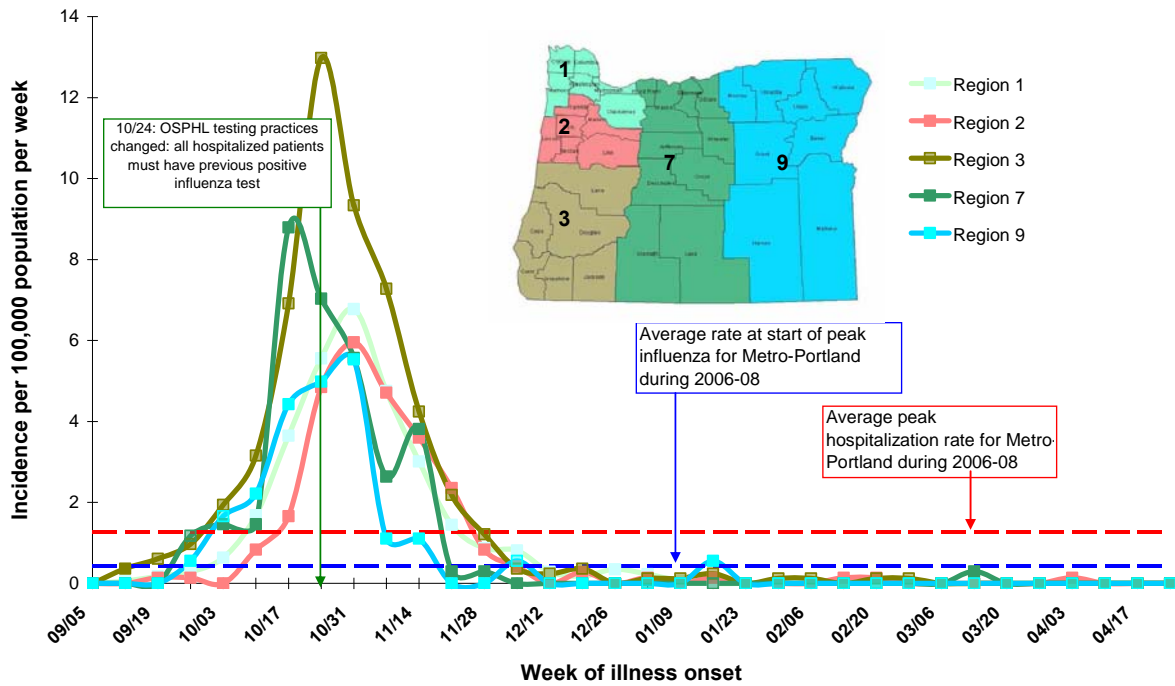
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 713 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	22	2	3	3	5	5	4	0	25.5
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	53	6	9	3	19	6	10	0	31.7
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	18	92	68	28	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1314	187	186	93	392	319	136	1	34.7
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.9	26.5	29.9	29.8	43.0	27.8		34.7

Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



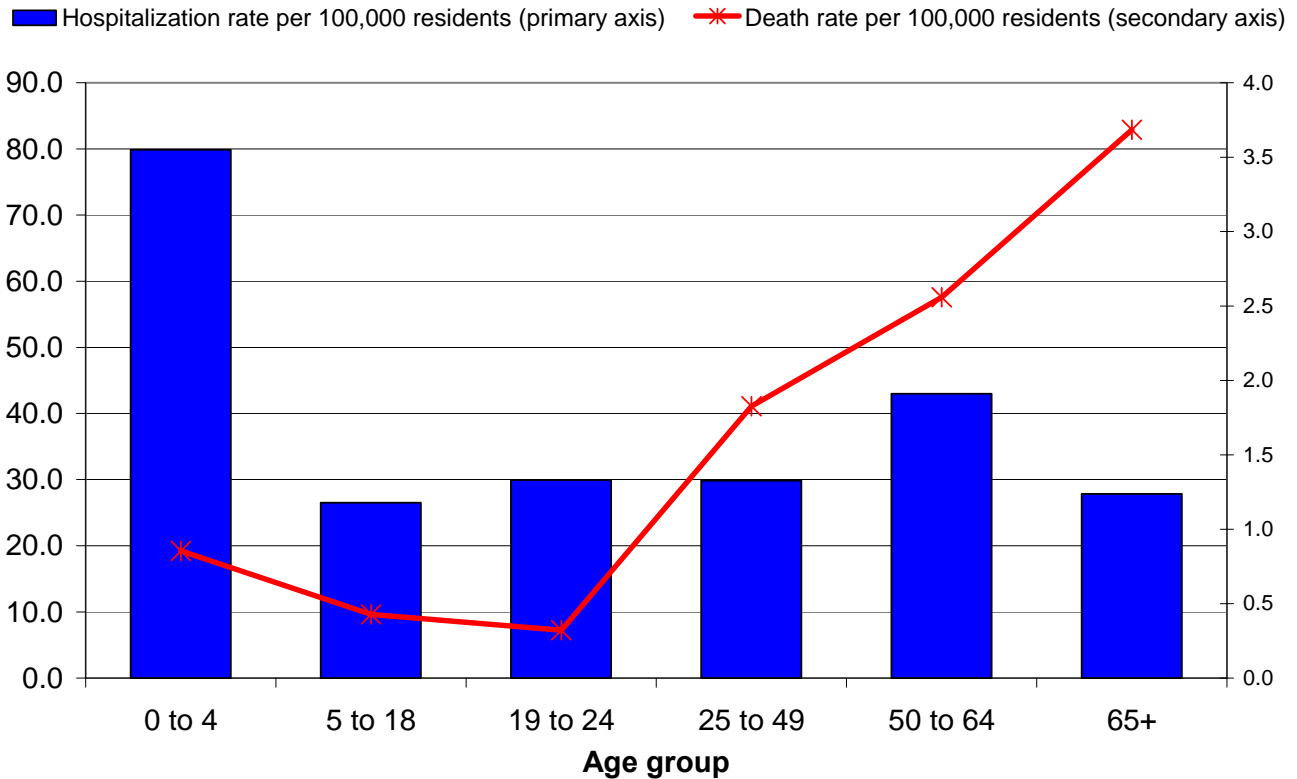
*Numbers are provisional and may fluctuate due to reporting delays

The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8

Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

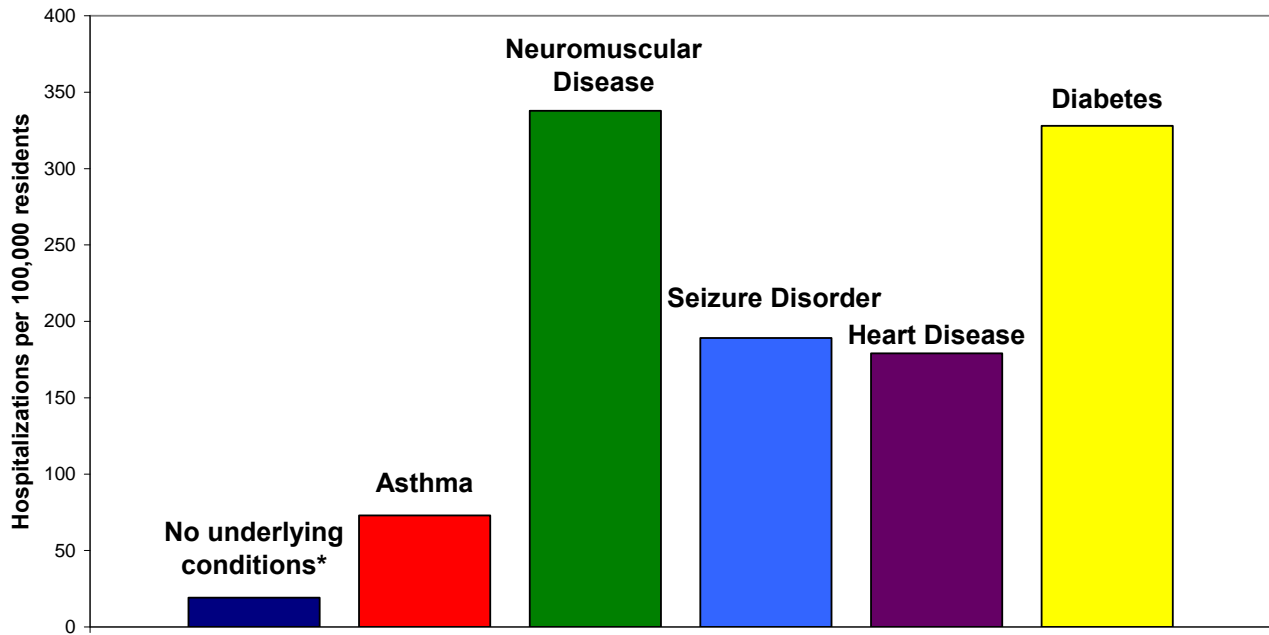
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 100% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=126 N (%)	Adult (age >17 years), N=366 N (%)
Treatment		
Received antivirals	101 (80)	324 (89)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (15)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

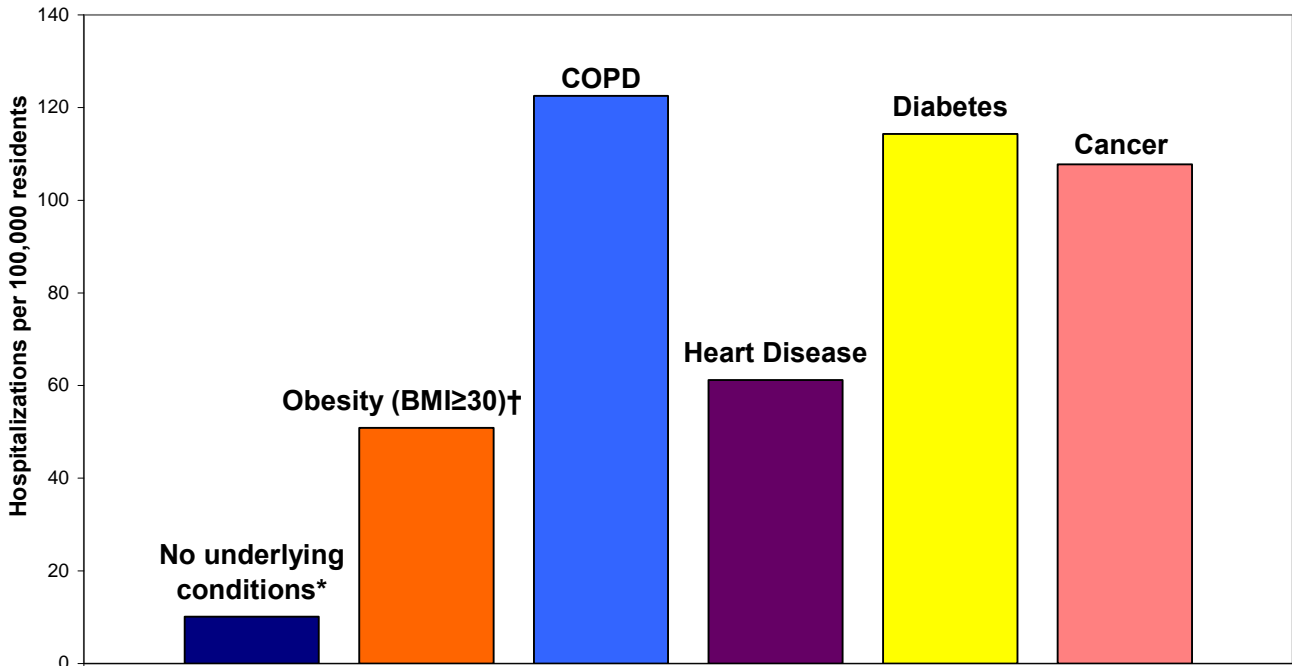
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)

* No ACIP underlying conditions

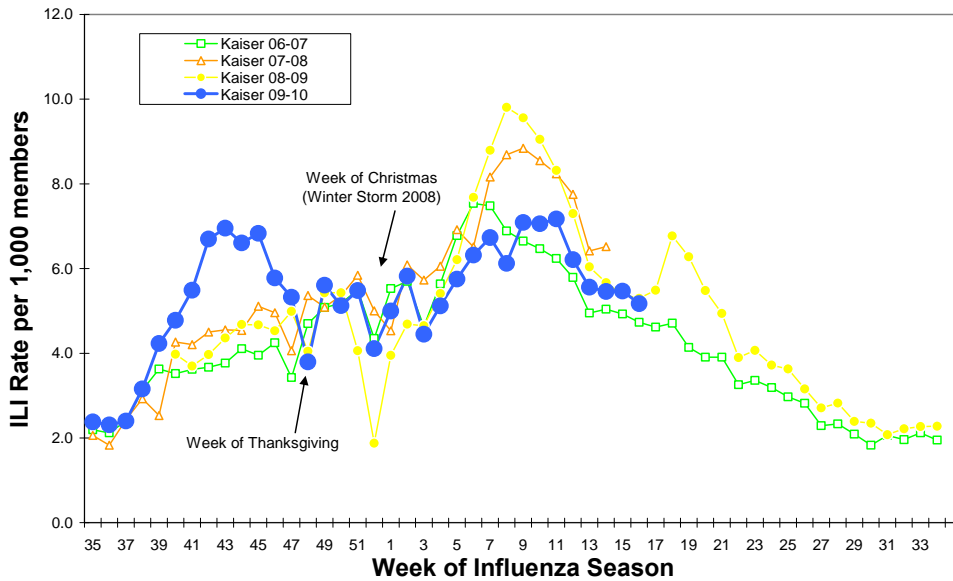
† Based on 80% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

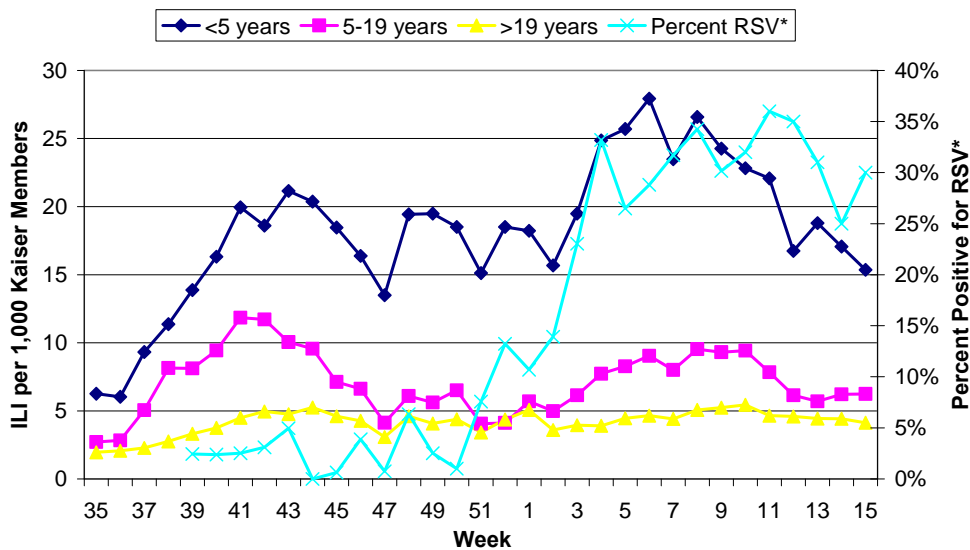
Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits decreased from 5.47 to 5.17 per 1,000 Kaiser members for the week ending April 17, 2010. The increase in ILI among Kaiser Permanent patients from January to mid-march was driven by the 0-4 year old age group and parallels the increases observed for RSV activity in Oregon.

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



**Kaiser Syndromic ILI per 1,000 by Age Group
and RSV Laboratory Surveillance Percent Positivity**



*Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System. It is calculated by dividing the number of positive RSV tests by the total number of RSV test performed.

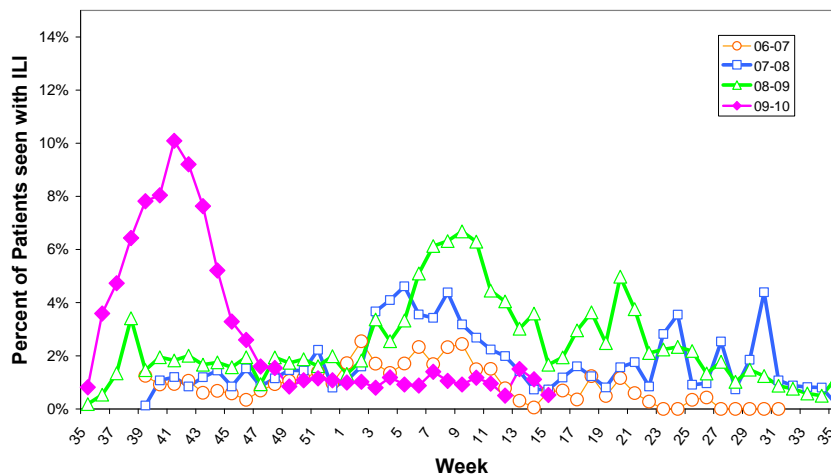
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending April 17, 2010, 0.52% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending April 17th	1715	0.52	6
Week ending April 10th	1794	1.11	9
Week ending April 3rd	1863	1.50	11

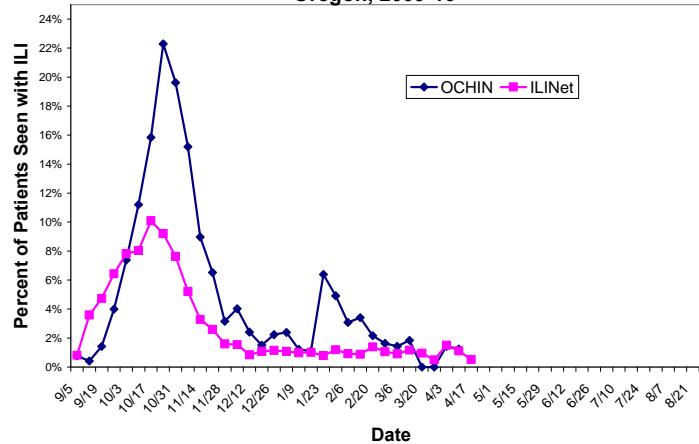
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. Due to a network error, there were no updates for the weeks ending March 20th and 27th. We apologize for this error. The percent of OCHIN patients with ILI during the week ending April 17th was 1.25.

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



Laboratory Surveillance

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

- Sentinel providers submissions (ILINet & CSTE)
- 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
- Lab-confirmation for seasonal influenza

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1. No seasonal influenza has been identified since October, 2009.

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 (%)	CSTE N %	Total N (%)	Total N(%)
Influenza A						
Pandemic H1N1	153 (52)	1,089 (62)	23 (46)	14 (9)	1,279 (57)	1 (17)
Seasonal A (H1)	1 (0)	1 (0)	0	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	0	1 (0)	0
Influenza B	1 (0)	0	0	0	1 (0)	0
Respiratory Syncytial Virus (RSV)	0	0	0	6 (4)	6 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (2)	6 (0)	0
Parainfluenza type 2	0	0	0	1 (1)	1 (0)	0
Adenovirus	2 (1)	0	0	7 (4)	9 (0)	0
Pending	0	0 (0)	0	3 (2)	3 (0)	1 (17)
Undetected	136 (46)	665 (38)	26 (52)	126 (79)	953 (42)	4 (67)
Total Tested	295	1,757	49	160	2,261	6

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

FLU BITES

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

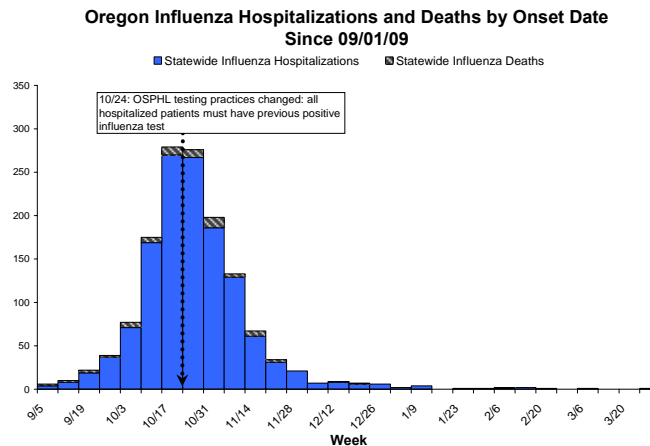
Published April 9, 2010



Summary

- There were only two hospitalizations and no deaths reported for the month of March; there have been no hospitalizations or deaths to date in the month of April.
- Since September 1, 2009, 1,315 patients have been hospitalized with laboratory-confirmed influenza statewide (958 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, 67 people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 65 deaths for whom information about medical conditions is known, 59 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – February 13th to be 3.9 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year. Kaiser Permanente NW ILI levels decreased for the third week in a row.
- Respiratory syncytial virus (RSV) activity in Oregon decreased to 31% positivity* for the week ending April 3rd. Despite the decrease from last week's percent positivity (35%), RSV activity is higher for this time of year compared to the previous four seasons.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

* Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System and is calculated by dividing the number of positive tests for RSV by the total number of tests performed



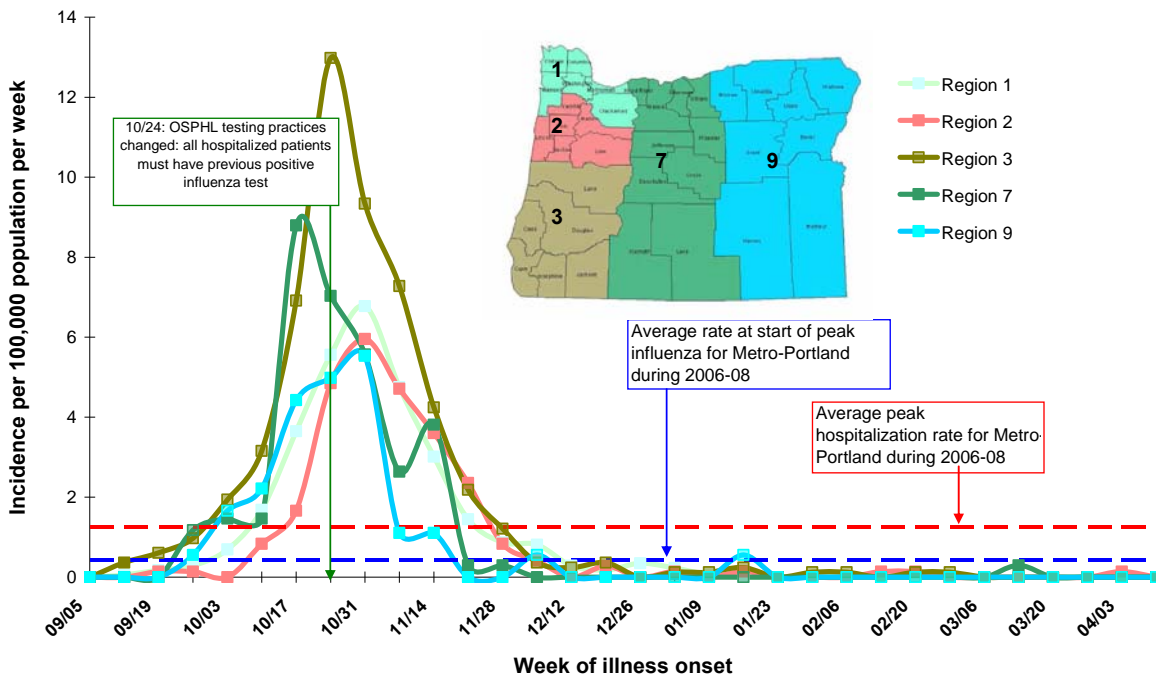
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 713 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	22	2	3	3	5	5	4	0	25.5
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	53	6	9	3	19	6	10	0	31.7
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	261	31	23	18	92	68	29	0	36.4
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1315	187	186	93	392	319	137	1	34.7
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.9	26.5	29.6	29.8	43.0	28.0		34.7

Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



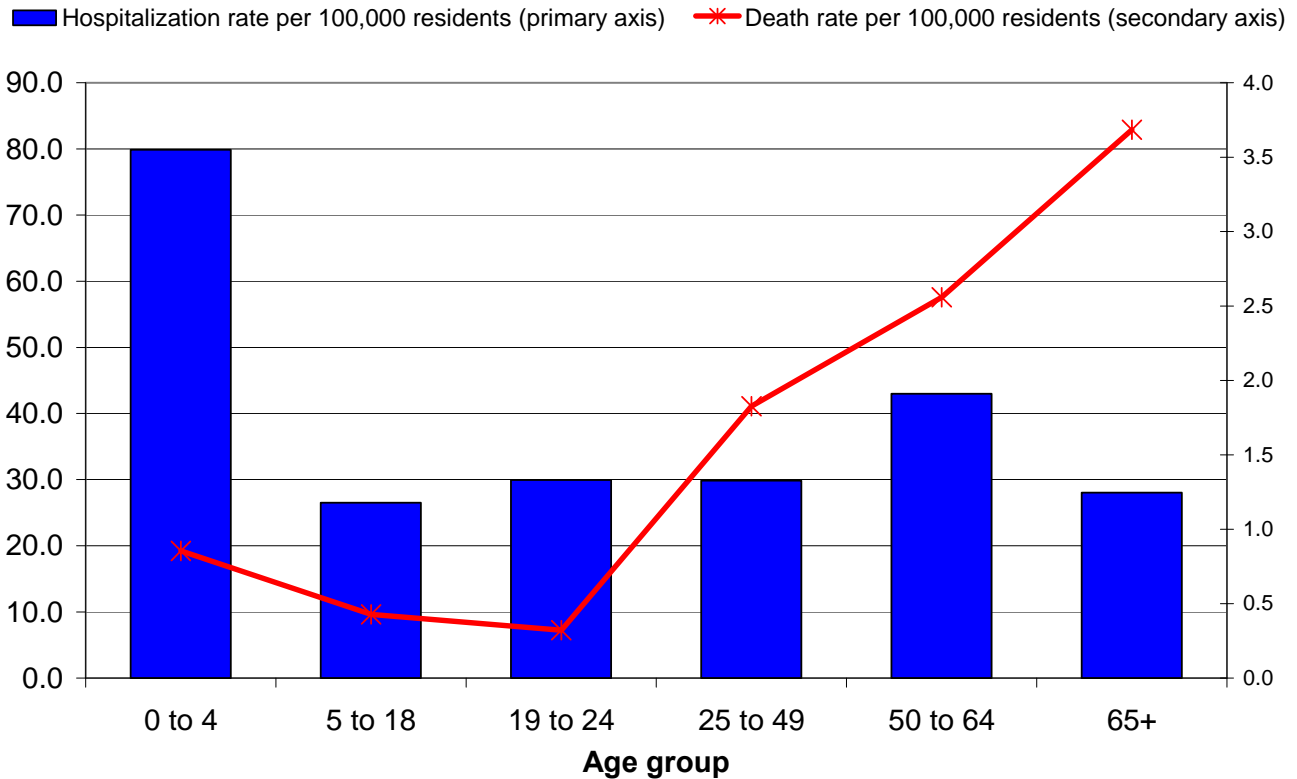
*Numbers are provisional and may fluctuate due to reporting delays

The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8

Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

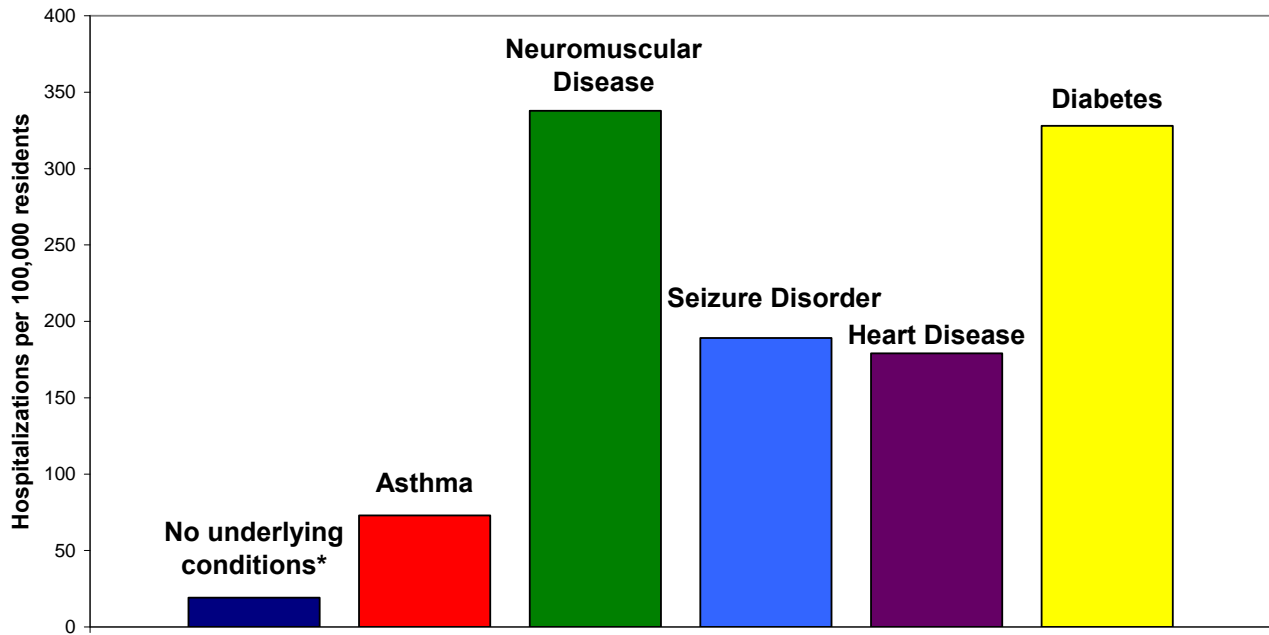
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 100% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=126 N (%)	Adult (age >17 years), N=366 N (%)
Treatment		
Received antivirals	101 (80)	324 (89)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (15)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

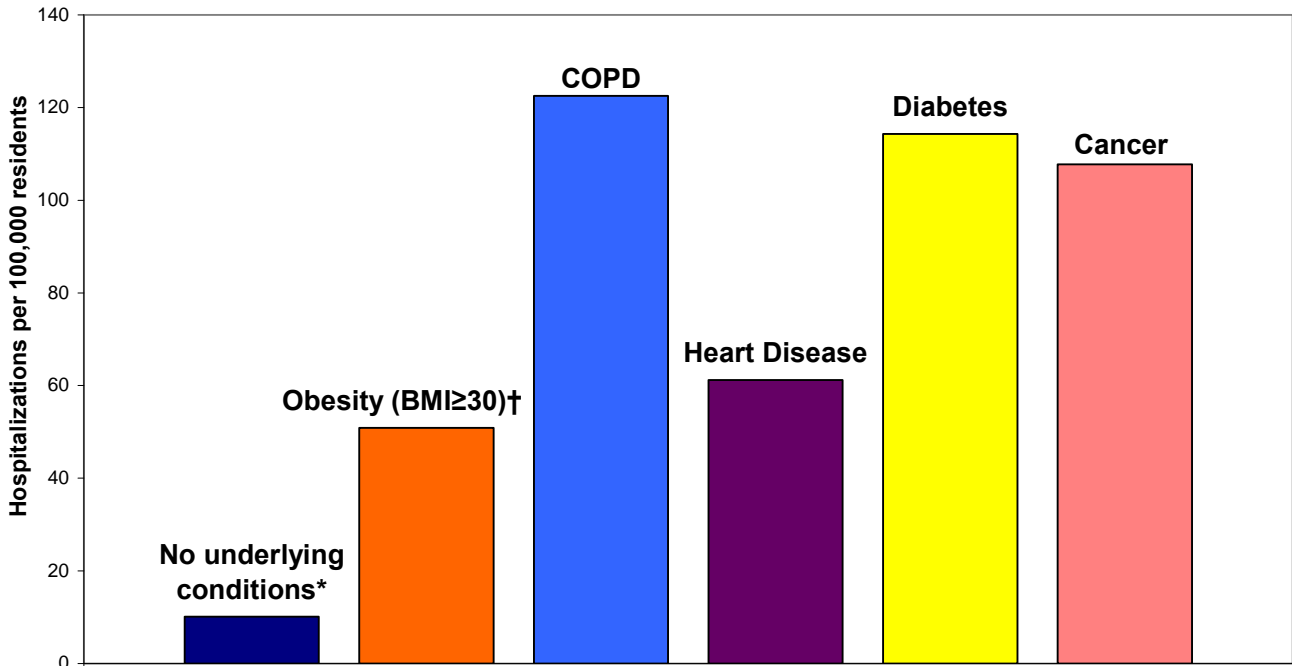
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)

* No ACIP underlying conditions

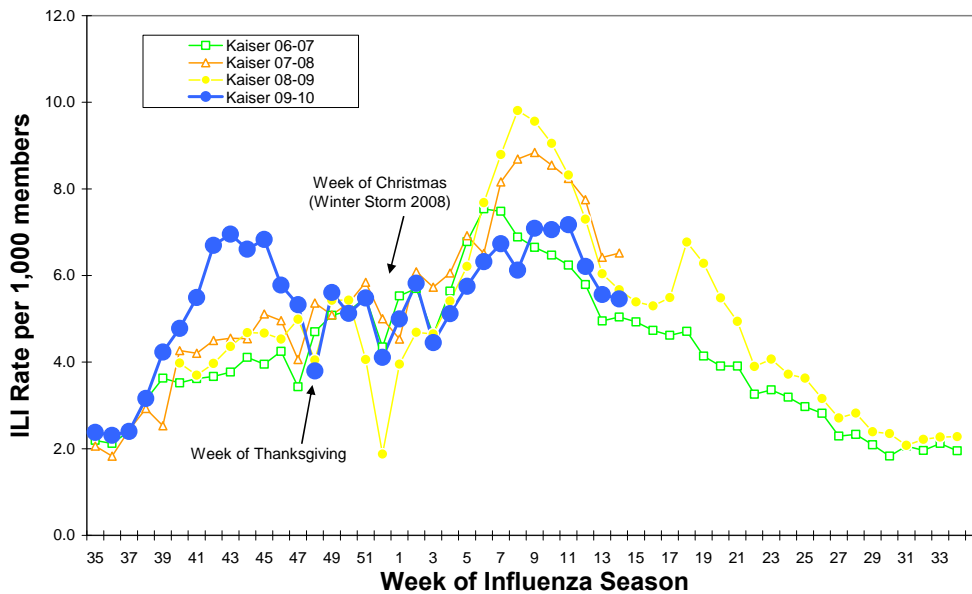
† Based on 80% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

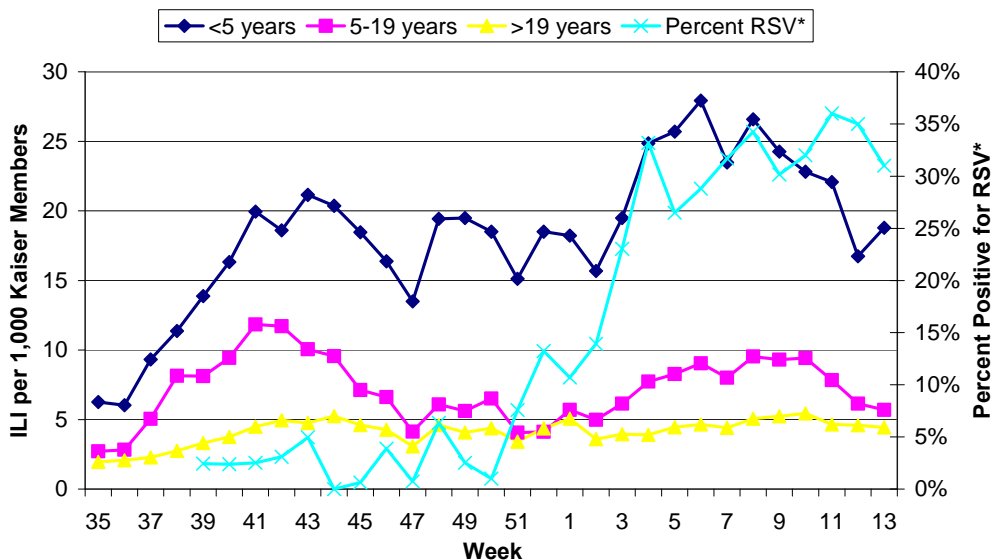
Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits decreased for the second week in a row to 5.46 per 1,000 Kaiser members for the week ending March 27, 2010. The increase in ILI among Kaiser Permanent patients from January to mid-march was driven by the 0-4 year old age group and parallels the increases observed for RSV activity in Oregon.

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



**Kaiser Syndromic ILI per 1,000 by Age Group
and RSV Laboratory Surveillance Percent Positivity**



*Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System. It is calculated by dividing the number of positive RSV tests by the total number of RSV test performed.

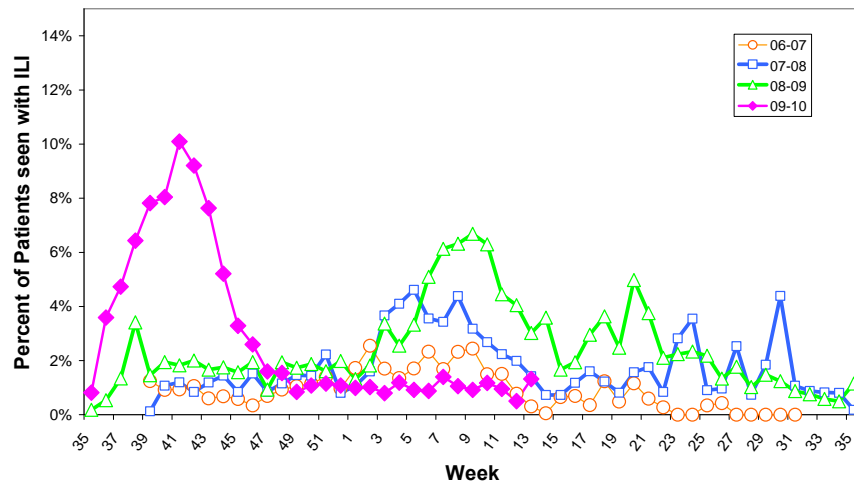
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending April 3, 2010, 1.32% of outpatients had ILI, which is just above the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending April 3rd	1824	1.32	10
Week ending March 27th	2589	0.5	13
Week ending March 20th	2617	0.96	13

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



Laboratory Surveillance

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

- Sentinel providers submissions (ILINet & CSTE)
- 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
- Lab-confirmation for seasonal influenza

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1. No seasonal influenza has been identified since October, 2009.

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 (%)	CSTE N %	Total N (%)	Total N(%)
Influenza A						
Pandemic H1N1	153 (52)	1,088 (62)	23 (46)	14 (9)	1,278 (57)	1 (7)
Seasonal A (H1)	1 (0)	1 (0)	0	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	0	1 (0)	0
Influenza B	1 (0)	0	0	0	1 (0)	0
Respiratory Syncytial Virus (RSV)	0	0	0	6 (0)	6 (0)	3 (21)
Parainfluenza type 1	2 (1)	1 (0)	0	3 (2)	6 (0)	0
Parainfluenza type 2	0	0	0	1 (1)	1 (0)	0
Adenovirus	2 (1)	0	0	7 (5)	9 (0)	0
Pending	2 (1)	0 (0)	0	12 (8)	14 (1)	0
Undetected	133 (45)	665 (38)	26 (52)	111 (72)	935 (41)	10 (71)
Total Tested	294	1,756	50	154	2,254	14

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

FLU BITES

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

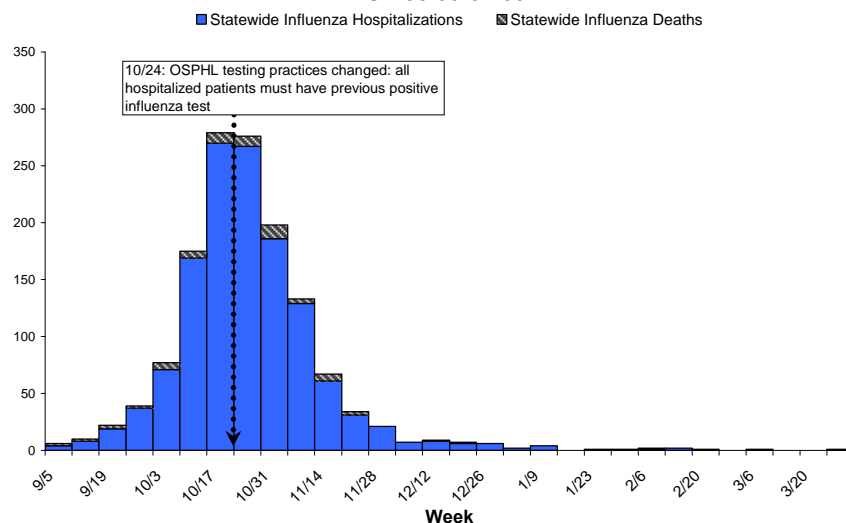
Published April 2, 2010



Summary

- There were only two hospitalizations and no deaths reported for the month of March.
- Since September 1, 2009, 1,314 patients have been hospitalized with laboratory-confirmed influenza statewide (957 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, 67 people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 65 deaths for whom information about medical conditions is known, 59 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – February 13th to be 3.9 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year. Kaiser Permanente NW ILI levels decreased for the second week in a row.
- Respiratory syncytial virus (RSV) activity in Oregon decreased only slightly this week from the season high observed last week.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



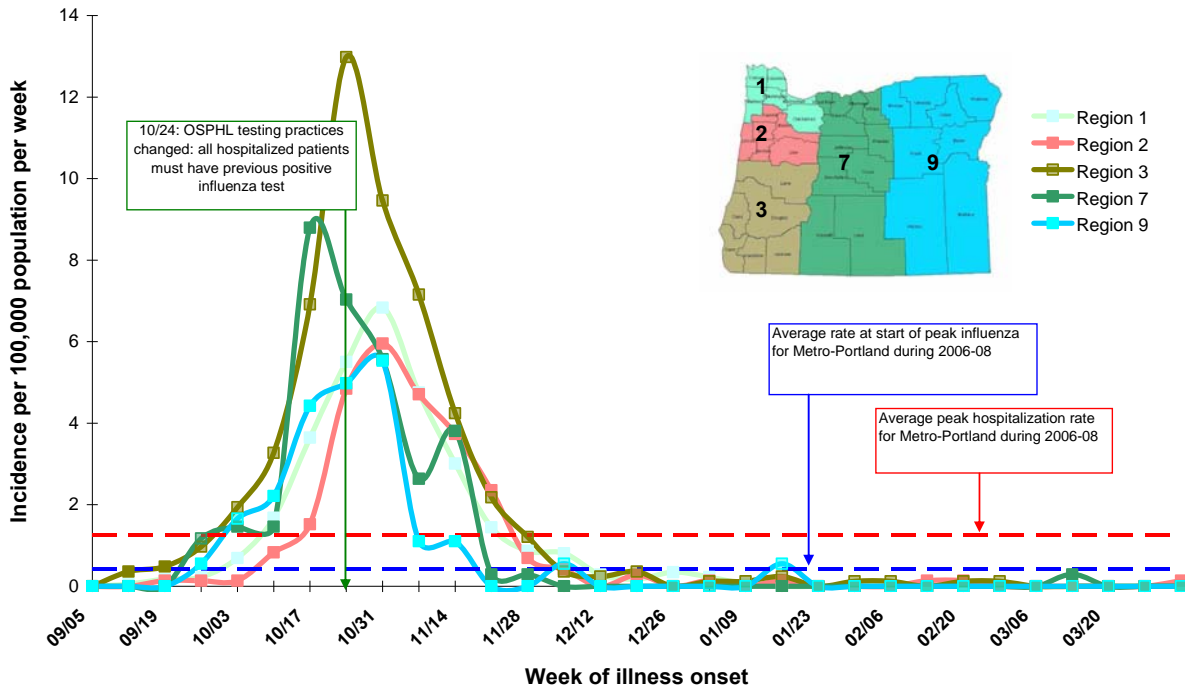
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 713 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	22	2	3	3	5	5	4	0	25.5
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	53	6	9	3	19	6	10	0	31.7
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1314	187	186	92	392	319	137	1	34.7
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.9	26.5	29.6	29.8	43.0	28.0		34.7

Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*

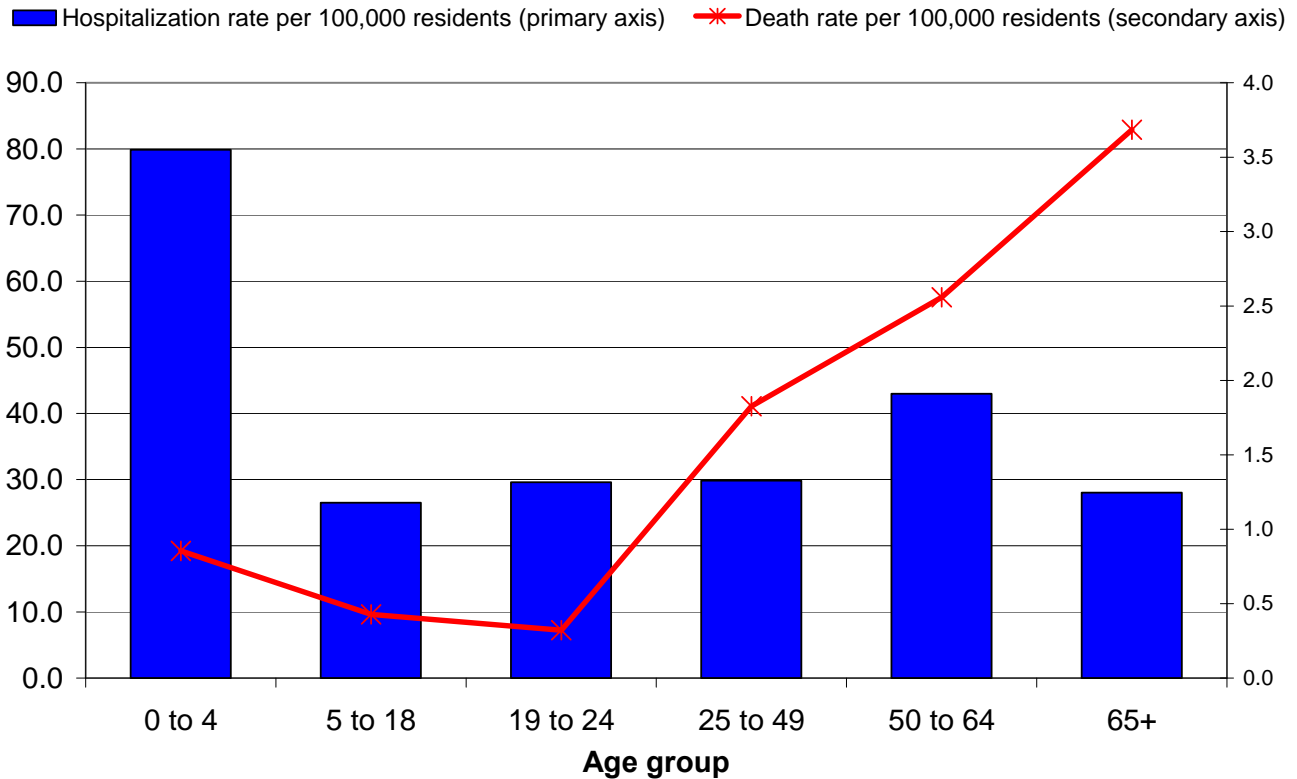


The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8

Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

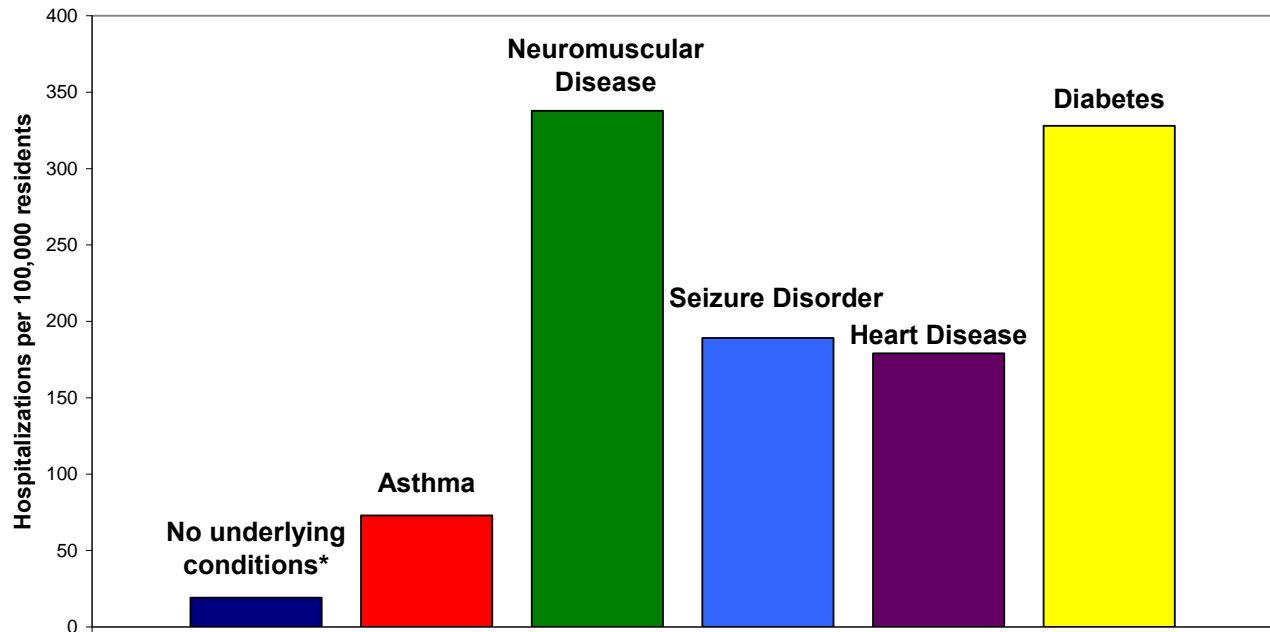
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 100% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=126 N (%)	Adult (age >17 years), N=366 N (%)
Treatment		
Received antivirals	101 (80)	324 (89)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (15)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

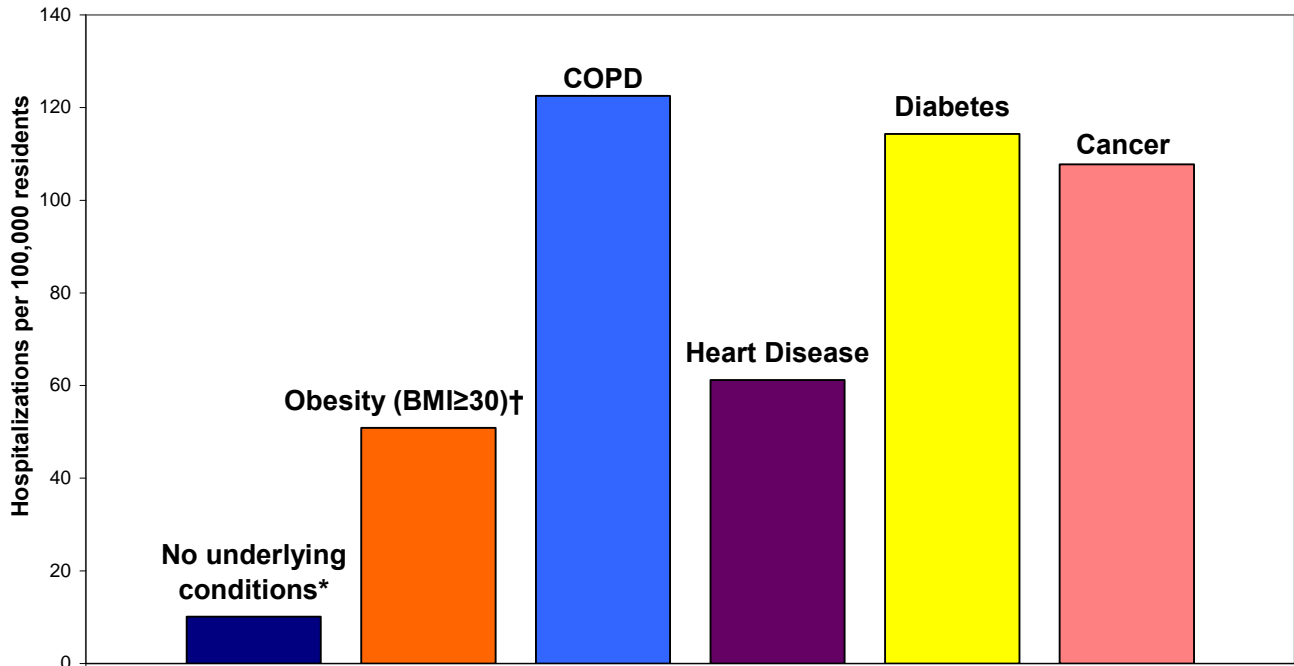
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)

* No ACIP underlying conditions

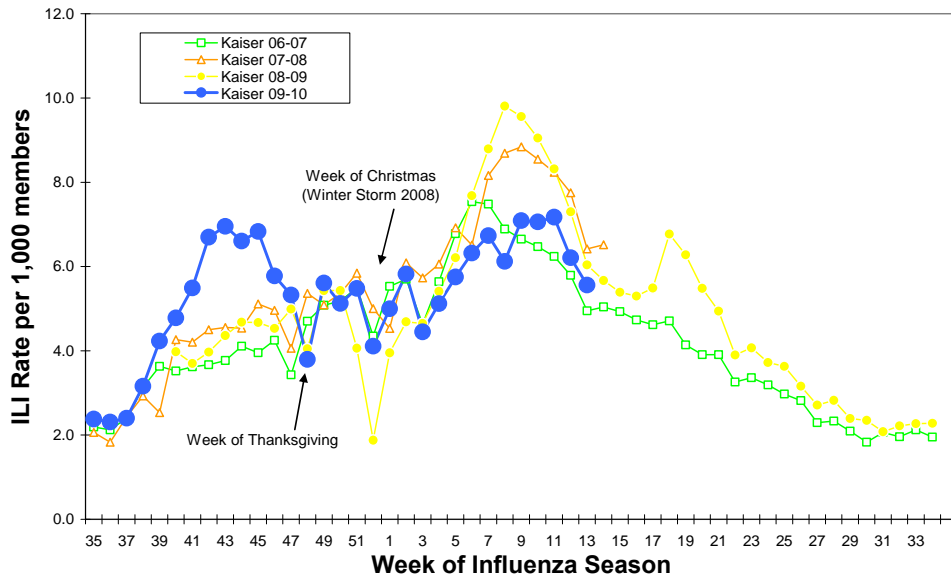
† Based on 80% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

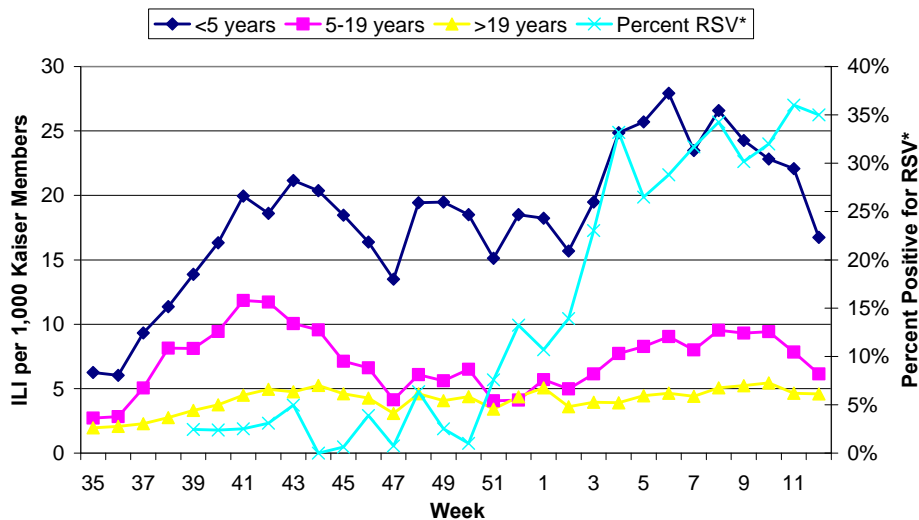
Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits decreased for the second week in a row to 5.56 per 1,000 Kaiser members for the week ending March 27, 2010. The increase in ILI among Kaiser Permanent patients from January to mid-march was driven by the 0-4 year old age group and parallels the increases observed for RSV activity in Oregon.

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



**Kaiser Syndromic ILI per 1,000 by Age Group
and RSV Laboratory Surveillance Percent Positivity**



*Percent positive for RSV is based on data from Oregon's RSV Laboratory Surveillance System. It is calculated by dividing the number of positive RSV tests by the total number of RSV test performed.

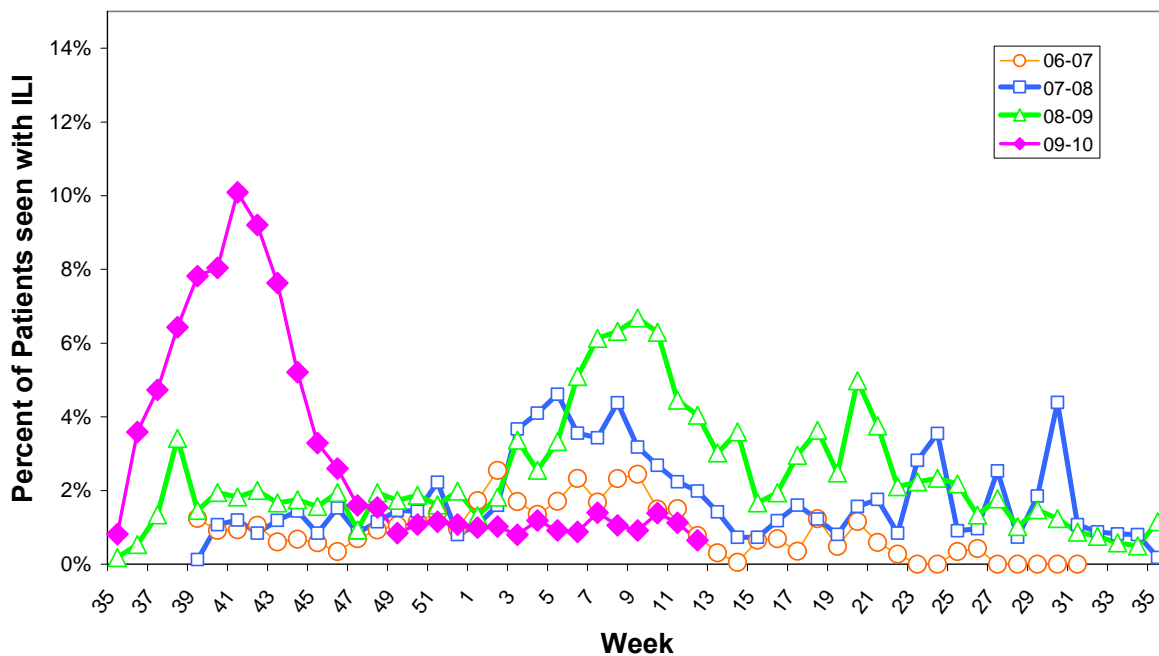
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending March 27th, 2010, 0.65% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending March 27 th	1992	0.65	10
Week ending March 20 th	2130	1.13	11
Week ending March 13 th	2236	1.39	12

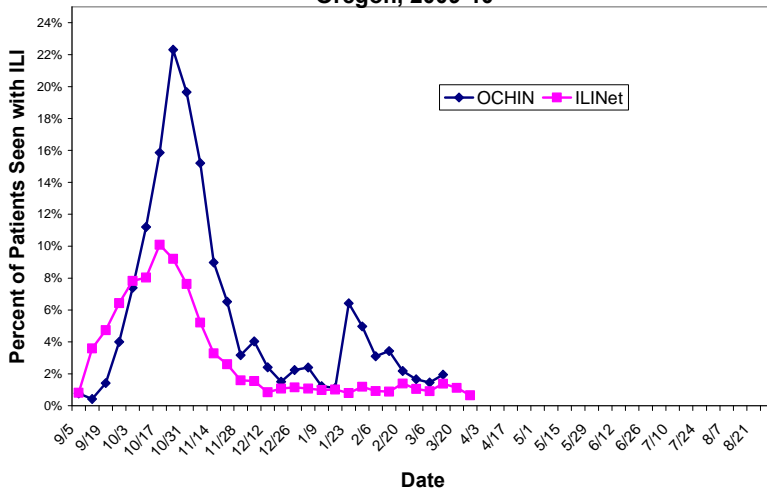
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. There was no update for the week ending March 20th at time of publication. We apologize for the delay in reporting. The percent of OCHIN patients with ILI during the week ending March 13th was 1.95.

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



Laboratory Surveillance

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

- Sentinel providers submissions (ILINet & CSTE)
- 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
- Lab-confirmation for seasonal influenza

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1. No seasonal influenza has been identified since October, 2009.

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 (%)	CSTE N %	Total N (%)	Total N(%)
Influenza A						
Pandemic H1N1	153 (53)	1,088 (62)	23 (61)	14 (10)	1,278 (57)	0
Seasonal A (H1)	1 (0)	1 (0)	0	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	0	1 (0)	0
Influenza B	1 (0)	0	0	0	1 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (2)	6 (0)	0
Parainfluenza type 2	0	0	0	1 (1)	1 (0)	0
Adenovirus	2 (1)	0	0	7 (5)	9 (0)	1 (8)
Pending	0	1 (0)	0	8 (6)	9 (0)	0
Undetected	132 (45)	669 (38)	15 (39)	102 (76)	918 (41)	12 (92)
Total Tested	291	1,761	38	135	2,225	13

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

FLU BITES

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

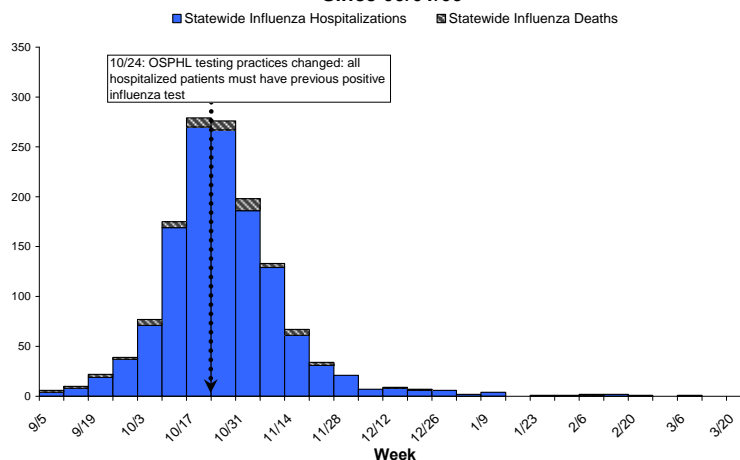
Published March 26, 2010



Summary

- There have only been two hospitalizations and no deaths reported to date in the month of March.
- Since September 1, 2009, 1,314 patients have been hospitalized with laboratory-confirmed influenza statewide (957 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, 67 people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 65 deaths for whom information about medical conditions is known, 59 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – February 13th to be 3.9 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year. Kaiser Permanente NW ILI levels decreased this week and are consistent with previous seasons.
- Respiratory syncytial virus (RSV) activity in Oregon increased this week to the highest level observed during this RSV season.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



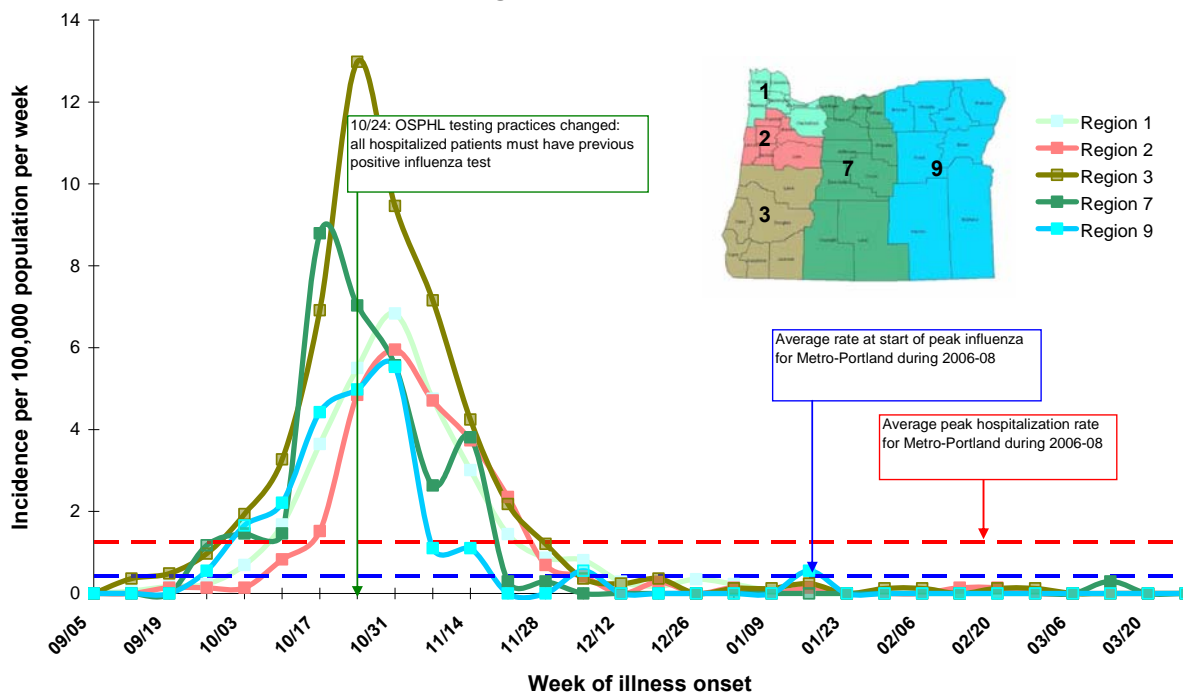
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 713 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	22	2	3	3	5	5	4	0	25.5
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	53	6	9	3	19	6	10	0	31.7
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1314	187	186	92	392	319	137	1	34.7
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.9	26.5	29.6	29.8	43.0	28.0		34.7

Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



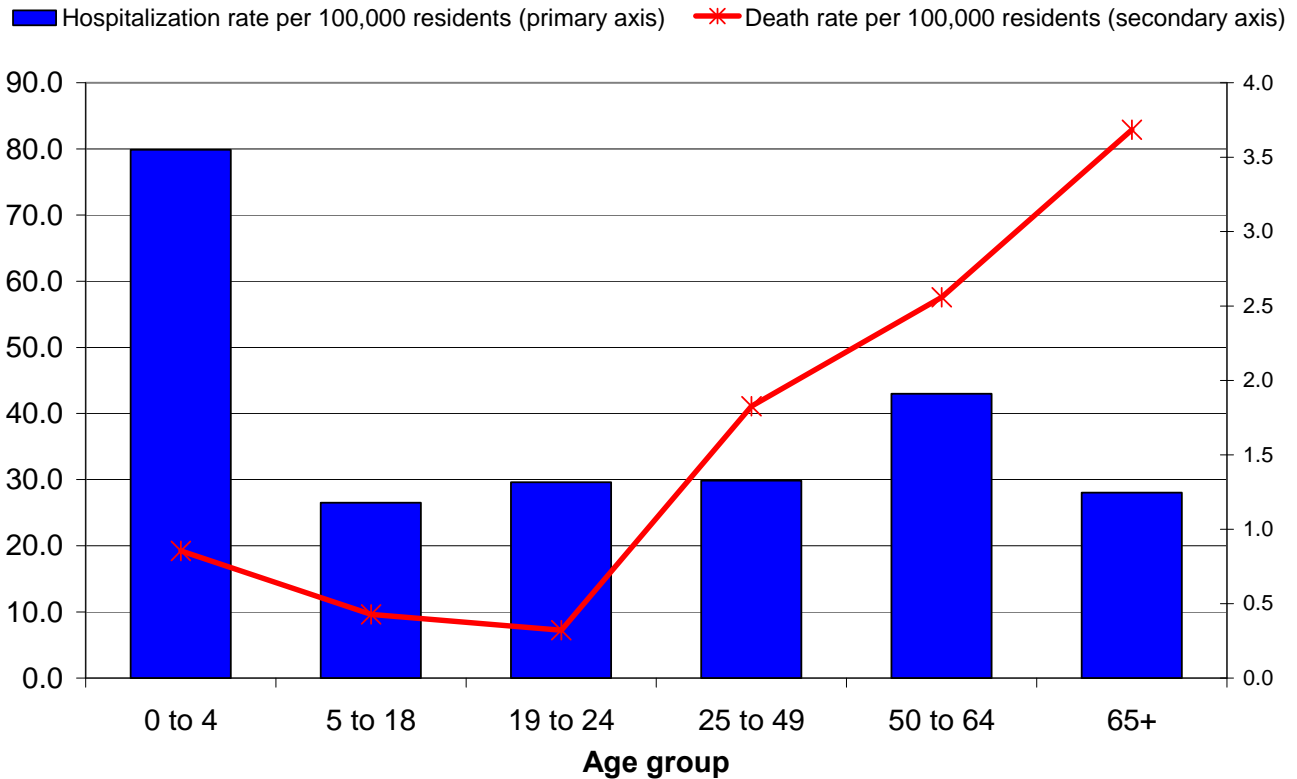
*Numbers are provisional and may fluctuate due to reporting delays

The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8

Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

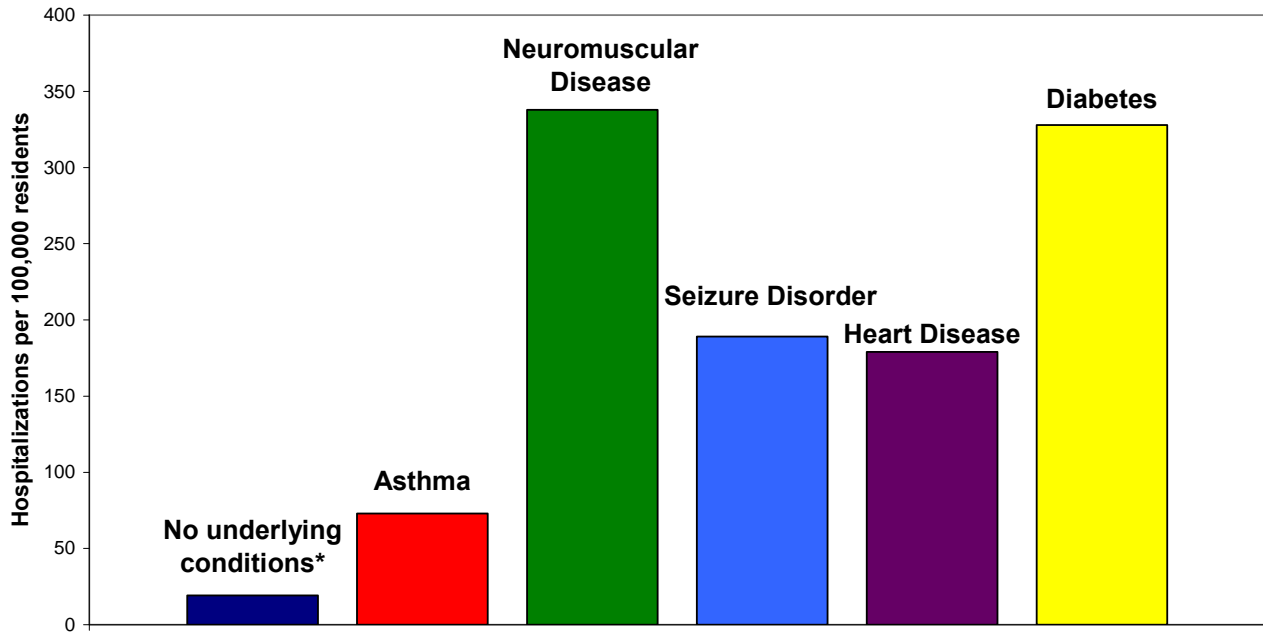
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 99% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=127 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	100 (79)	323 (88)
Outcomes		
Pneumonia	36 (28)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (14)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

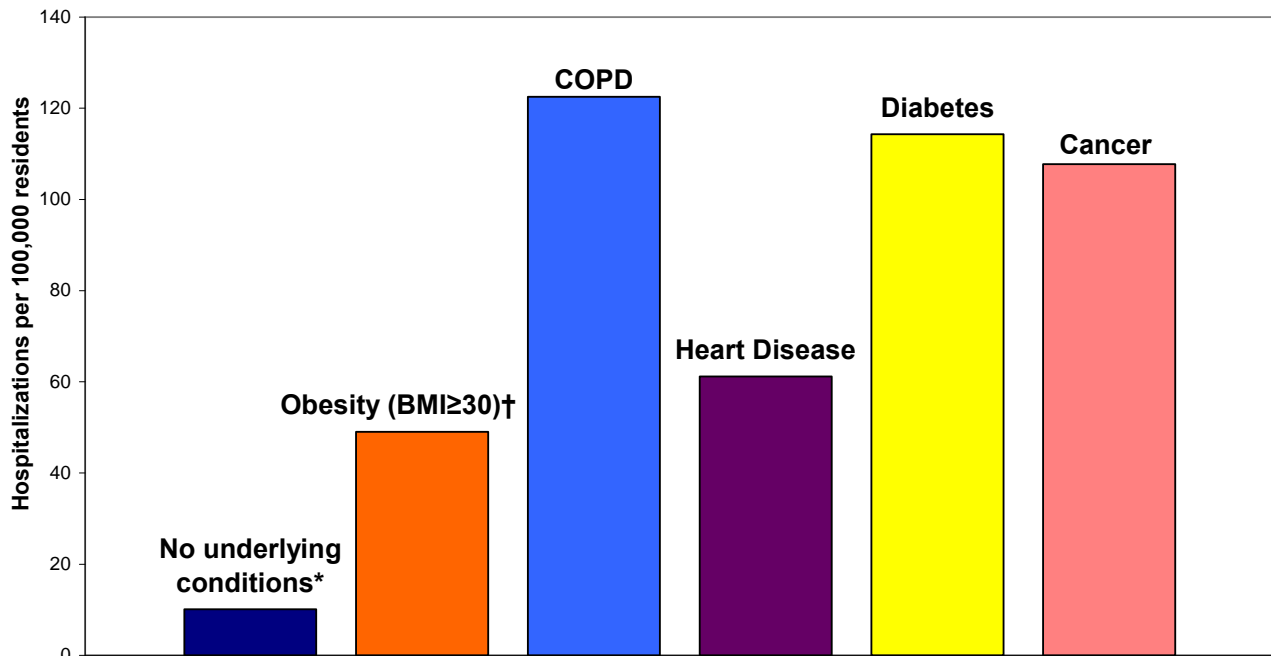
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



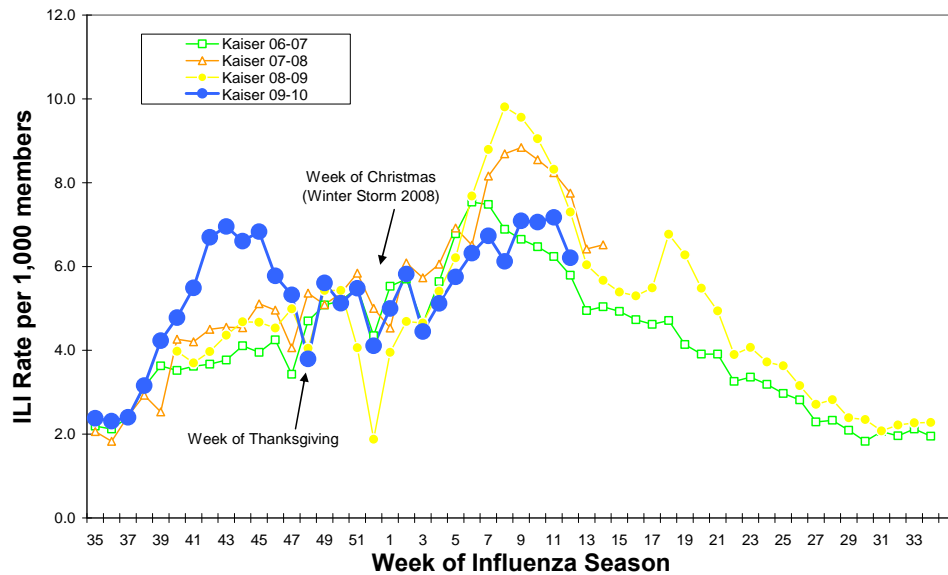
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 77% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits decreased to 6.21 per 1,000 Kaiser members for the week ending March 20, 2010. ILI illness in Kaiser Permanent patients has increased in the 0-4 year old age group since January and correlates with the onset of RSV season.

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



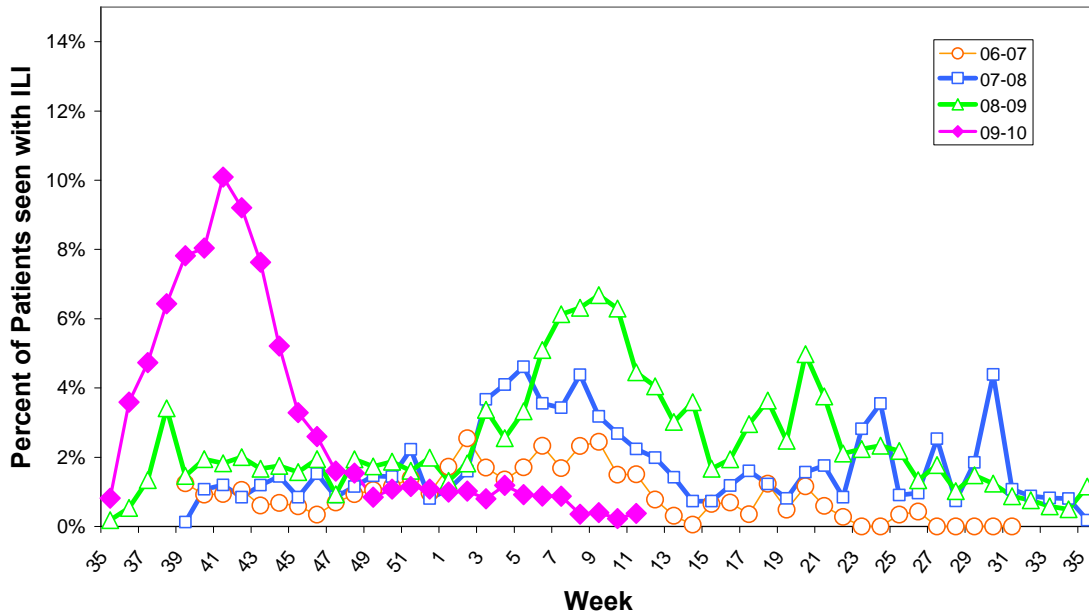
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending March 20th, 2010, 0.37% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending March 20th	1067	0.37	5
Week ending March 13th	1306	0.23	7
Week ending March 6th	2255	0.40	11

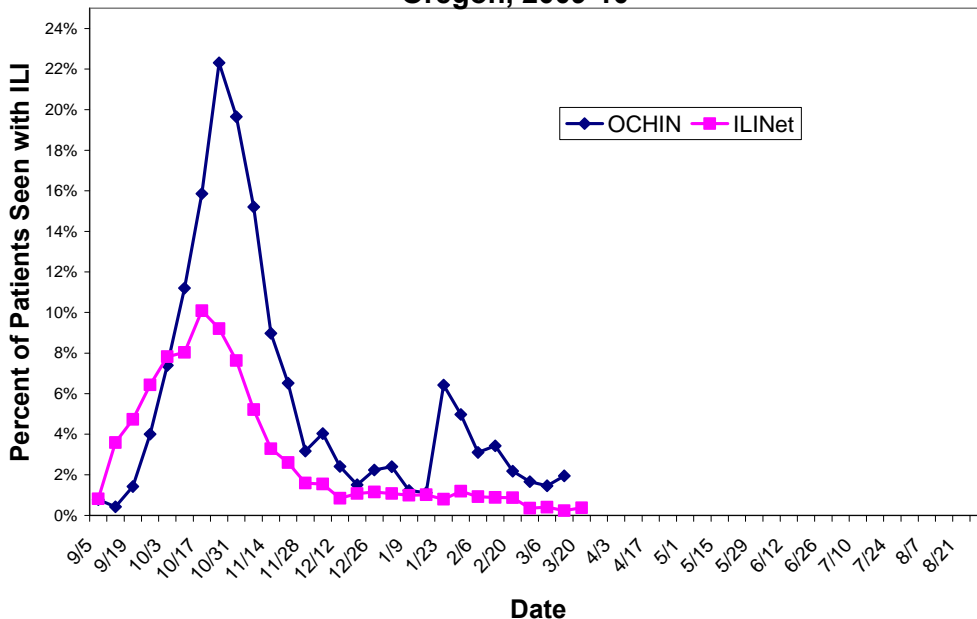
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending March 13th was 1.95.

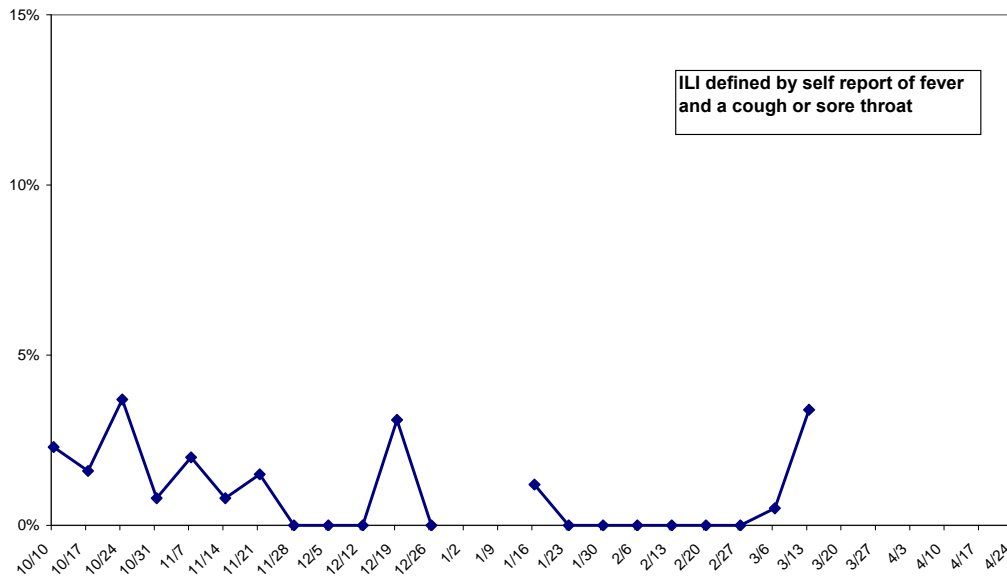
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for ILI

Oregon Public Health Division collects statewide level data on ILI via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). With low levels of influenza activity, BRFSS is only updated every other week. For the last two weeks ending March 6th and March 13th, respectively, 0.5% and 3.4% of respondents reported ILI in the last seven 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 & CSTE)
- 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
- Lab-confirmation for seasonal influenza

Nearly 100% of influenza identified at OSPHL this season has been pandemic H1N1. No seasonal influenza has been identified since October, 2009.

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 (%)	CSTE N %	Total N (%)	Total N(%)
Influenza A						
Pandemic H1N1	153 (53)	1,087 (62)	23 (46)	14 (11)	1,277 (57)	0
Seasonal A (H1)	1 (0)	1 (0)	0	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	0	1 (0)	0
Influenza B	1 (0)	0	0	0	1 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	2 (2)	5 (0)	0
Parainfluenza type 2	0	0	0	1 (1)	1 (0)	0
Adenovirus	2 (1)	0	0	3 (2)	5 (0)	1 (8)
Pending	3 (1)	8 (0)	12 (24)	24 (19)	47 (2)	1 (8)
Undetected	129 (44)	669 (38)	15 (30)	80 (65)	893 (40)	11 (85)
Total Tested	291	1,767	50	124	2,232	13

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

FLU BITES

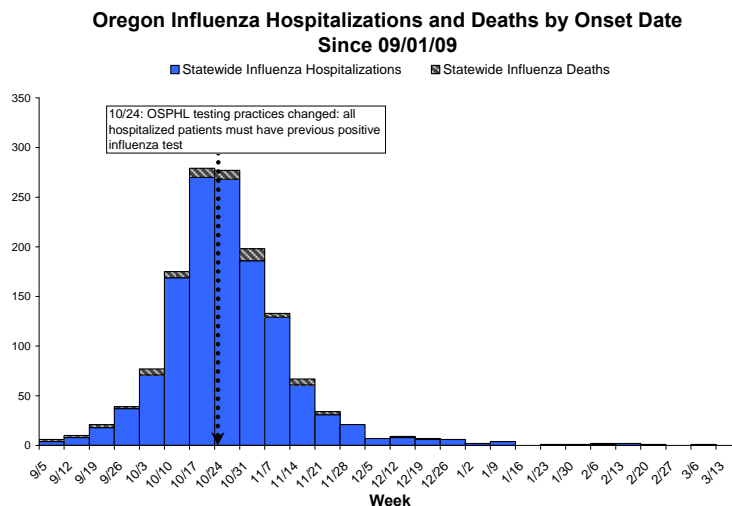
Oregon's Weekly Surveillance Report for Influenza and other Respiratory Viruses

Published March 18, 2010



Summary

- In the month of February, Oregon only had four hospitalizations and one death. There has only been one hospitalization and no deaths reported to date in March.
- Since September 1, 2009, 1,313 patients have been hospitalized with laboratory-confirmed influenza statewide (957 adults; 356 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, 67 people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 65 deaths for whom information about medical conditions is known, 59 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – February 13th to be 3.9 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are consistent with previous seasons.
- Respiratory syncytial virus (RSV) activity in Oregon increased slightly this week. Despite the high levels of activity observed over the past four weeks, RSV activity remains consistent with past seasons.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

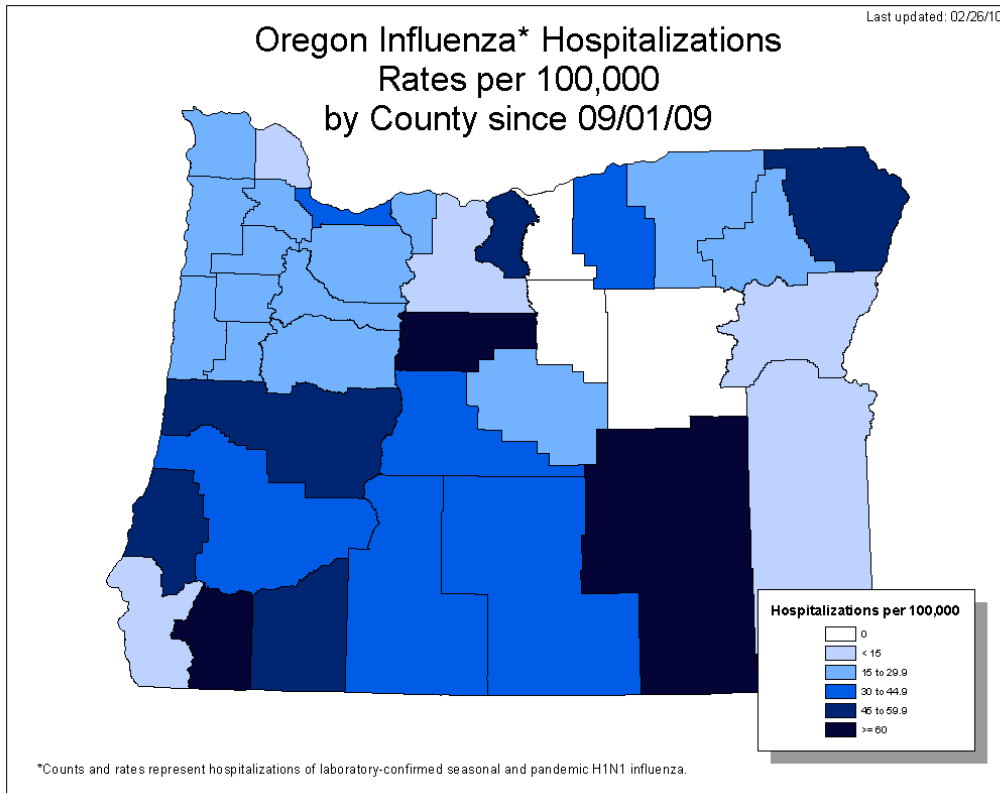


Statewide Hospitalizations and Deaths

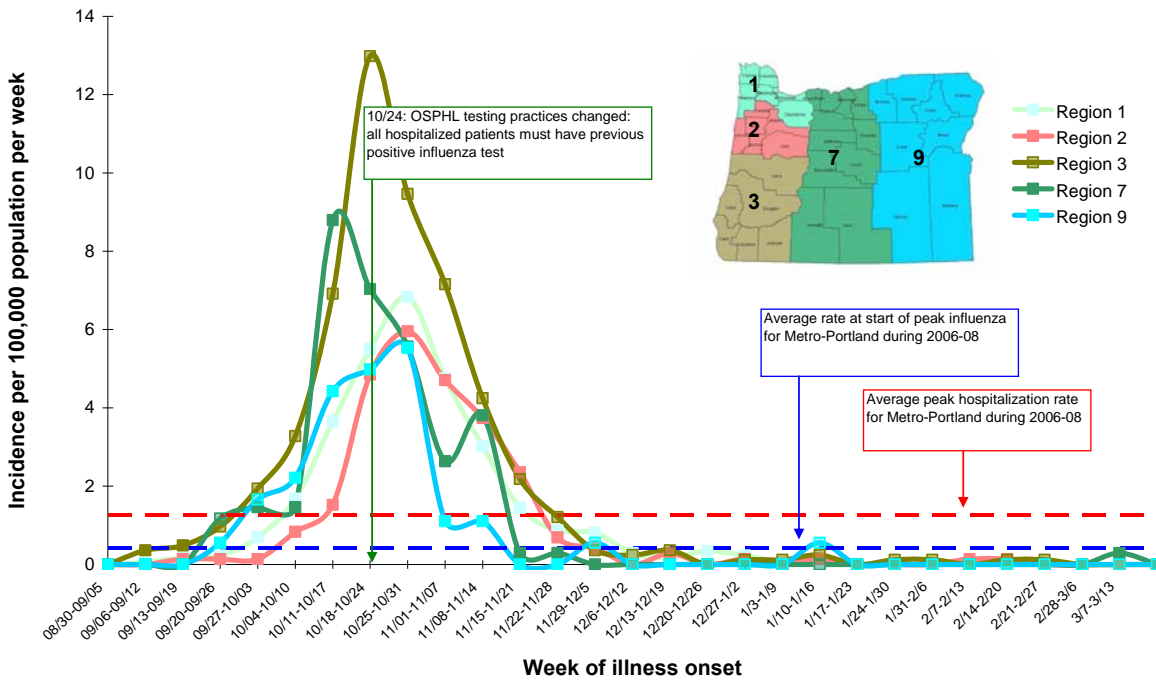
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 713 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	21	1	3	3	5	5	4	0	24.4
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	53	6	9	3	19	6	10	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1313	186	186	92	392	319	137	1	34.6
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.5	29.6	29.8	43.0	28.0		34.6



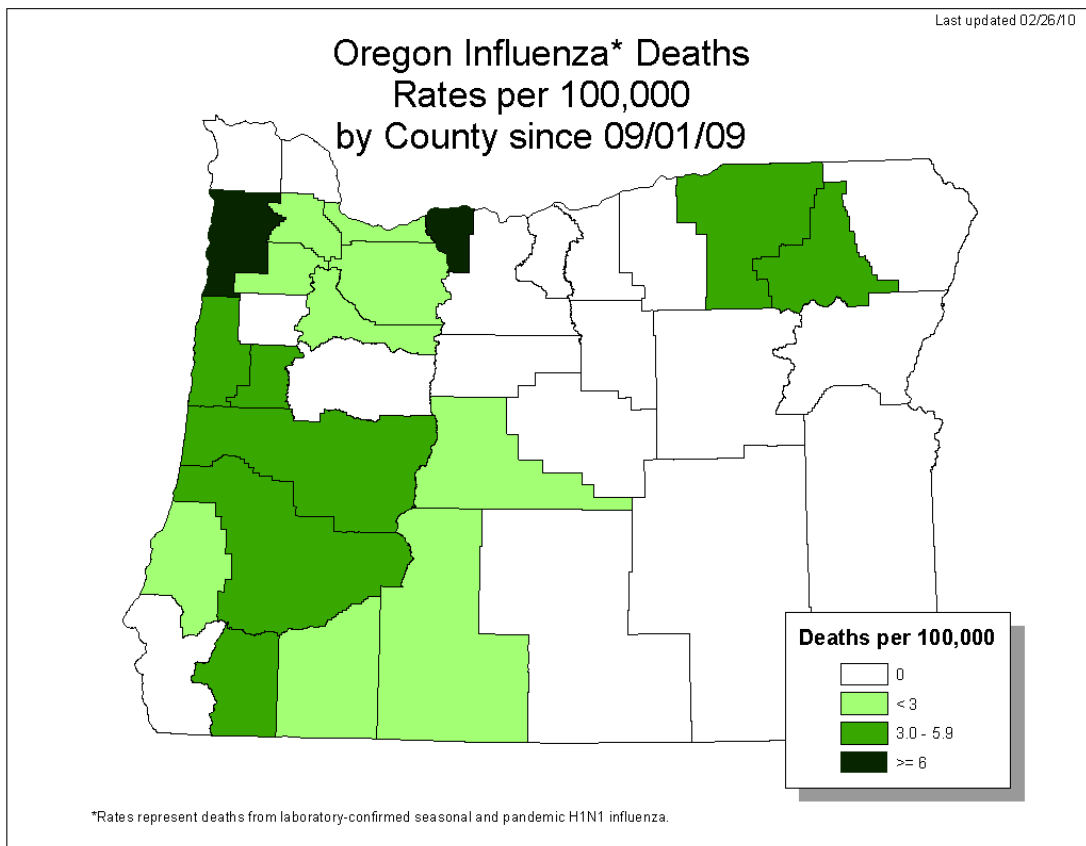
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



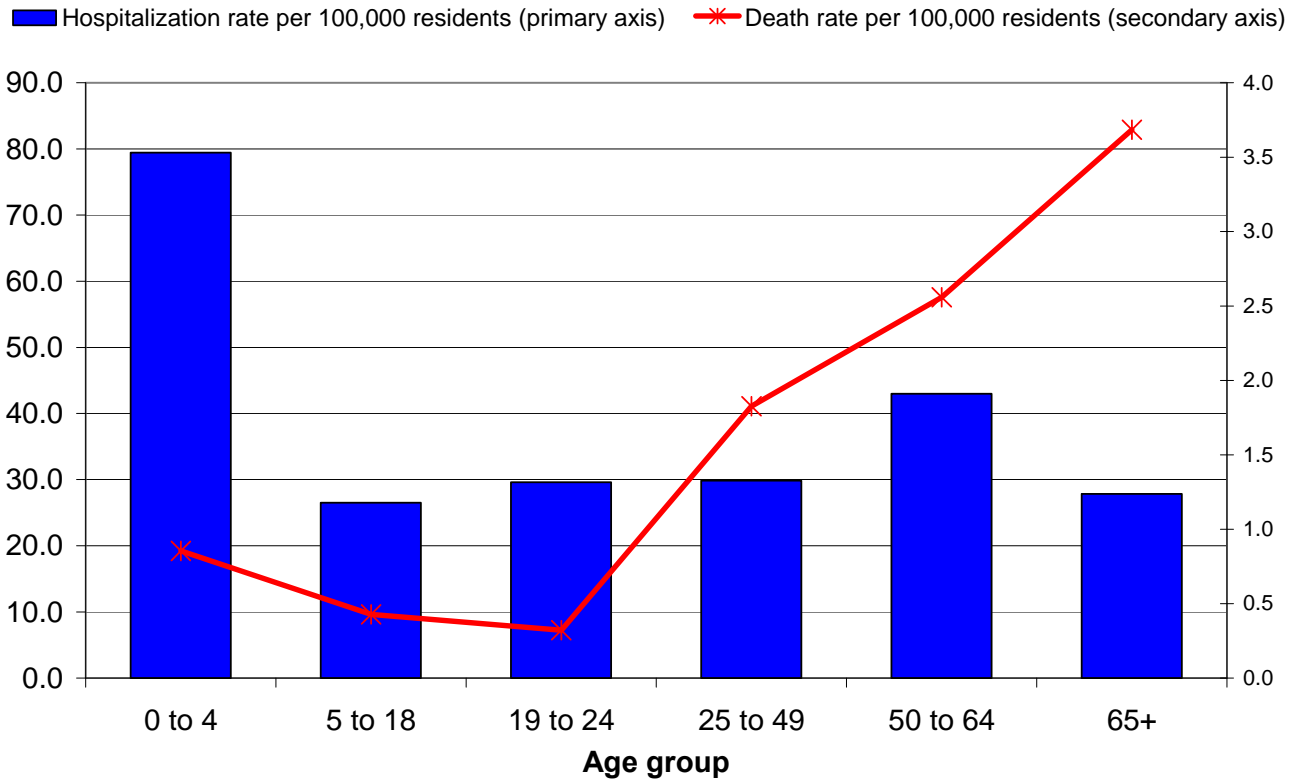
The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

**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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

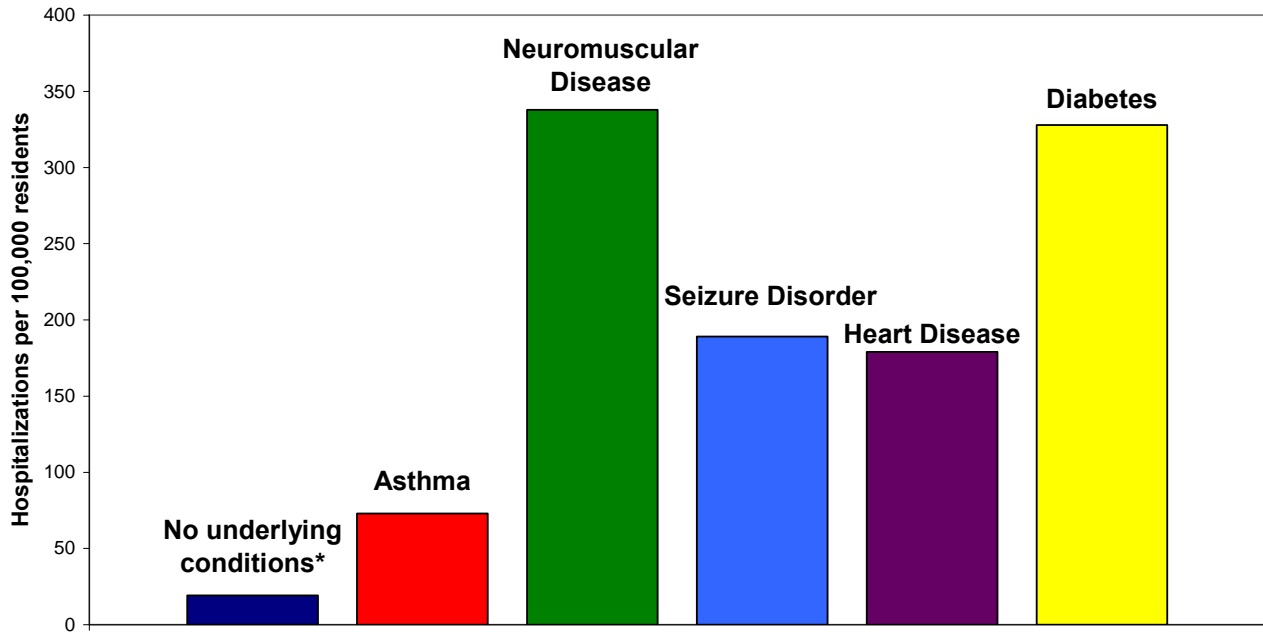
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 99% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=127 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	100 (79)	323 (88)
Outcomes		
Pneumonia	36 (28)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (14)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

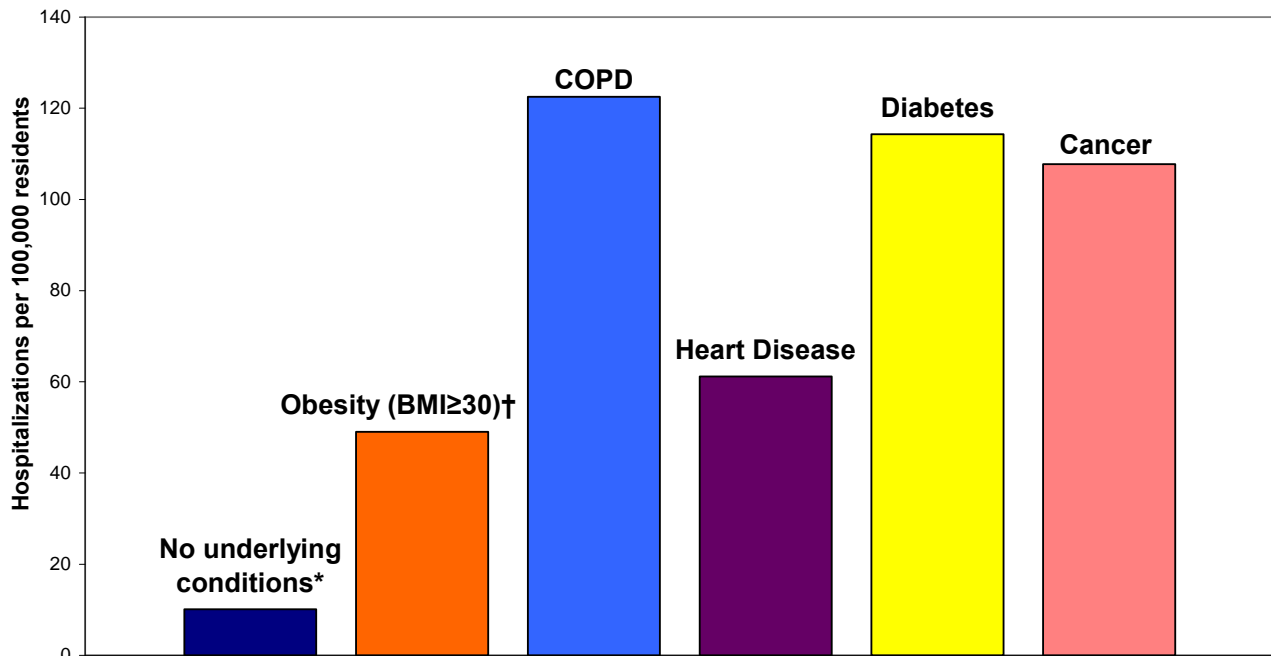
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



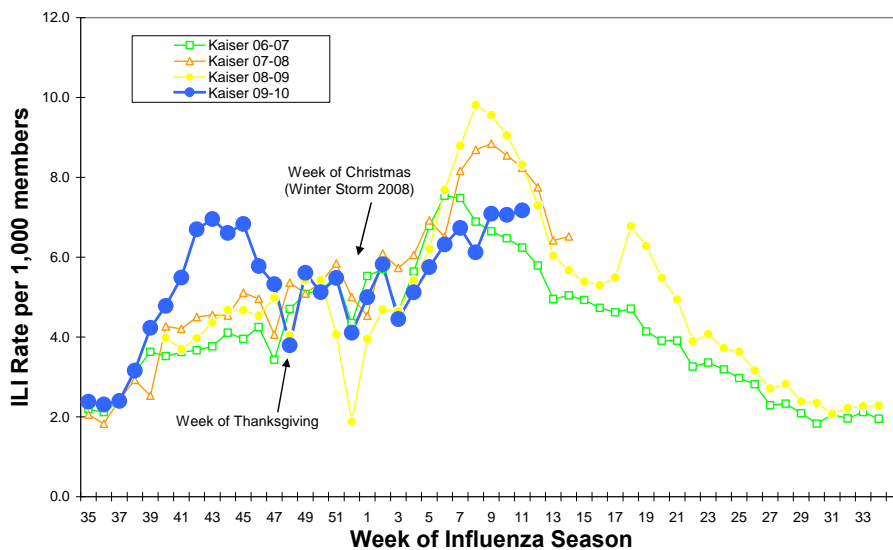
Diseases are not mutually exclusive
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 † Based on 77% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

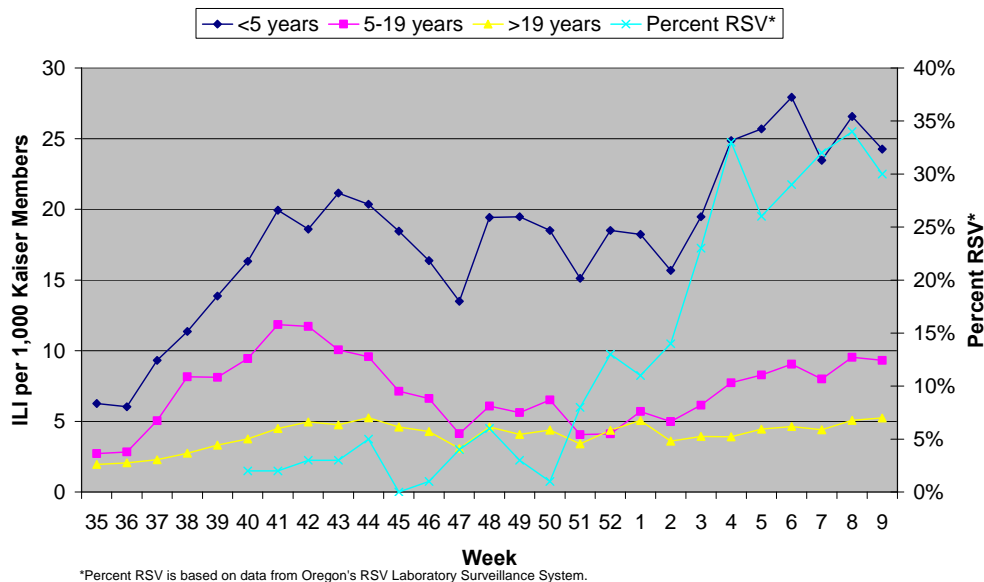
Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits increased slightly to 7.17 per 1,000 Kaiser members for the week ending March 13, 2010. Those less than 5 years of age shared the greatest burden of ILI among Kaiser members and coincides with the increase in RSV activity. The number of outpatient visits remains slightly below those observed at the same point in the last two seasons and above the level observed in the 06-07 season.

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



**Kaiser Syndromic ILI Data by Age Group
Rate per 1,000 Kaiser Members**



*Percent RSV is based on data from Oregon's RSV Laboratory Surveillance System.

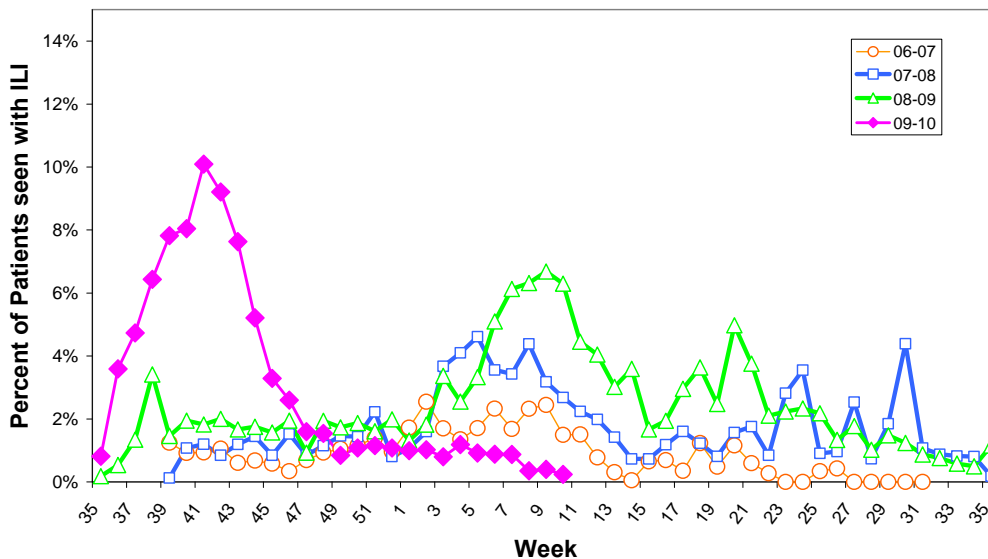
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending March 13th, 2010, 0.24% of outpatients had ILI, which is well below the average for non-influenza weeks, although only six reported results.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending March 13 th	1252	0.24	6
Week ending March 6 th	2255	0.40	11
Week ending February 27 th	3400	0.35	14

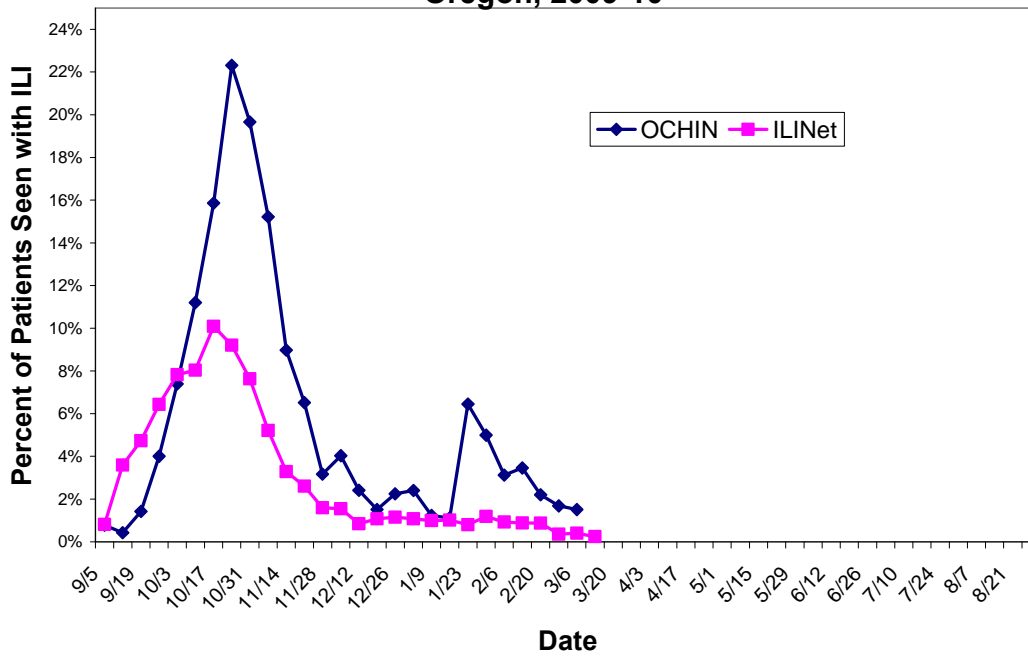
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending March 6th was 1.5.

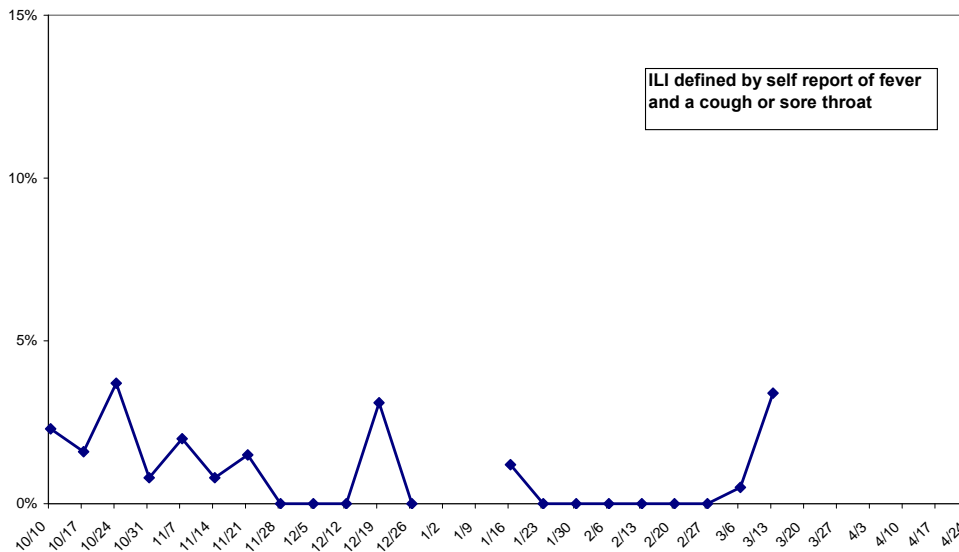
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for ILI

Oregon Public Health Division collects statewide level data on ILI via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). With low levels of influenza activity, BRFSS is only updated every other week. For the last two weeks ending March 6th and March 13th, respectively, 0.5% and 3.4% of respondents reported ILI in the last seven 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. No seasonal influenza has been identified since October, 2009.

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	153 (53)	1,087 (62)	23 (52)	1,263 (60)	0
Seasonal A (H1)	1 (0)	1 (0)	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	1 (0)	0
Influenza B	1 (0)	0	0	1 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (0)	0
Parainfluenza type 2	0	0	0	0	0
Adenovirus	2 (1)	0	0	2 (0)	1 (7)
Pending	3 (1)	1 (0)	6 (14)	10 (0)	5 (36)
Undetected	129 (44)	669 (38)	15 (34)	813 (39)	8 (57)
Total Tested	291	1,760	44	2,095	14

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

FLU BITES

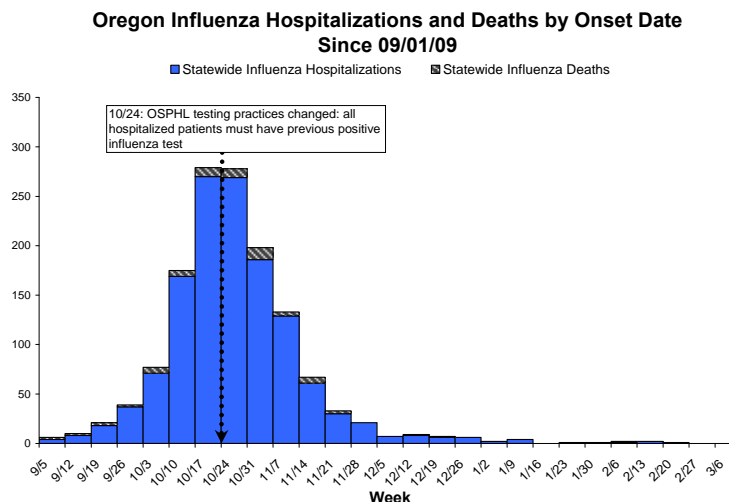
Oregon's Weekly Surveillance Report for Influenza and other Respiratory Viruses

Published March 12, 2010



Summary

- In the month of February, Oregon only had four hospitalizations and one death. There have been no hospitalizations or deaths reported to date in March.
- Since September 1, 2009, 1,312 patients have been hospitalized with laboratory-confirmed influenza statewide (956 adults; 356 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-seven people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 64 deaths for whom information about medical conditions is known, 58 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.8 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – February 13th to be 3.9 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are consistent with previous seasons.
- After increasing for three weeks in a row, respiratory syncytial virus (RSV) activity in Oregon decreased this week. The amount of observed activity this week is slightly less than previous seasons.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October 2009.

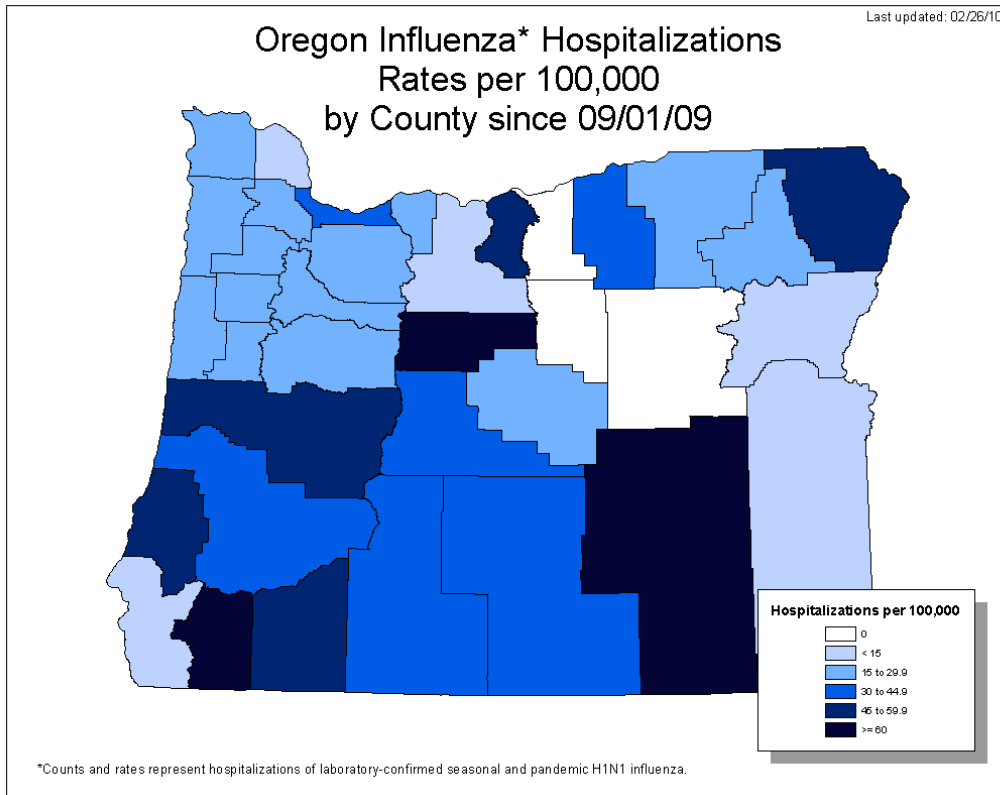


Statewide Hospitalizations and Deaths

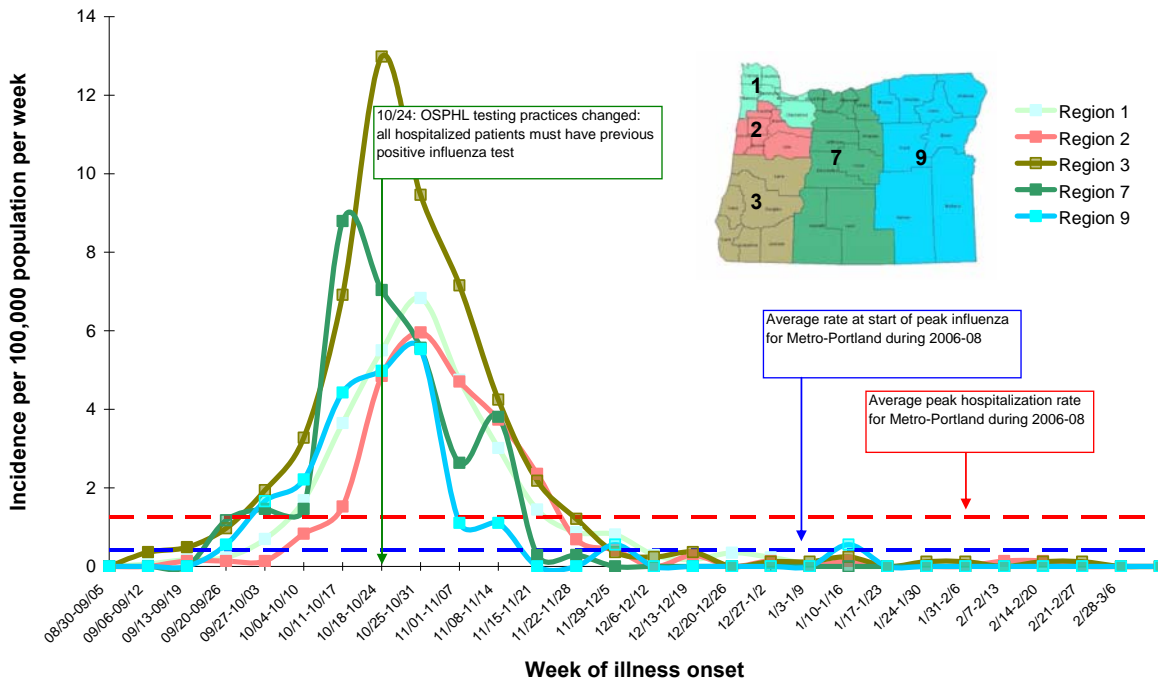
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 36 and 37, respectively. Ages range from 0 to 93 years. Females constitute 712 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	21	1	3	3	5	5	4	0	24.4
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1312	186	186	92	392	319	136	1	34.6
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.5	29.6	29.8	43.0	27.8		34.6



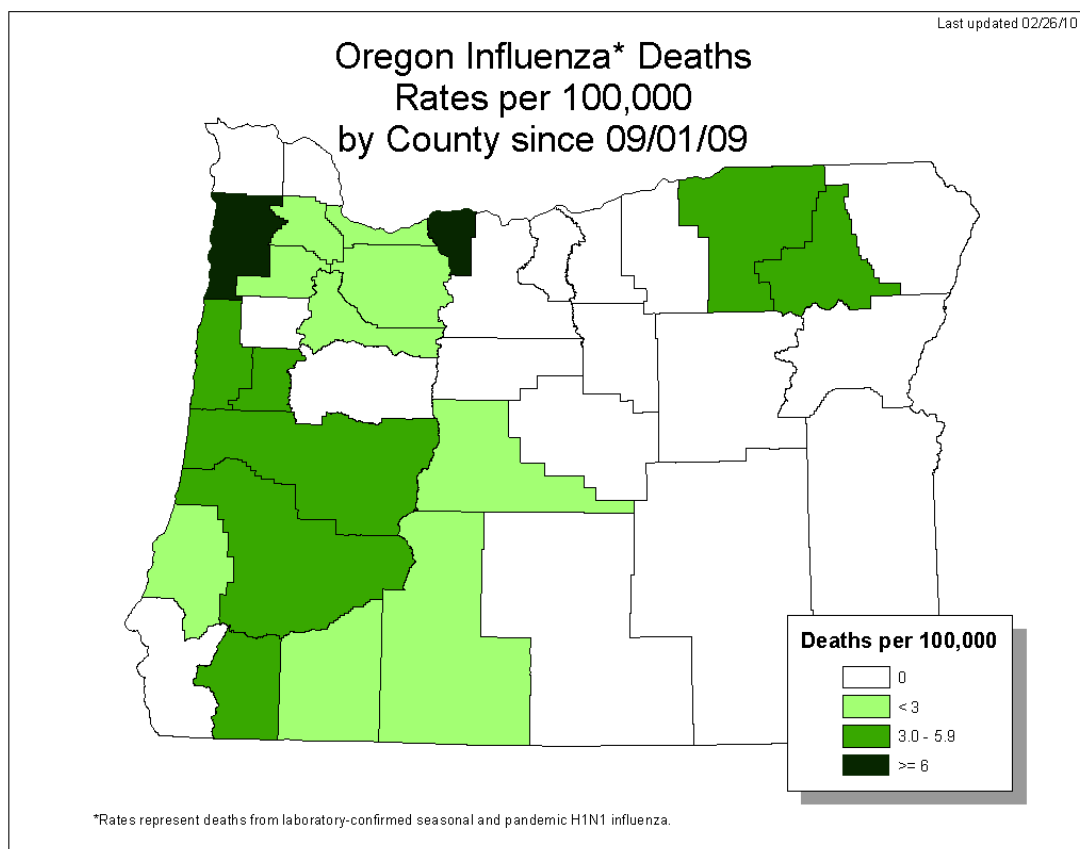
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



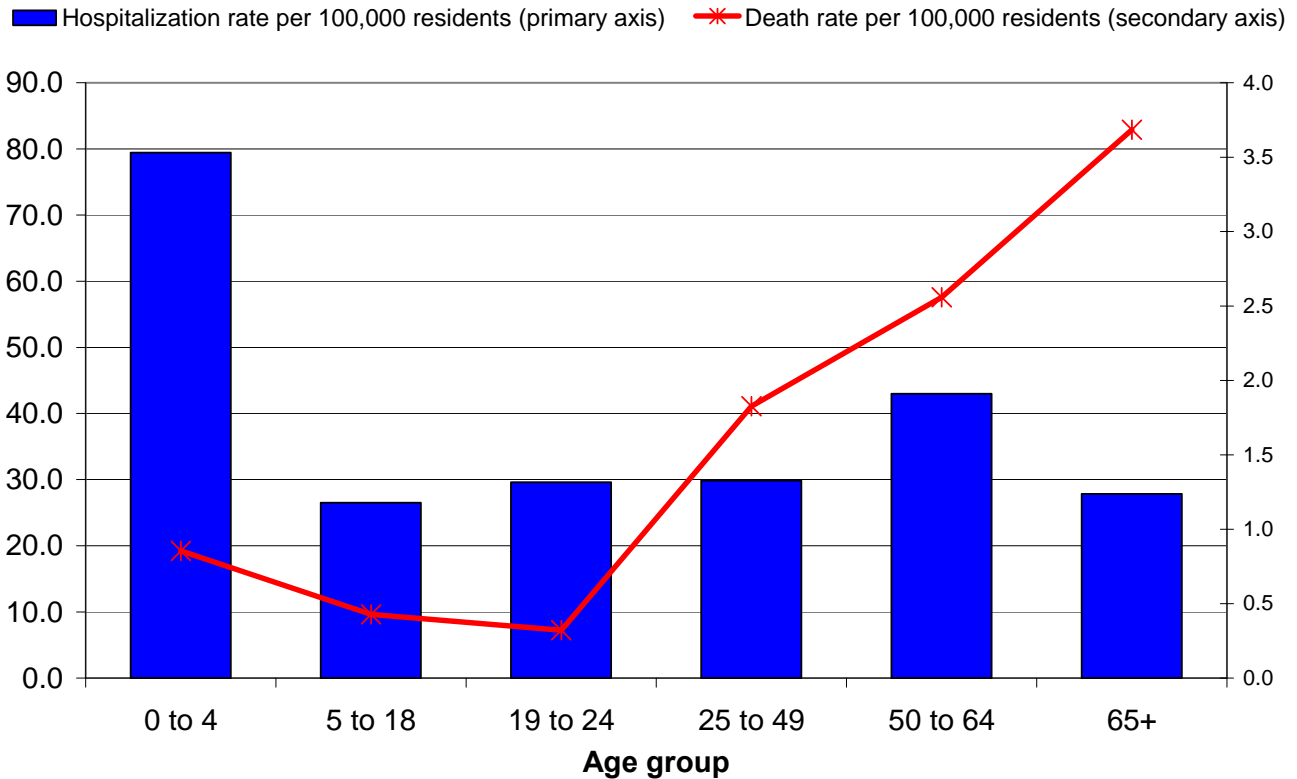
The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

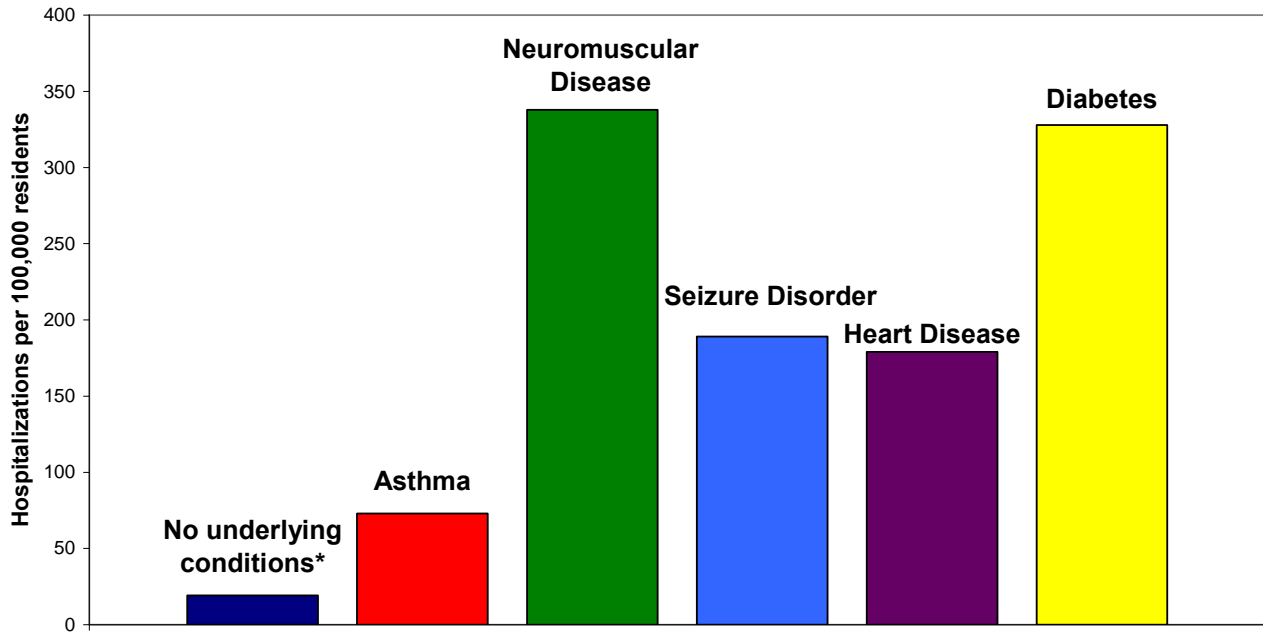
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 99% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=126 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	100 (79)	323 (88)
Outcomes		
Pneumonia	36 (28)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (14)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

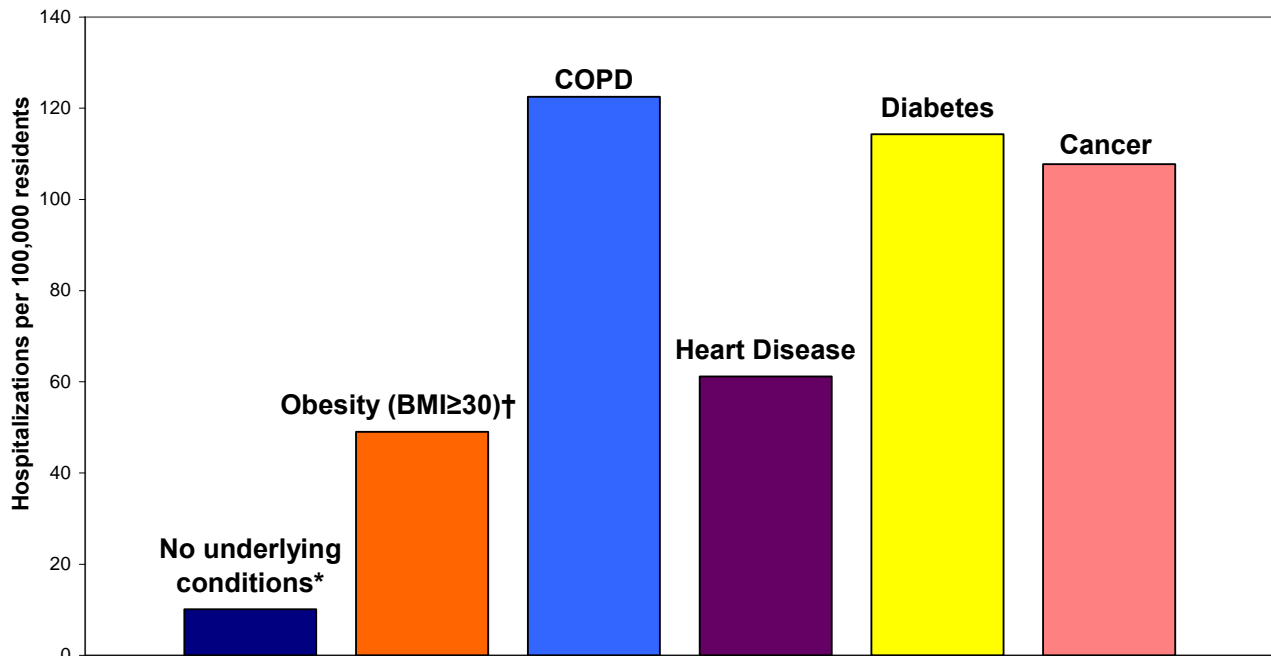
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



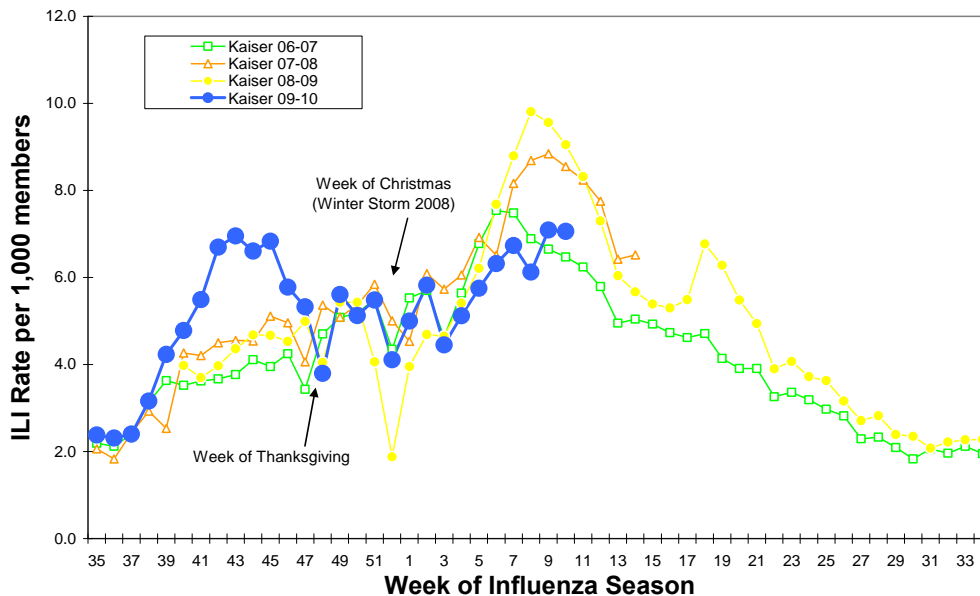
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 77% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits decreased slightly to 7.06 per 1,000 Kaiser members for the week ending March 6, 2010. The number of outpatient visits remains below those observed at the same point in the last two seasons and only slightly above the level observed in the 06-07 season.

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



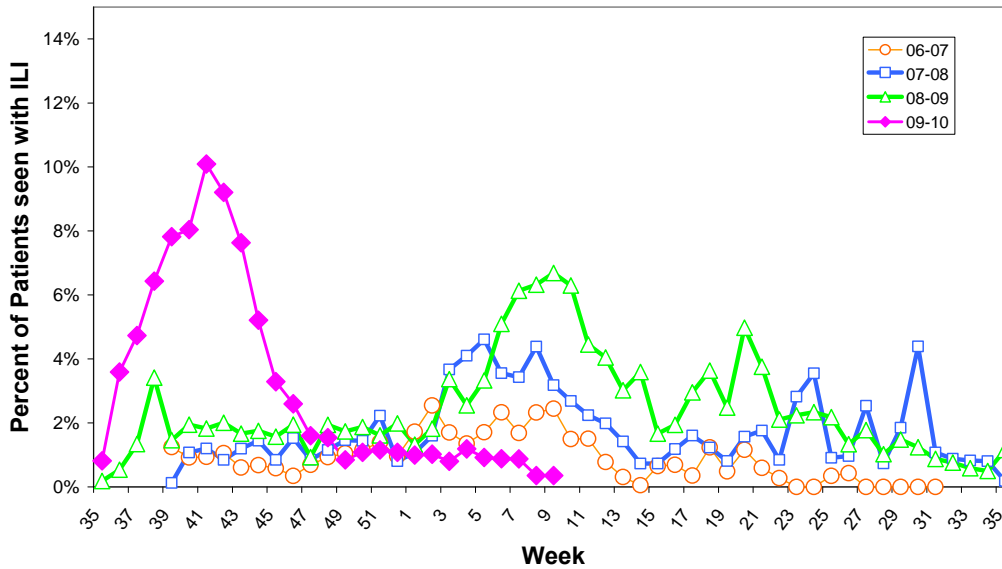
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending March 6th, 2010 (and the second week in a row) 0.35% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending March 6th	1695	0.35	9
Week ending February 27th	3400	0.35	14
Week ending February 20th	1949	0.87	10

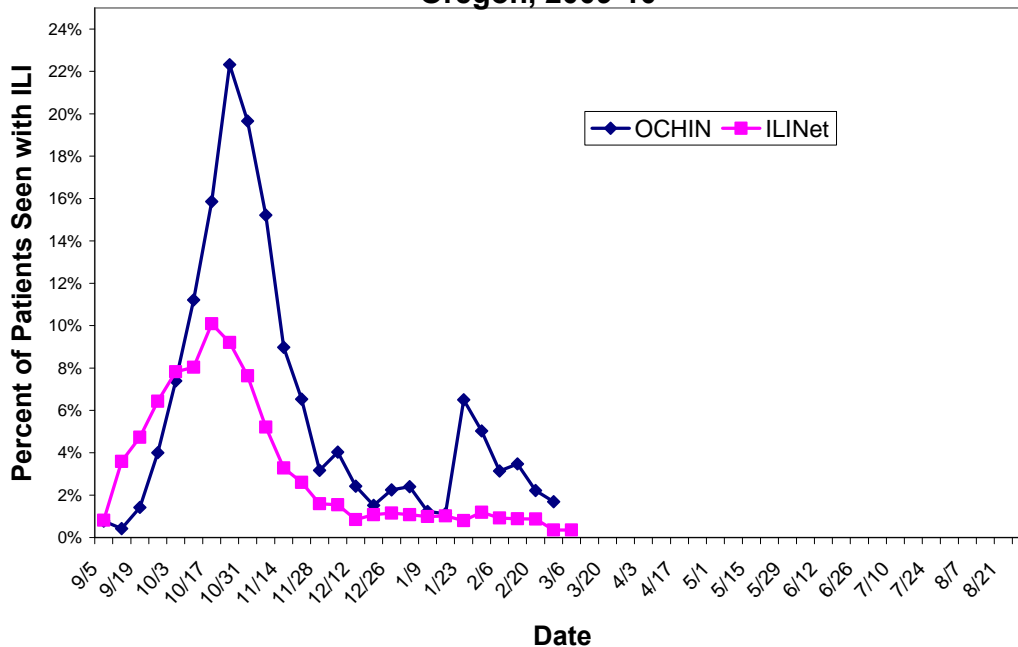
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending February 27th was 1.69.

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



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. No seasonal influenza has been identified since October, 2009.

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	153 (53)	1,087 (62)	23 (61)	1,263 (60)	0
Seasonal A (H1)	1 (0)	1 (0)	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	1 (0)	0
Influenza B	1 (0)	0	0	1 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (0)	0
Parainfluenza type 2	0	0	0	0	0
Adenovirus	2 (1)	0	0	2 (0)	1 (7)
Pending	1 (0)	0	0	0	11 (79)
Undetected	129 (45)	676 (38)	15 (39)	820 (39)	2 (14)
Total Tested	289	1,766	38	2,093	14

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

These numbers are provisional. We are currently updating the numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

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

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

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

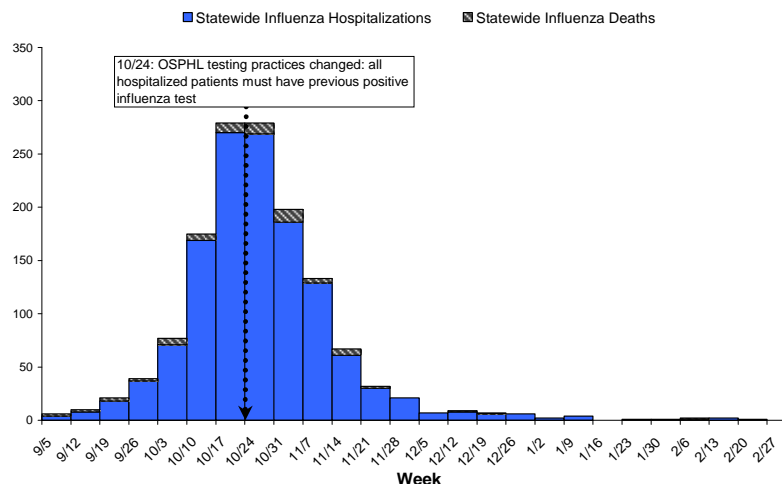
Published March 5, 2010



Summary

- In the month of February, Oregon has had four hospitalizations and one death.
- Since September 1, 2009, 1,312 patients have been hospitalized with laboratory-confirmed influenza statewide (956 adults; 356 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-seven people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 64 deaths for whom information about medical conditions is known, 58 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – January 16th to be 3.8 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels remain below those observed at the same point in the last two seasons and only slightly above the level observed in the 06-07 season.
- Respiratory syncytial virus (RSV) activity in Oregon has steadily increased for past three weeks ending February 27th, 2010. Although activity is high, it is consistent with previous seasons.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October, 2009.

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09

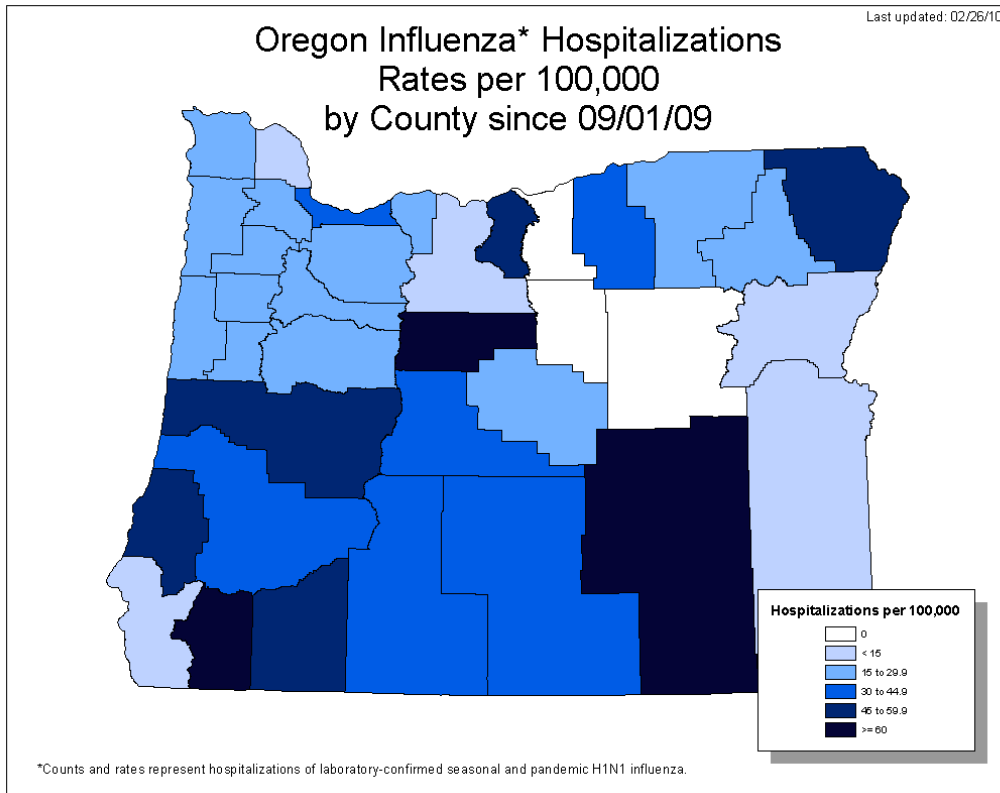


Statewide Hospitalizations and Deaths

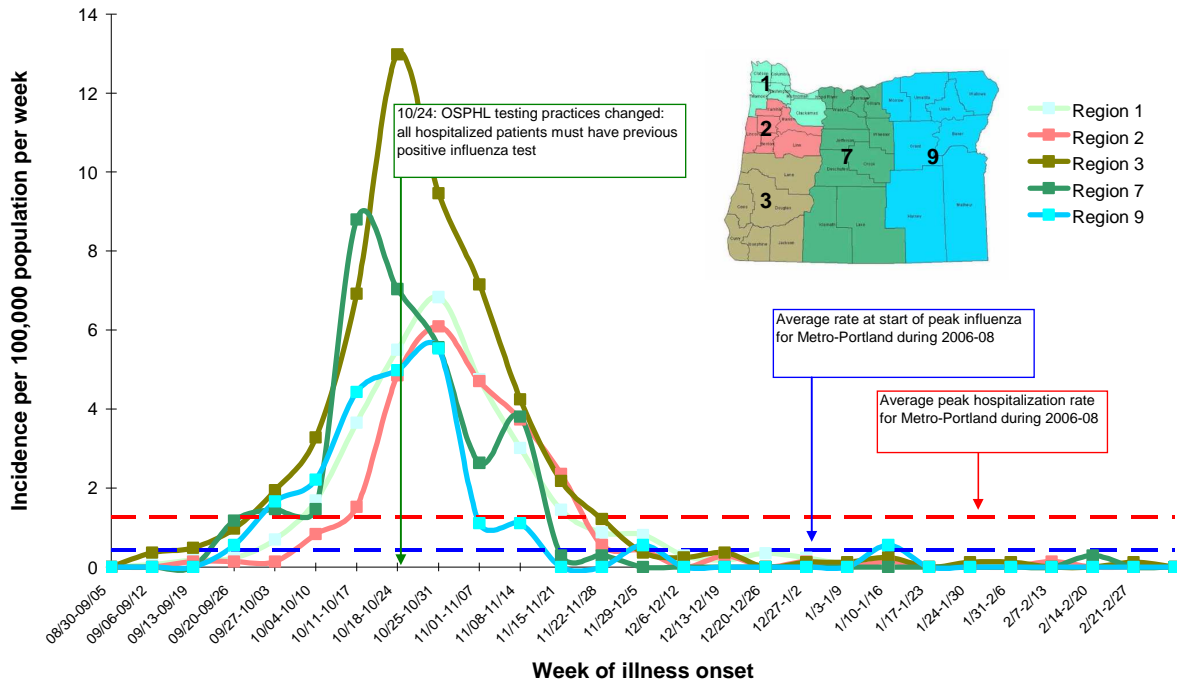
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 93 years. Females constitute 712 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	21	1	3	3	5	5	4	0	24.4
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	202	28	36	9	56	56	17	0	58.4
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1312	186	186	92	392	319	136	1	34.6
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.5	29.6	29.8	43.0	27.8		34.6



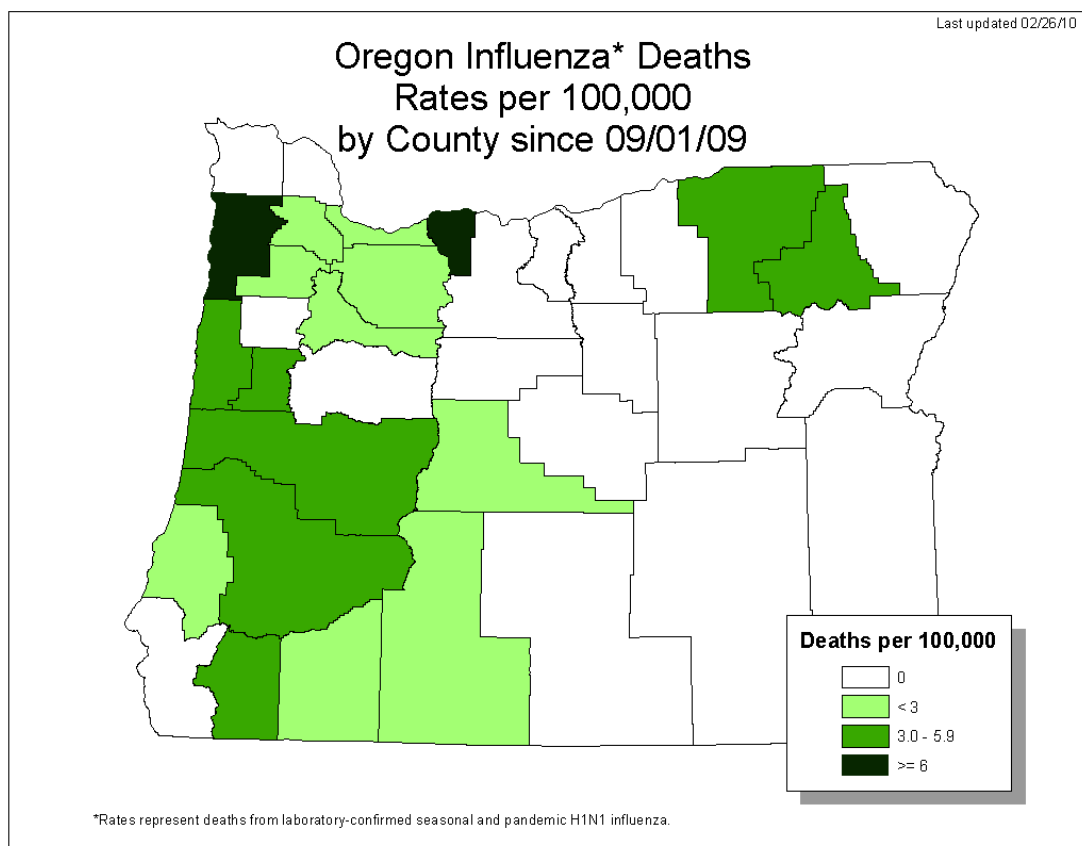
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



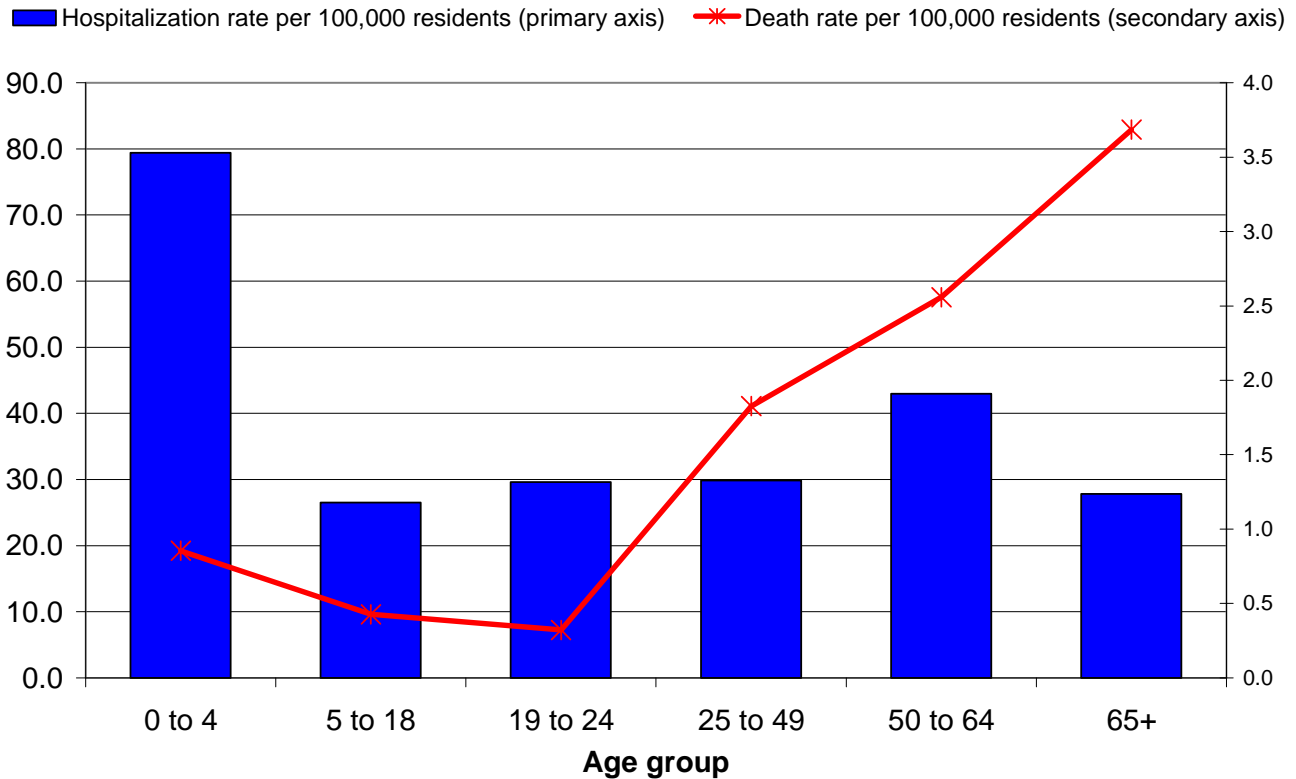
The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

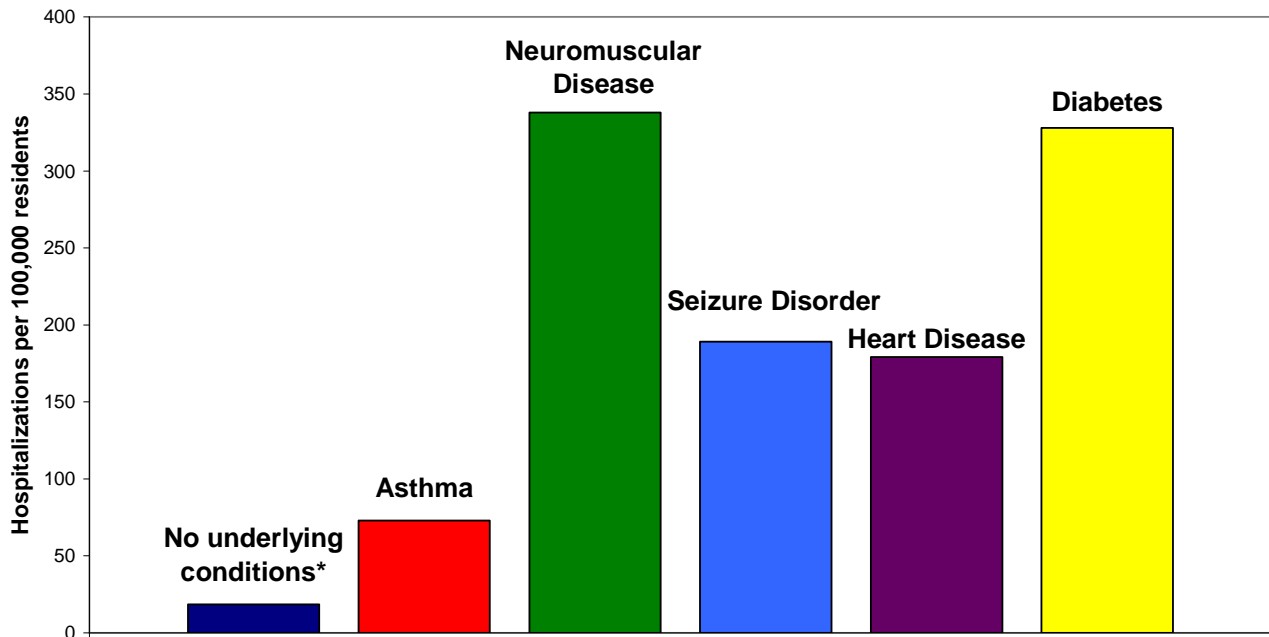
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Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=125 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	99 (79)	323 (88)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (14)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

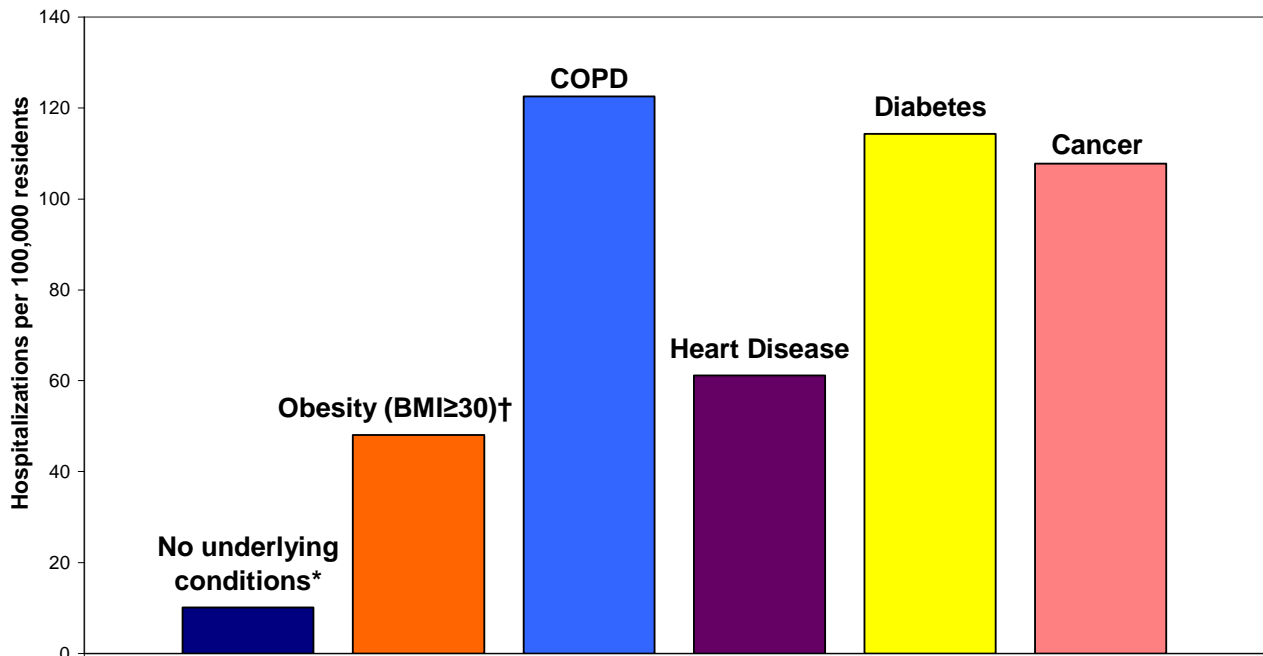
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



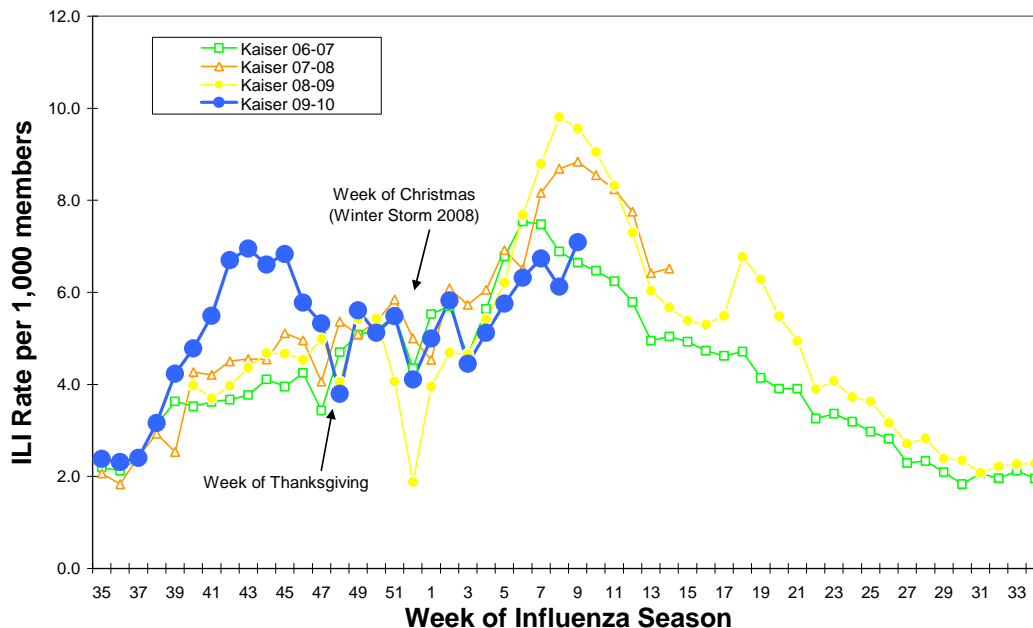
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 75% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits increased to 7.09 per 1,000 Kaiser members for the week ending February 27, 2010. Despite the increase in ILI activity, the number of outpatient visits still remains below those observed at the same point in the last two seasons and only slightly above the level observed in the 06-07 season.

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



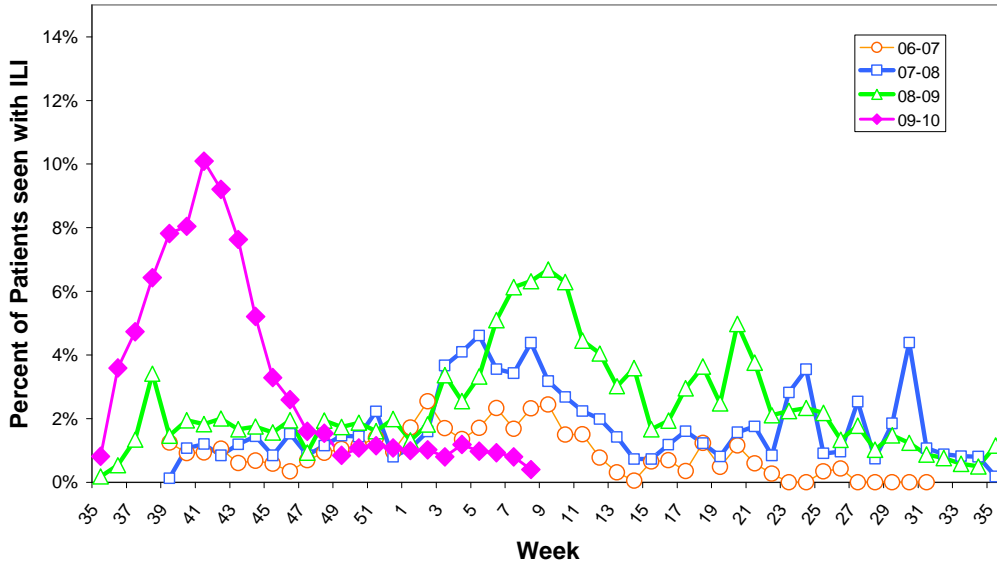
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending February 27th, 2010 0.40% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending February 27th	3020	0.40	10
Week ending February 20th	1879	0.80	8
Week ending February 13th	3118	0.93	14

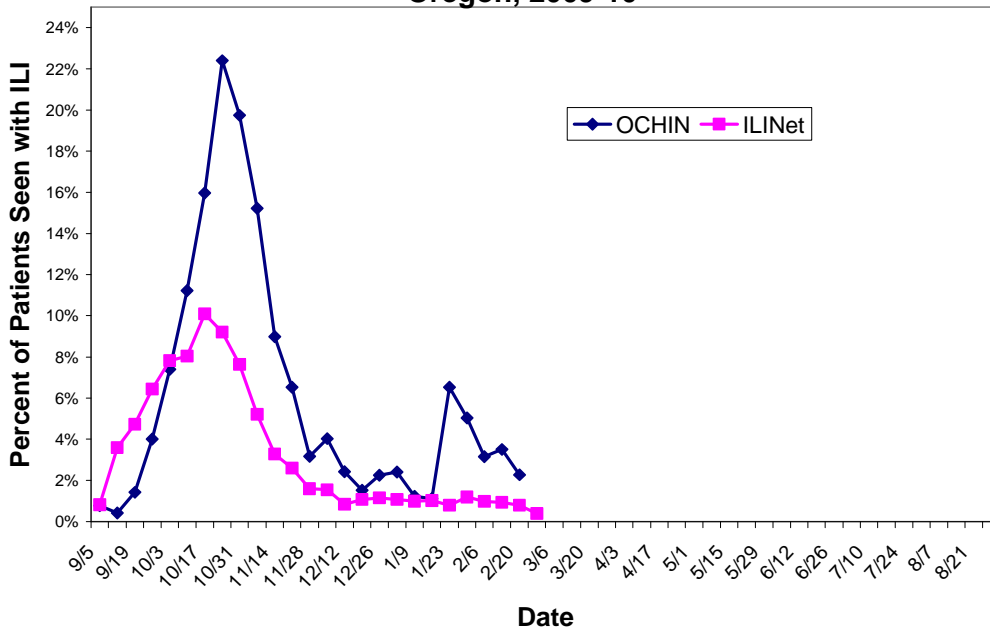
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending February 20th was 2.27.

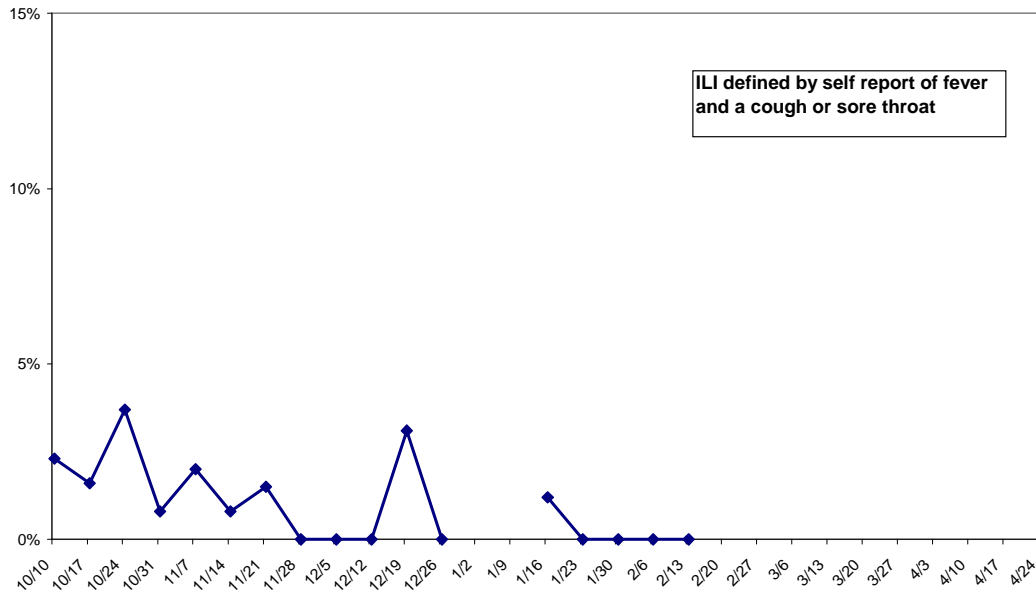
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on ILI via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). With low levels of influenza activity, BRFSS is only updated every other week. We apologize for the delay, but the most recent BRFSS data for the last two weeks ending February 27th are unavailable at the time of publication. For the two weeks ending February 13th, no BRFSS respondents reported having symptoms of ILI with 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. No seasonal influenza has been identified since October, 2009.

**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	153 (53)	1,087 (62)	23 (61)	1263 (60)	0
Seasonal A (H1)	1 (0)	1 (0)	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	1 (0)	0
Influenza B	1 (0)	0	0	1 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (0)	0
Parainfluenza type 2	0	0	0	0	0
Adenovirus	1 (0)	0	0	1 (0)	0
Pending	0	0	0	0	3 (60)
Undetected	130 (45)	675 (38)	15 (39)	820 (39)	2 (40)
Total Tested	288	1,765	38	2,091	5

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

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 numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

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/>

FLU BITES

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

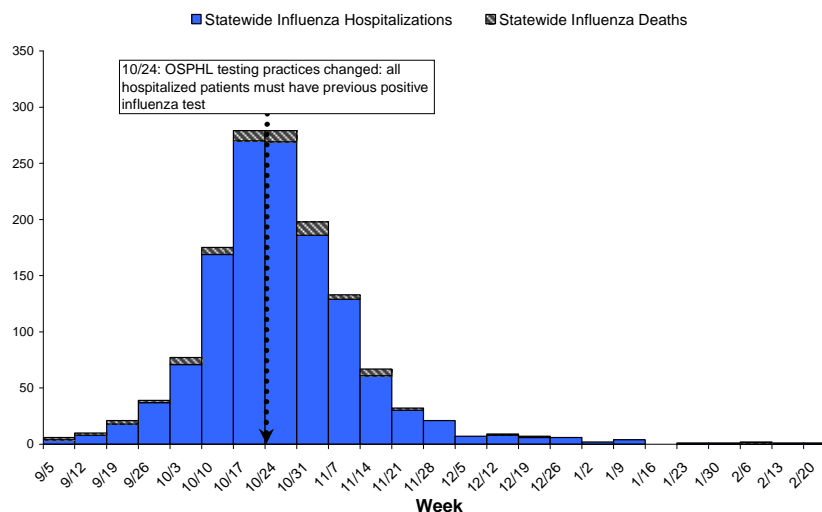
Published February 26, 2010



Summary

- In the last five weeks, Oregon has had five hospitalizations and one death.
- Since September 1, 2009, 1,311 patients have been hospitalized with laboratory-confirmed influenza statewide (955 adults; 356 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-seven people have died from influenza (63 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 64 deaths for whom information about medical conditions is known, 58 (91%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – January 16th to be 3.8 per 100,000.
- ILINet rates of influenza-like illness (ILI) are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are slightly below levels seen in previous seasons.
- Respiratory syncytial virus (RSV) activity in Oregon increased slightly for the week ending February 20th, 2010. Although activity is high, it is consistent with previous seasons.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory since October, 2009.

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09

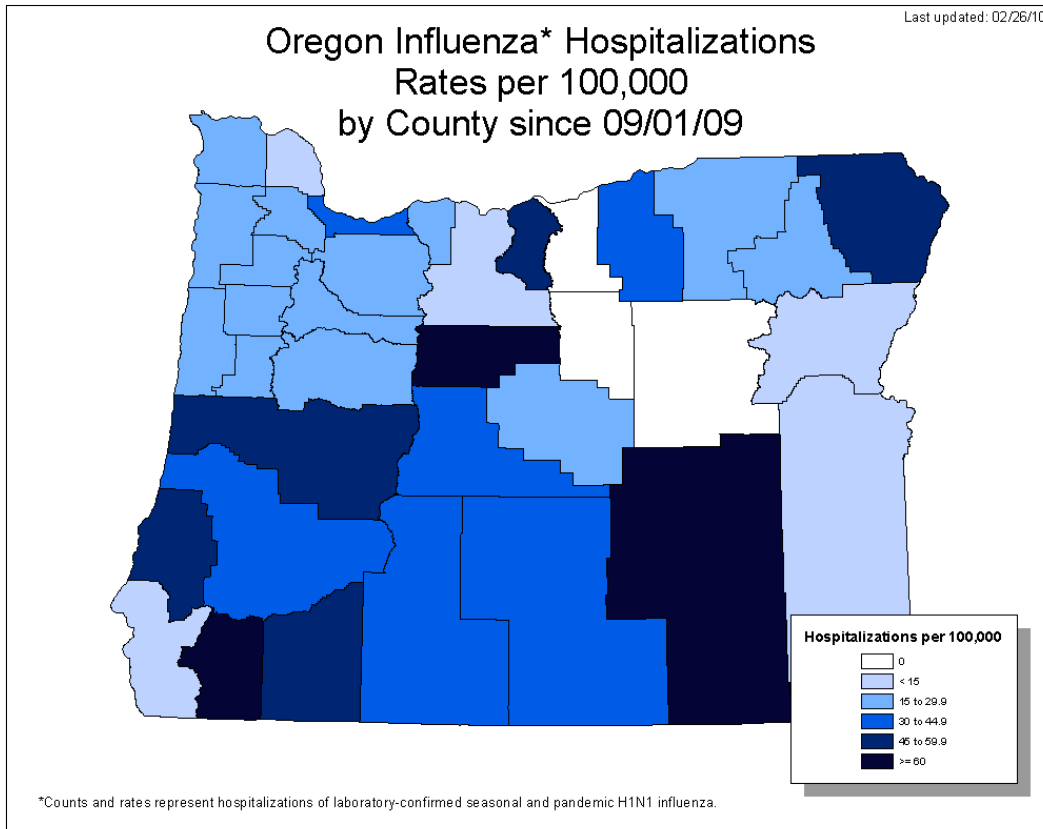


Statewide Hospitalizations and Deaths

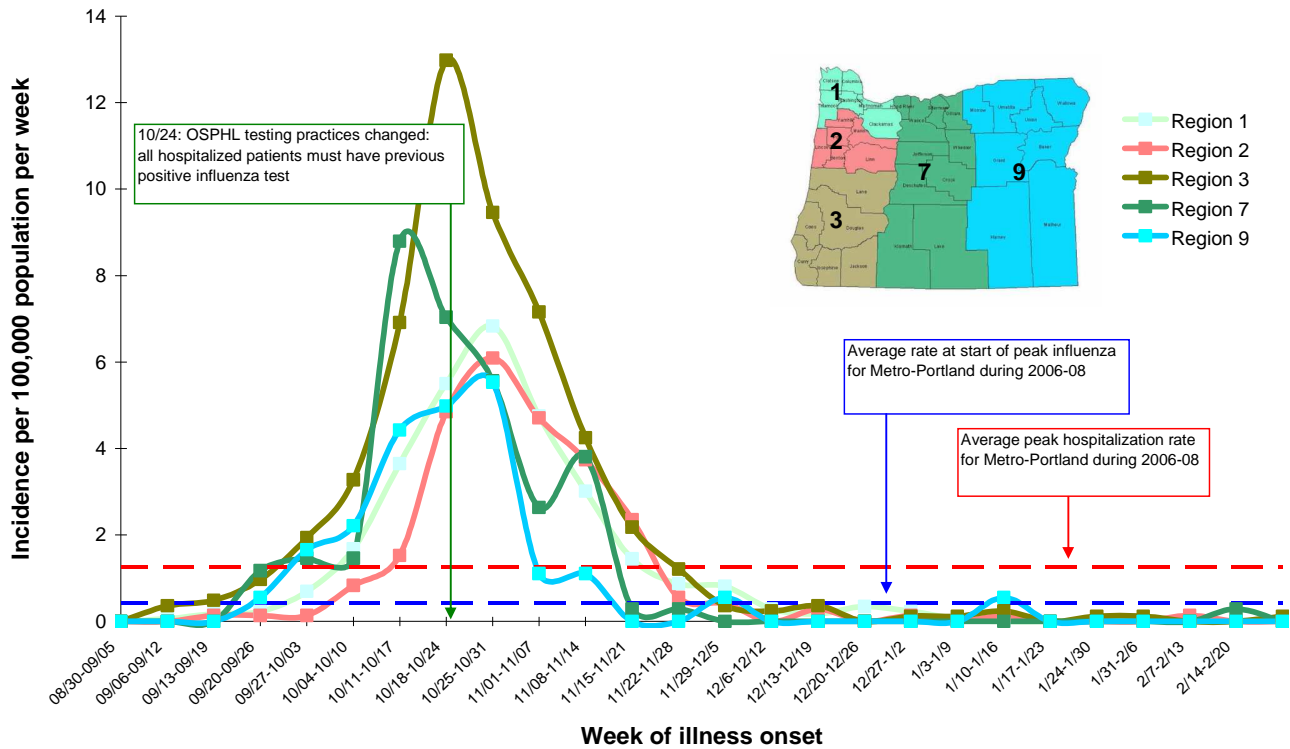
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 93 years. Females constitute 711 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	21	1	3	3	5	5	4	0	23.2
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	26.1
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	201	28	36	9	56	56	16	0	57.8
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1311	186	186	92	392	319	135	1	34.6
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.5	29.6	29.8	43.0	27.6		34.6



Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*

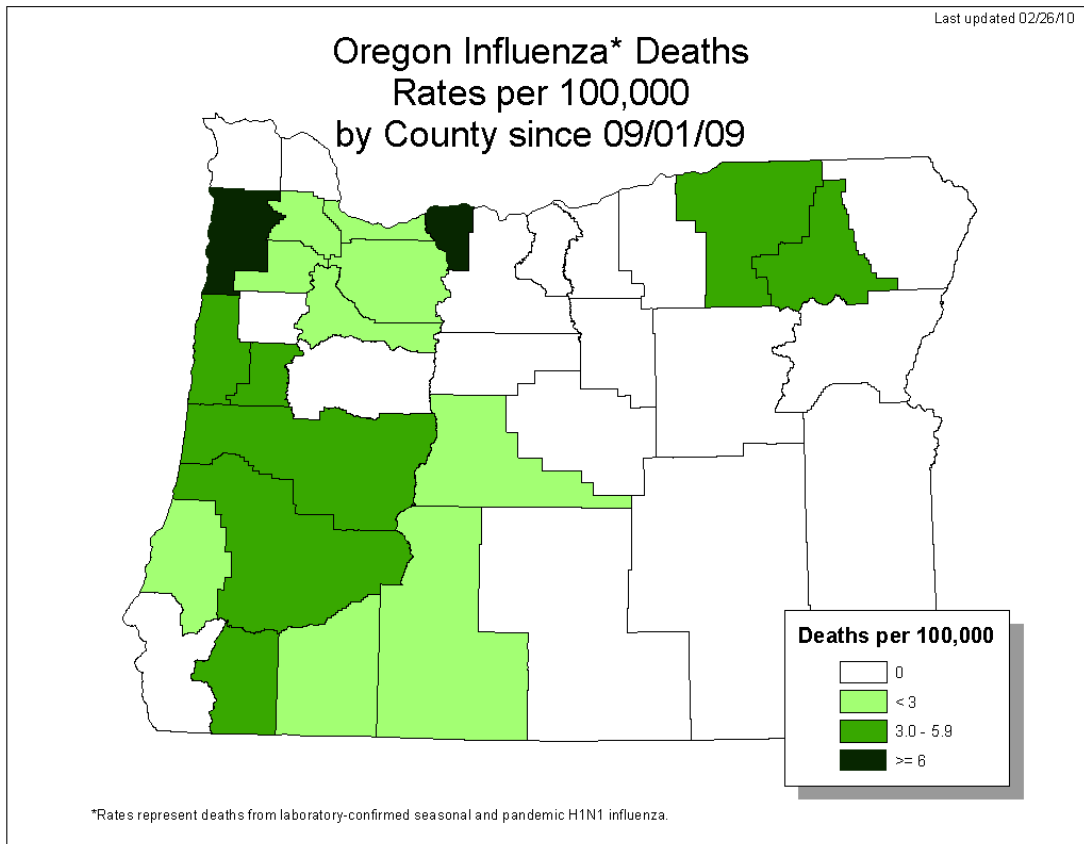


*Numbers are provisional and may fluctuate due to reporting delays

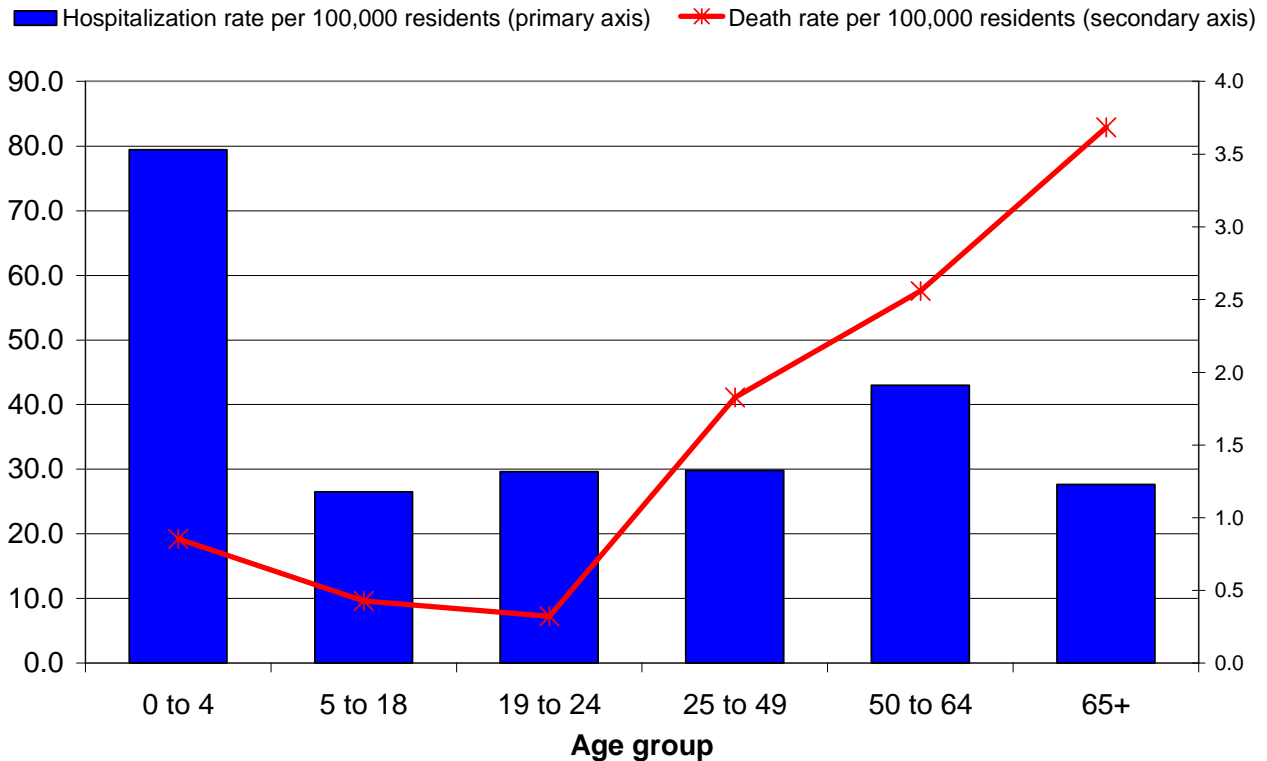
The mean and median age of influenza deaths statewide since September 1, 2009 is 52 years. Ages range from 2 to 93 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	3	0	0	0	0	2	1	3.5
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	67	2	3	1	24	19	18	1.8
Percentage		3	4	1	36	28	27	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.7	1.8



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

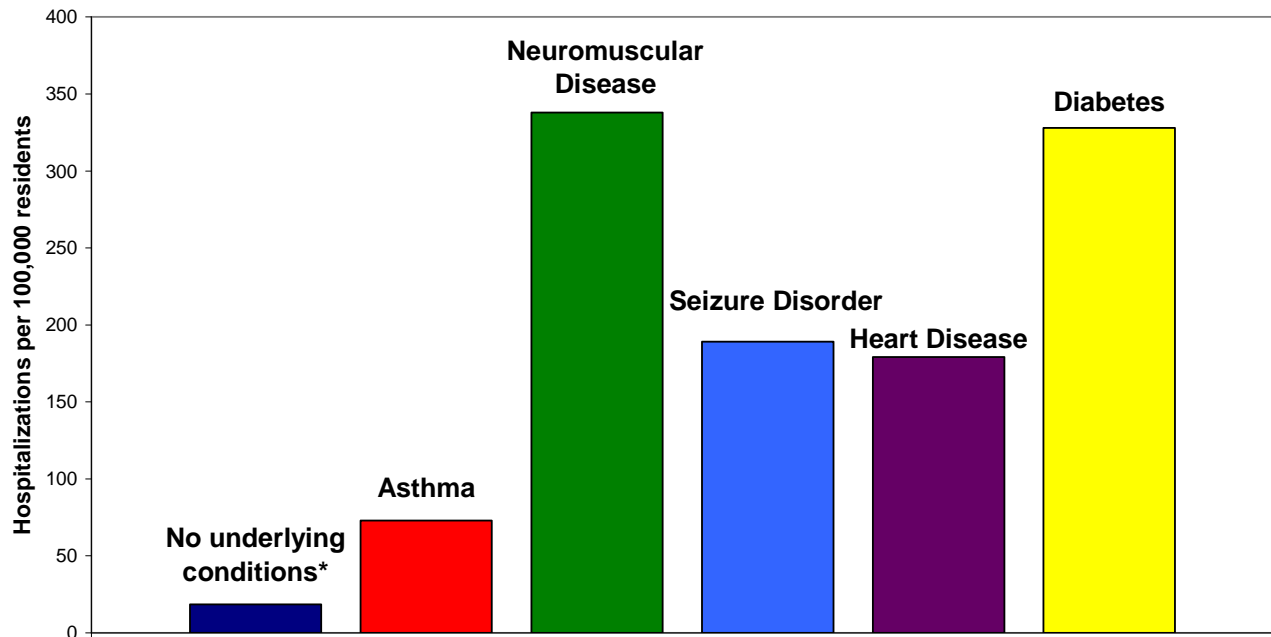
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 99% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=125 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	99 (79)	323 (88)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (14)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

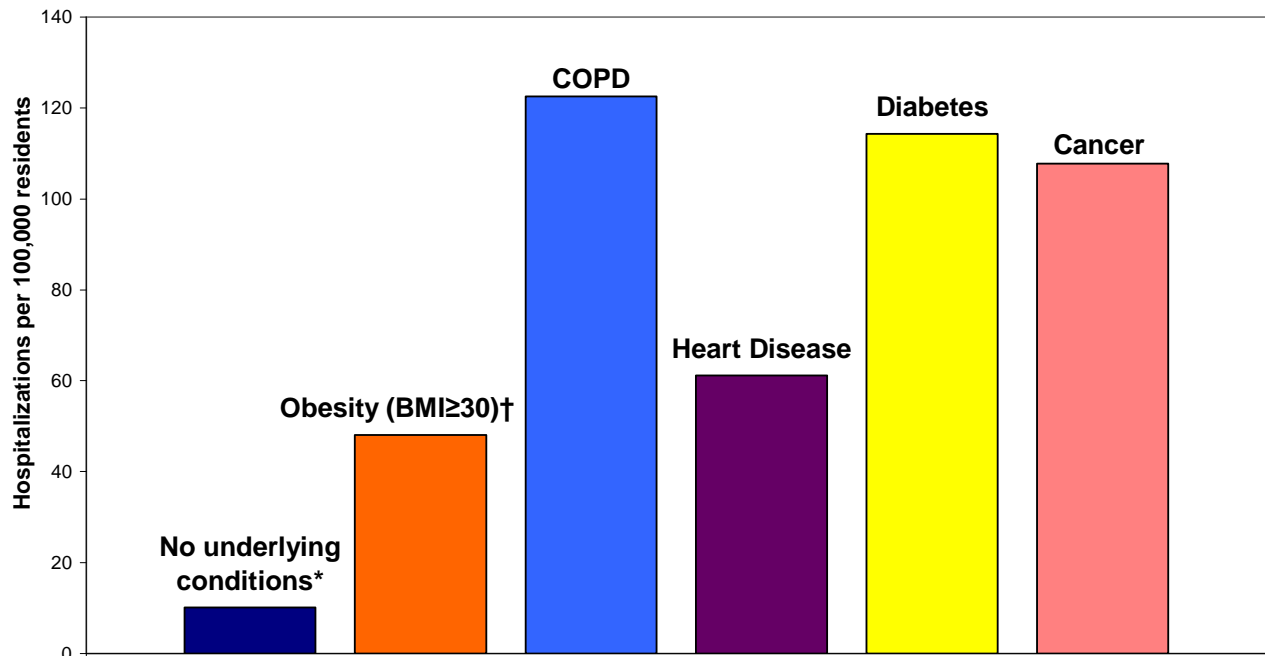
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



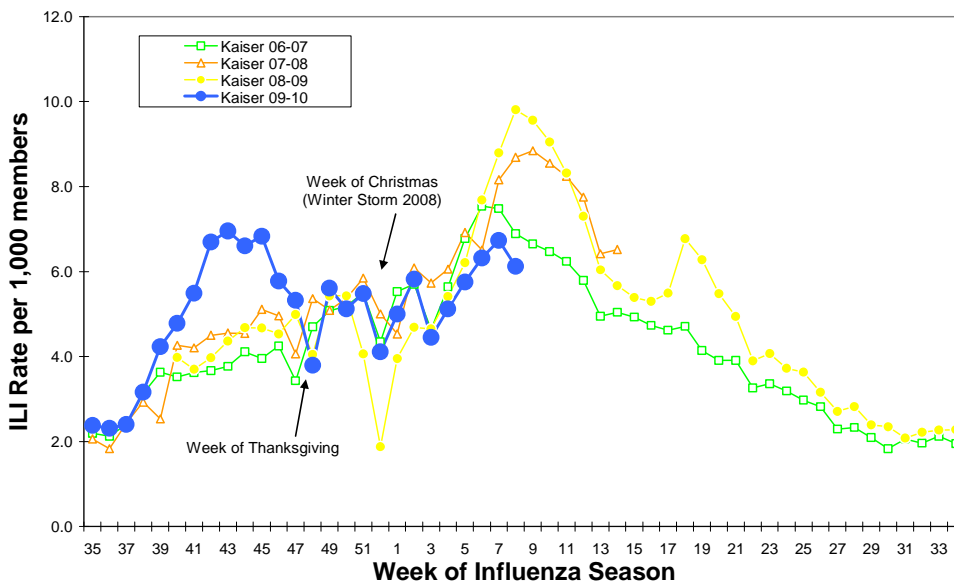
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 75% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. The number of ILI outpatient visits decreased to 6.12 per 1,000 Kaiser members for the week ending February 20, 2010. This decrease in ILI visits follows four weeks of increasing ILI activity, which was still below levels historically seen in February.

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



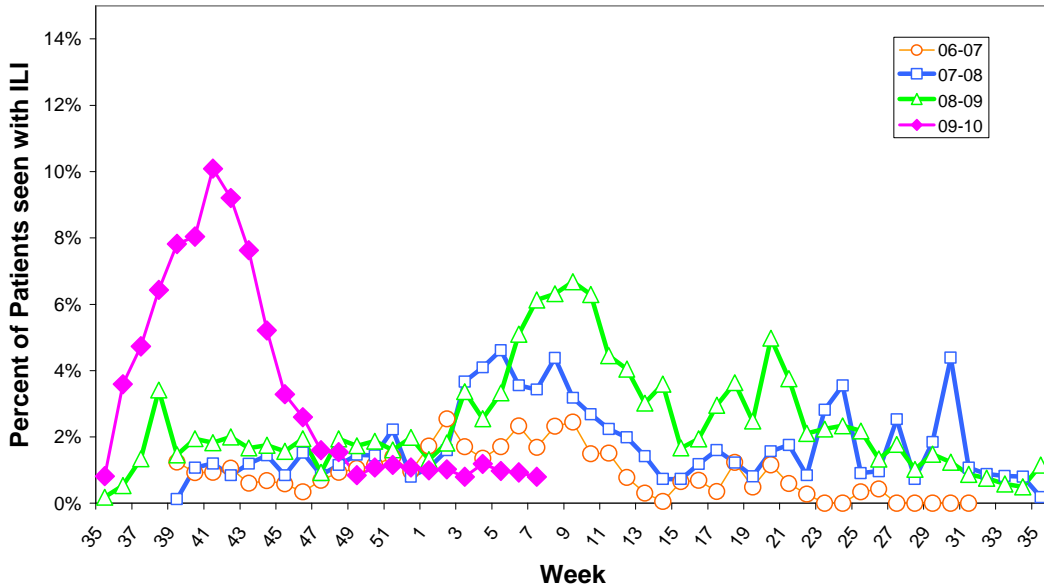
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Oregon’s outpatient influenza-like illness network is comprised of 30 voluntary healthcare providers from all across Oregon who report the number of patients with influenza-like illness (ILI) as well as total number of patient visits for each week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

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$) is 1.29%. For the week ending February 20th, 2010 0.80% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending February 20th	1879	0.80	8
Week ending February 13th	3118	0.93	14
Week ending February 6th	2766	0.98	13

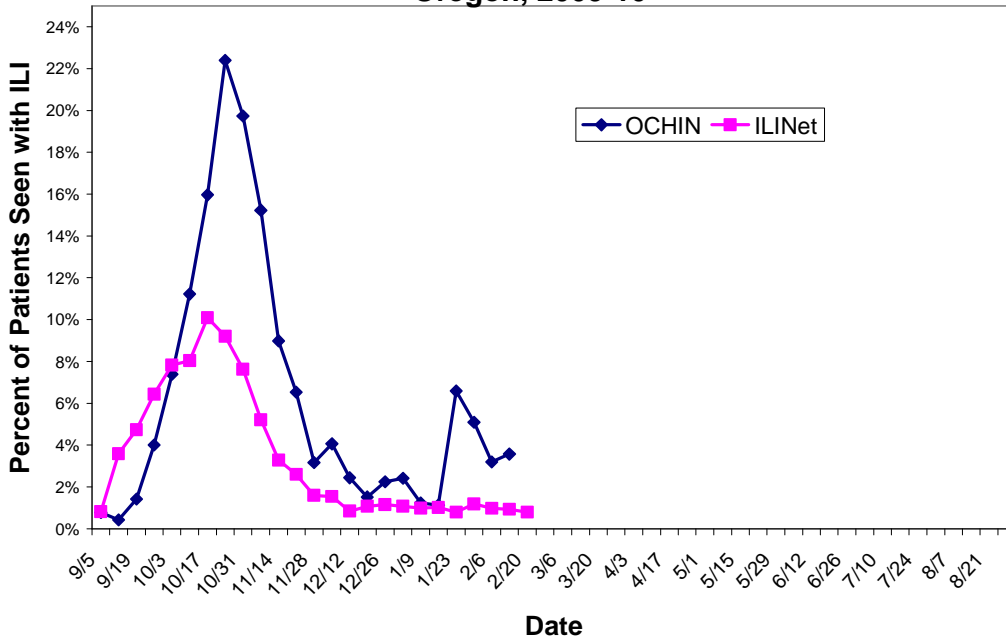
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending February 13th was 3.57.

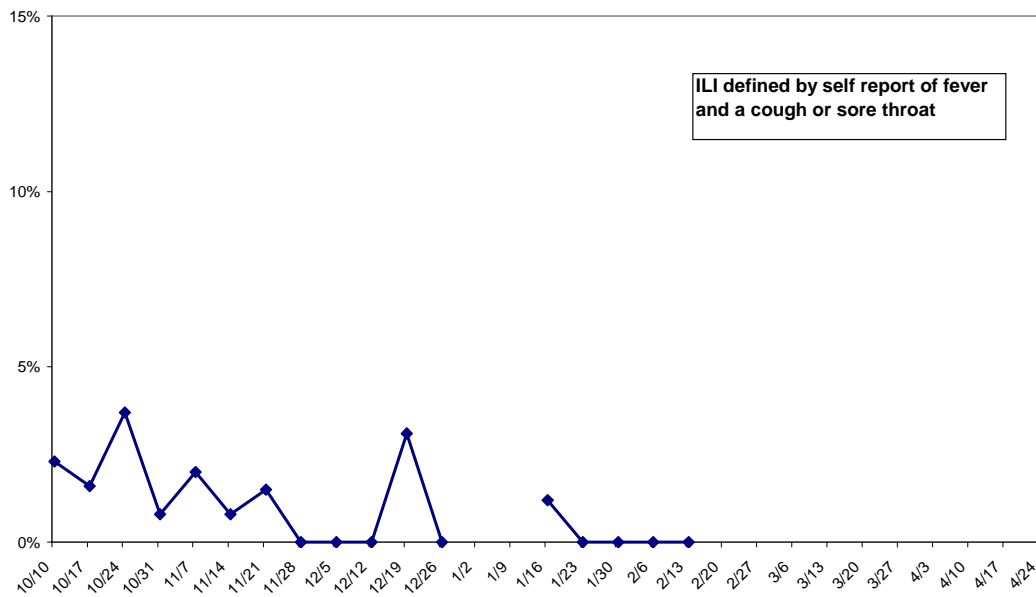
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on ILI via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). With low levels of influenza activity, BRFSS is only updated every other week. For the last two weeks ending February 13th, no BRFSS respondents reported having symptoms of ILI with 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. No seasonal influenza has been identified since October, 2009.

**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	153 (53)	1,087 (61)	23 (61)	1263 (60)	0
Seasonal A (H1)	1 (0)	1 (0)	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	1 (0)	0
Influenza B	1 (0)	0	0	1 (0)	0
Parainfluenza type 1	2 (1)	1 (0)	0	3 (0)	0
Adenovirus	1 (0)	0	0	1 (0)	0
Pending	0	0	0	0	0
Undetected	129 (45)	675 (38)	15 (39)	819 (39)	8 (100)
Total Tested	290	1,780	38	2,108	8

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits.

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 numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

Additional resources:

More Oregon influenza surveillance data is available at:

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

FLU BITES

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

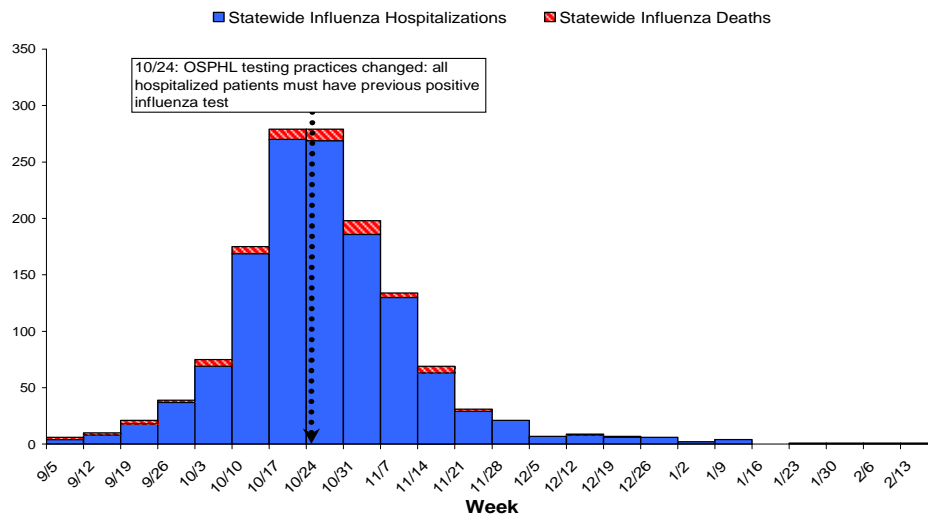
Published February 19, 2010



Summary

- In the last 4 weeks, Oregon has only had four hospitalizations and no deaths.
- Since September 1, 2009, 1,310 patients have been hospitalized with laboratory-confirmed influenza statewide (953 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-six people have died from influenza (62 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 63 deaths for whom information about medical conditions is known, 57 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – January 16th to be 3.8 per 100,000.
- ILINet rates are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are slightly below levels seen in previous seasons.
- Respiratory syncytial virus (RSV) activity in Oregon increased slightly for the week ending February 13th, 2010 and still remains high overall. The official start of the RSV season was the week ending January 9th, 2010.
- No seasonal influenza viruses have been detected at Oregon State Public Health Laboratory.

Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09

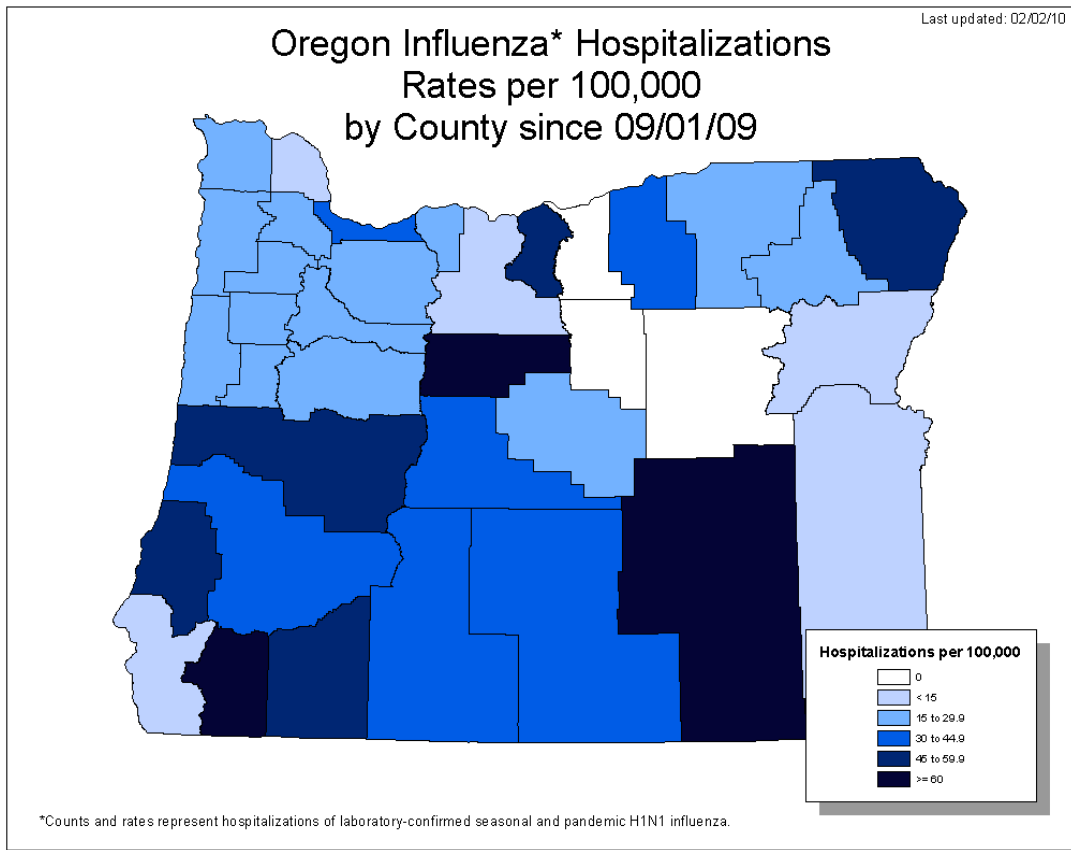


Statewide Hospitalizations and Deaths

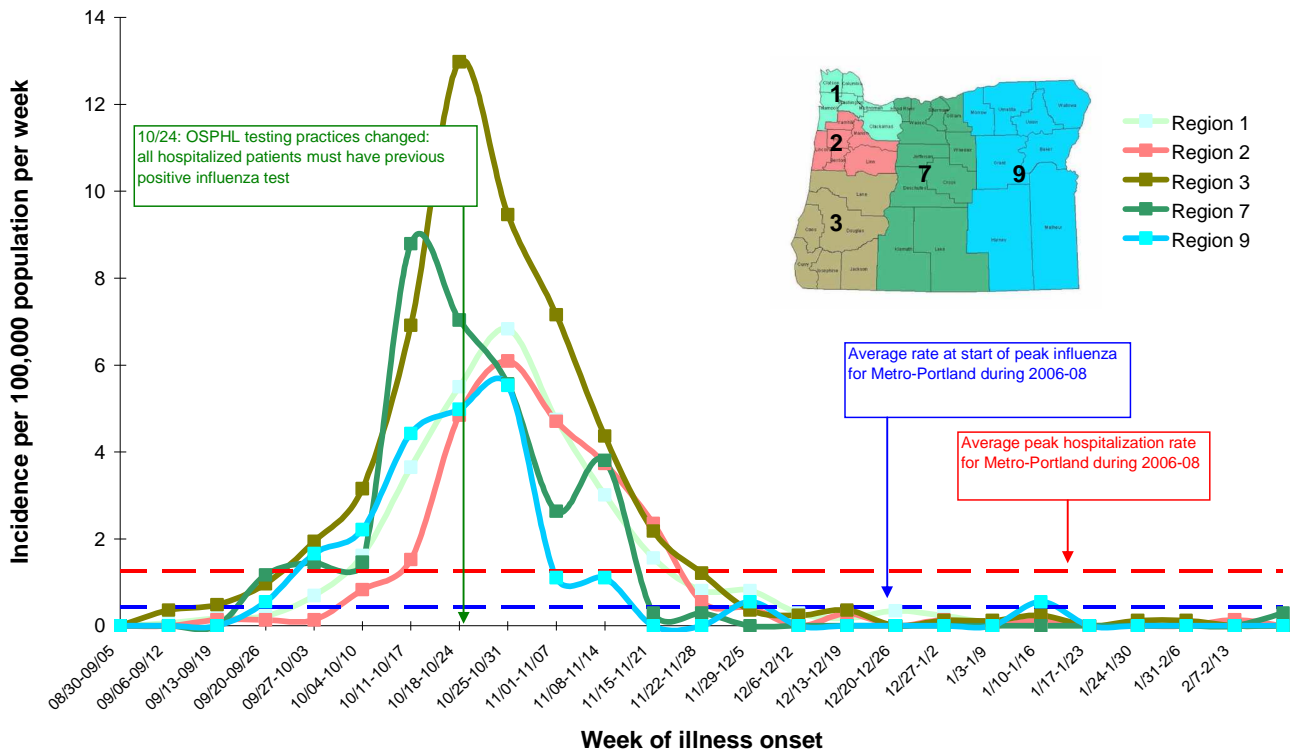
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 93 years. Females constitute 709 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	20	1	3	3	5	5	3	0	23.2
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	7	2	1	1	3	0	0	0	26.1
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	108	13	13	8	20	35	19	0	52.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	200	28	36	9	56	56	15	0	57.8
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1310	187	186	92	392	319	133	1	34.6
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.9	26.5	29.6	29.8	43.0	27.2		34.6



Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*

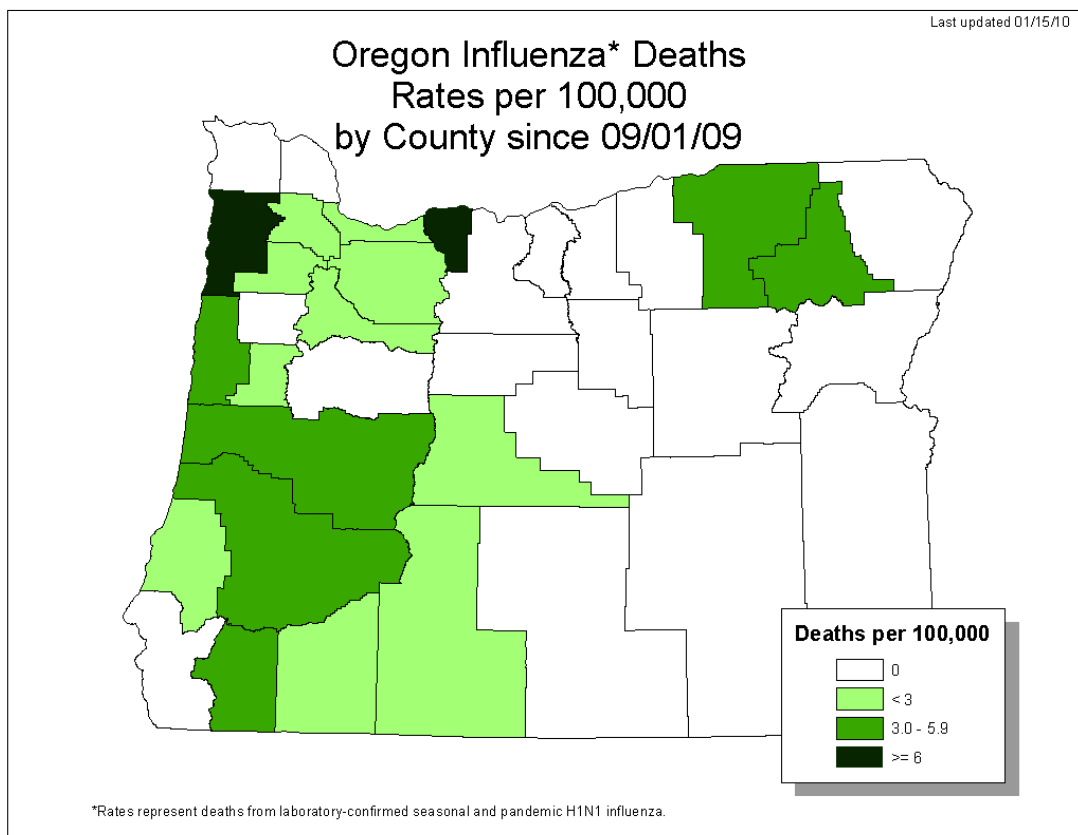


*Numbers are provisional and may fluctuate due to reporting delays

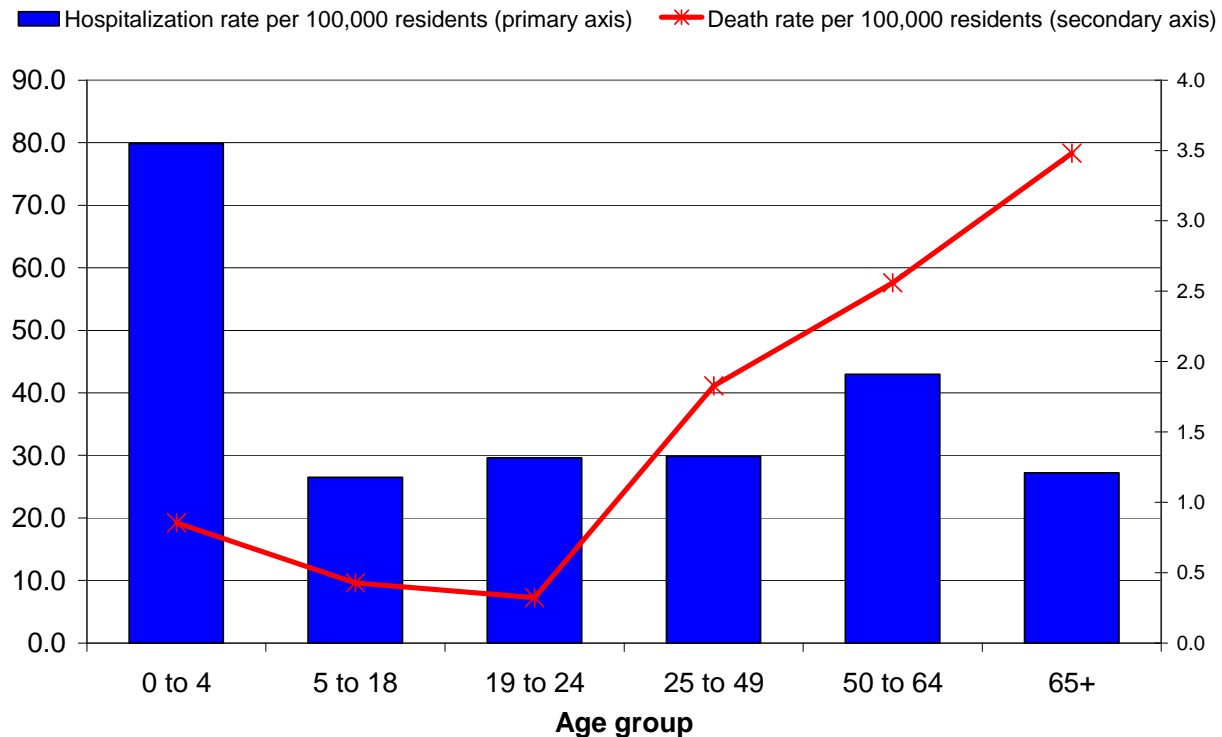
The mean and median age of influenza deaths statewide since September 1, 2009 are 52 and 51 years, respectively. Ages range from 2 to 87 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	2.3
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	66	2	3	1	24	19	17	1.7
Percentage		3	5	2	36	29	26	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.5	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

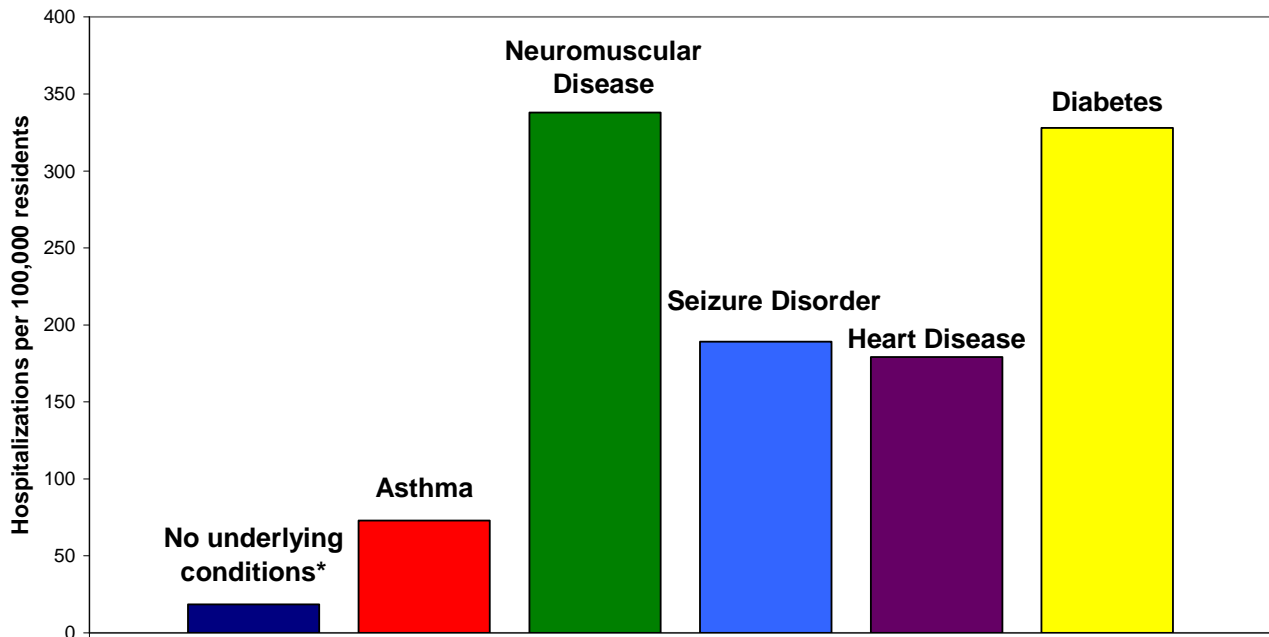
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 99% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=125 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	99 (79)	323 (88)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (14)	93 (25)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (6)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

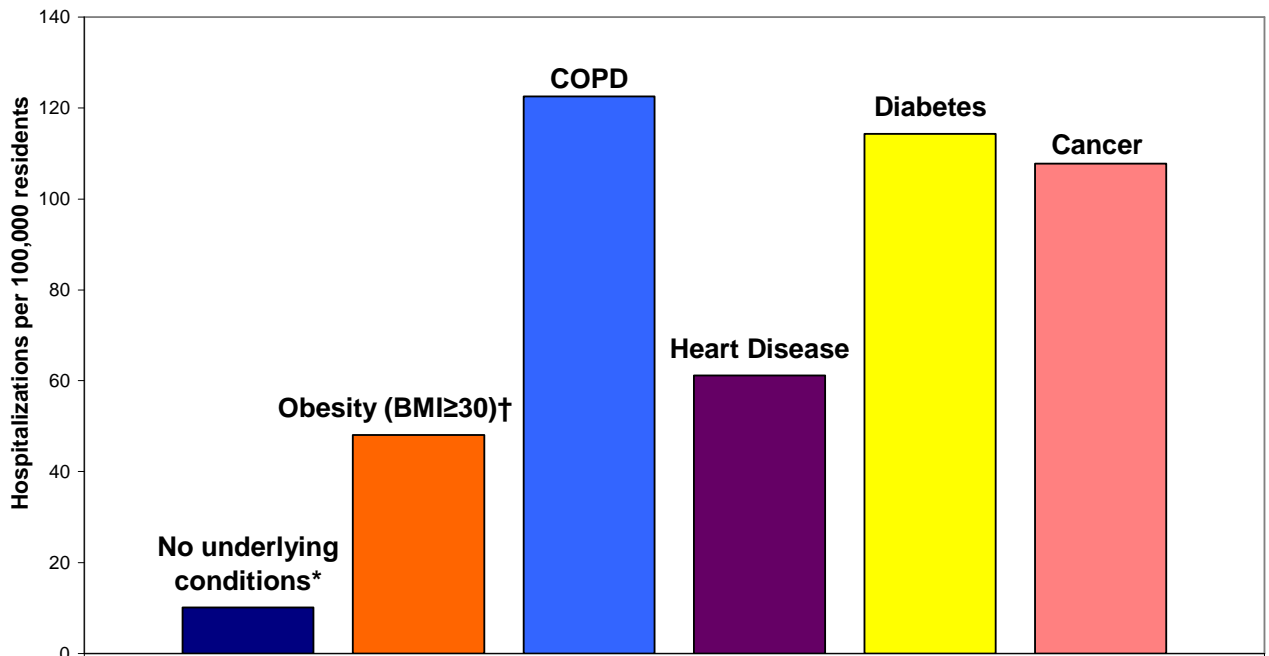
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



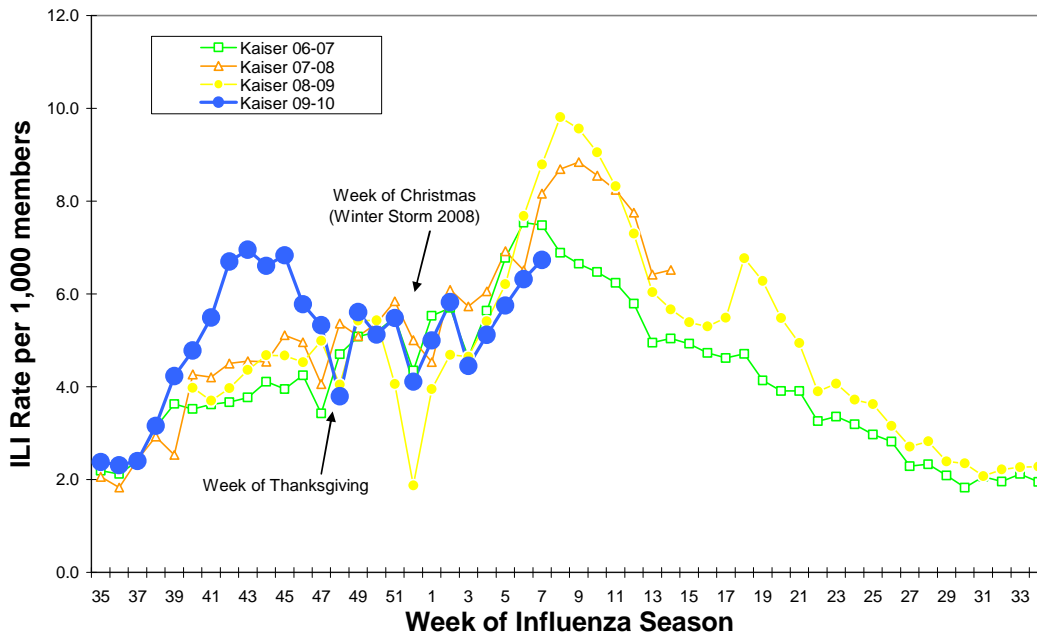
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 75% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

Outpatient Influenza-like Illness (ILI)

Kaiser Syndromic Surveillance

Oregon Public Health Division receives discharge diagnoses data for Kaiser Permanente Northwest member outpatient visits. Although the number of ILI outpatient visits increased for the fourth week in a row to 6.73 per 1,000 Kaiser members during the week ending February 13, 2010, ILI levels are still below levels historically seen in February.

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



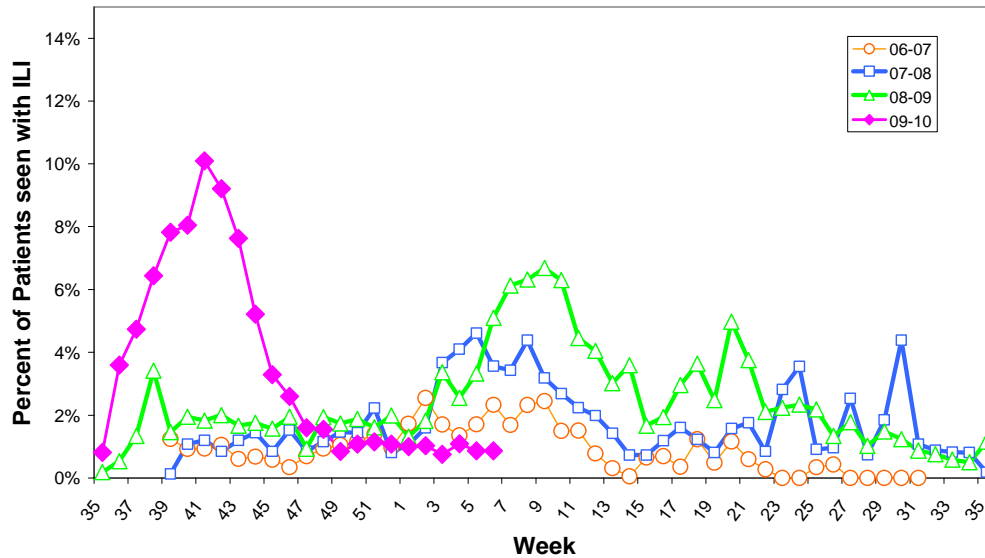
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average ILI reported during non-influenza weeks (defined as percent positive for influenza at the Oregon State Public Health Laboratory $< 10\%$, is 1.29%. For the week ending February 13th, 2010 (and the second week in a row) 0.86% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending February 13th	3010	0.86	11
Week ending February 6th	2667	0.86	10
Week ending January 30th	3576	1.09	14

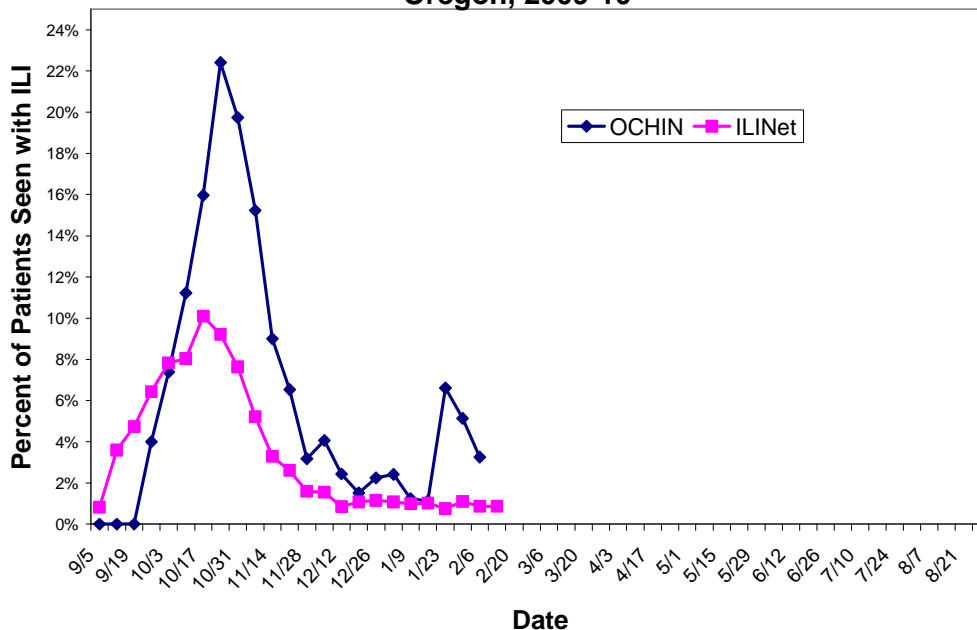
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending January 30th was 3.26%.

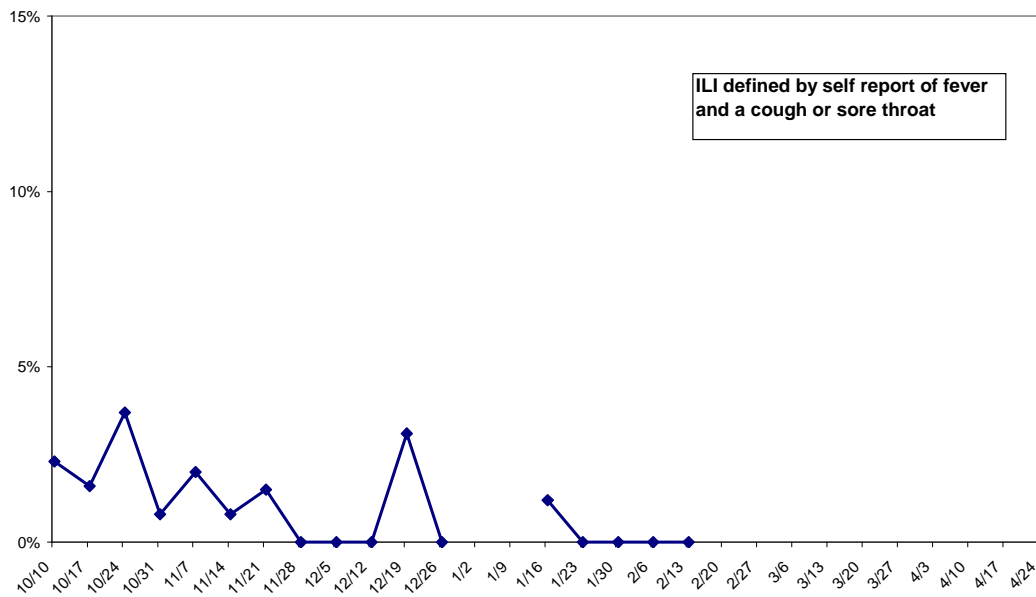
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on ILI via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). With low levels of influenza activity, BRFSS is only updated every other week. For the last two weeks ending February 13th, no BRFSS respondents reported having symptoms of ILI with 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. No seasonal influenza has been identified since October, 2009.

**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	153 (53)	1,087 (61)	23 (60)	1263 (60)	0
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	1 (0)	1 (0)	3 (8)	2 (0)	0
Undetected	135 (47)	687 (39)	12 (32)	837 (40)	7 (100)
Total Tested	290	1,777	38	2,105	7

* Although we make our best effort to only include hospitalized patients in our laboratory surveillance, submissions for hospitalized cases include some ER visits..

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 numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

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/>

FLU BITES

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

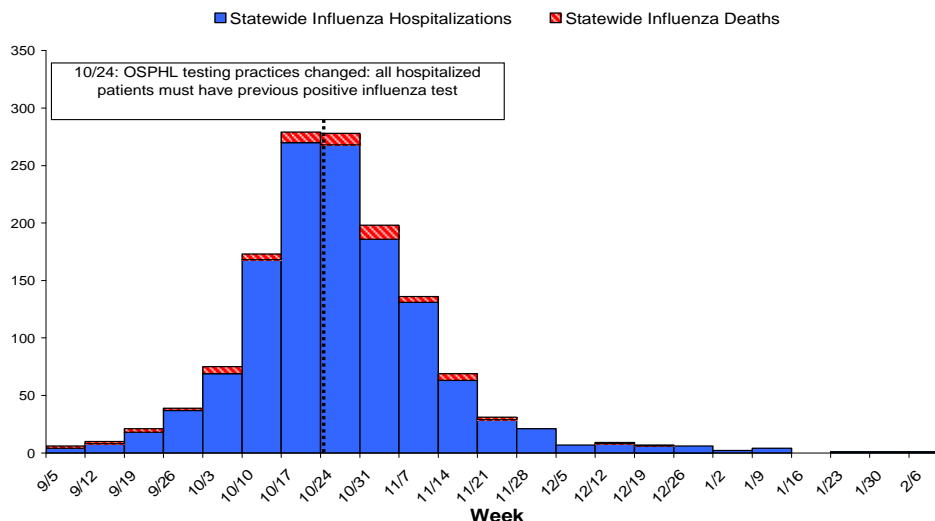
Published February 12, 2010



Summary

- One influenza hospitalization and no deaths were reported for the week ending February 6th.
- Since September 1, 2009, 1,308 patients have been hospitalized with laboratory-confirmed influenza statewide (952 adults; 356 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-six people have died from influenza (62 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 63 deaths for whom information about medical conditions is known, 57 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – January 16th to be 3.8 per 100,000.
- All of our influenza-like illness (ILI) syndromic surveillance systems report low levels of ILI; ILINet rates are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are also slightly below levels seen in previous seasons.
- Respiratory syncytial virus (RSV) in Oregon decreased this week following three continuously increasing weeks of activity but still remains high. The official start of the RSV season was the week ending January 9th, 2010.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**

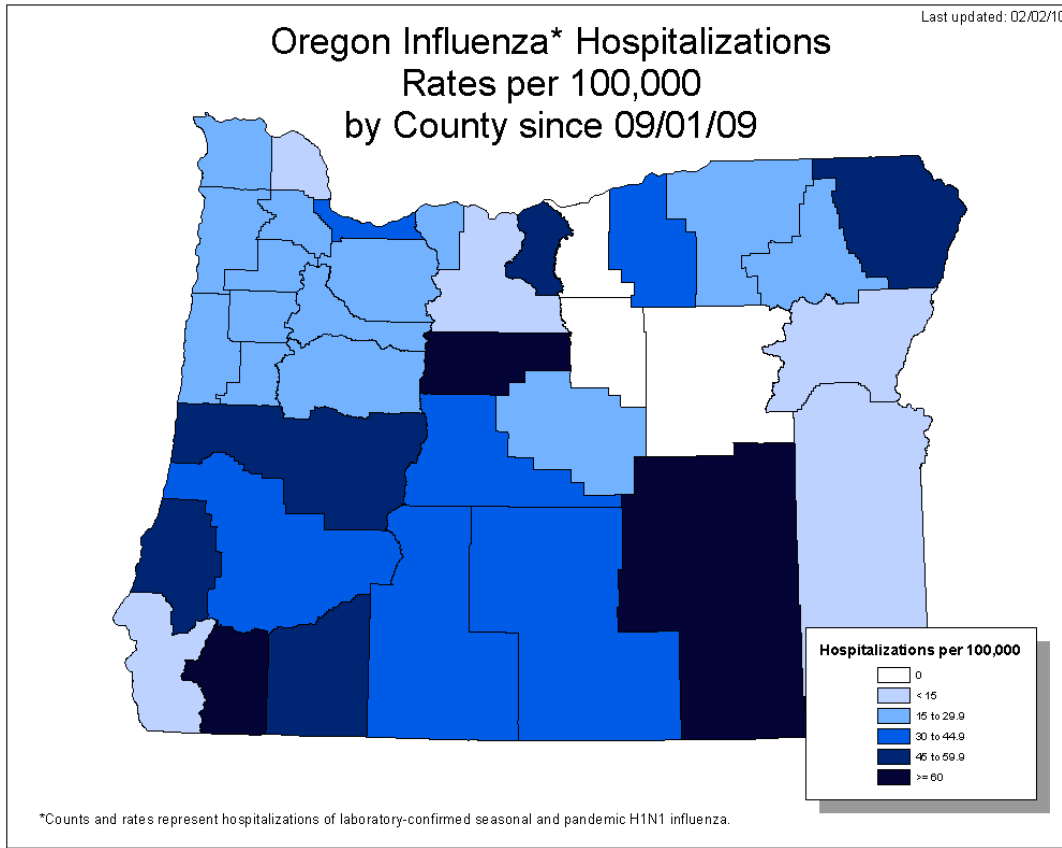


Statewide Hospitalizations and Deaths

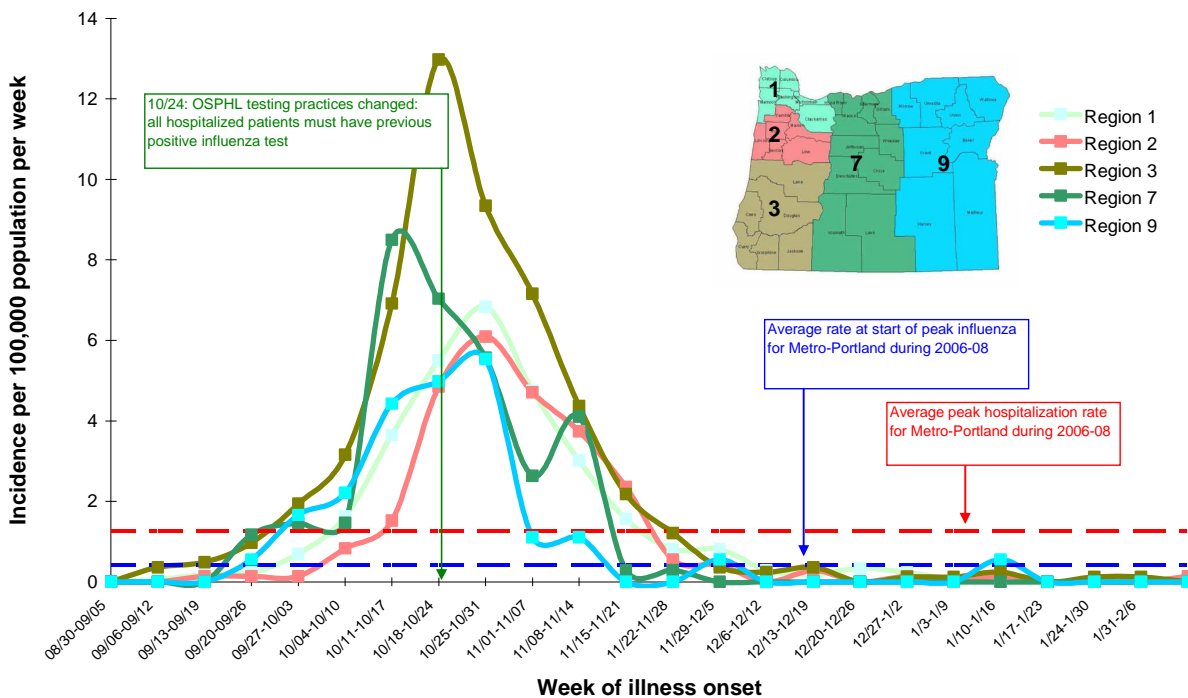
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 93 years. Females constitute 707 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	20	1	3	3	5	5	3	0	22.1
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	107	13	13	8	20	34	19	0	52.1
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	200	28	36	9	56	56	15	0	57.8
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1308	186	186	92	392	318	133	1	34.5
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.5	29.6	29.8	42.8	27.2		34.5



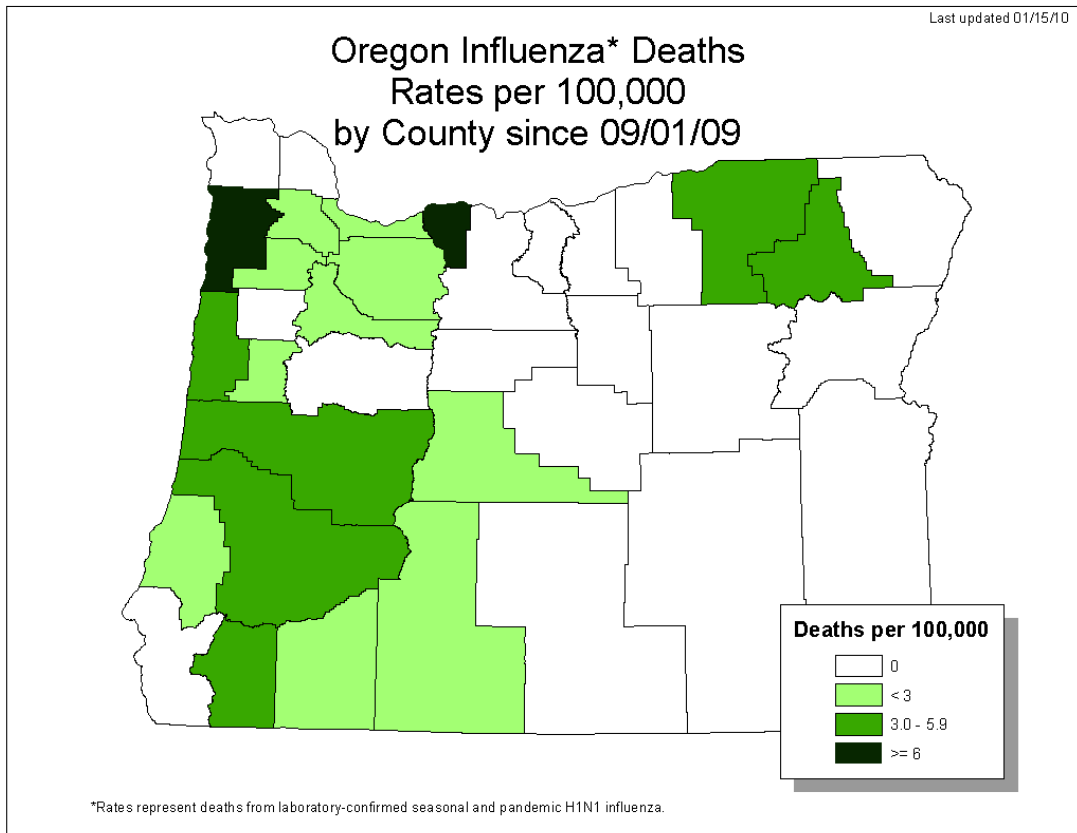
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



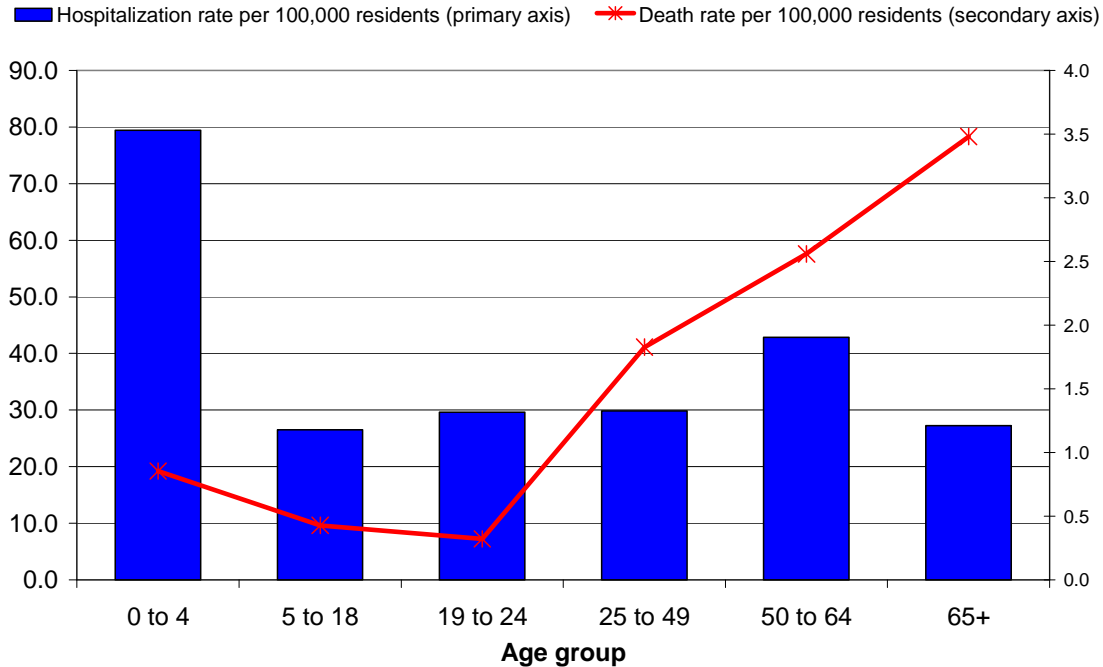
The mean and median age of influenza deaths statewide since September 1, 2009 are 52 and 51 years, respectively. Ages range from 2 to 87 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	2.3
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	66	2	3	1	24	19	17	1.7
Percentage		3	5	2	36	29	26	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.5	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

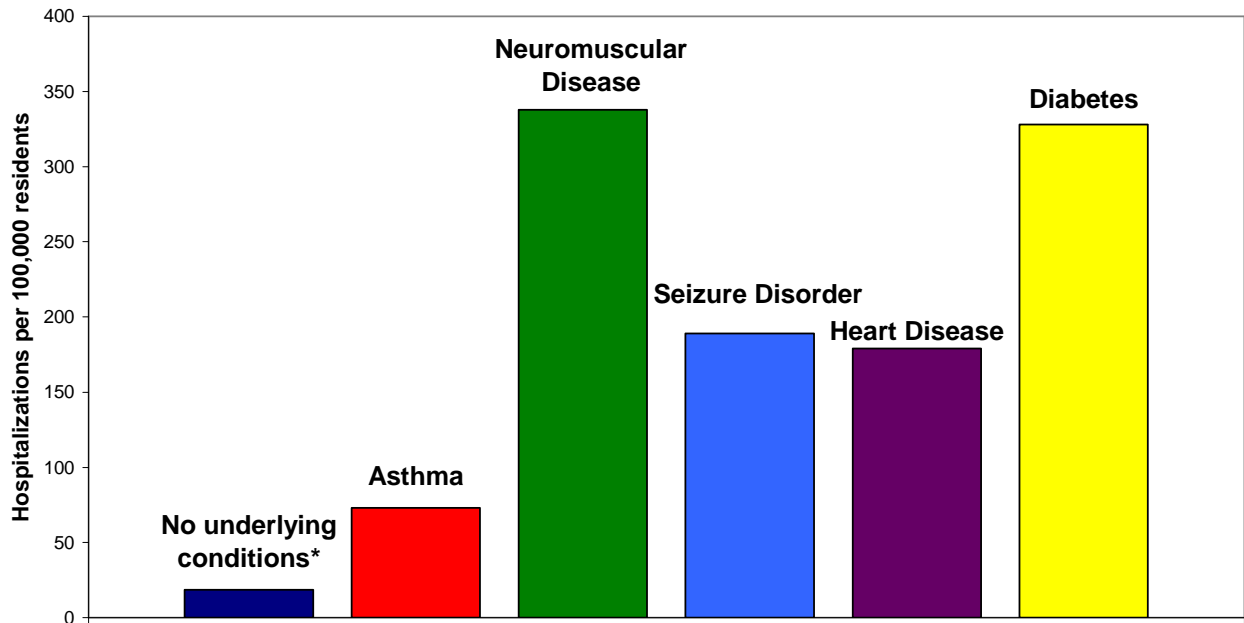
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 99% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=123 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	99 (81)	323 (89)
Outcomes		
Pneumonia	36 (29)	176 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (16)	93 (26)
ARDS	2 (2)	28 (8)
Mechanically Ventilated	8 (7)	55 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	10 (3)

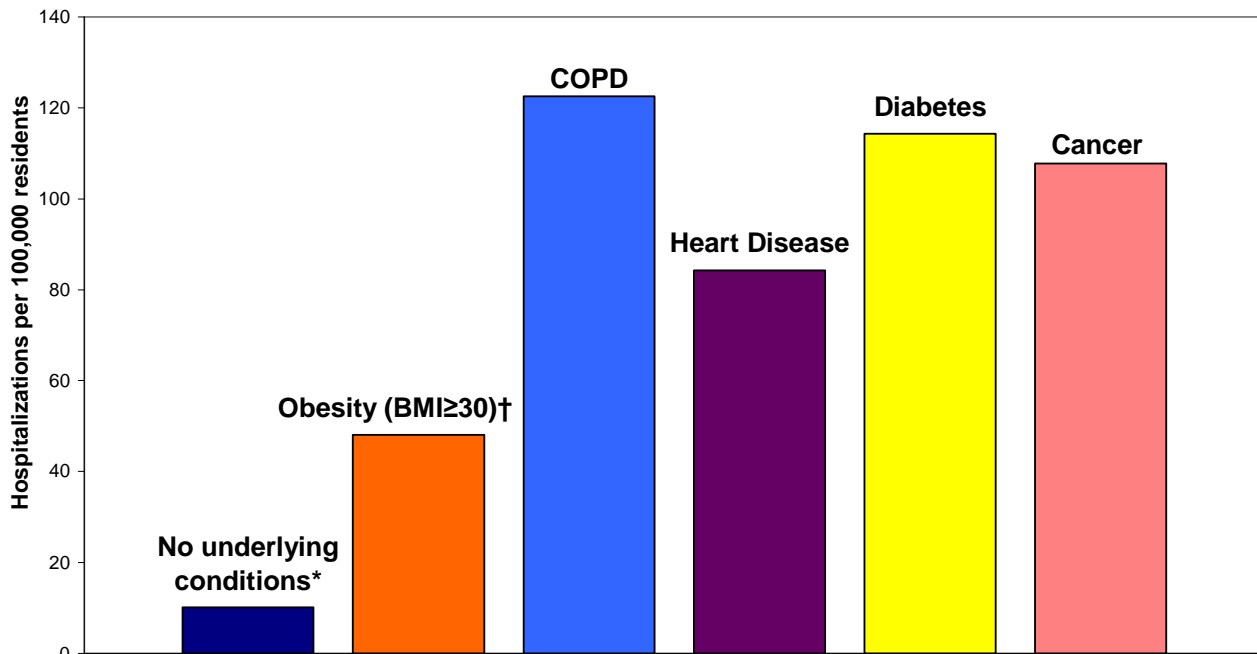
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



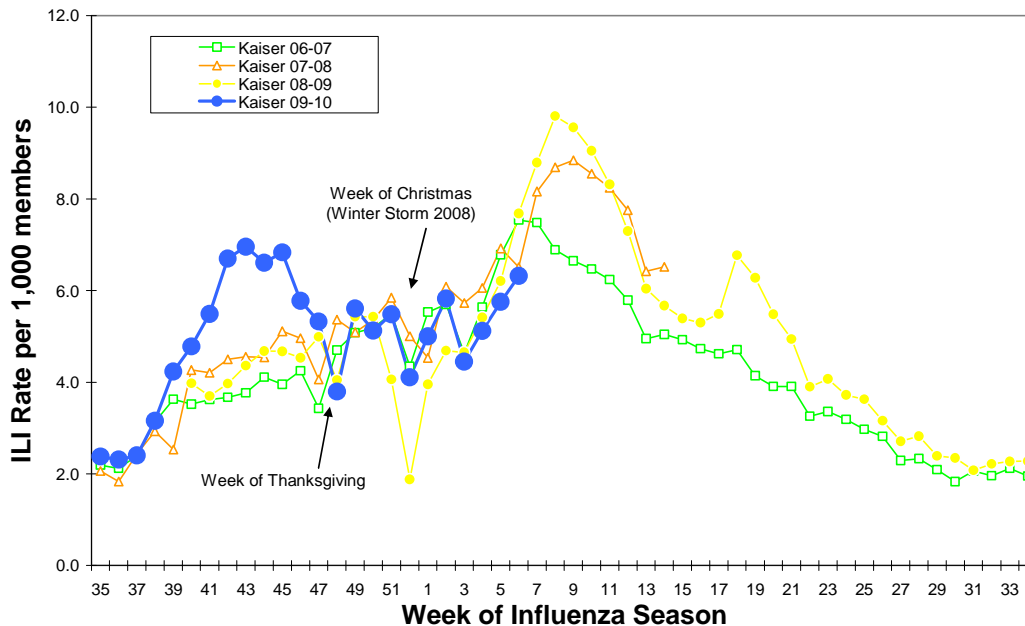
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 74% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

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 increased for the second week in a row to 6.32 per 1,000 Kaiser members during the week ending February 6, 2010.

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



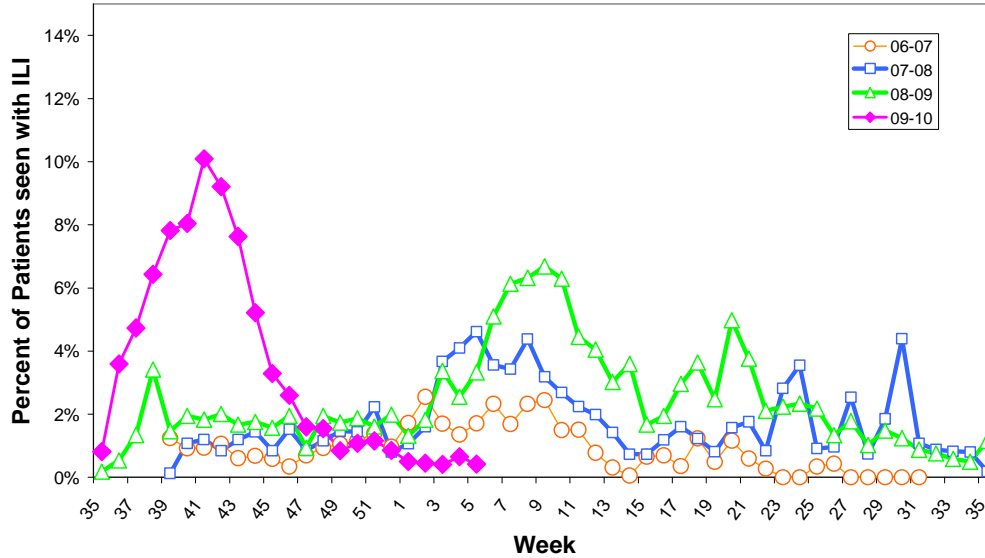
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending February 6th, 2010 0.42% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending February 6th	2395	0.42	9
Week ending January 30th	3240	0.65	13
Week ending January 23nd	2915	0.41	13

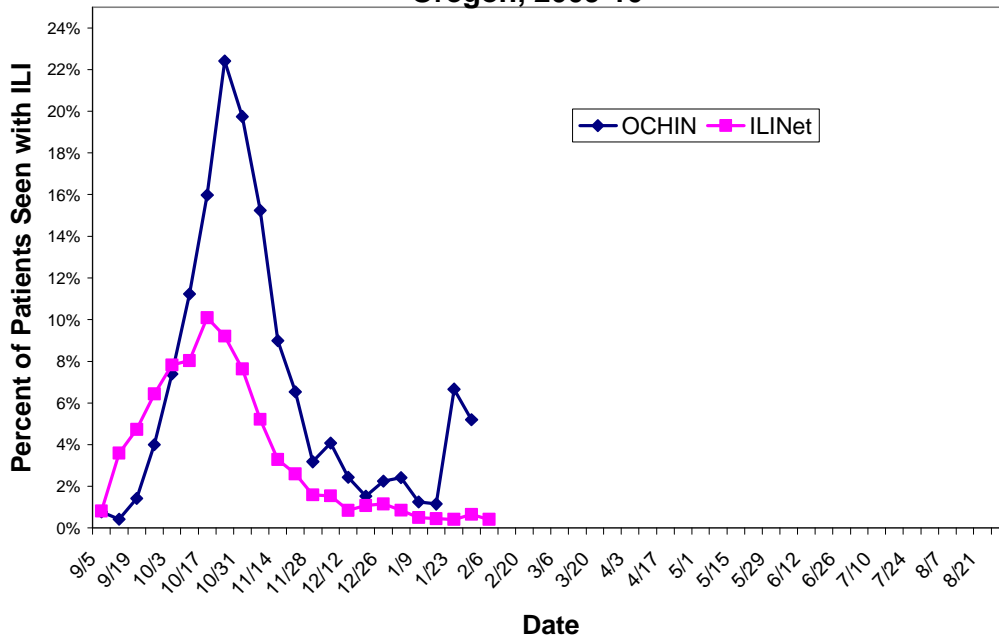
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending January 30th was 5.19%.

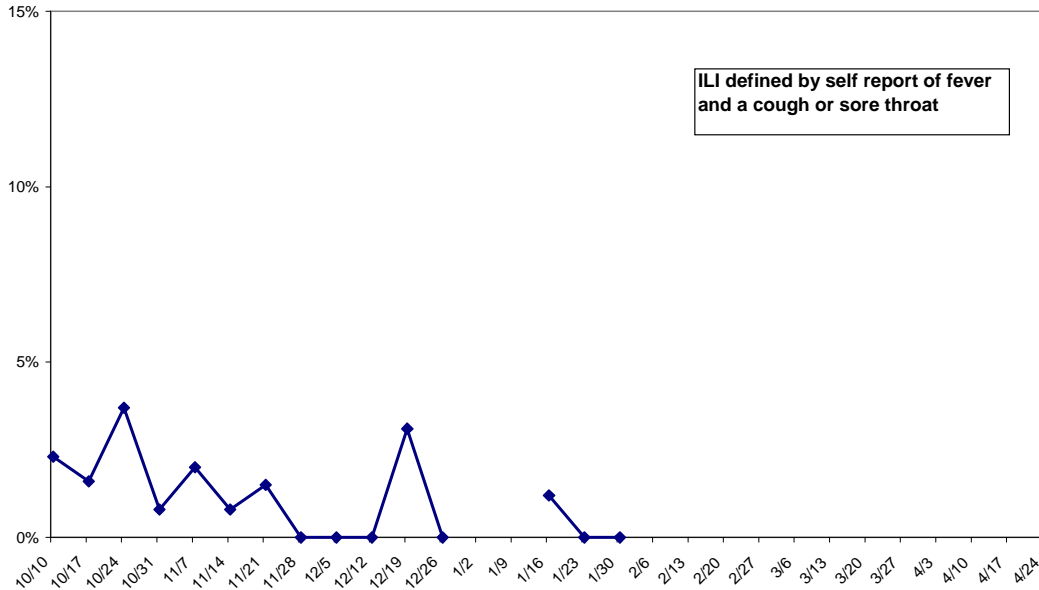
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). With low levels of influenza activity, BRFSS is only updated every other week. For the weeks ending January 23rd and 30th, no BRFSS respondents reported having symptoms of ILI with 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. No seasonal influenza has been identified since October, 2009.

**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	153 (54)	1,087 (61)	23 (60)	1,263 (60)	2 (15)
Seasonal A (H1)	1 (<1)	1 (<1)	0	2 (<1)	0
Seasonal A (H3)	0	1 (<1)	0	1 (<1)	0
Influenza B	0	0	0	0	0
Pending	2 (<1)	4 (<1)	3 (8)	9 (<1)	5 (39)
Undetected	128 (45)	681 (38)	12 (32)	821 (39)	6 (46)
Total Tested	284	1,774	38	2,096	13

*Submissions for hospitalized cases include some ER visits, although we make our best effort to only include hospitalized patients in our laboratory surveillance.

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 numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

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/>

FLU BITES

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

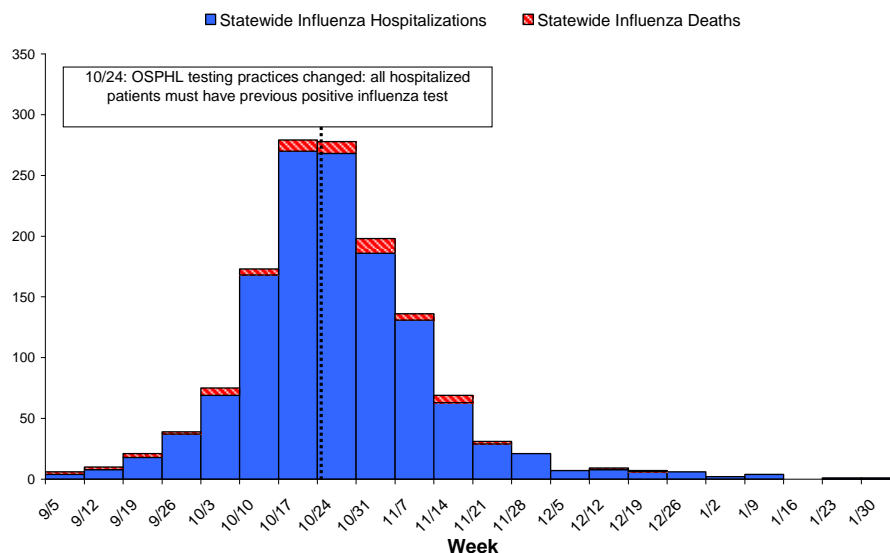
Published February 5, 2010



Summary

- One influenza hospitalization and no deaths were reported for the week ending January 30th.
- Since September 1, 2009, 1,307* patients have been hospitalized with laboratory-confirmed influenza statewide (951 adults; 355 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-six people have died from influenza (62 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 63 deaths for whom information about medical conditions is known, 57 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – December 12th to be 3.7 per 100,000.
- All of our influenza-like illness (ILI) syndromic surveillance systems report low levels of ILI; ILINet rates are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are also slightly below levels seen in previous seasons.
- Respiratory syncytial virus (RSV) in Oregon increased substantially from the previous week; the official start of the RSV season was the week ending January 9th, 2009.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



* The hospitalization count remains the same since last week's report. Duplicate cases and cases that didn't meet our case definition were removed.

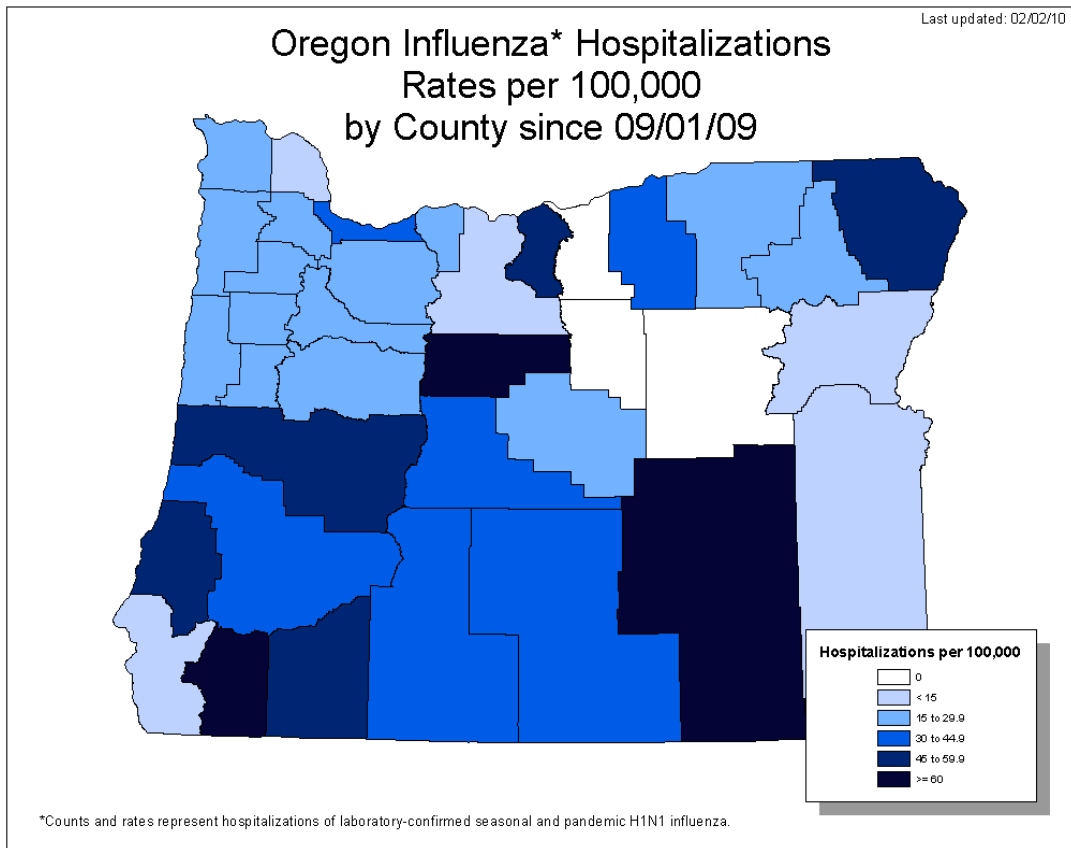
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 707 (54%) of hospitalized cases.

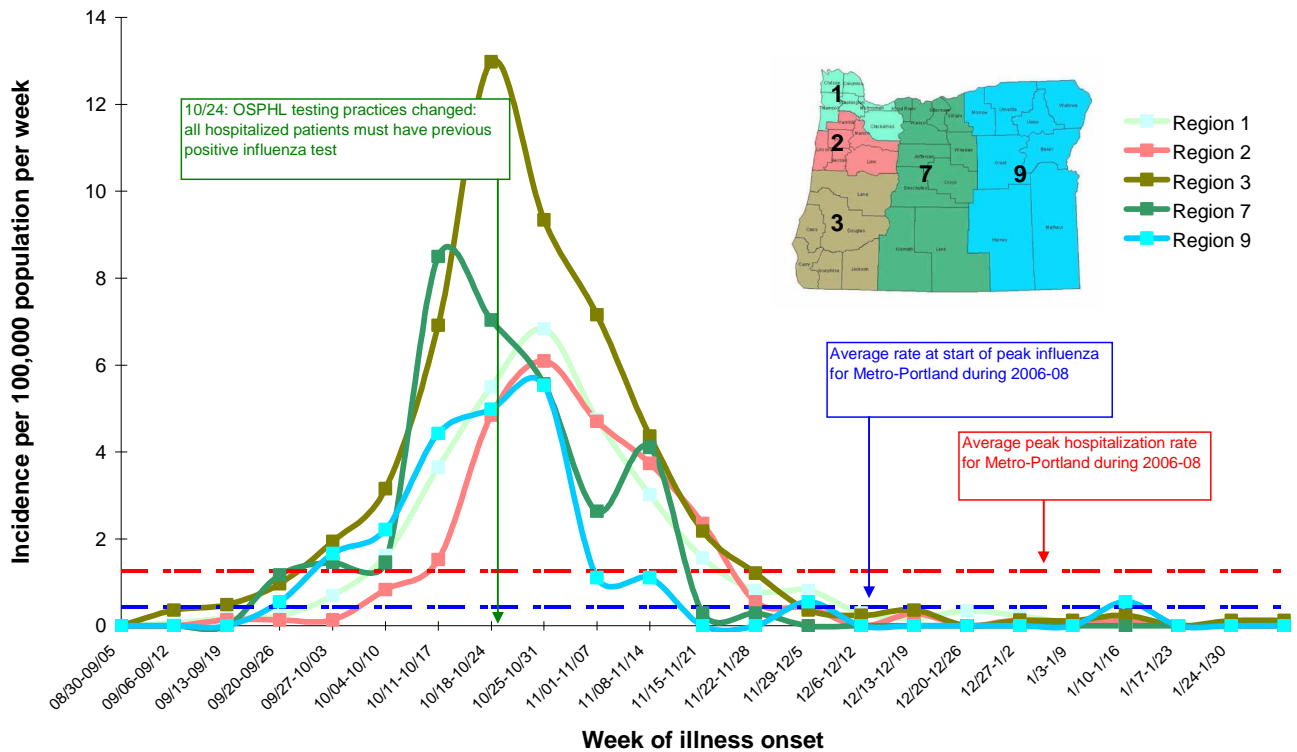
Distribution of Hospitalized Influenza Cases by County and Age Group Since September 1, 2009

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	2	0	0	0	0	1	1	0	12.2
Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	107	13	13	8	20	34	19	0	52.1
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	200	28	36	9	56	56	15	0	57.8
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	19	7	17	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1307	186	186	92	392	318	132	1	34.5
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.5	29.6	29.8	42.8	27.0		34.5

* The hospitalization count remains the same since last week's report. Duplicate cases and cases that didn't meet our case definition were removed.



Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*

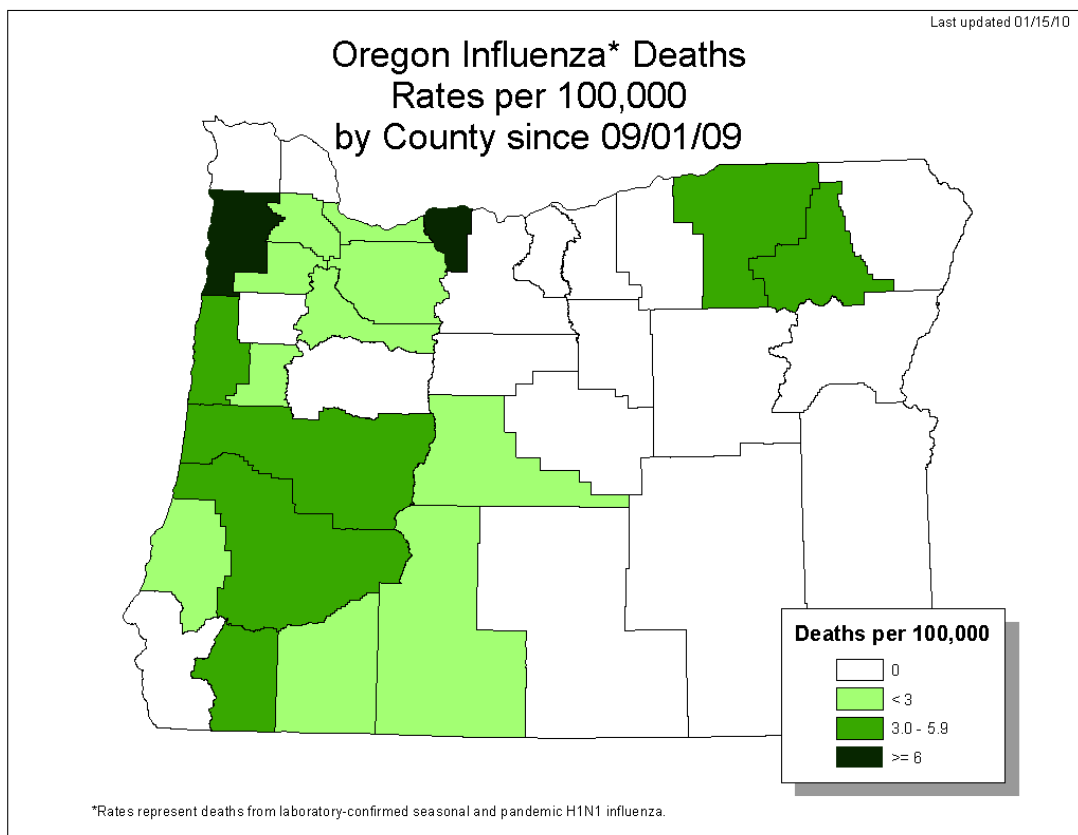


*Numbers are provisional and may fluctuate due to reporting delays

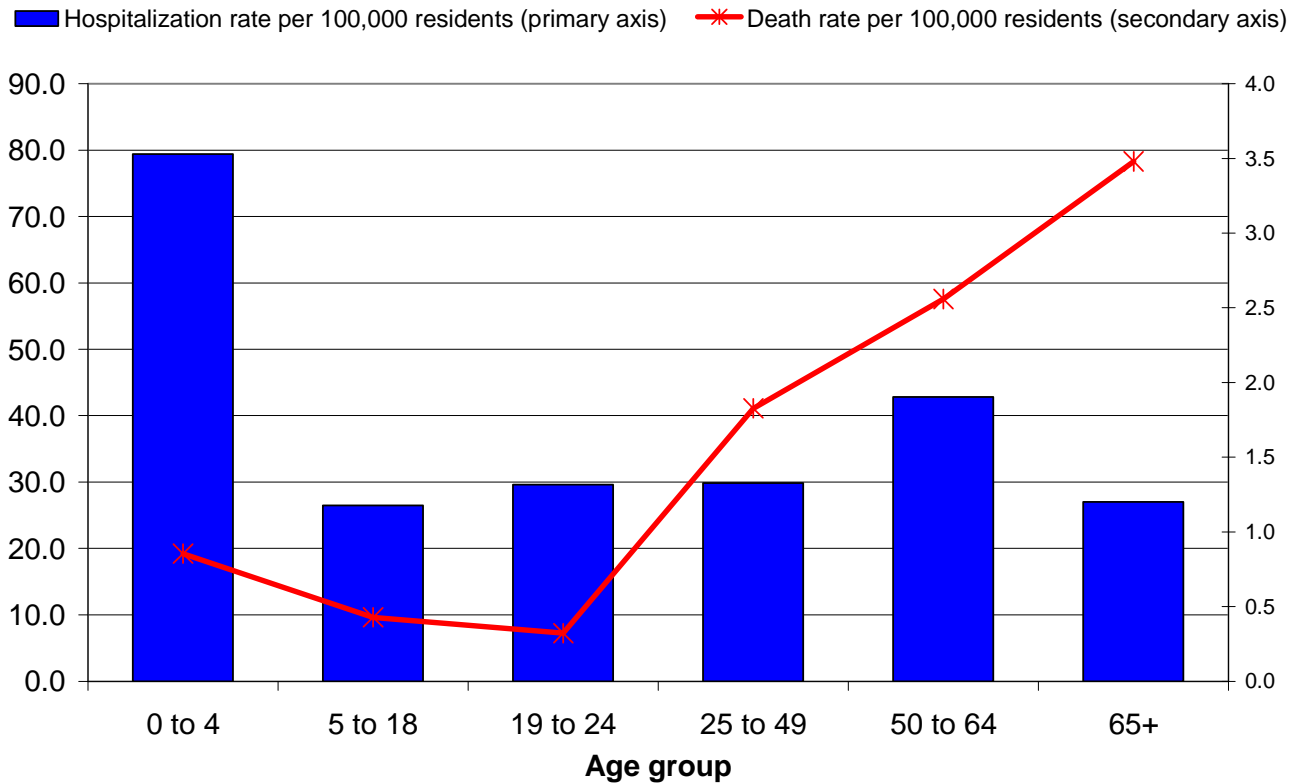
The mean and median age of influenza deaths statewide since September 1, 2009 are 52 and 51 years, respectively. Ages range from 2 to 87 years. Males constitute 58% of influenza deaths.

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+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	2.3
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	66	2	3	1	24	19	17	1.7
Percentage		3	5	2	36	29	26	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.5	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

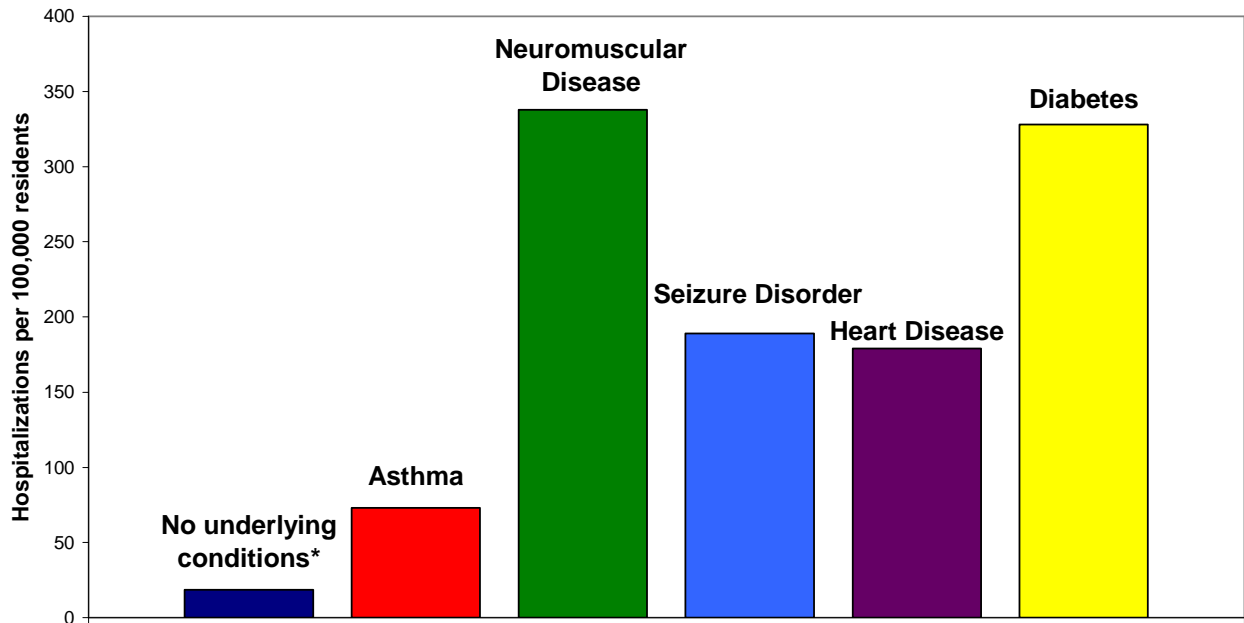
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 98% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=123 N (%)	Adult (age >17 years), N=365 N (%)
Treatment		
Received antivirals	99 (81)	325 (89)
Outcomes		
Pneumonia	36 (29)	178 (49)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (16)	95 (26)
ARDS	2 (2)	29 (8)
Mechanically Ventilated	8 (7)	56 (16)
ECMO	1 (1)	3 (1)
Died	2 (2)	11 (3)

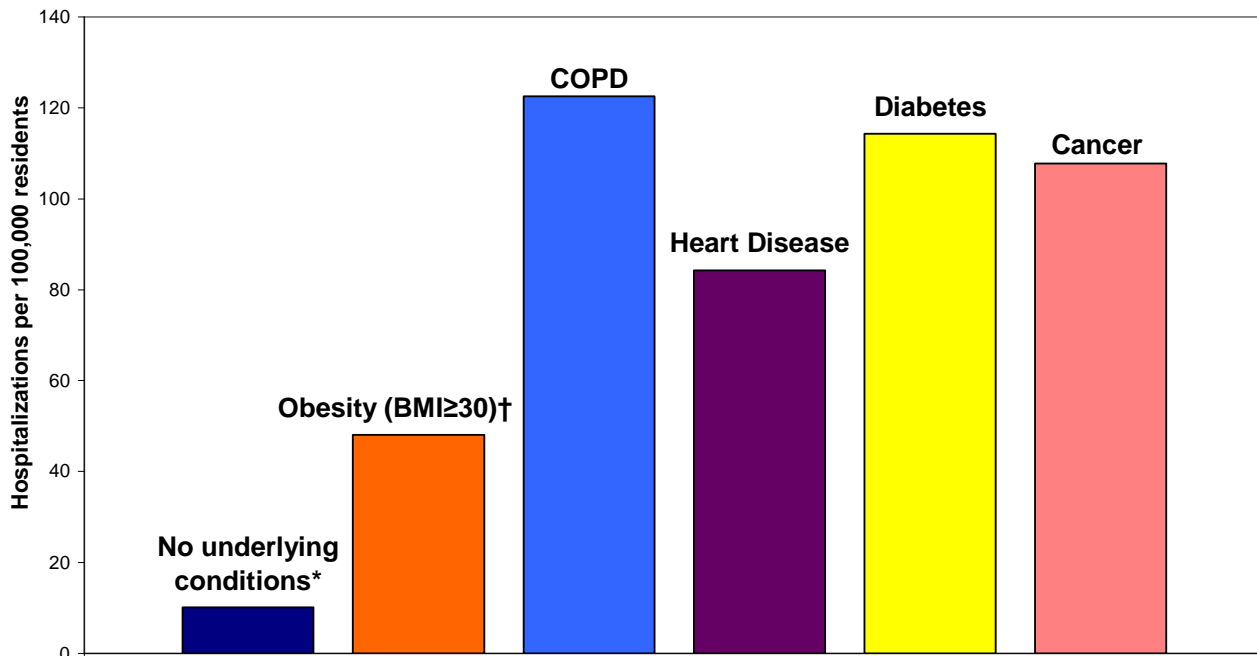
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



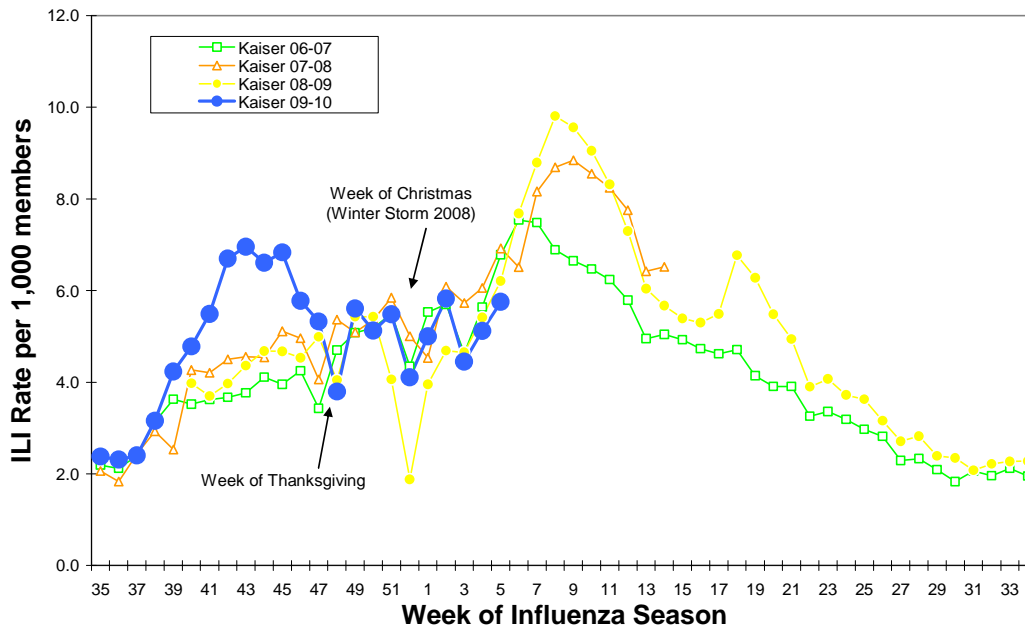
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 74% of adult patients with available height and weight information, Obesity is not an ACIP underlying condition

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 increased for the second week in a row to 5.75 per 1,000 Kaiser members during the week ending January 30, 2010.

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



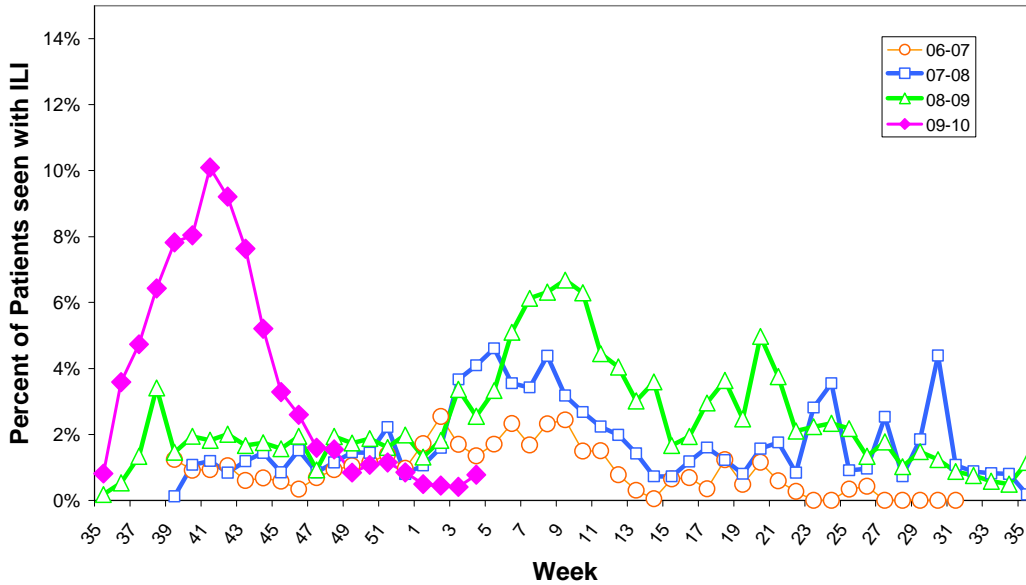
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending January 30th, 0.78% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending January 30 th	2685	0.78	12
Week ending January 23 nd	2915	0.41	13
Week ending January 16 th	3119	0.45	14

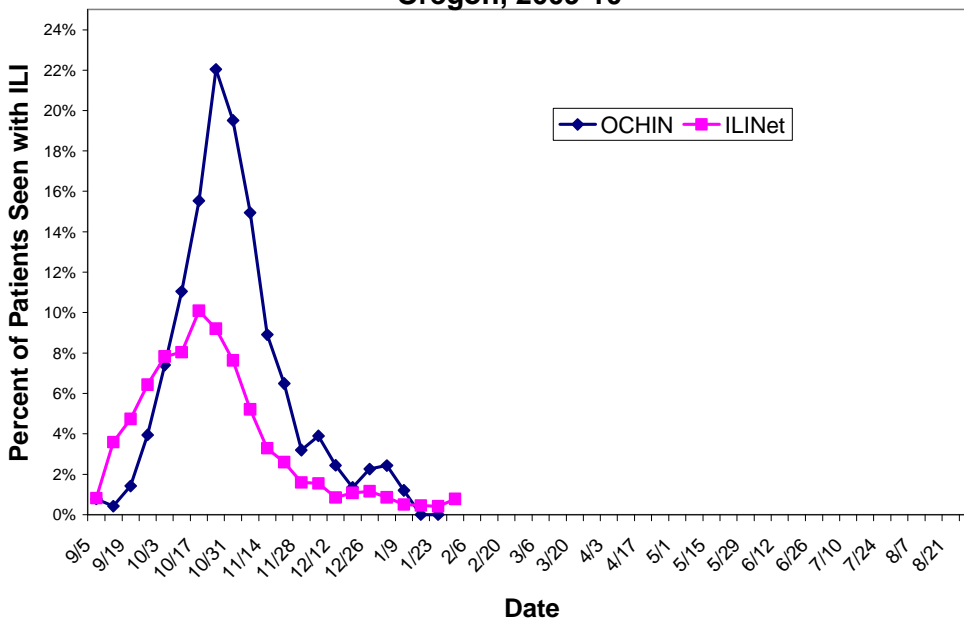
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending January 23rd, 2010 was 0%.

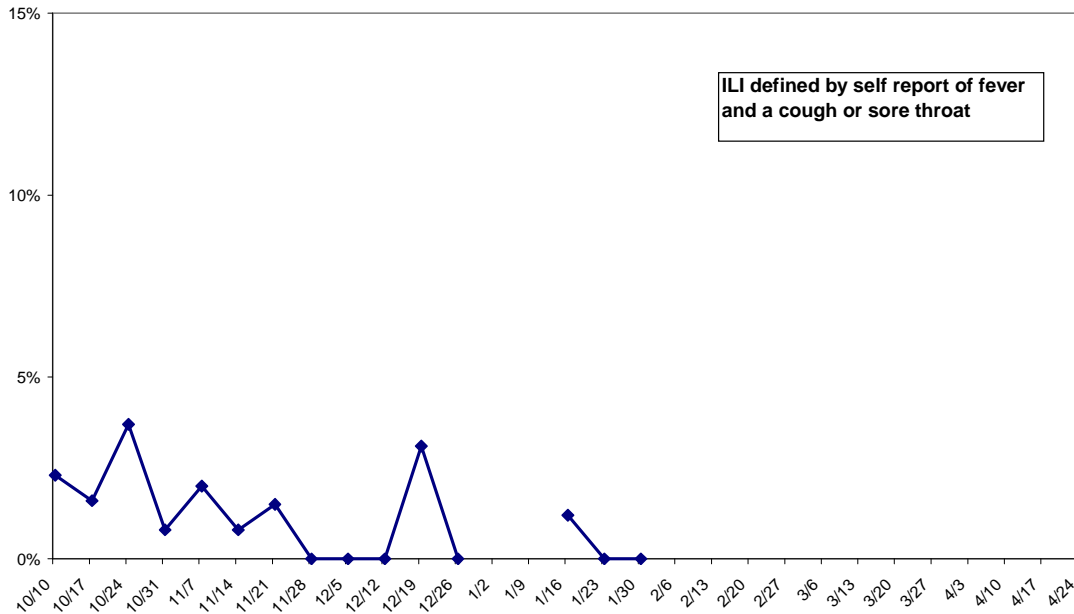
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). For the weeks ending January 23rd and 30th, no BRFSS respondents reported having symptoms of ILI with 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. No seasonal influenza has been identified since October, 2009.

**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	153 (54)	1,085 (62)	23 (66)	1,261 (60)	0
Seasonal A (H1)	1 (0)	1 (0)	0	2 (<1)	0
Seasonal A (H3)	0	1 (0)	0	1 (<1)	0
Influenza B	0	0	0	0	0
Pending	4 (1)	6 (0)	0	10 (<1)	3 (43)
Undetected	125 (44)	676 (38)	12 (34)	813 (39)	4 (57)
Total Tested	283	1,769	35	2,087	7

*Submissions for hospitalized cases include some ER visits. Please be patient as we continue to educate our submitters.

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 numbers of hospitalizations and deaths on our web page twice weekly at:

http://www.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/>.

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/>

FLU BITES

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

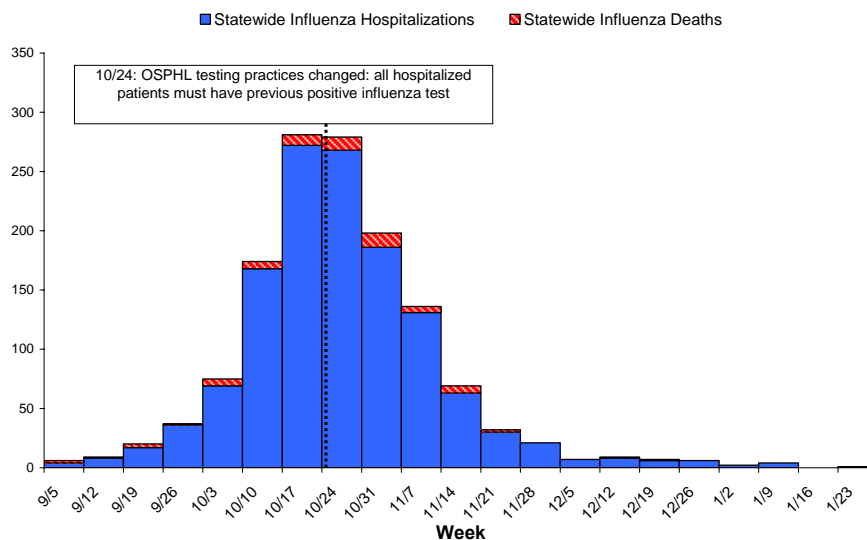
Published January 29, 2010



Summary

- One influenza hospitalization and no deaths were reported for the week ending January 23rd.
- Since September 1, 2009, 1,307* patients have been hospitalized with laboratory-confirmed influenza statewide (950 adults; 356 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-six people have died from influenza (62 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 63 deaths for whom information about medical conditions is known, 56 (89%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – December 12th to be 3.7 per 100,000.
- All of our influenza-like illness (ILI) syndromic surveillance systems report low levels of ILI; ILINet rates are significantly below expected for this time of year, and Kaiser Permanente NW ILI levels are also slightly below levels seen in previous seasons.
- Respiratory syncytial virus (RSV) in Oregon increased substantially from the previous week; the official start of the RSV season was the week ending January 9th, 2009.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



* Number of hospitalizations have decreased since last week's report. Duplicate cases and cases that didn't meet our case definition were removed.

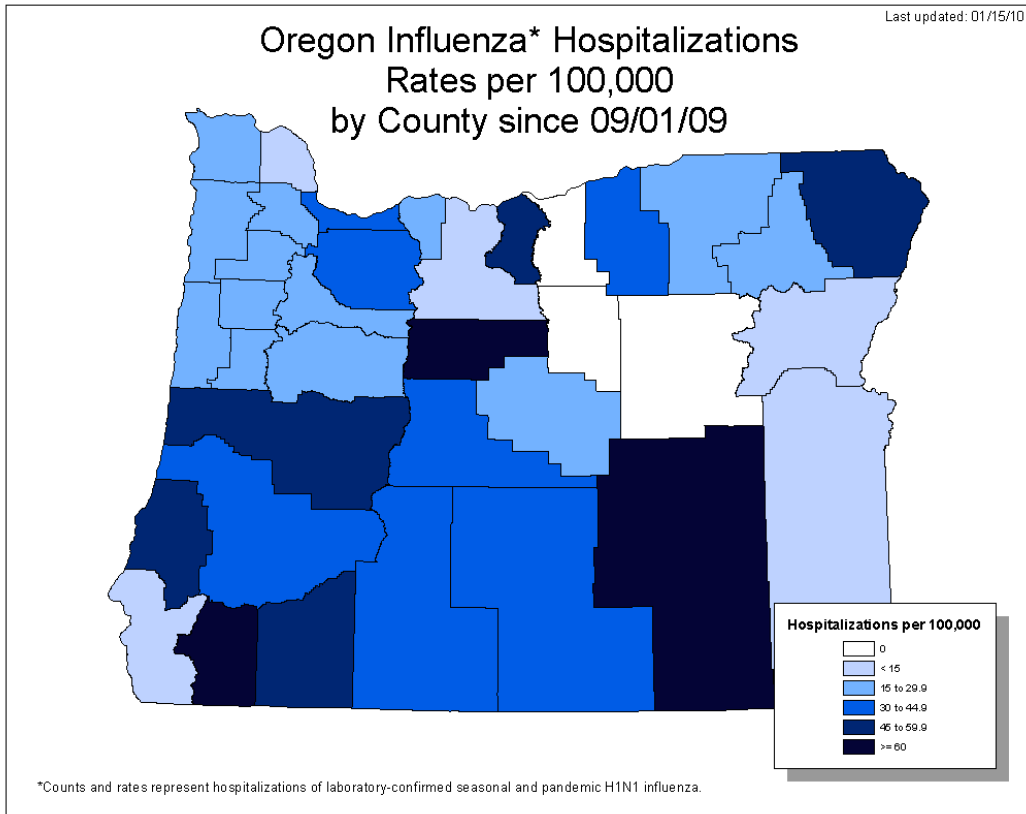
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The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 707 (54%) of hospitalized cases.

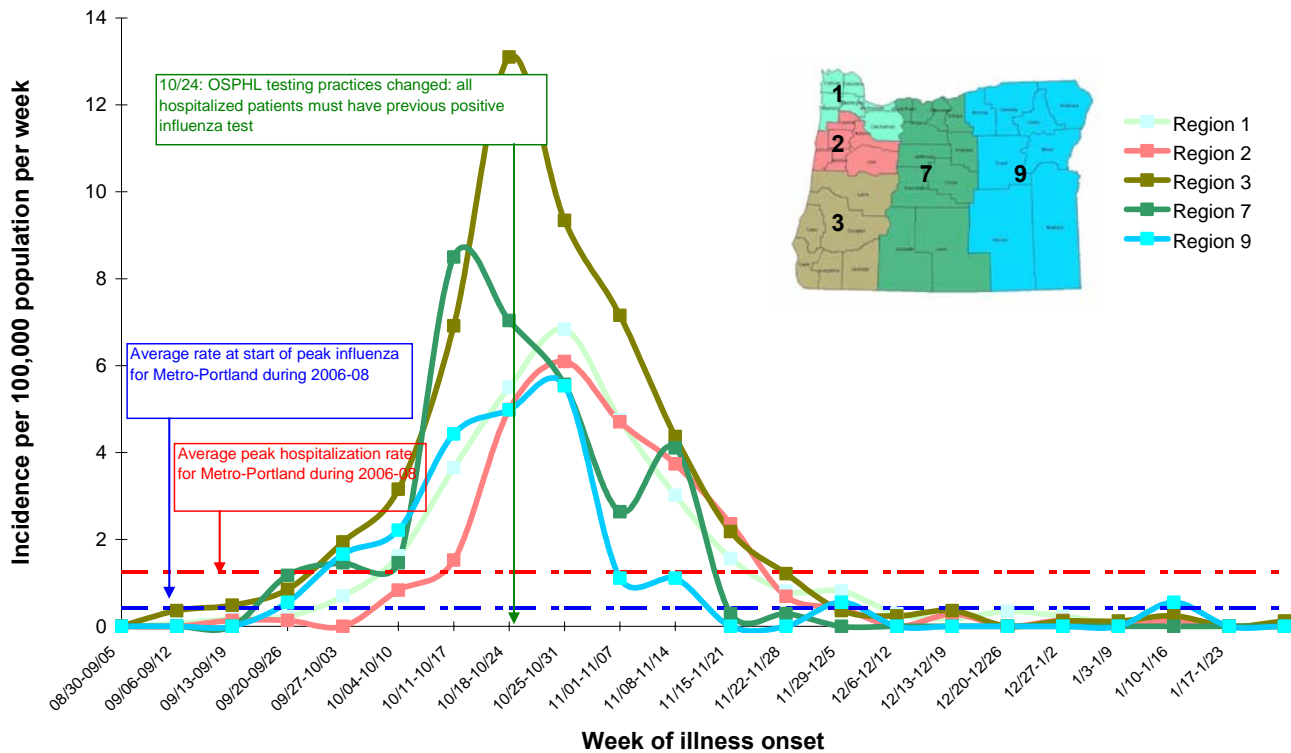
Distribution of Hospitalized Influenza Cases by County and Age Group Since September 1, 2009

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
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Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	107	13	13	8	20	34	19	0	52.1
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	199	28	36	9	56	56	14	0	57.5
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	93	22	20	7	17	19	8	0	29.5
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1307	186	187	92	392	318	131	1	34.5
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.7	29.6	29.8	42.8	26.8		34.5

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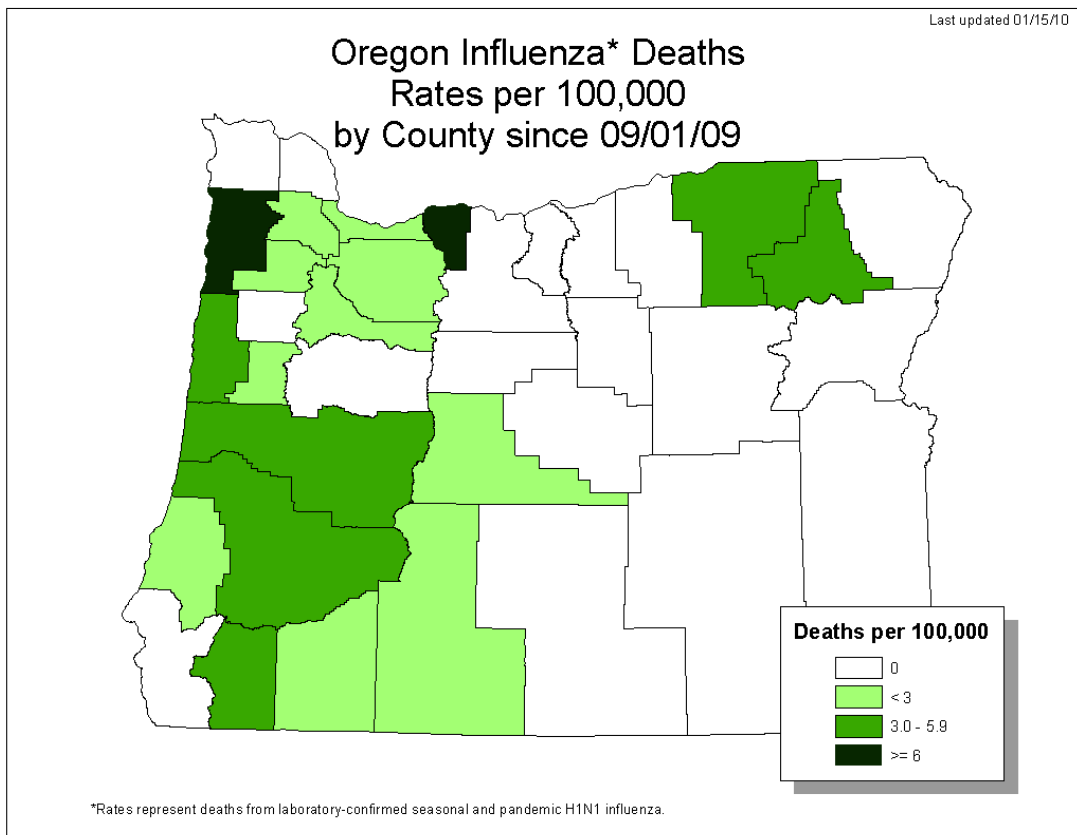
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



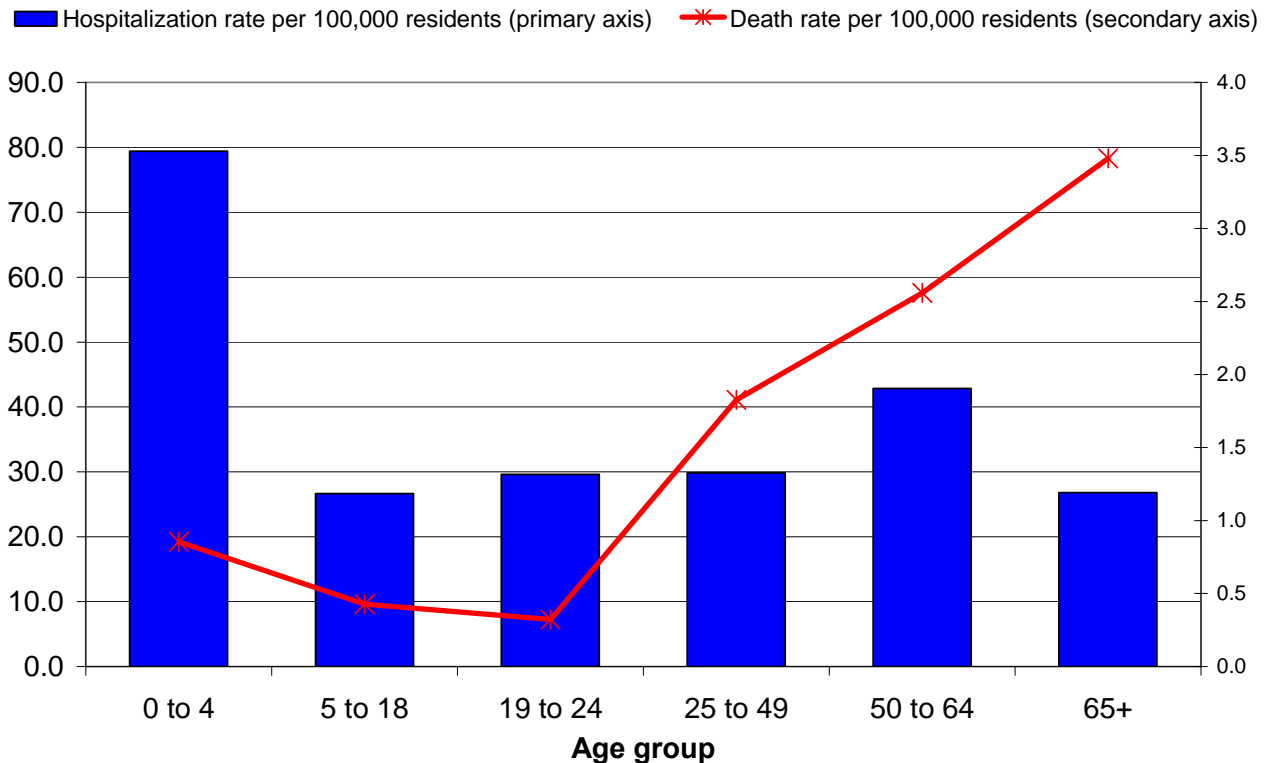
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County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	2.3
Clackamas	2	0	0	0	0	0	2	0.5
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
Jackson	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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	66	2	3	1	24	19	17	1.7
Percentage		3	5	2	36	29	26	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.5	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

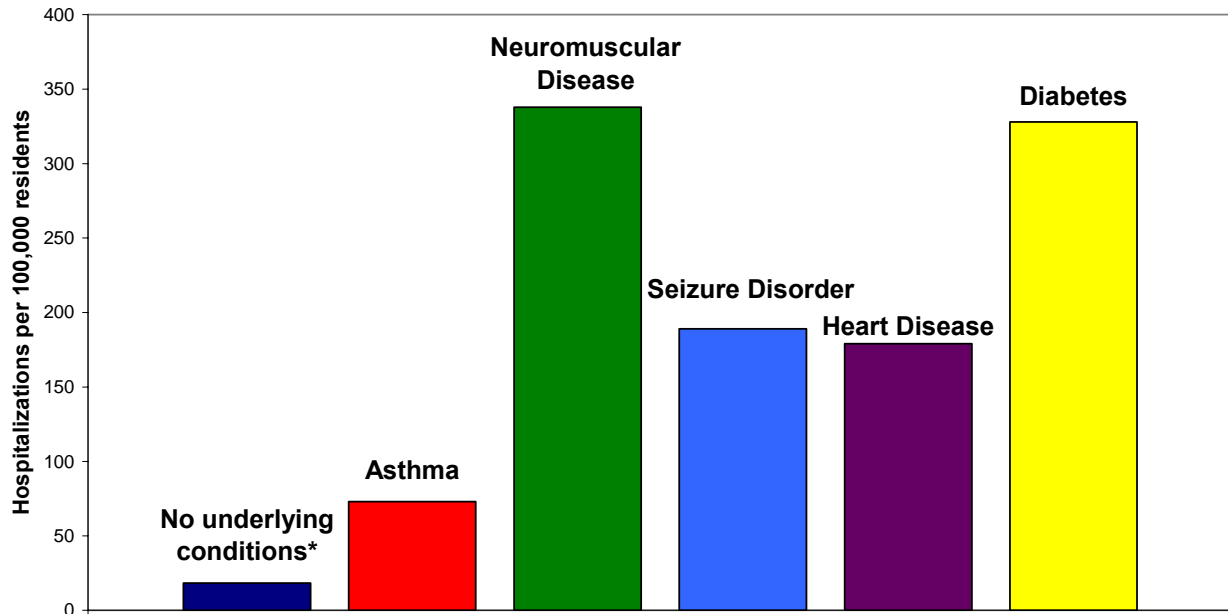
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Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=122 N (%)	Adult (age >17 years), N=362 N (%)
Treatment		
Received antivirals	98 (81)	320 (89)
Outcomes		
Pneumonia	36 (30)	174 (48)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (16)	94 (26)
ARDS	2 (2)	29 (8)
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ECMO	1 (1)	3 (1)
Died	2 (2)	11 (3)

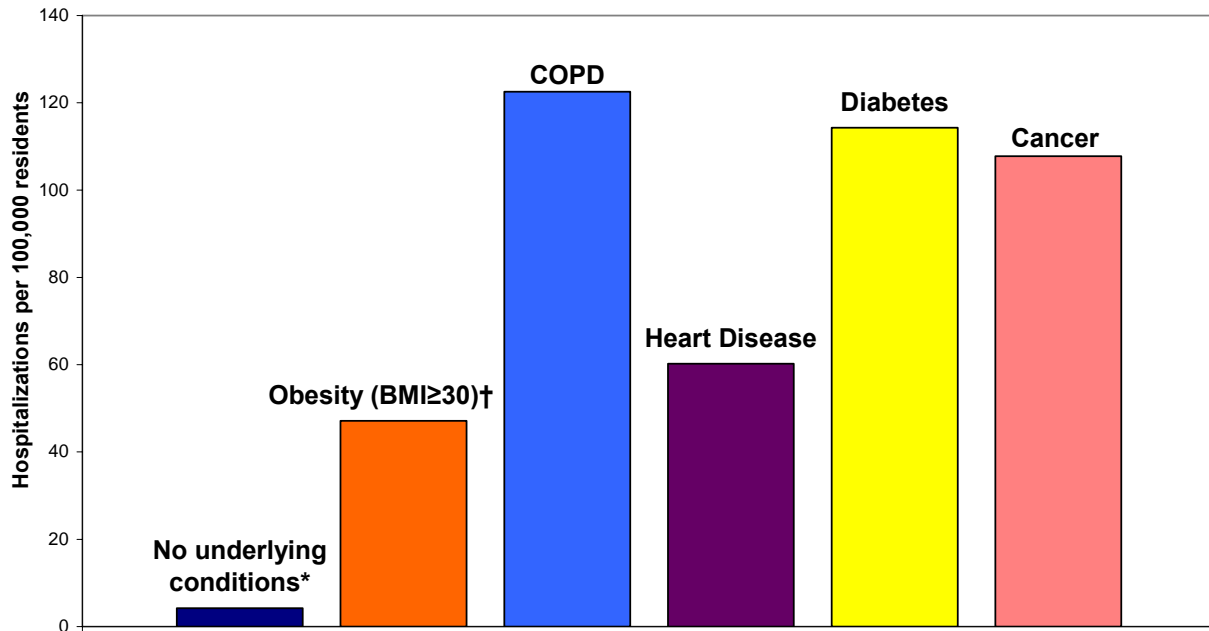
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition per 100,000 Oregon Residents



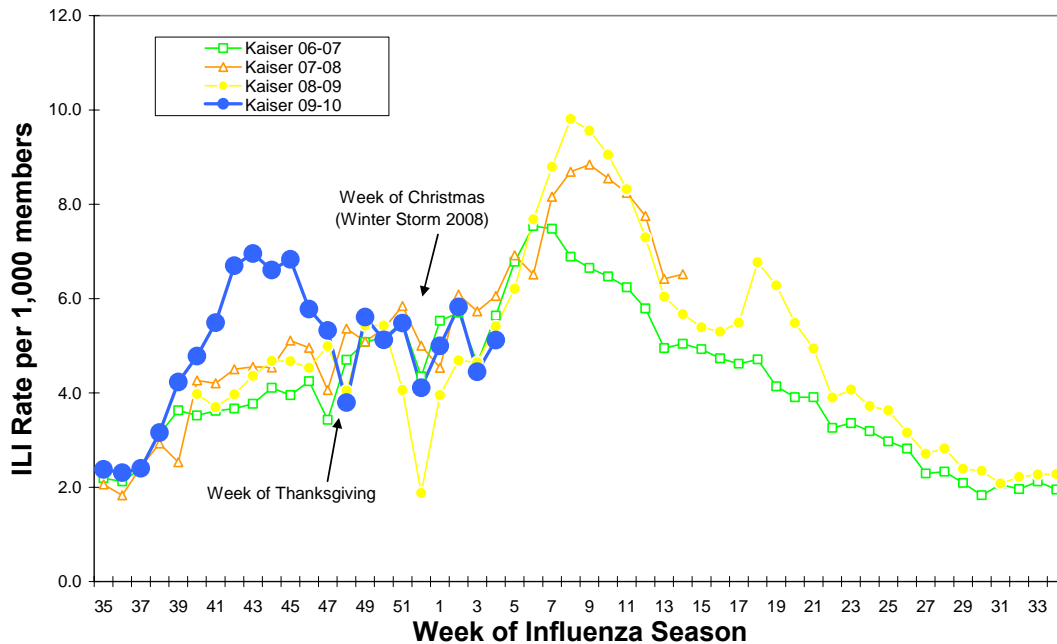
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Outpatient Influenza-like Illness

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



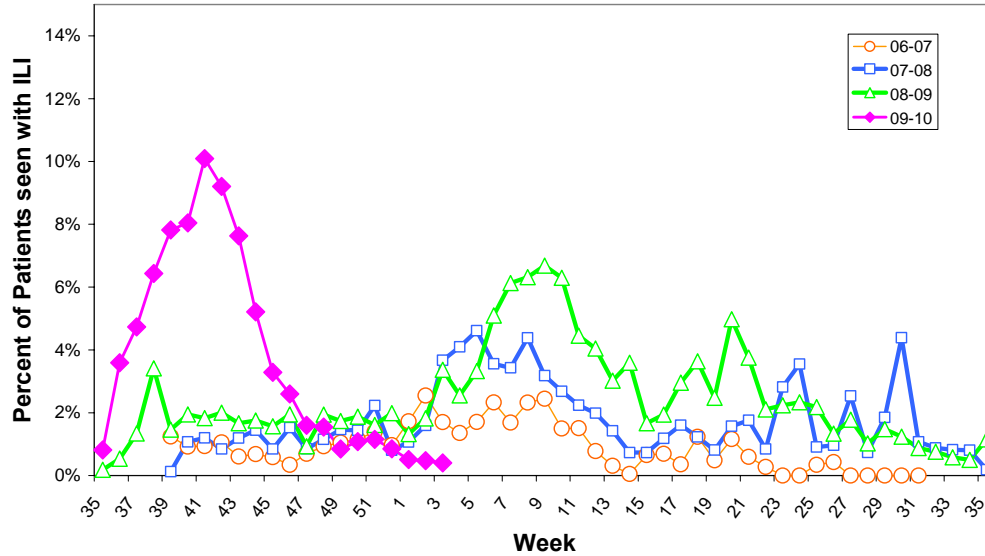
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending January 23rd, 0.4% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending January 23nd	2753	0.40	11
Week ending January 16th	2973	0.47	13
Week ending January 9th	4931	0.51	18

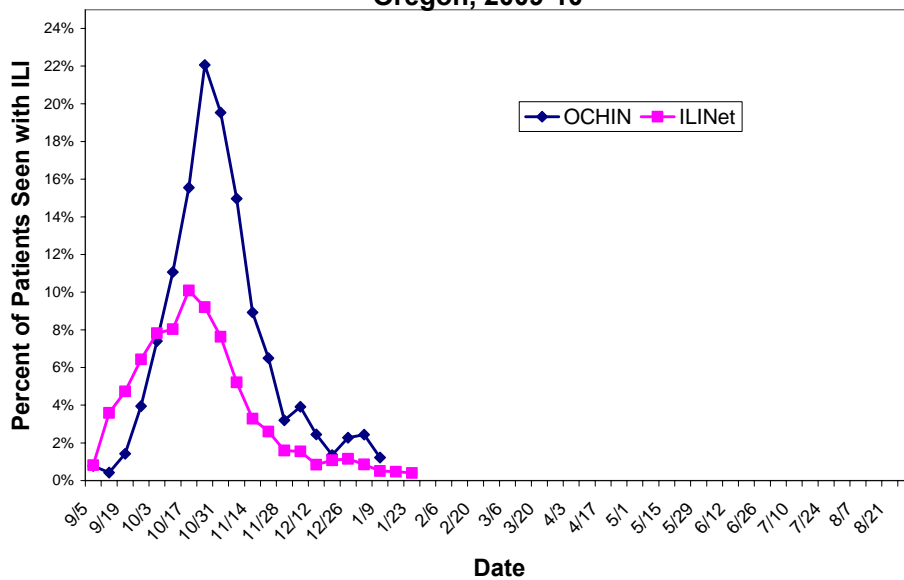
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending January 9, 2010 was 1.2%.

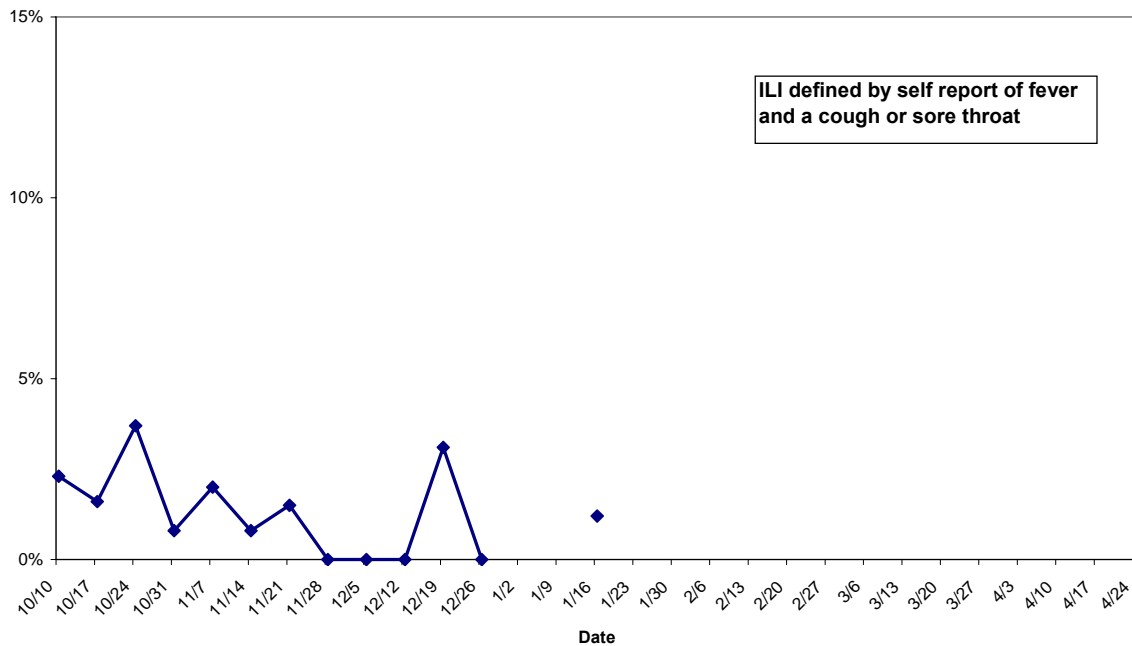
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). *BRFSS data was unavailable for the weeks ending January 2nd and January 9th.* Just over 1% of BRFSS respondents for the week ending January 16th reported having symptoms of ILI with onset in the last 7 days. There is no BRFSS data update at this time for the week ending in January 23rd. We apologize for the delay in reporting this data.

**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. No seasonal influenza has been identified since October, 2009.

**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	153 (55)	1,085 (62)	23 (66)	1,261 (61)	0
Seasonal A (H1)	1 (<1)	1 (0)	0	2 (0)	0
Seasonal A (H3)	0	1 (0)	0	1 (0)	0
Influenza B	0	0	0	0	0
Pending	1 (<1)	2 (0)	0	3 (0)	0
Undetected	123 (44)	673 (38)	12 (34)	808 (39)	5 (100)
Total Tested	278	1,762	35	2,075	5

*Submissions for hospitalized cases include some ER visits. Please be patient as we continue to educate our submitters.

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 numbers of hospitalizations and deaths on our web page once weekly at:

http://www.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/>.

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/>

FLU BITES

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

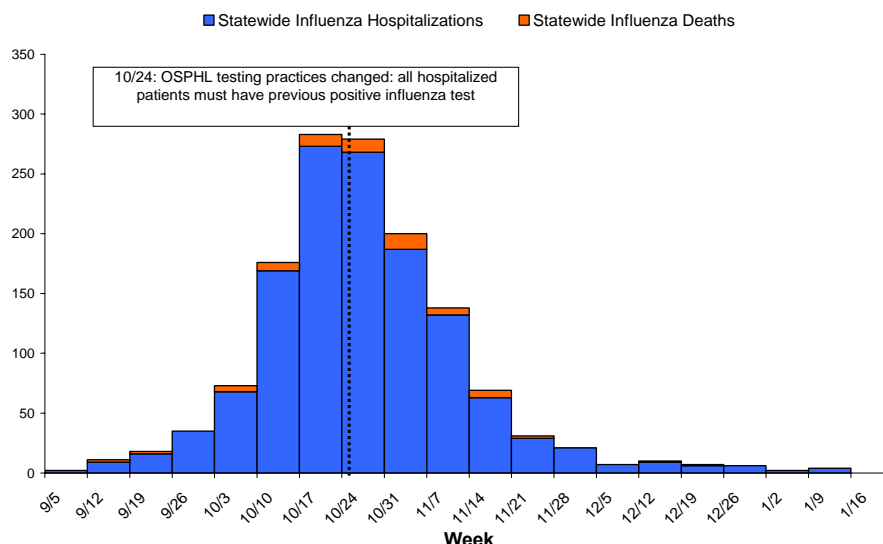
Published January 22, 2010



Summary

- No influenza hospitalizations or deaths were reported for the week ending January 16th.
- Since September 1, 2009, 1,306* patients have been hospitalized with laboratory-confirmed influenza statewide (949 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, and adults with chronic lung disease or diabetes.
- Since September 1, 2009, sixty-six people have died from influenza (62 adults; 4 children). Of the four pediatric deaths, all had neuro-developmental conditions. Of the 58 adults for whom information about medical conditions is known, 51 (88%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – December 12th to be 3.7 per 100,000.
- All of our influenza-like illness (ILI) syndromic surveillance systems report low levels of ILI; ILINet data is way below what we would normally see for this time of year and Kaiser Permanente NW data is slightly below levels seen in previous seasons.
- Respiratory syncytial virus (RSV) activity is beginning to increase in Oregon; the official start of the RSV season was the week ending January 9th, 2009.

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09



* Number of hospitalizations have decreased since last week's report. Duplicate cases and cases that didn't meet our case definition were removed.

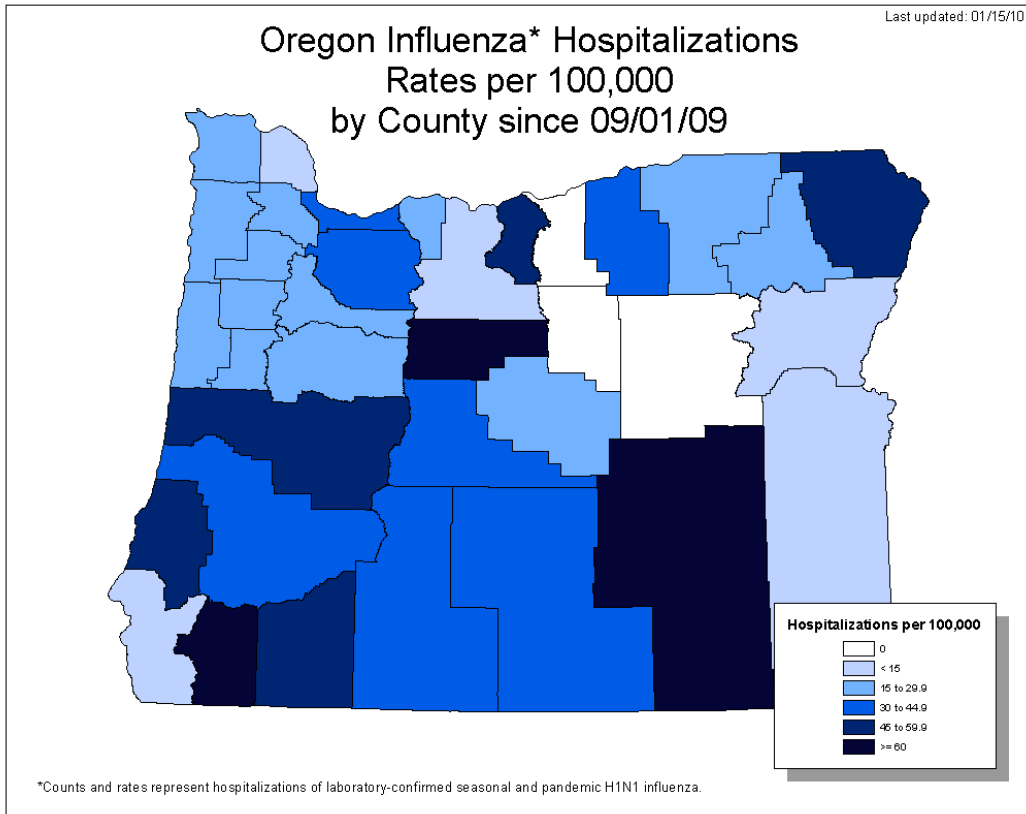
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 706 (54%) of hospitalized cases.

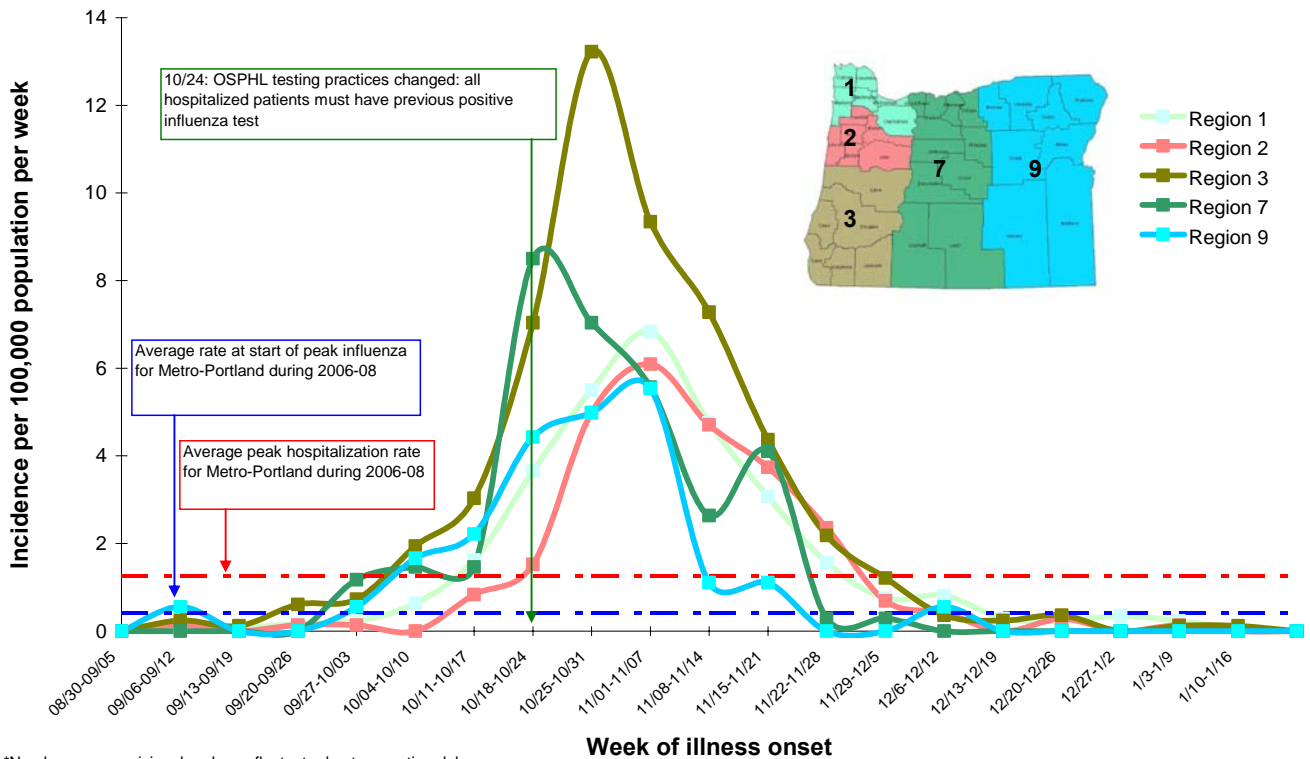
Distribution of Hospitalized Influenza Cases by County and Age Group Since September 1, 2009

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	2	0	0	0	0	1	1	0	12.2
Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	112	15	20	10	38	21	8	0	29.7
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	107	13	13	8	20	34	19	0	52.1
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	198	28	36	9	55	56	14	0	57.2
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	93	22	20	7	17	19	8	0	29.5
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	144	28	18	10	49	29	10	0	27.7
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1306	186	187	92	391	318	131	1	34.5
% total		14	14	7	30	24	10		
Age group rate per 100,000 pop		79.4	26.7	29.6	29.8	42.8	26.8		34.5

* Number of hospitalizations have decreased since last week's report. Duplicate cases and cases that didn't meet our case definition were removed.



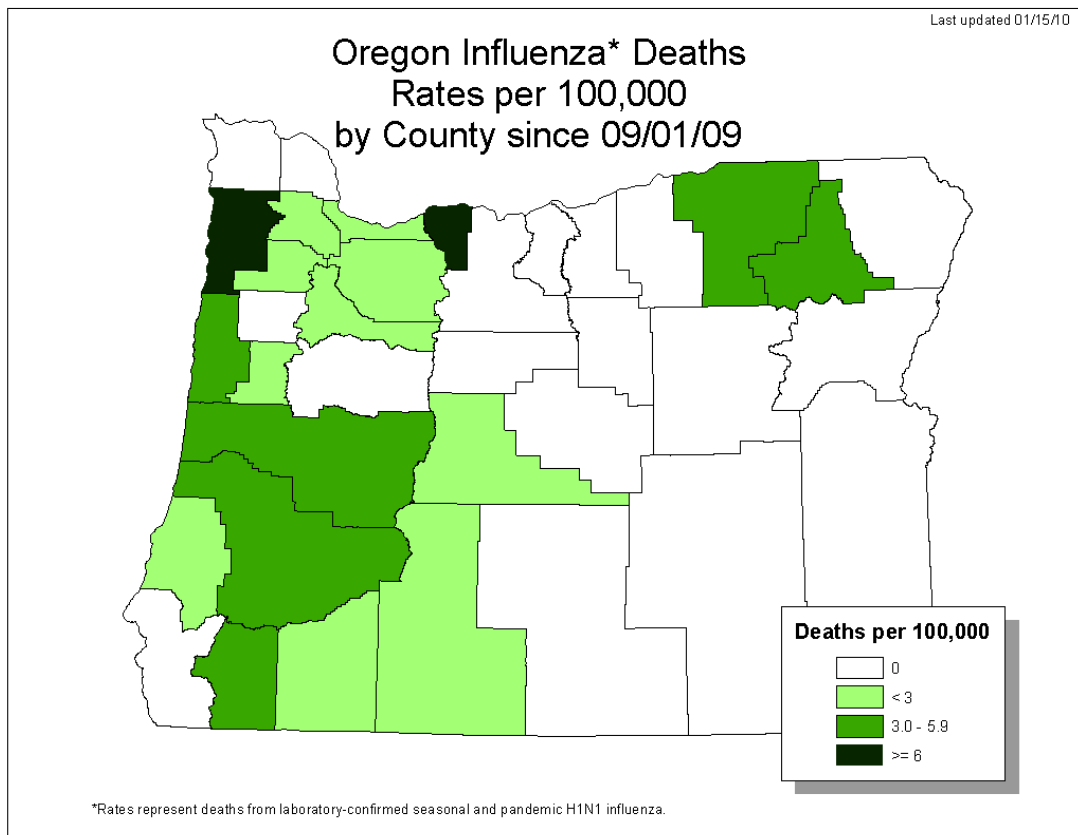
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



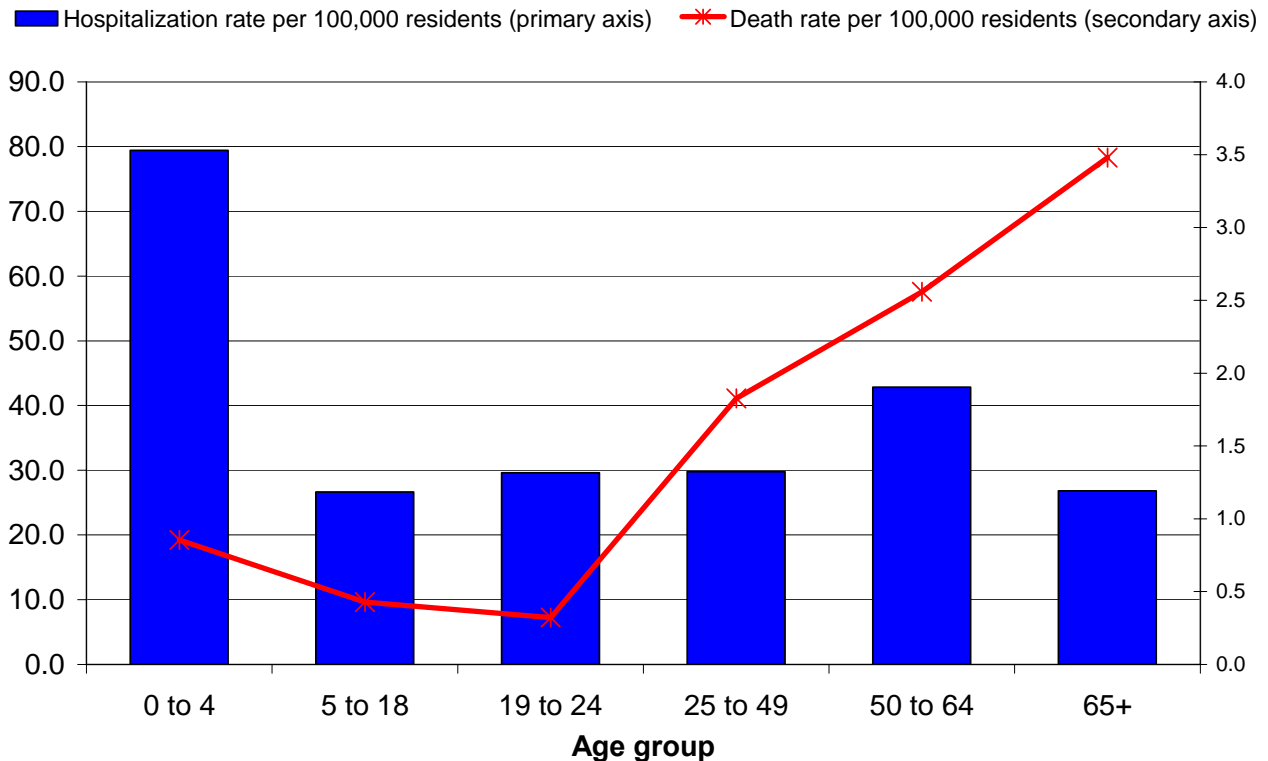
The mean and median age of influenza deaths statewide since September 1, 2009 are 52 and 51 years, respectively. Ages range from 2 to 87 years. Males constitute 57% of influenza deaths.

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+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	1.2
Clackamas	2	0	0	0	0	0	2	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	66	2	3	1	24	19	17	1.7
Percentage		3	5	2	36	29	26	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.5	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

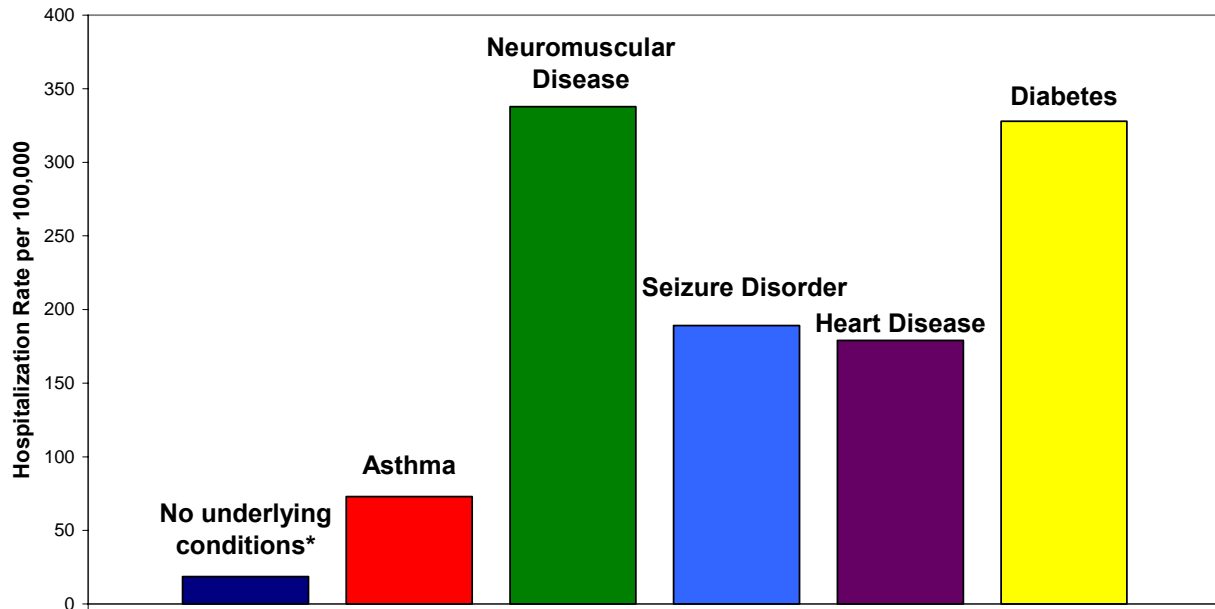
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 96% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=123 N (%)	Adult (age >17 years), N=357 N (%)
Treatment		
Received antivirals	99 (80)	315 (88)
Outcomes		
Pneumonia	36 (29)	174 (49)
Bronchiolitis	1 (1)	---
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (15)	93 (26)
ARDS	2 (2)	29 (8)
Mechanically Ventilated	8 (7)	55 (15)
ECMO	1 (1)	3 (1)
Died	2 (2)	11 (3)

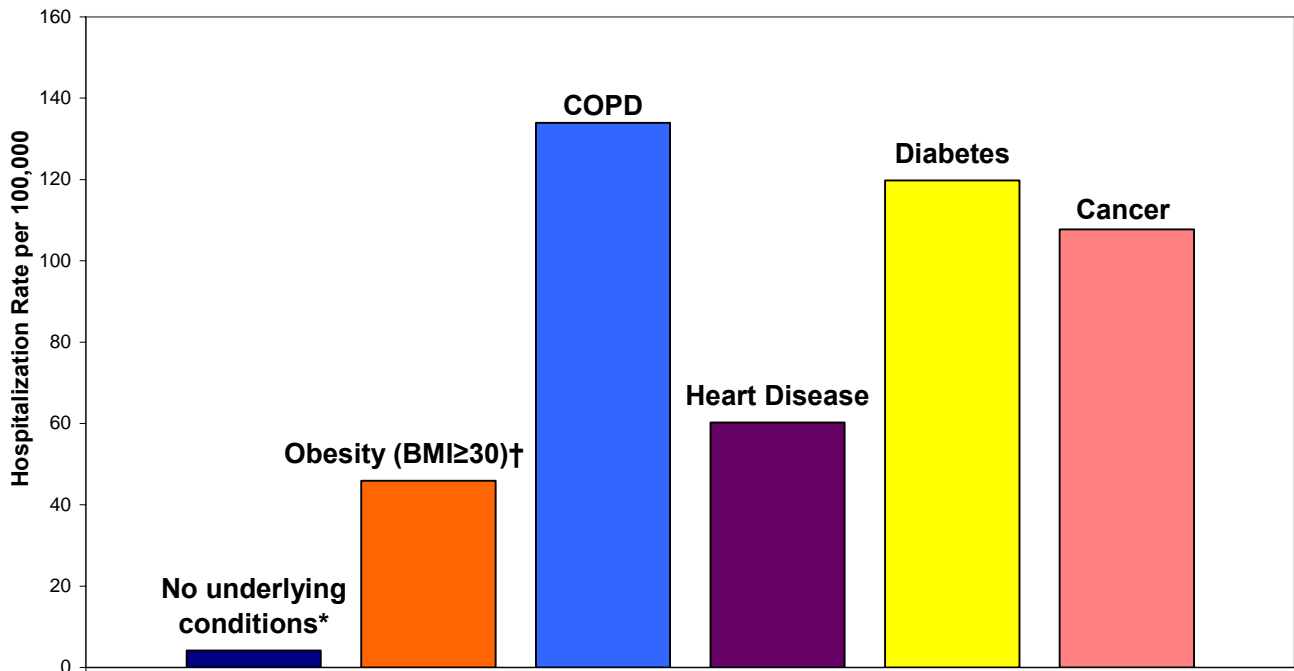
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age, respectively

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP vaccine priority group underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



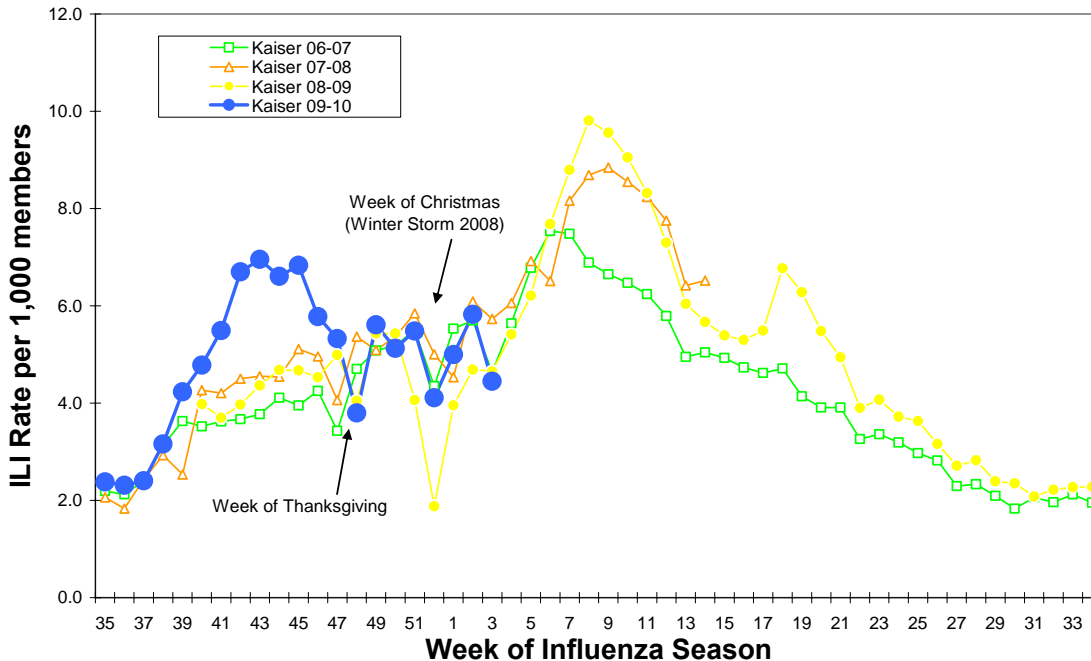
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 60% of adult patients with available height and weight information

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 increased to 4.45 per 1,000 Kaiser members during the week ending January 16, 2010.

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



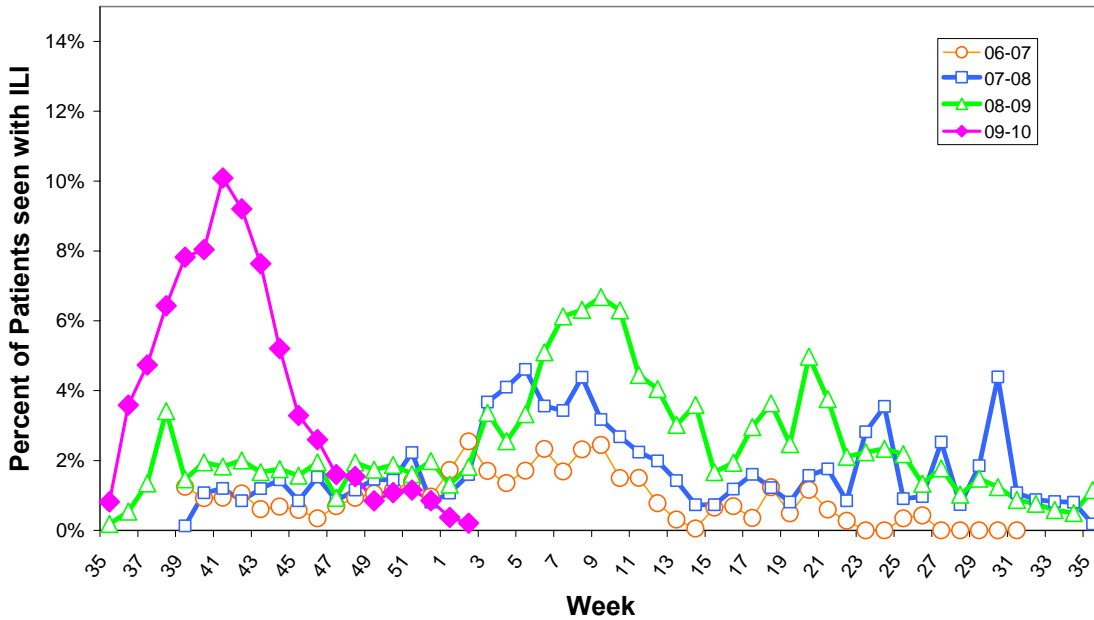
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending January 16th, 0.21% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending January 16th	2409	0.21	11
Week ending January 9th	4883	0.37	17
Week ending January 2nd	2940	0.85	18

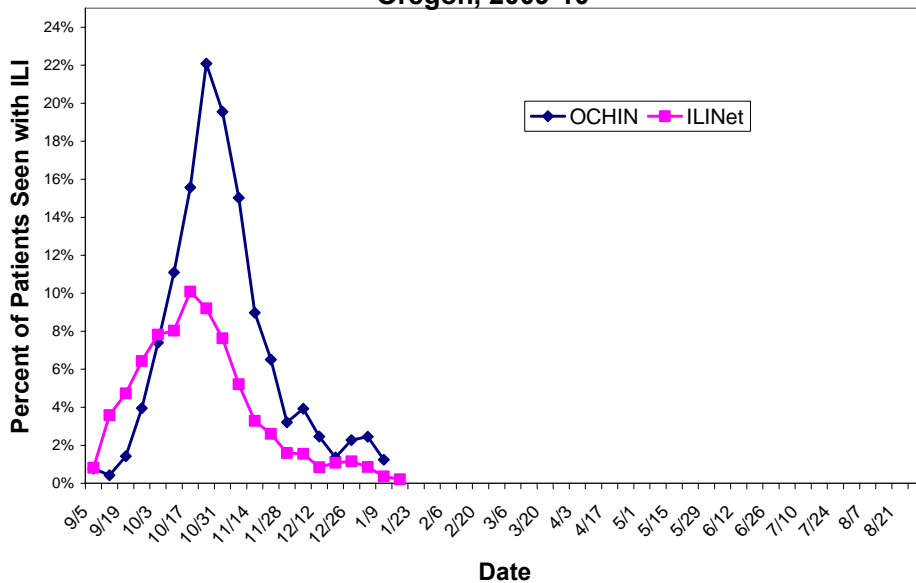
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending January 9, 2010 was 1.2%.

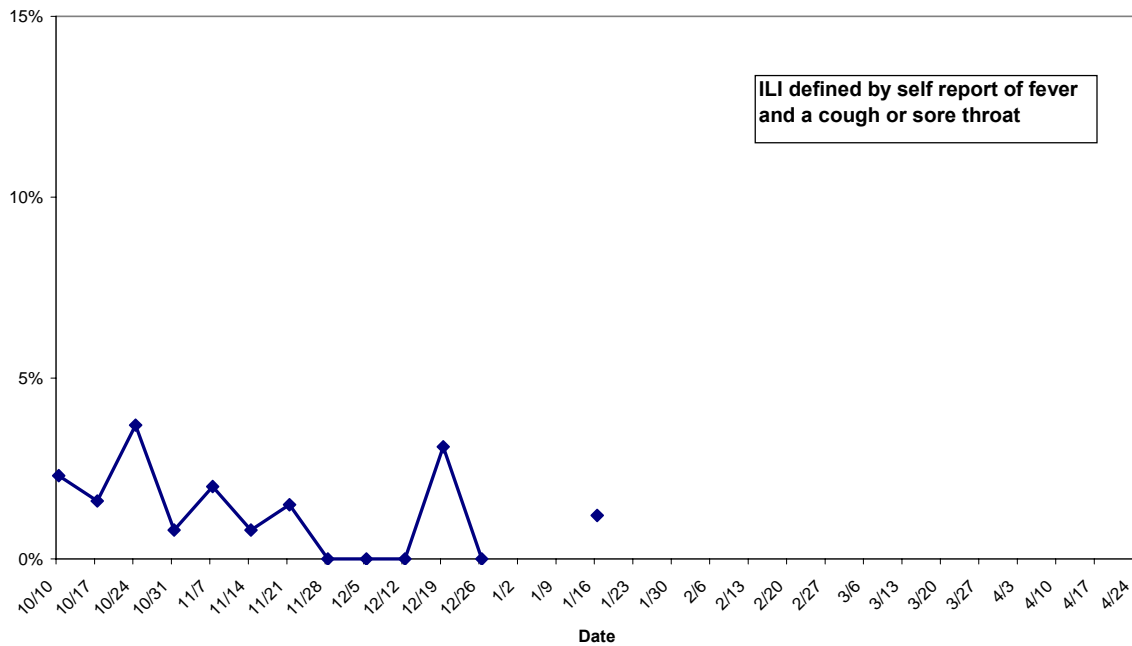
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). *BRFSS data was unavailable for the weeks ending January 2 and January 9.* Just over 1% of BRFSS respondents for the week ending January 16th reported having symptoms of ILI with 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. No seasonal influenza has been identified since October, 2009.

**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	153 (56)	1,085 (62)	23 (66)	1,261 (61)	0
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	2 (1)	1 (0)	6 (17)	9 (1)	3 (43)
Undetected	117 (43)	671 (38)	6 (17)	795 (38)	4 (57)
Total Tested	274	1,759	35	2,068	7

*Submissions for hospitalized cases include some ER visits. Please be patient as we continue to educate our submitters.

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

http://www.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/>.

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/>

FLU BITES

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

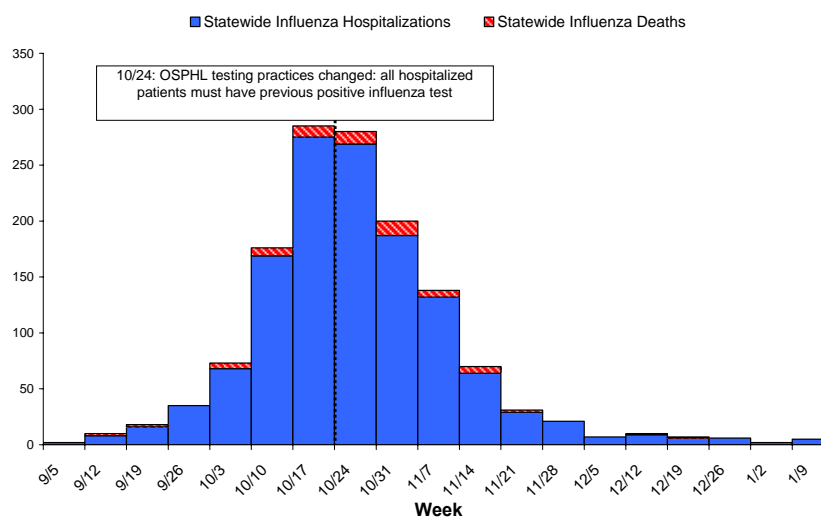
Published January 15, 2010



Summary

- Since September 1, 2009, 1,309 patients have been hospitalized with laboratory-confirmed influenza statewide (952 adults; 357 children). Rates of hospitalization are substantially higher among individuals with underlying conditions, including pregnant women, children with neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- For the week ending January 9th, 2010, four hospitalizations were reported statewide (0.1 per 100,000 Oregonians), making this the sixth week in a row with fewer than 10 hospitalizations.
- Since September 1, sixty-six people have died from influenza (62 adults; 4 children). Of the four pediatric deaths, 4 (100) percent had underlying conditions. Of the 58 adults for whom information about medical conditions is known, 51 (88%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 2 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – December 12th to be 3.7 per 100,000.
- Two of our influenza-like illness (ILI) syndromic surveillance systems showed slight increases in ILI this week, although rates of illness are below what is expected for this time of year in a typical influenza season. Respiratory syncytial virus (RSV) activity is beginning to increase in Oregon; the official start of the RSV season was the week ending January 9th, 2009. The increase in RSV may account for some of the increases in ILI seen in outpatient settings.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**

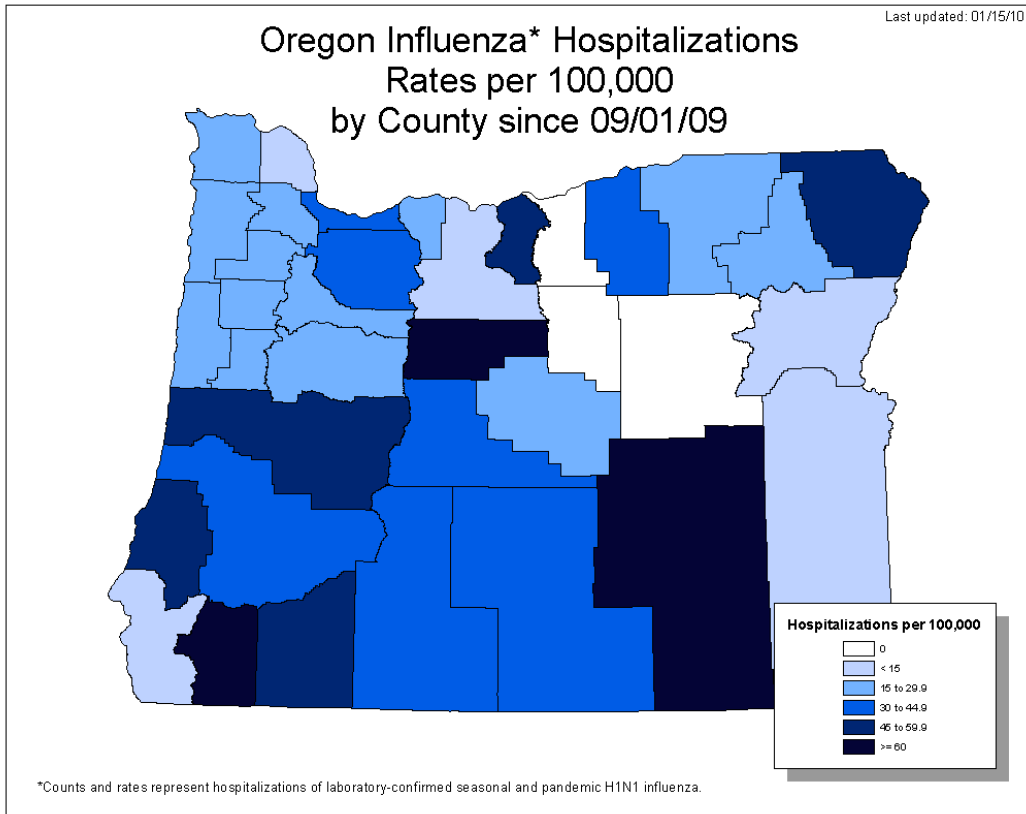


Statewide Hospitalizations and Deaths

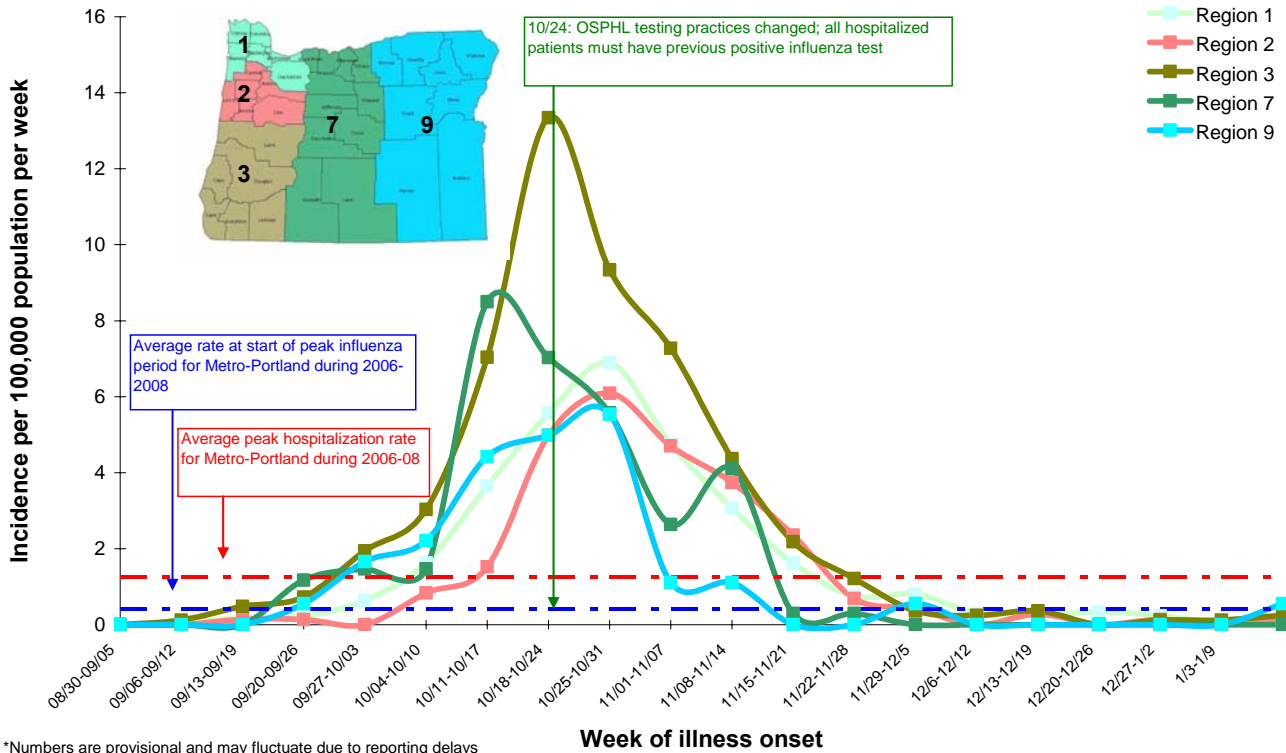
The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 708 (54%) of hospitalized cases.

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	2	0	0	0	0	1	1	0	12.2
Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	113	15	20	10	39	21	8	0	30.0
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	107	13	13	8	20	34	19	0	52.1
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	24	1	8	0	4	8	3	0	36.3
Lake	3	1	0	1	1	0	0	0	39.6
Lane	198	28	36	9	55	56	14	0	57.2
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	93	22	20	7	17	19	8	0	29.5
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	261	31	23	17	93	68	29	0	36.4
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	145	28	18	10	49	30	10	0	27.9
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1309	186	187	92	393	319	131	1	34.5
% total		14	14	7	30	25	10		
Age group rate per 100,000 pop		79.4	26.7	29.6	29.9	43.0	26.8		34.5



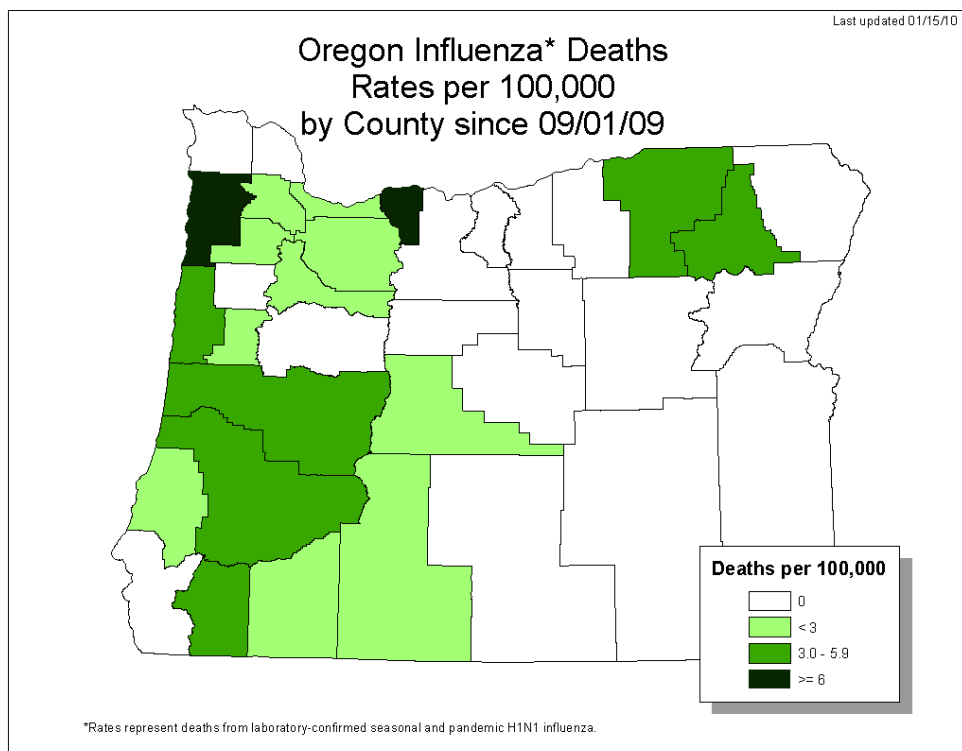
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



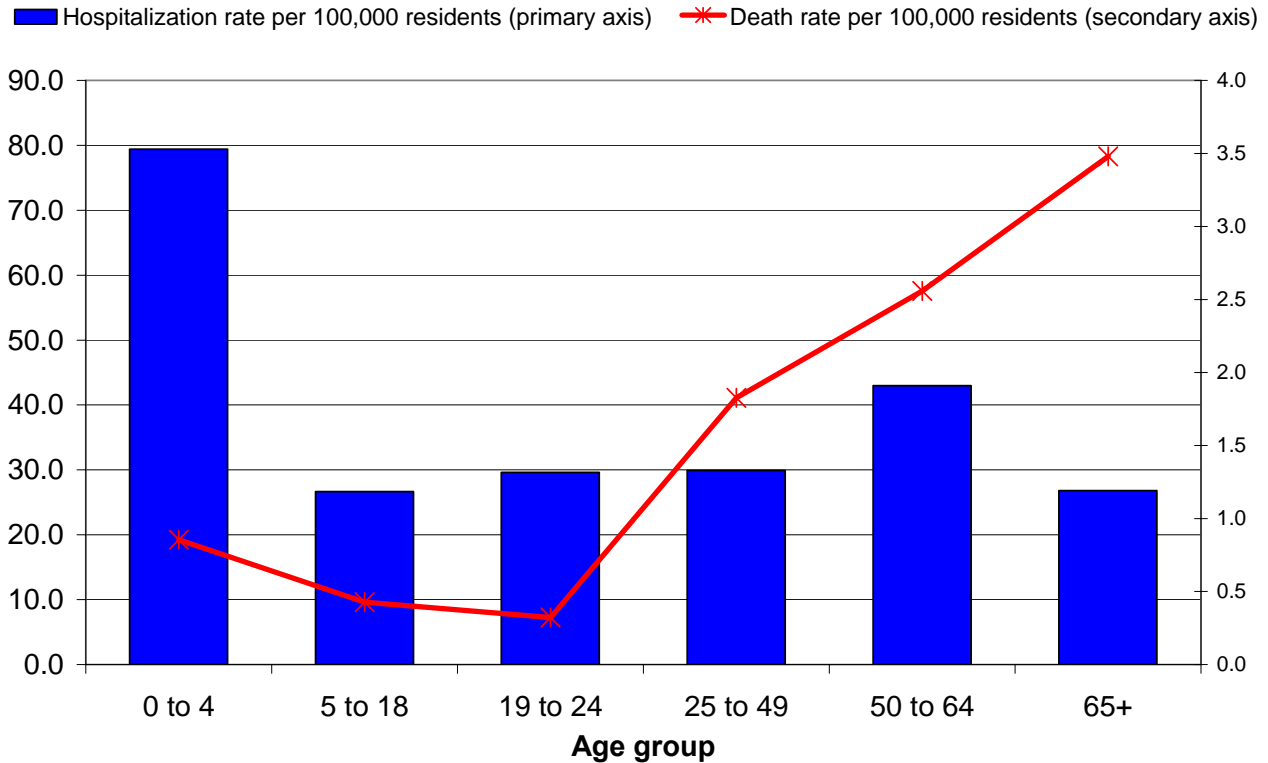
The mean and median age of influenza deaths statewide since September 1, 2009 are 52 and 51 years, respectively. Ages range from 2 to 87 years. Males constitute 57% of influenza deaths.

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+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	1.2
Clackamas	2	0	0	0	0	0	2	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	66	2	3	1	24	19	17	1.7
Percentage		3	5	2	36	29	26	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.5	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

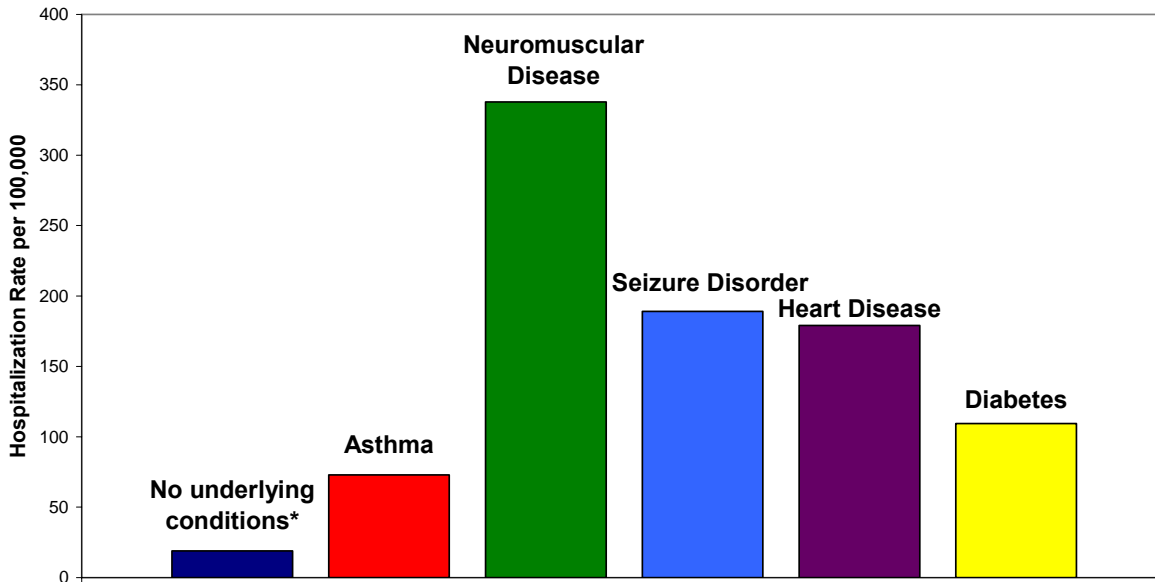
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 95% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=122 N (%)	Adult (age >17 years), N=356 N (%)
Treatment		
Received antivirals	99 (81)	315 (88)
Outcomes		
Pneumonia	36 (29)	175 (49)
Bronchiolitis	1 (1)	0
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (16)	93 (26)
ARDS	2 (2)	29 (8)
Mechanically Ventilated	8 (7)	55 (16)
ECMO	1 (1)	3 (1)
Died	2 (2)	11(3)

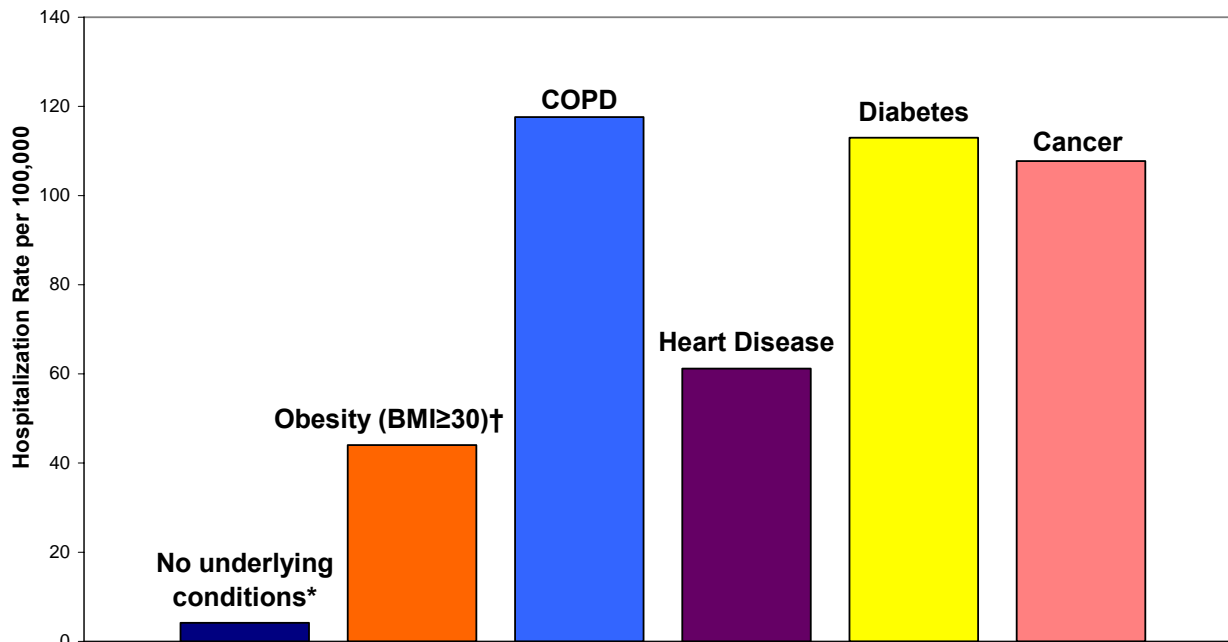
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age respectively.

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



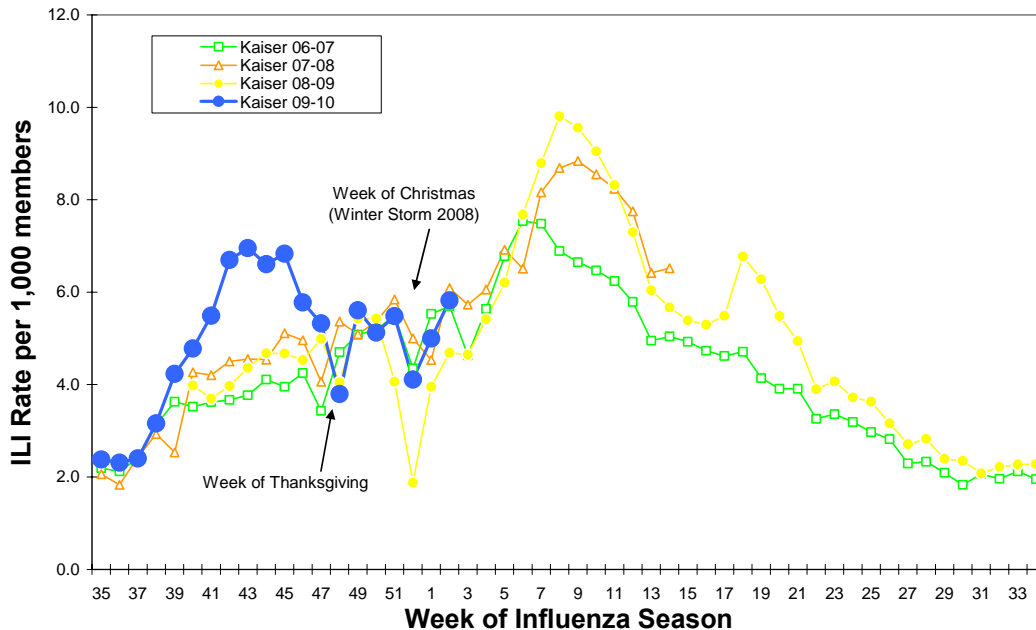
Diseases are not mutually exclusive
 Denominator: BRFSS 2007 (Obesity, Heart Disease, Diabetes); NHIS 2003 (COPD, Cancer)
 * No ACIP underlying conditions
 † Based on 72% of adult patients with available height and weight information

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 increased to 5.82 per 1,000 Kaiser members during the week ending January 9, 2010. An increase in activity following the winter holidays has occurred in previous years.

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



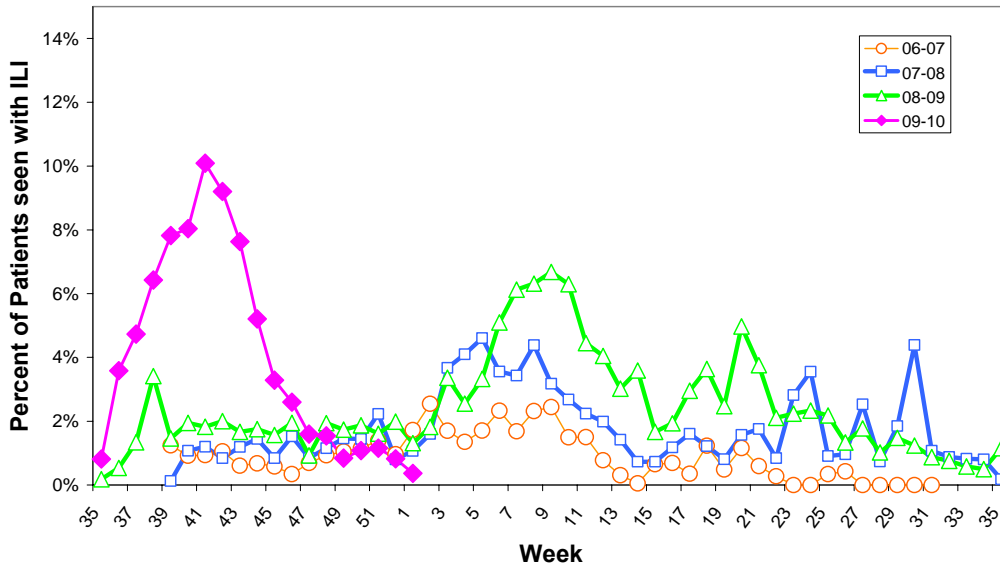
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending January 9nd, 0.37% of outpatients had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending January 9th	3534	0.37	21
Week ending January 2nd	1943	0.82	15
Week ending December 26th	3121	1.15	13

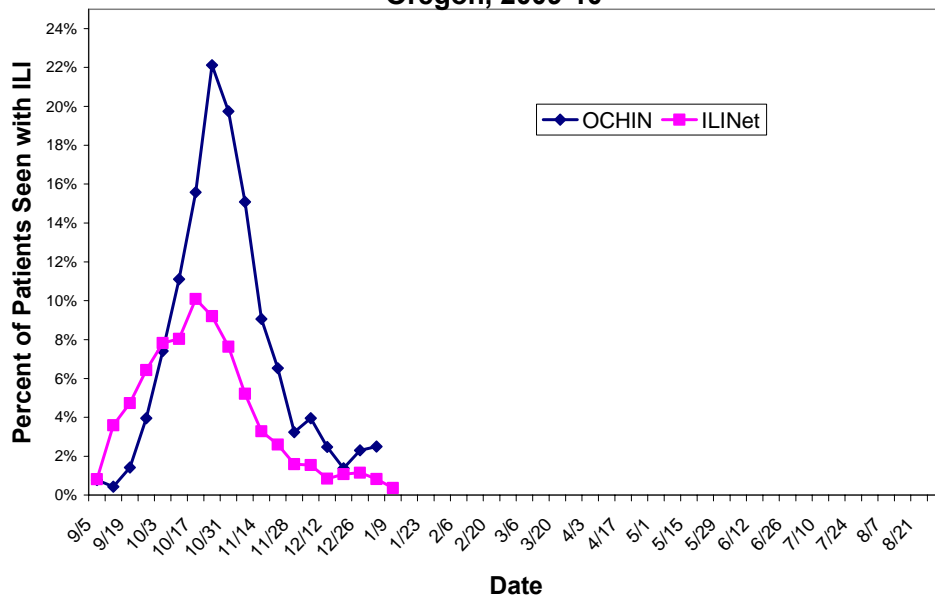
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending January 2, 2010 was 2.5%.

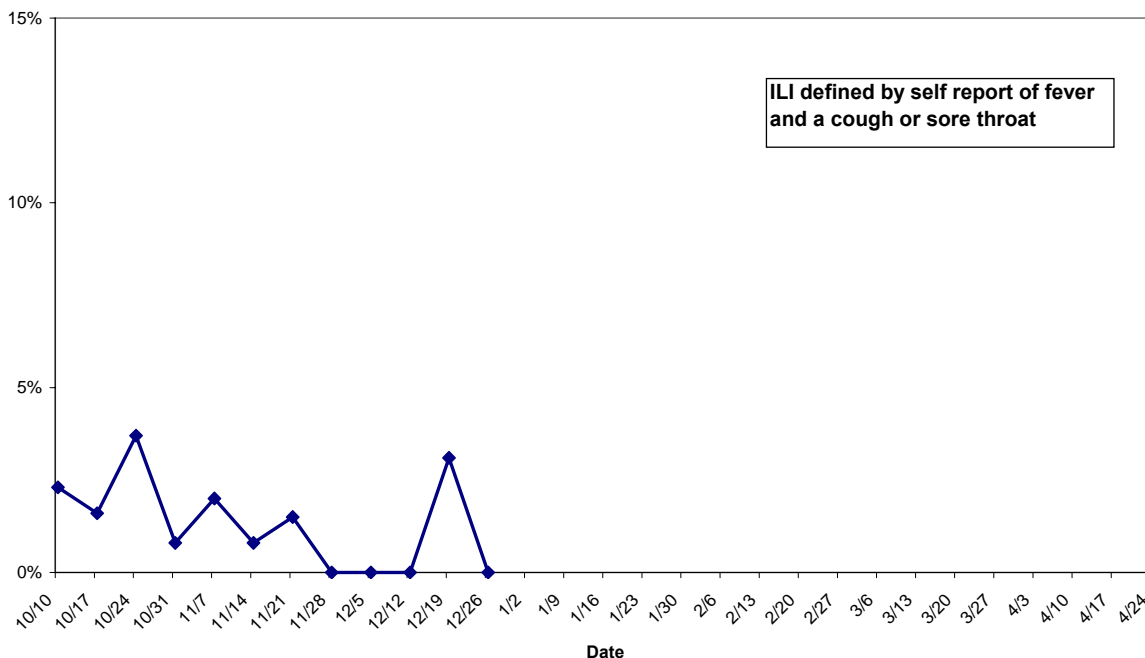
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). *BRFSS data is unavailable for the last two flu week; we apologize for the delay.* The last BRFSS data from the week ending December 26th, showed no respondents reported having symptoms of ILI with onset in the last 7 days; however, only 7 respondents were interviewed during this time period.

**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. No seasonal influenza has been identified since October, 2009.

**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	153 (57)	1,085 (62)	23 (64)	1,261 (61)	1 (6)
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	0	4 (0)	7 (19)	11 (1)	9 (56)
Undetected	117 (43)	666 (38)	6 (17)	789 (38)	6 (38)
Total Tested	271	1,757	36	2,064	16

*Submissions for hospitalized cases include some ER visits. Please be patient as we continue to educate our submitters.

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

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/>.

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/>

FLU BITES

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

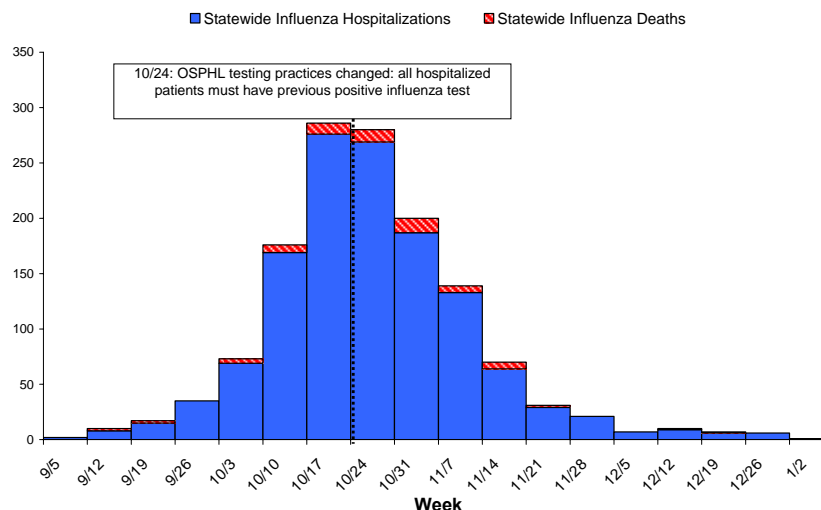
Published January 8th, 2010



Summary

- Since September 1, 2009, 1,307 patients have been hospitalized with laboratory-confirmed influenza statewide (949 adults; 358 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 neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- For the week ending January 2, 2010 one hospitalization was reported statewide (0.02 per 100,000 Oregonians), making this the fifth week in a row with fewer than 10 hospitalizations.
- Two influenza-related deaths were reported during the week ending January 2, however one of these deaths occurred during the week ending December 26. Since September 1, sixty-five people have died from influenza (61 adults; 4 children). Of the 59 individuals for whom information about medical conditions is known, 53 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.97 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – November 14th to be 3.2 per 100,000.
- Two of our influenza-like illness (ILI) syndromic surveillance systems showed slight increases in ILI this week; however, ILINet providers are reporting ILI at levels below what would be expected when influenza is circulating, and Kaiser Permanente NW is reporting rates of illness expected for this time of year in a typical influenza season.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



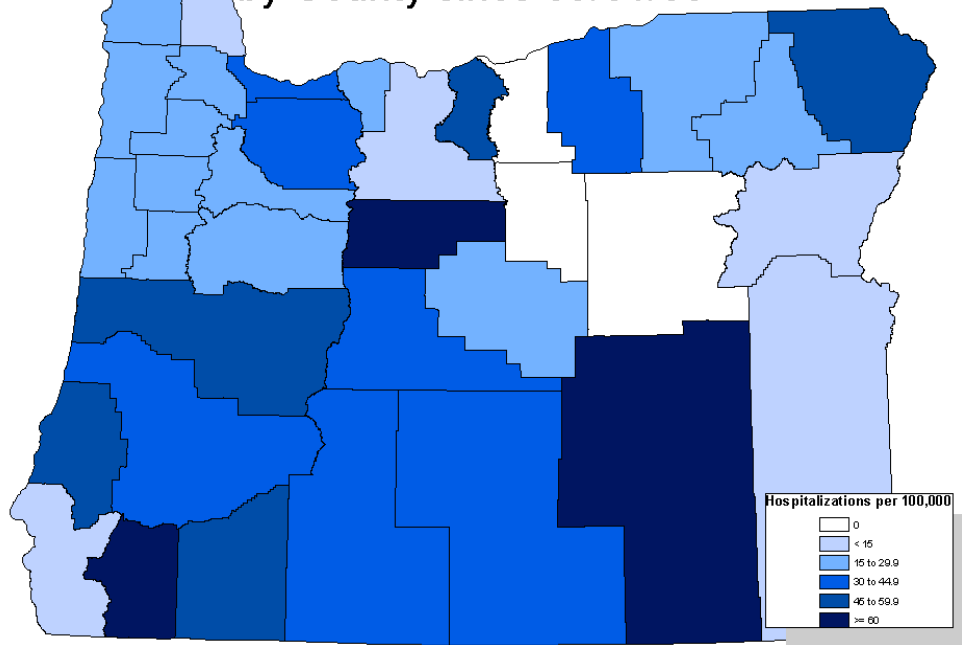
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 706 (54%) of hospitalized cases.

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

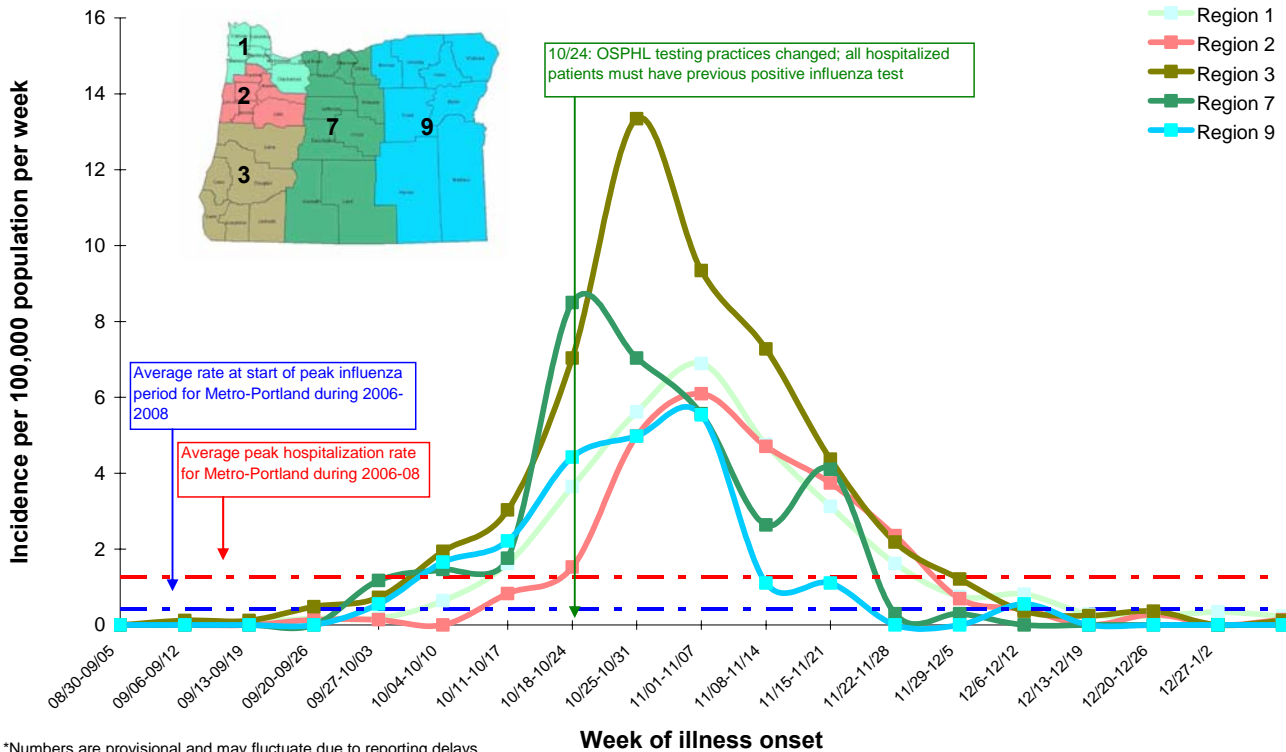
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	113	15	20	10	39	21	8	0	30.0
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	5	1	1	0	2	1	0	0	10.4
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	106	13	13	8	20	34	18	0	51.6
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	198	28	36	9	55	56	14	0	57.2
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	20	7	16	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	260	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	5	0	2	0	1	1	1	0	19.2
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	146	28	19	10	49	30	10	0	28.1
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1307	186	188	92	391	319	130	1	34.5
% total		14	14	7	30	25	10		
Age group rate per 100,000 pop		79.4	26.8	29.6	29.8	43.0	26.6		34.5

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 Hospitalization Rates by Region, Oregon, Since 09/01/09*

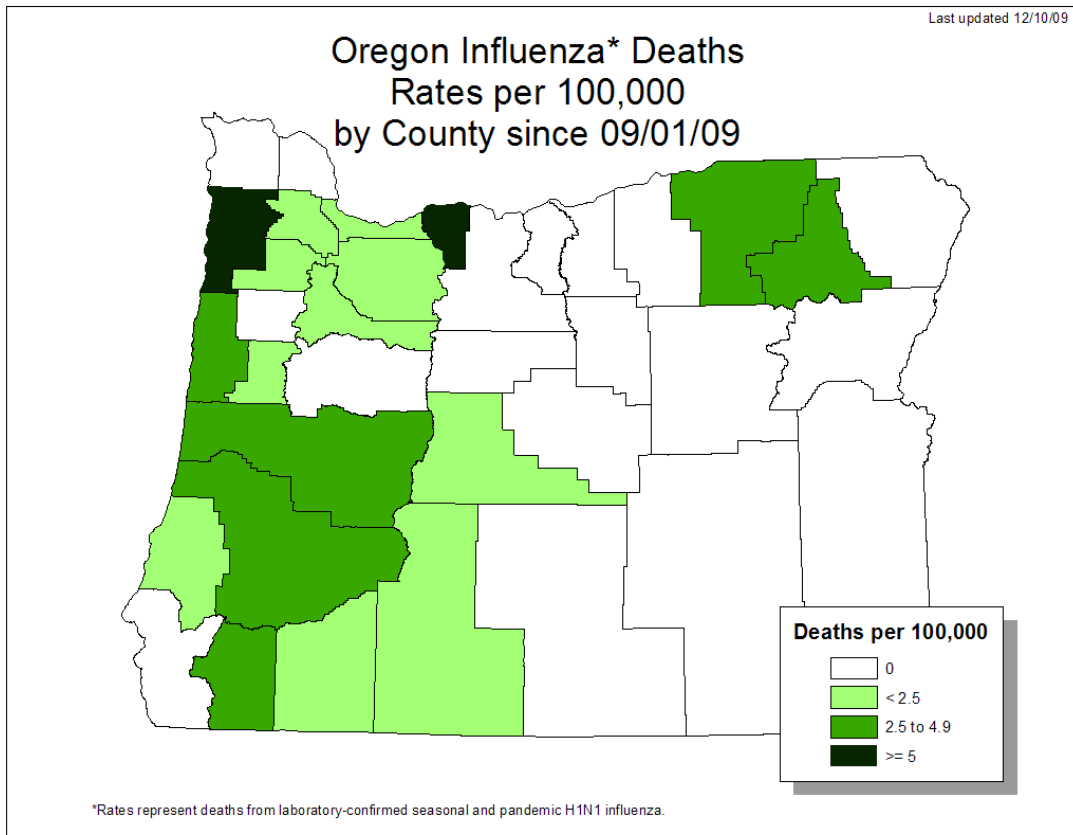


*Numbers are provisional and may fluctuate due to reporting delays

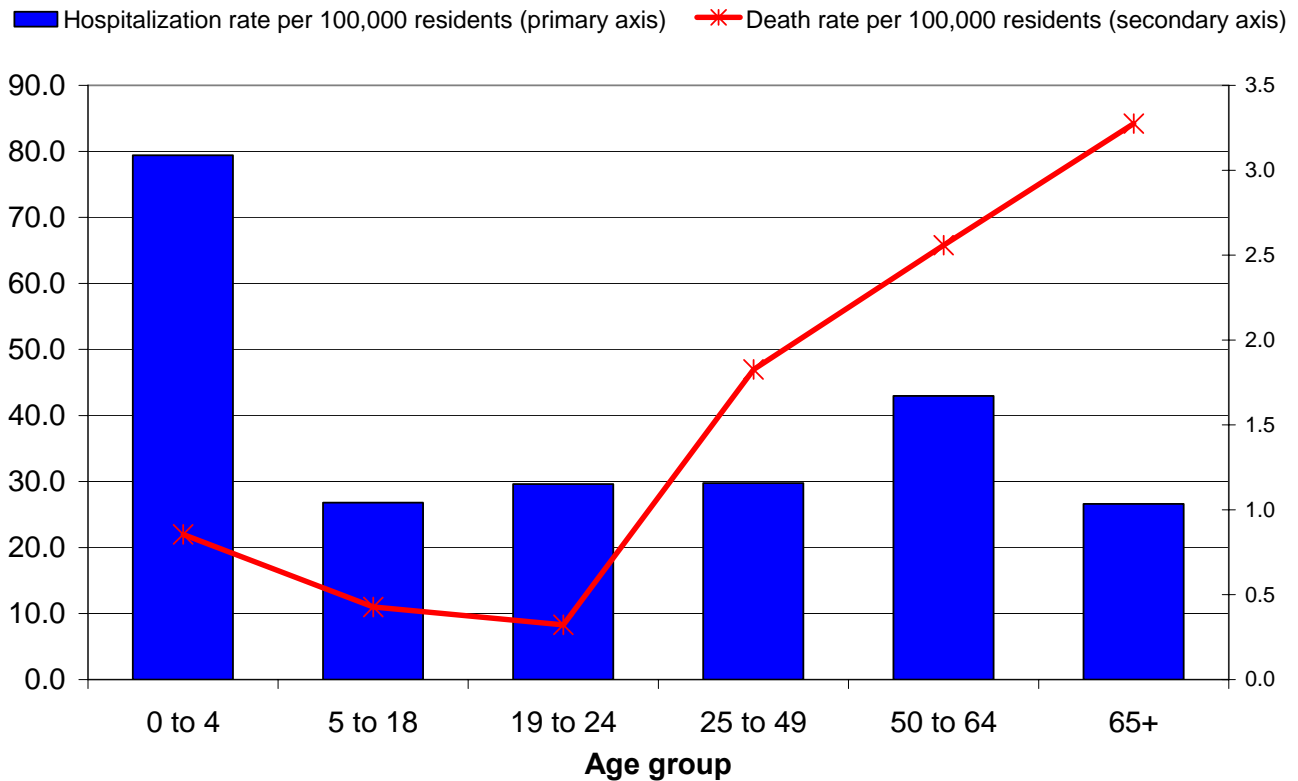
The mean and median age of influenza deaths statewide since September 1, 2009 are 51 and 50 years, respectively. Ages range from 2 to 87 years. Males constitute 57% of influenza deaths.

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+	County rate per 100,000 pop
Benton	2	0	0	0	0	2	0	2.3
Clackamas	1	0	0	0	0	0	1	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	3	0	1	0	1	1	0	11.5
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	65	2	3	1	24	19	16	1.7
Percentage		3	5	2	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.6	3.3	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



EIP Surveillance Area Hospitalizations

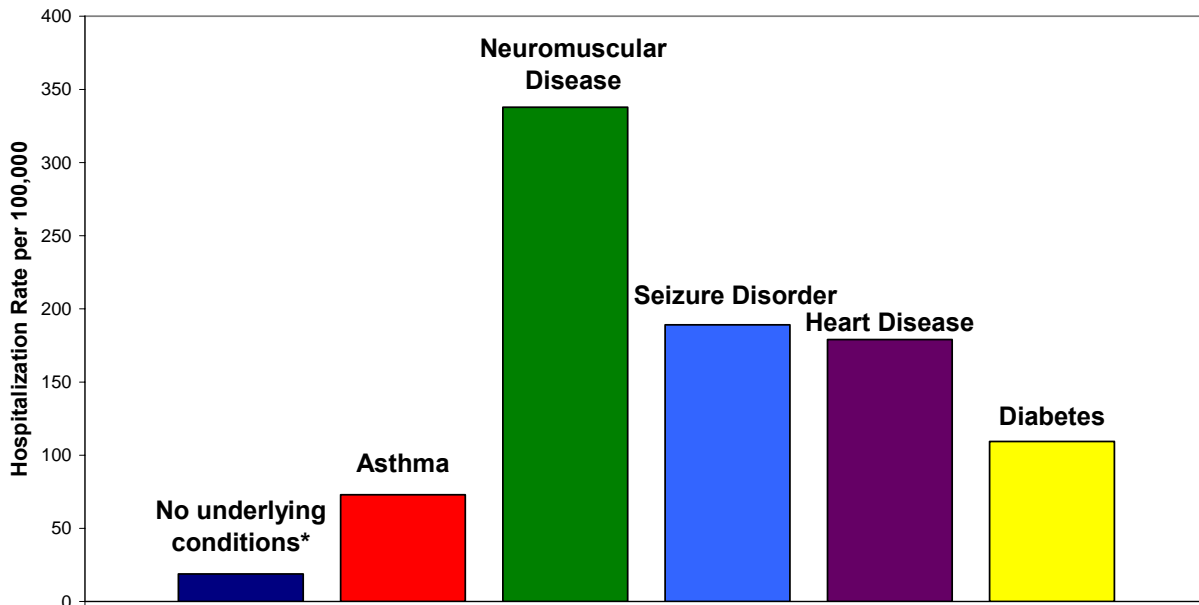
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Characteristics of EIP area Hospitalized Cases

	Pediatric (ages 0 – 17) N=123 N (%)	Adult (age >17 years), N=354 N (%)
Treatment		
Received antivirals	100 (81)	316 (89)
Outcomes		
Pneumonia	36 (29)	175 (49)
Bronchiolitis	1 (1)	0
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	18 (16)	94 (27)
ARDS	2 (2)	29 (8)
Mechanically Ventilated	8 (7)	55 (16)
ECMO	1 (1)	3 (1)
Died	2 (2)	12 (3)

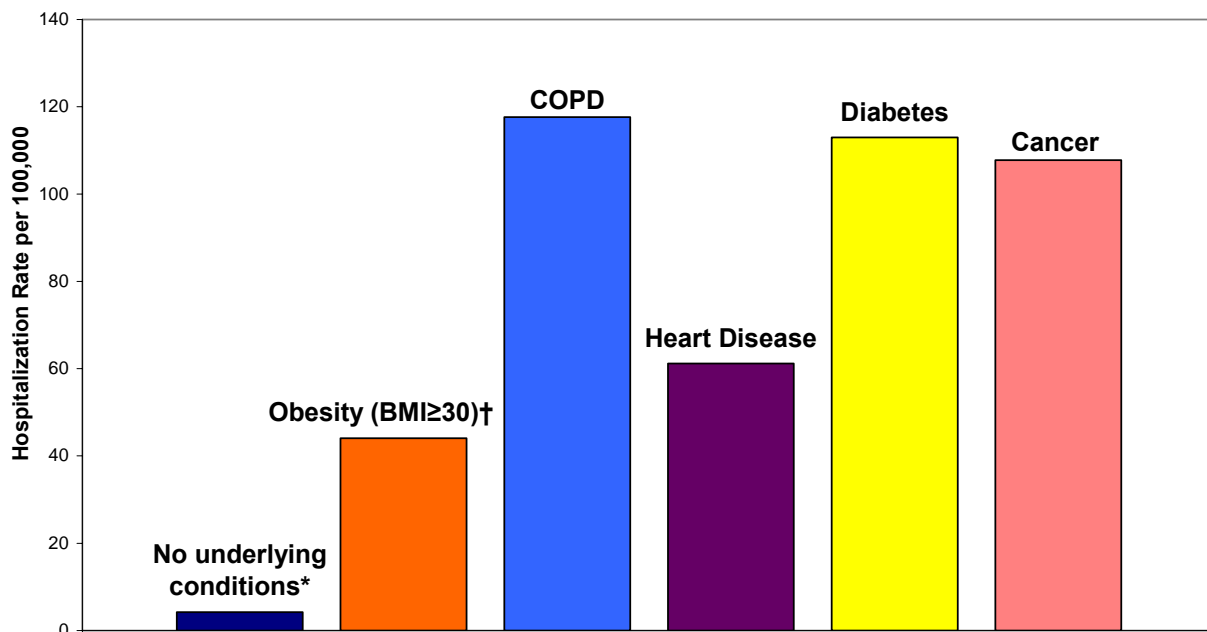
* EIP surveillance case definition for pediatrics and adults is 0-17 and >18 years of age respectively.

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



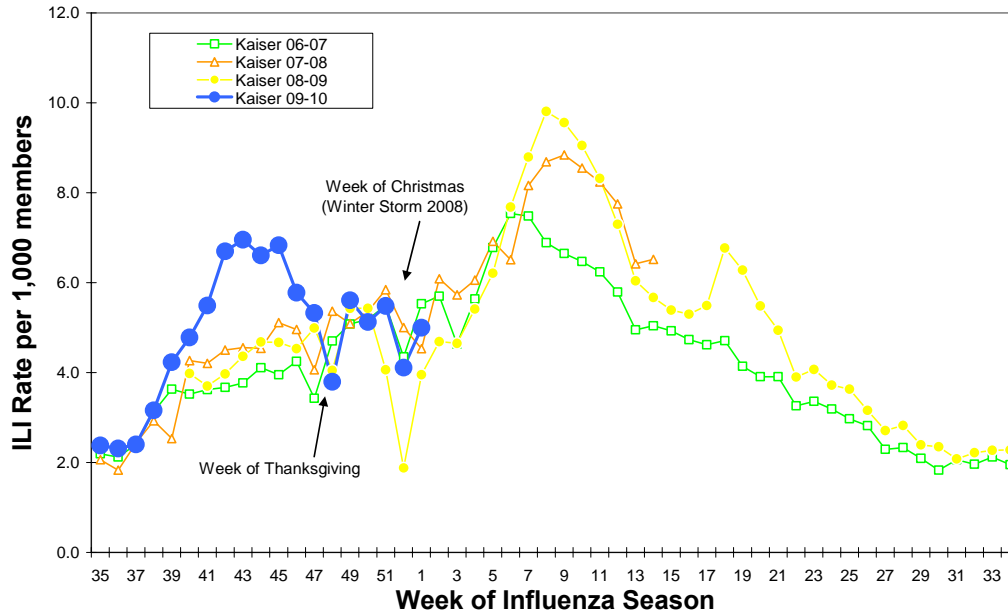
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 † Based on 72% of adult patients with available height and weight information

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 increased to 5.00 per 1,000 Kaiser members during the week ending January 2, 2010. An increase in activity following the winter holidays has occurred in previous years.

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



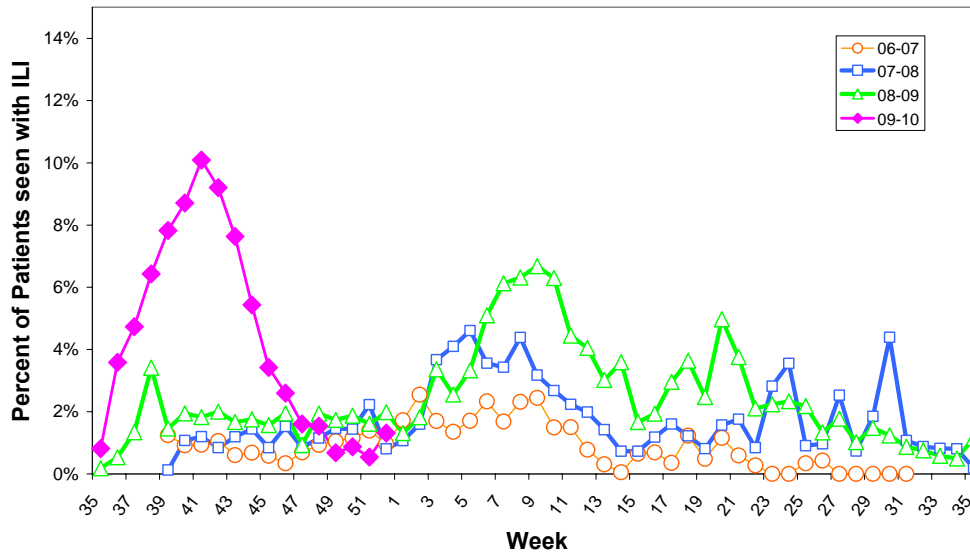
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Influenza-like illness (ILI) is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending January 2nd, 1.31% of patients seen had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending January 2nd	1067	1.31	11
Week ending December 26th	1653	0.54	13
Week ending December 19th	3770	0.88	18

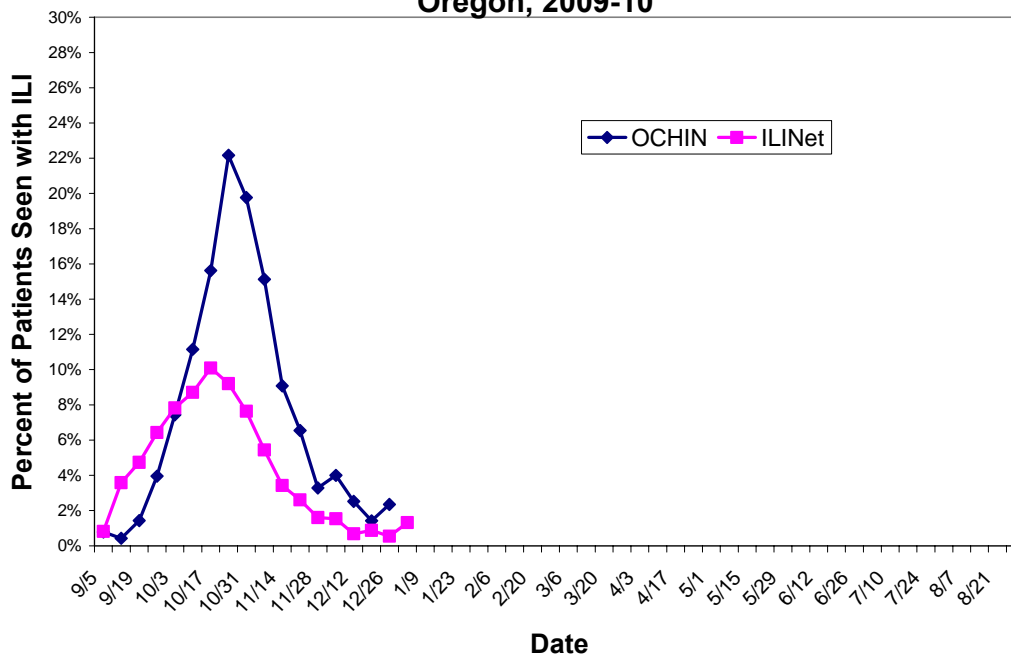
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. The percent of OCHIN patients with ILI during the week ending December 26th was 2.35%.

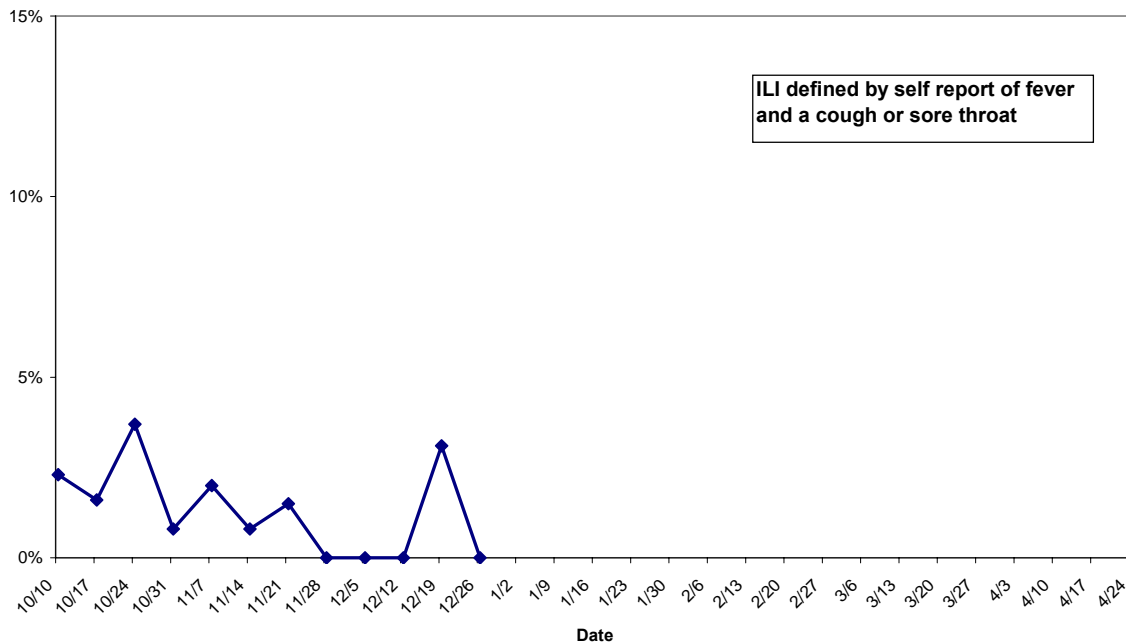
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). During the week ending December 26th, no respondents reported having symptoms of ILI with onset in the last 7 days; however, only 7 respondents were interviewed during this time period.

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. No seasonal influenza has been identified since October, 2009.

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

	Cumulative since September 1, 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N(%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	152 (57)	1,075 (62)	23 (79)	1,250 (62)	0
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	0	1 (0)	0	1 (0)	0
Undetected	113 (42)	661 (38)	6 (21)	780 (38)	0
Total Tested	266	1,739	29	2,034	0

*Submissions for hospitalized cases may include some ER visits.

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

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/>.

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/>

FLU BITES

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

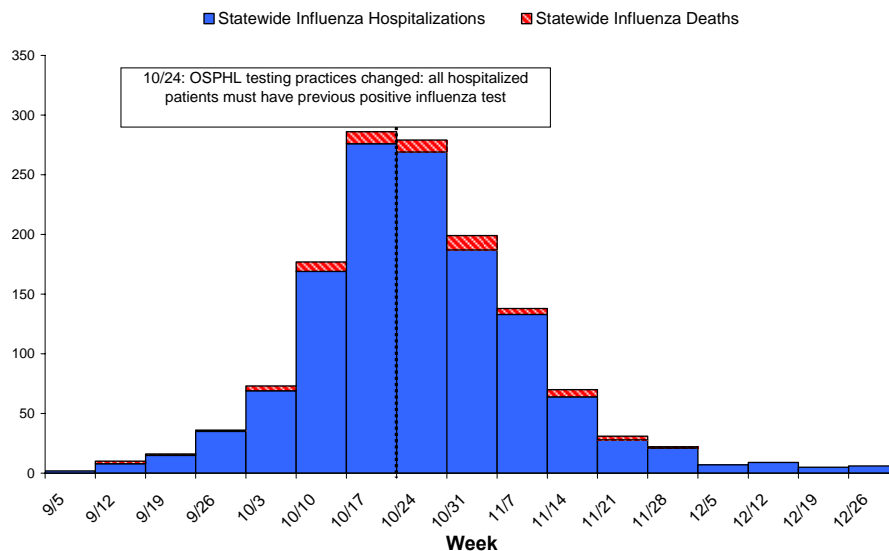
Published January 4th, 2010



Summary

- Since September 1, 2009, 1,303 patients have been hospitalized with laboratory-confirmed influenza statewide (946 adults; 357 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 neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- For the week ending December 26, 2009, six hospitalizations were reported statewide (0.16 per 100,000 Oregonians), making this the fourth week in a row with fewer than 10 hospitalizations.
- No influenza-related deaths have been reported for four weeks. Since September 1, sixty-three people have died from influenza (59 adults; 4 children). Of the 58 individuals for whom information about medical conditions is known, 52 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.9 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – November 14th to be 3.2 per 100,000.
- Two of our influenza-like illness (ILI) syndromic surveillance systems showed decreases in ILI this week; ILINet providers are reporting ILI at levels below what would be expected when influenza is circulating, and Kaiser Permanente NW is reporting rates of illness expected for this time of year in a typical influenza season.

**Oregon Influenza Hospitalizations and Deaths by Onset Date
Since 09/01/09**



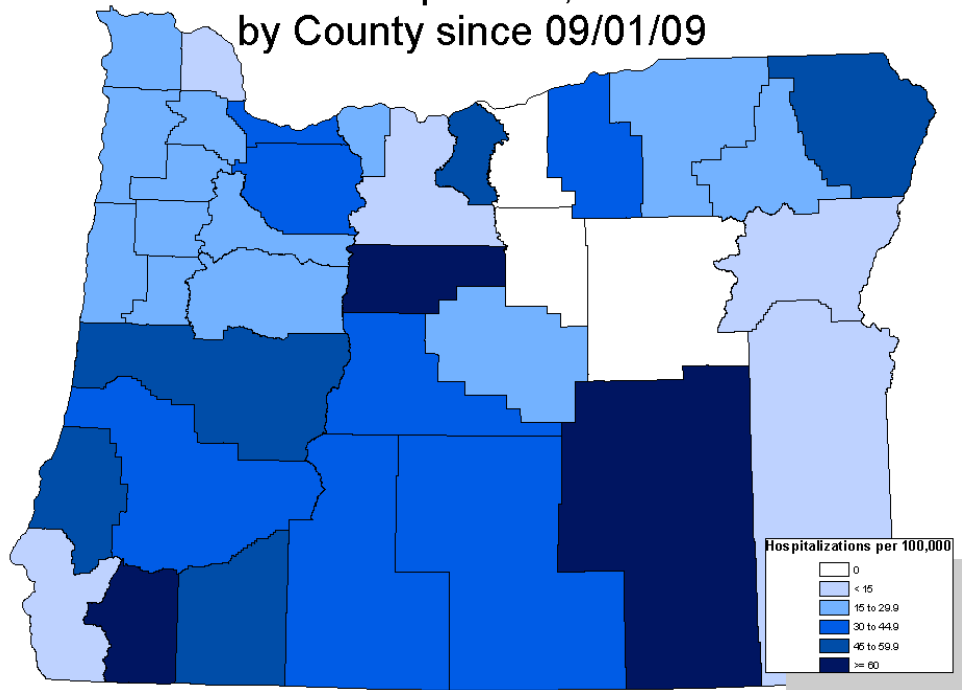
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 705 (54%) of hospitalized cases.

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

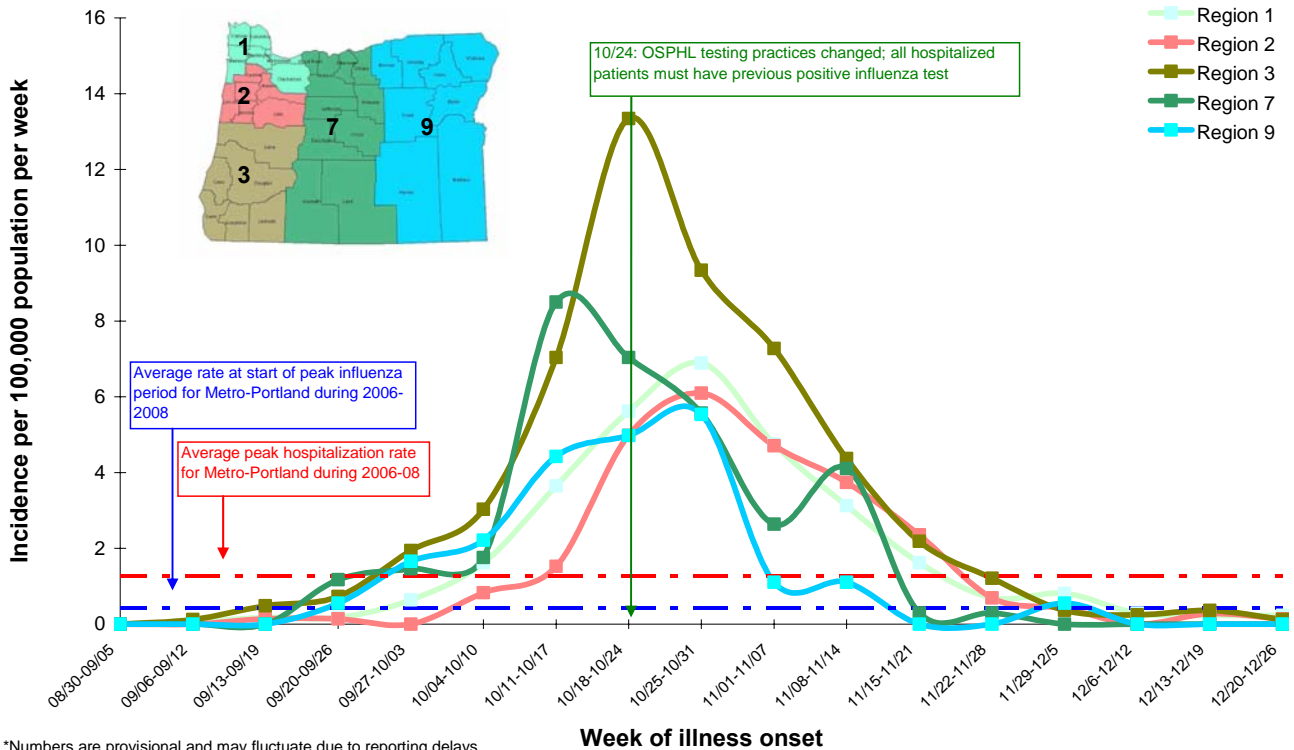
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	113	15	20	10	39	21	8	0	30.0
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	4	1	0	0	2	1	0	0	8.3
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	104	13	13	8	20	34	16	0	50.7
Jefferson	17	6	2	1	6	2	0	0	75.7
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	198	28	36	9	55	56	14	0	57.2
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	92	22	20	7	16	19	8	0	29.2
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	258	31	23	17	92	68	29	0	36.2
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	4	0	2	0	0	1	1	0	15.3
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	146	28	19	10	49	30	10	0	28.1
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1303	186	187	92	390	319	128	1	34.4
% total		14	14	7	30	25	10		
Age group rate per 100,000 pop		79.4	26.7	29.6	29.7	43.0	26.2		34.4

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 Hospitalization Rates by Region, Oregon, Since 09/01/09*

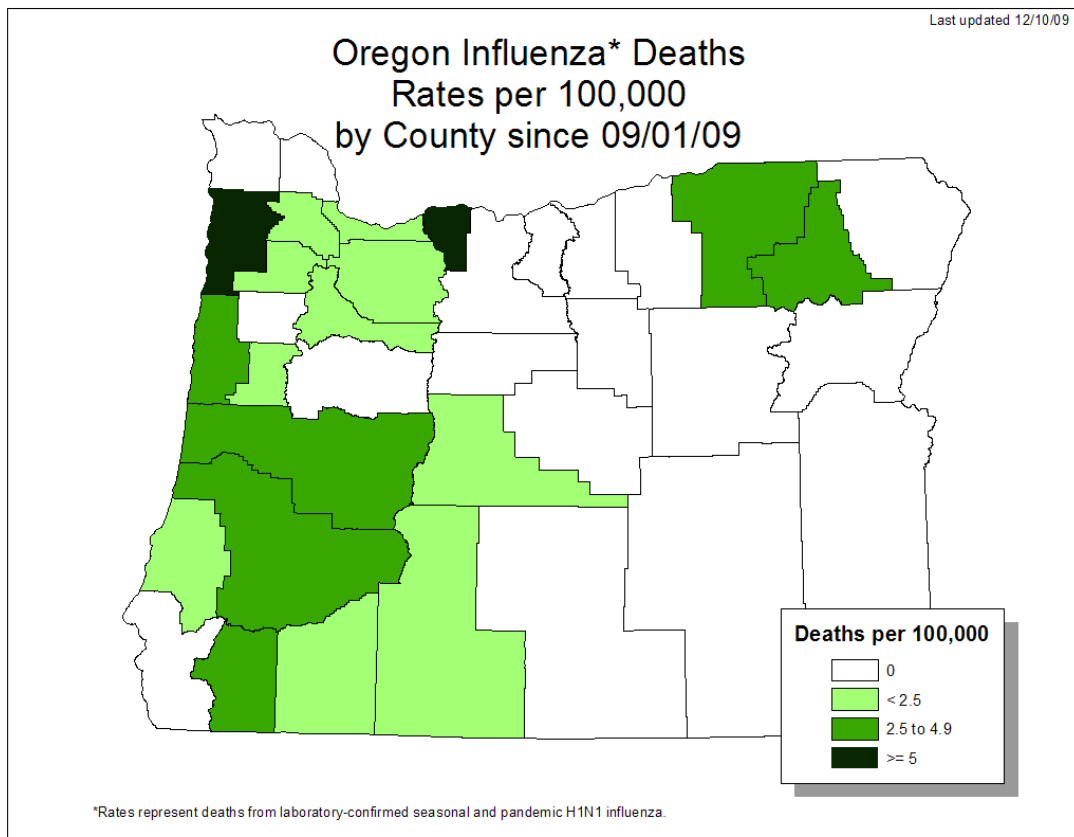


*Numbers are provisional and may fluctuate due to reporting delays

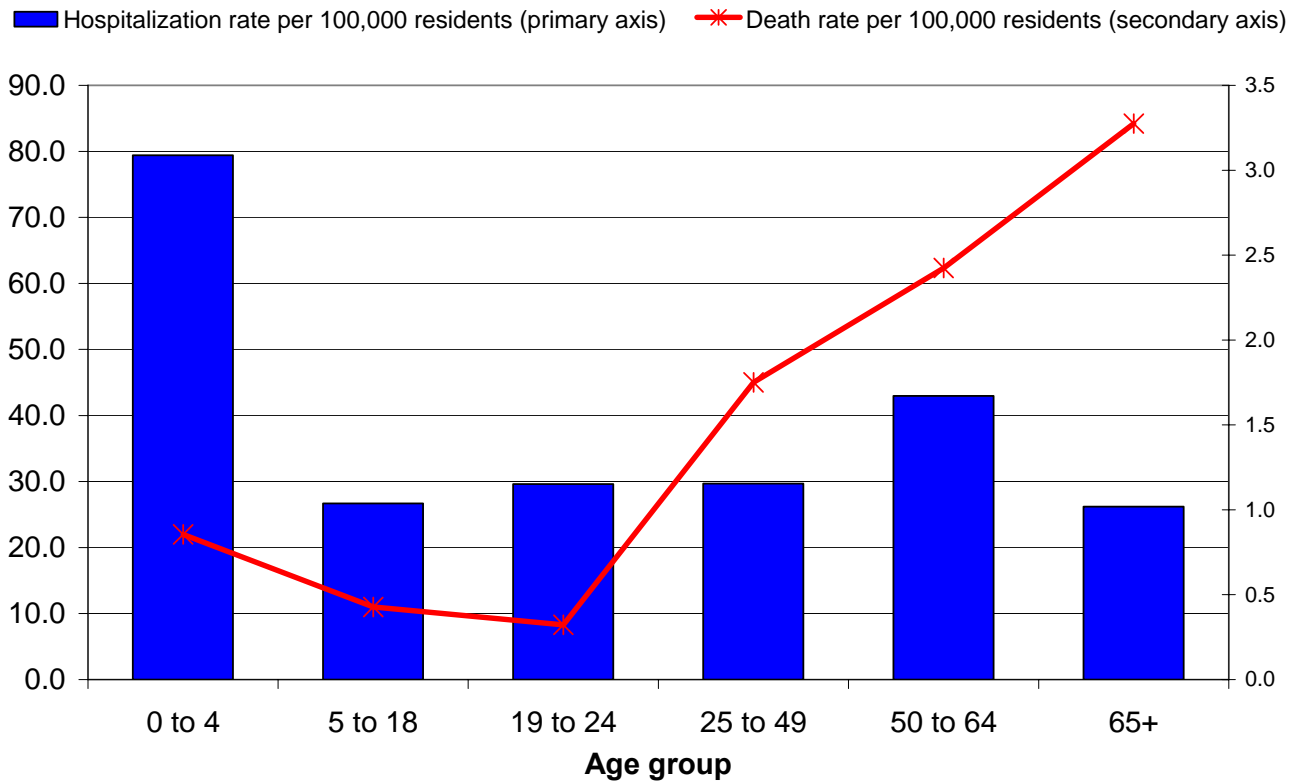
The mean and median age of influenza deaths statewide since September 1, 2009 are 51 and 50 years, respectively. Ages range from 2 to 87 years. Males constitute 59% of influenza deaths.

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+	County rate per 100,000 pop
Benton	1	0	0	0	0	1	0	1.2
Clackamas	1	0	0	0	0	0	1	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	2	0	1	0	0	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	63	2	3	1	23	18	16	1.7
Percentage		3	5	2	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.4	3.3	1.7



Influenza Hospitalizations and Deaths, Rate per 100,000 Oregon Residents, Since 09/01/09



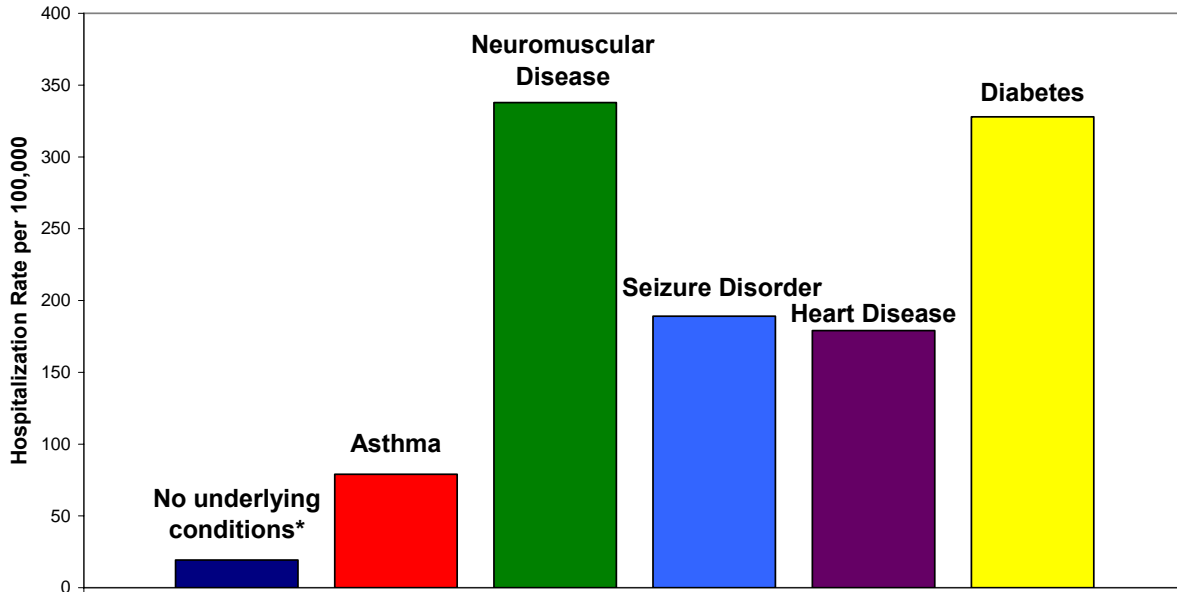
EIP Surveillance Area Hospitalizations

As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 939% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

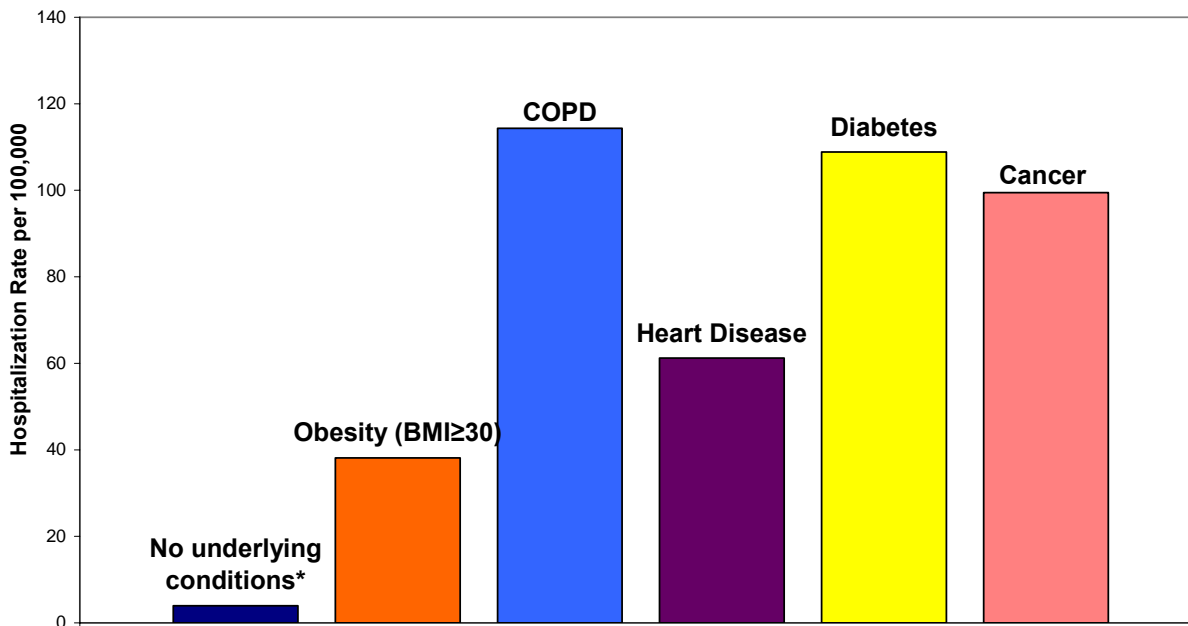
	Pediatric (ages 0 – 18) N=128 N (%)	Adult (age >18 years), N=344 N (%)
Treatment		
Received antivirals	103 (81)	305 (89)
Outcomes		
Pneumonia	36 (28)	172 (50)
Bronchiolitis	1 (1)	0
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (16)	90 (26)
ARDS	2 (2)	27 (8)
Mechanically Ventilated	8 (6)	53 (15)
ECMO	1 (1)	2 (1)
Died	2 (2)	12 (4)

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



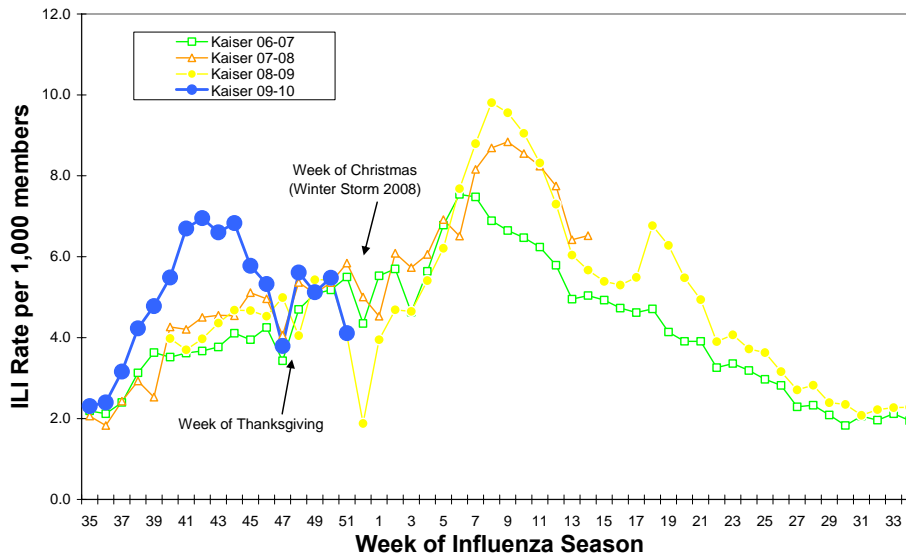
Diseases are not mutually exclusive
 Denominator: BRFSS 2007, NHIS, 2003
 * No ACIP underlying conditions

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 4.11 per 1,000 Kaiser members during the week ending December 26, 2009. A decrease in activity during the winter holidays has occurred in previous years.

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



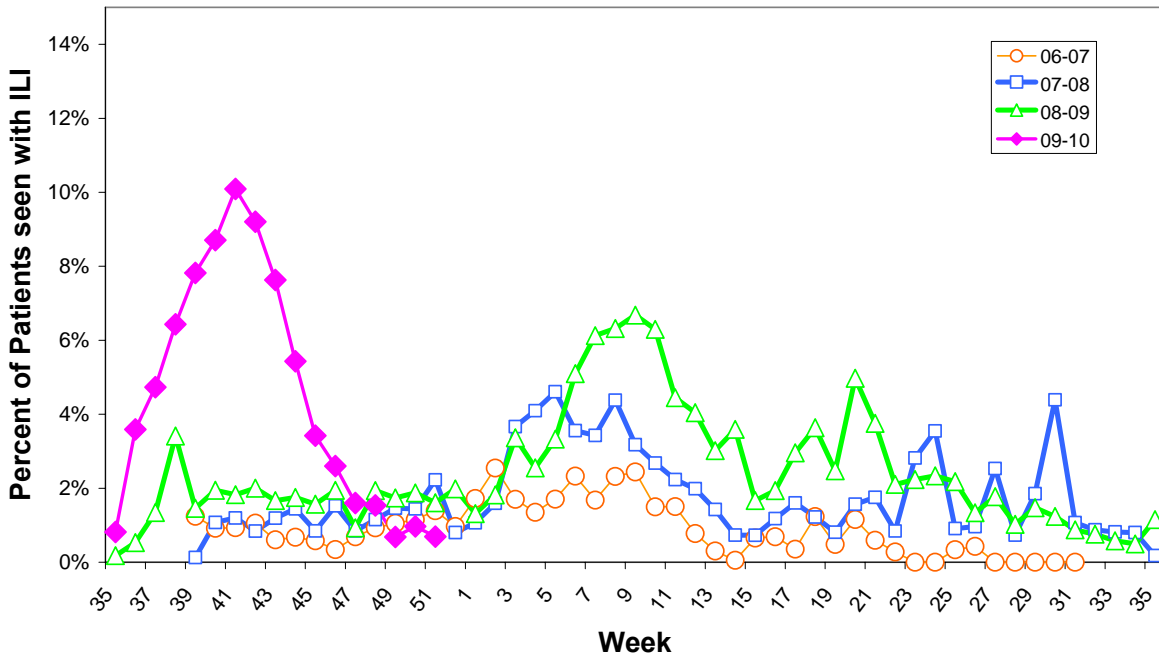
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending December 19th, 0.89% of patients seen had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending December 26th	1160	0.69	12
Week ending December 19th	3190	0.97	17
Week ending December 12th	4404	0.68	20

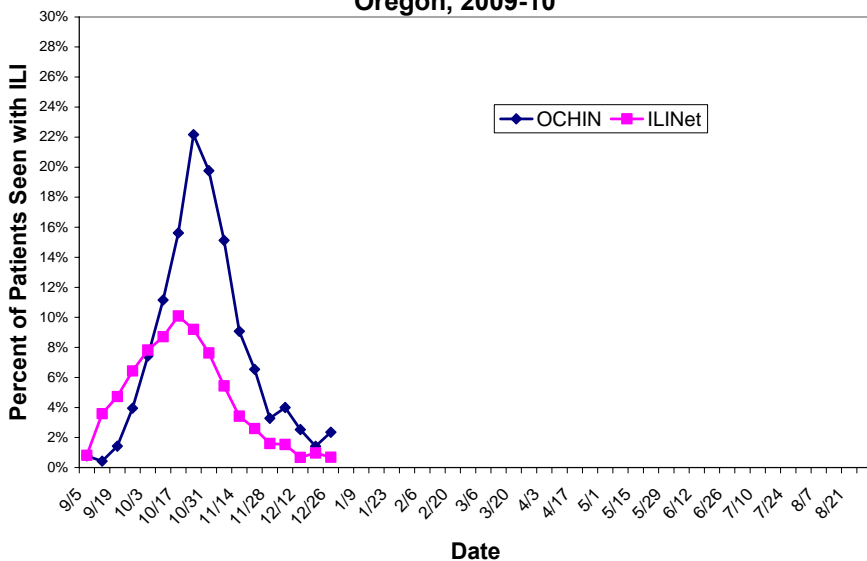
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. The percent of OCHIN patients with ILI during the week ending December 26th was 2.34%.

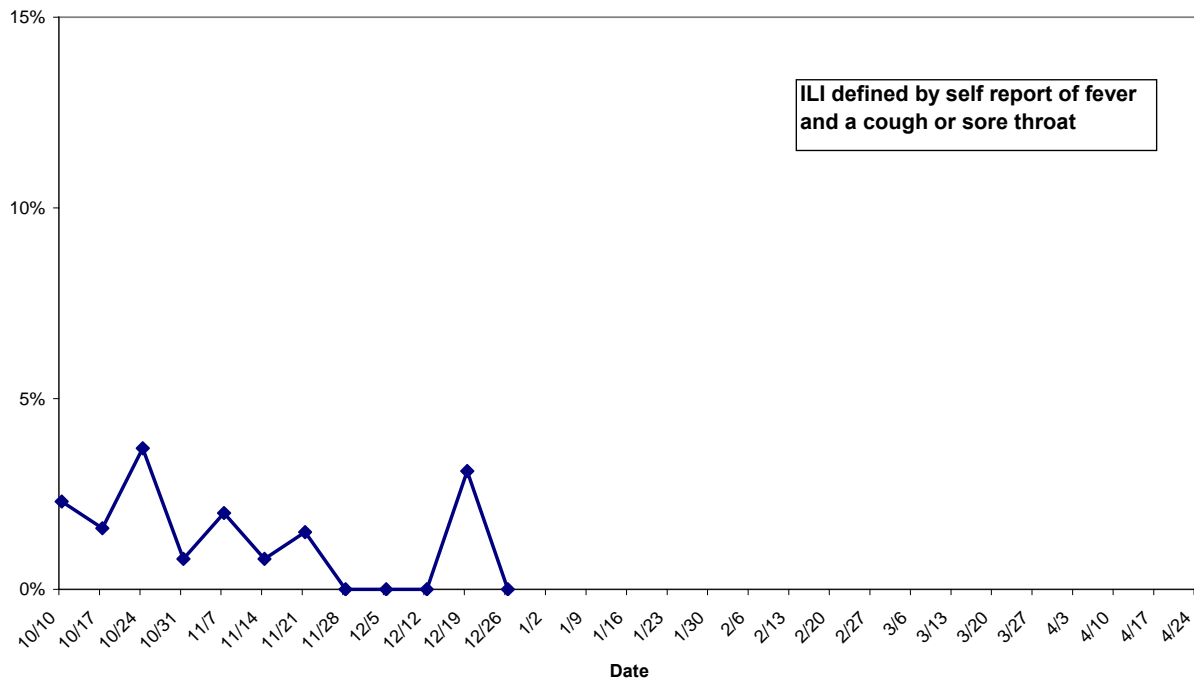
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



Community Surveillance for Influenza-like Illness

Oregon Public Health Division collects statewide level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). During the week ending December 26th, no respondents reported having symptoms of ILI with onset in the last 7 days; however, only 7 respondents were interviewed during this time period.

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. No seasonal influenza has been identified since October, 2009.

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

	Cumulative since September 1, 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N(%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	152 (57)	1,075 (62)	23 (79)	1,250 (62)	0
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	0	1 (0)	0	1 (0)	1 (50)
Undetected	113 (42)	661 (38)	6 (21)	780 (38)	1 (50)
Total Tested	266	1,739	29	2,034	2

*Submissions for hospitalized cases may include some ER visits.

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

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/>.

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/>

FLU BITES

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

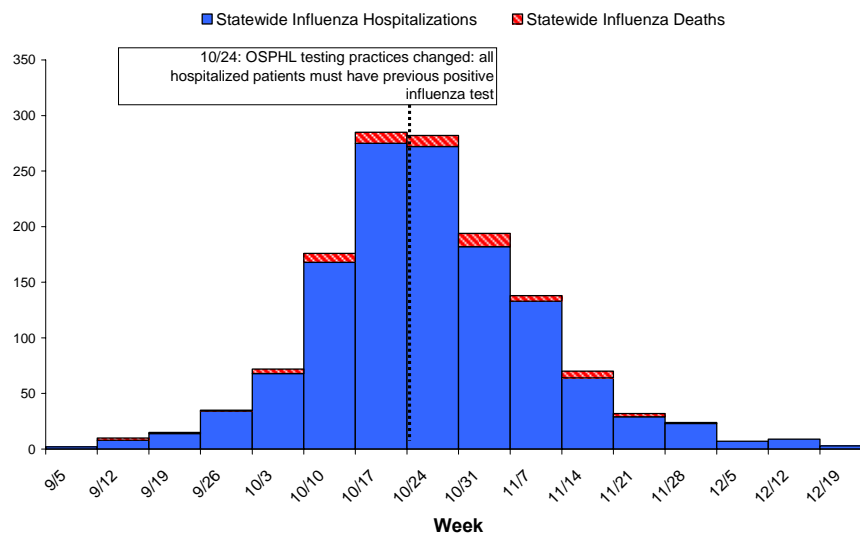
Published December 24th, 2009



Summary

- Since September 1, 2009, 1,291 patients have been hospitalized with laboratory-confirmed influenza statewide (939 adults and 352 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 neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- For the week ending December 19, 2009, four hospitalizations were reported statewide (0.1 per 100,000 Oregonians), making this the third week in a row with fewer than 10 hospitalizations.
- No influenza-related deaths have been reported for three weeks. Since September 1, sixty-three people have died from influenza (59 adults and 4 children). Of the 58 individuals for whom information about underlying conditions is known, 52 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.9 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – November 14th to be 3.2 per 100,000.
- Two of our influenza-like illness (ILI) syndromic surveillance systems showed slight increases in ILI this week, however ILINet providers are reporting ILI at levels below what would be expected when influenza is circulating, and Kaiser Permanente NW is reporting rates of illness expected for this time of year in a typical influenza season.

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09



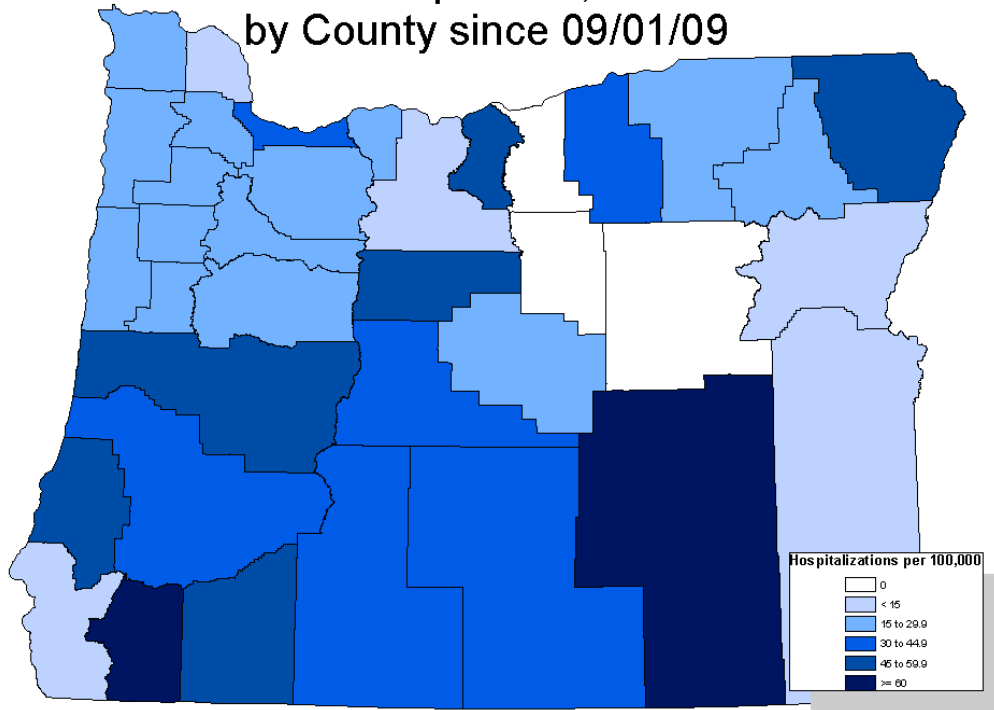
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 699 (54%) of hospitalized cases.

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

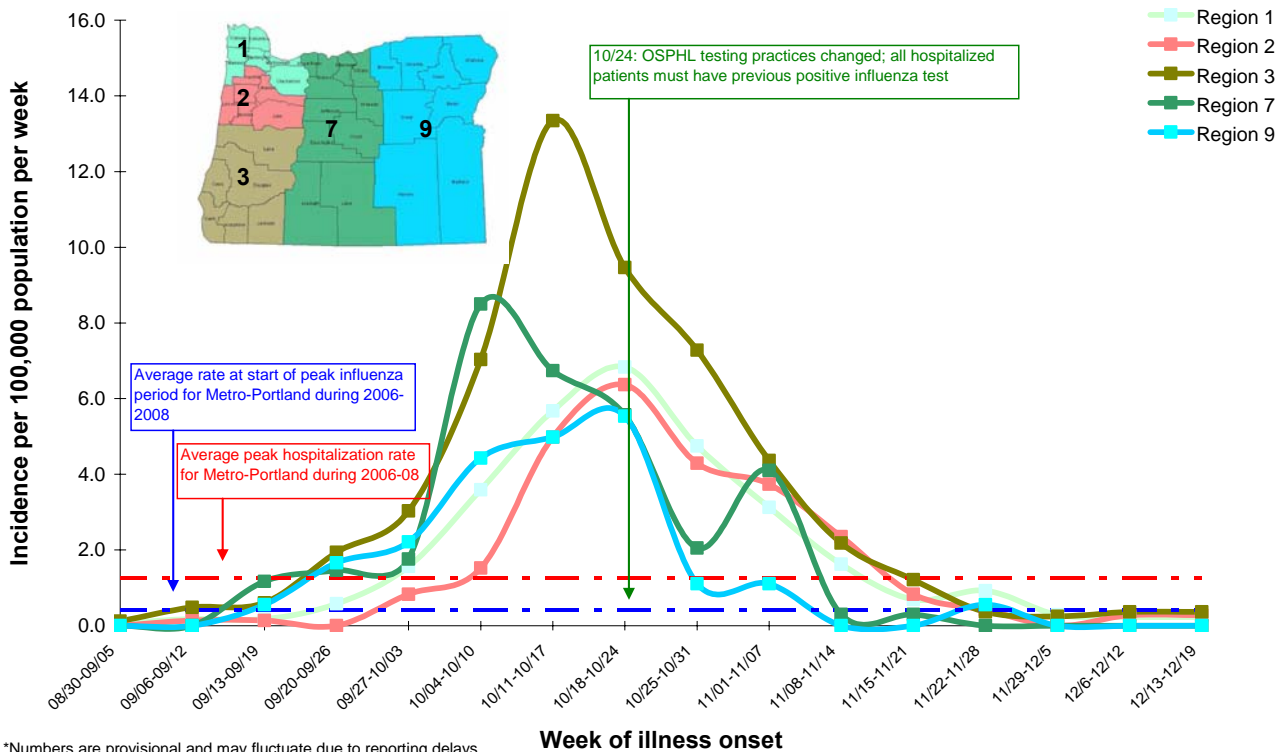
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	19	1	3	3	5	5	2	0	22.1
Clackamas	110	15	20	10	37	21	7	0	29.2
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	3	1	0	0	1	1	0	0	6.2
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	104	13	13	8	20	34	16	0	50.7
Jefferson	14	4	2	1	6	1	0	0	62.4
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	197	28	35	9	55	56	14	0	57.0
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	91	22	19	7	16	19	8	0	28.9
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	258	31	23	16	91	68	29	0	35.9
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	4	0	2	0	0	1	1	0	15.3
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	145	27	19	10	49	30	10	0	27.9
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1291	183	185	91	386	318	127	1	34.1
% total		14	14	7	30	25	10		
Age group rate per 100,000 pop		78.1	26.4	29.3	29.4	42.8	26.0		34.1

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

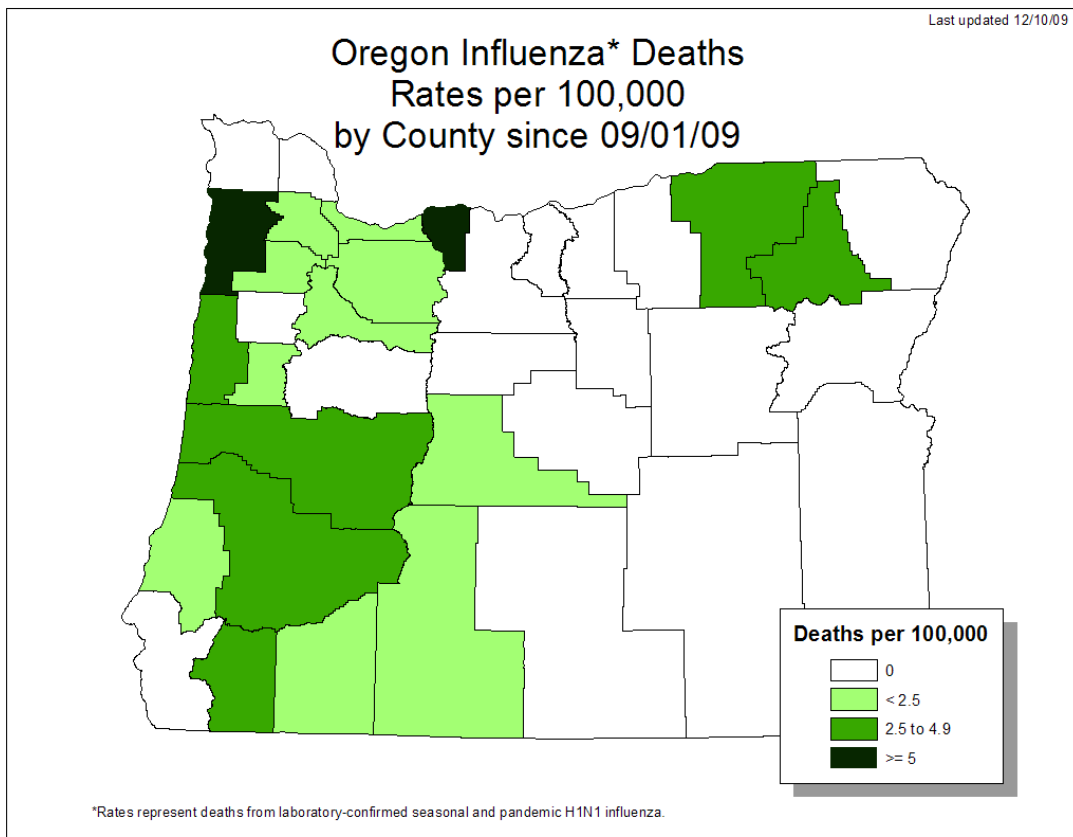
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



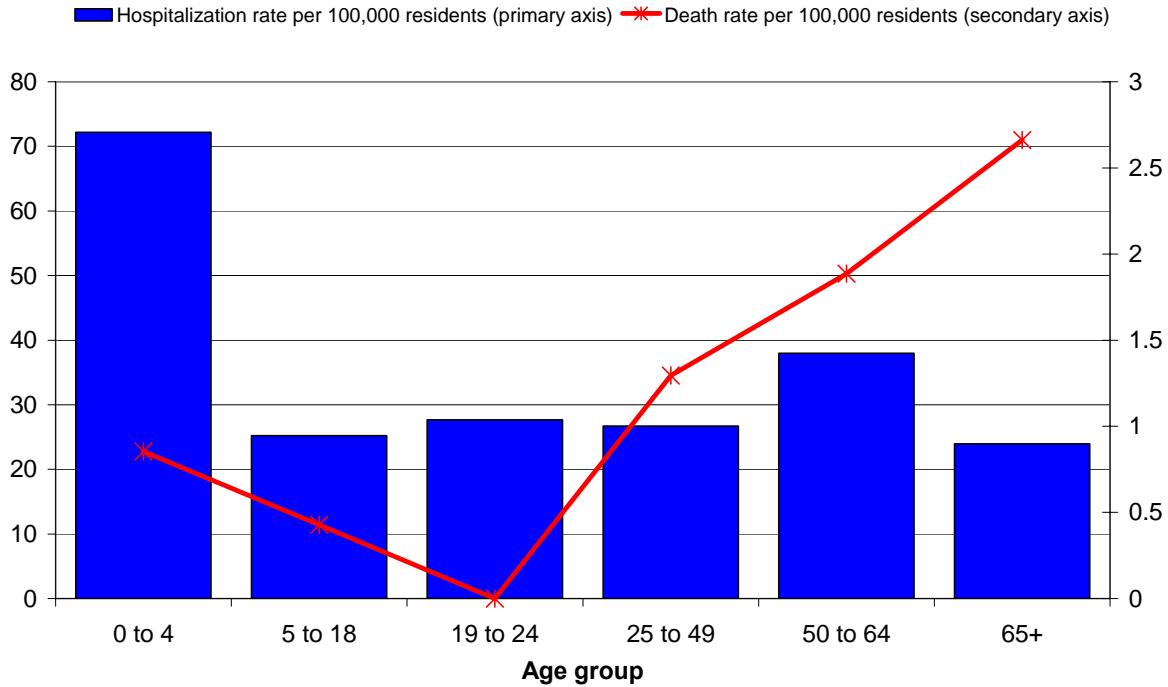
The mean and median age of influenza deaths statewide since September 1, 2009 are 51 and 50 years, respectively. Ages range from 2 to 87 years. Males constitute 59% of influenza deaths.

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+	County rate per 100,000 pop
Benton	1	0	0	0	0	1	0	1.2
Clackamas	1	0	0	0	0	0	1	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	2	0	1	0	0	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	63	2	3	1	23	18	16	1.7
Percentage		3	5	2	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.4	3.3	1.7



**Influenza Hospitalizations and Deaths,
Rates per 100,000 Oregon Residents, Since 09/01/09**



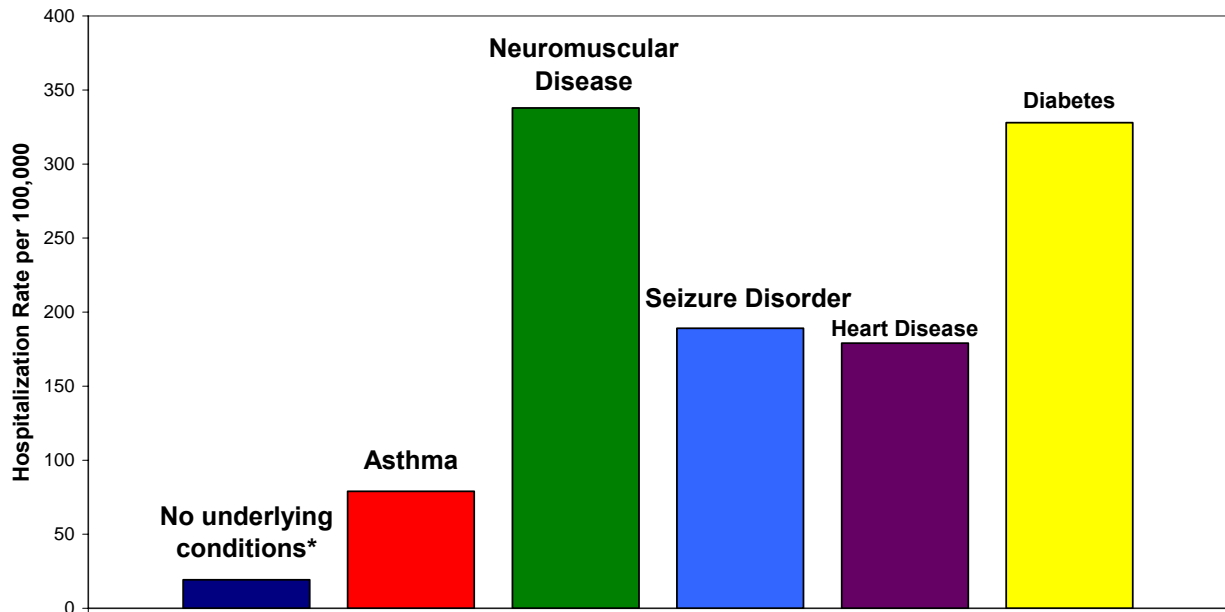
EIP Surveillance Area Hospitalizations

As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 89% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

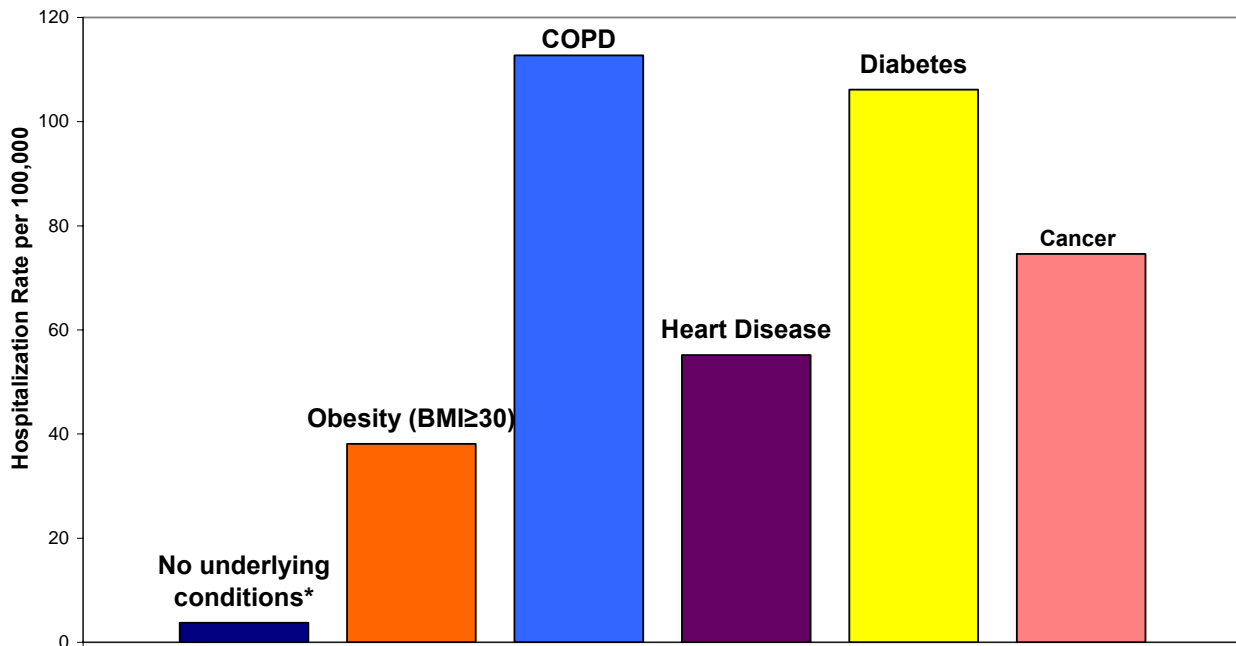
	Pediatric (ages 0 – 18) N=126 N (%)	Adult (age >18 years), N=323 N (%)
Treatment		
Received antivirals	102 (82)	285 (89)
Outcomes		
Pneumonia	35 (28)	157 (49)
Bronchiolitis	1 (1)	0
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (16)	82 (26)
ARDS	2 (2)	24 (7)
Mechanically Ventilated	7 (6)	48 (15)
ECMO	1 (1)	2 (1)
Died	3 (2)	9 (3)

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



Diseases are not mutually exclusive
 Denominator: NHIS, 2003 & OR DHS, 2009
 *No ACIP underlying conditions

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



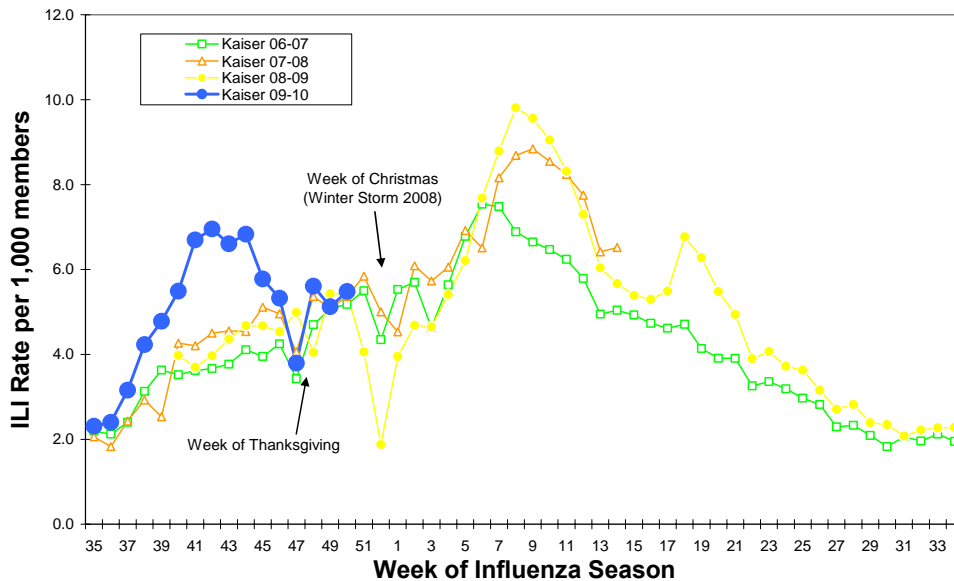
Diseases are not mutually exclusive
 Denominator: BRFSS 2007, NHIS, 2003
 * No ACIP underlying conditions

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 increased slightly to 5.48 per 1,000 Kaiser members during the week ending December 19, 2009. The decrease in activity reported during the week of November 22-28th, corresponds to the Thanksgiving holidays. Decreases in activity have been seen in years prior for both Thanksgiving and Christmas holidays.

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



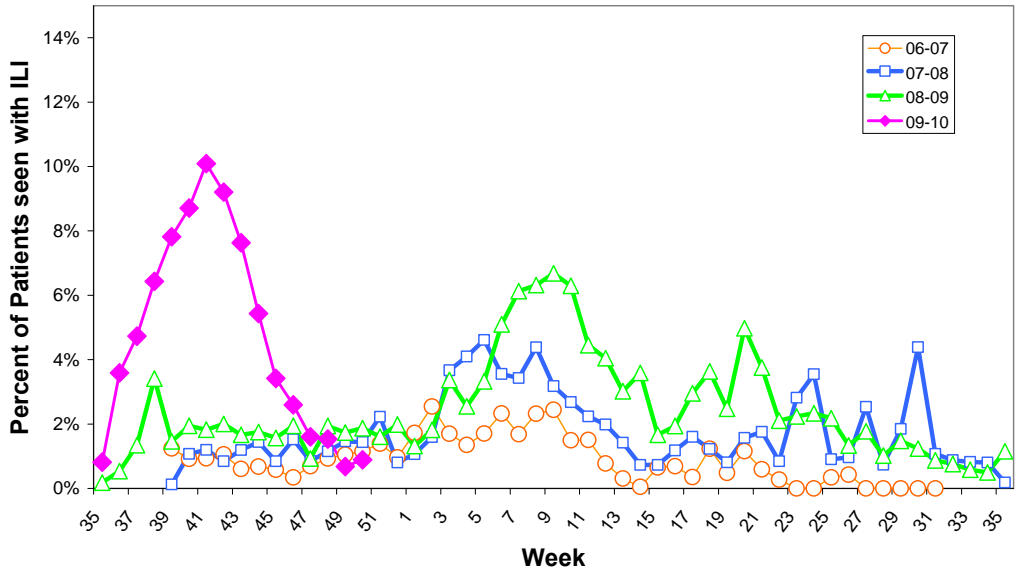
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 or sore throat. The number of patient visits and the percent of patients with ILI for the last 3 weeks are presented below. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is 1.29%. For the week ending December 19th, 0.89% of patients seen had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending December 19th	896	0.89	9
Week ending December 12th	4404	0.68	20
Week ending December 5th	4945	1.54	20

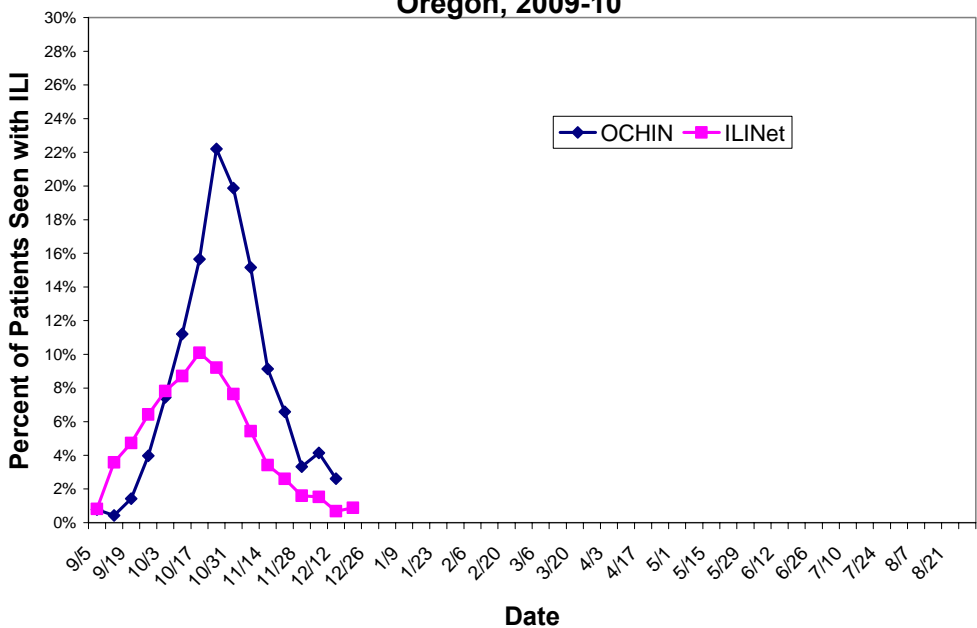
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



OCHIN Influenza-like Illness Surveillance

Oregon Public Health Division also receives discharge diagnoses data from OCHIN Inc., a fast-growing collaborative comprising 28 federally qualified health centers (FQHC) and rural health centers. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending December 12th was 2.61%.

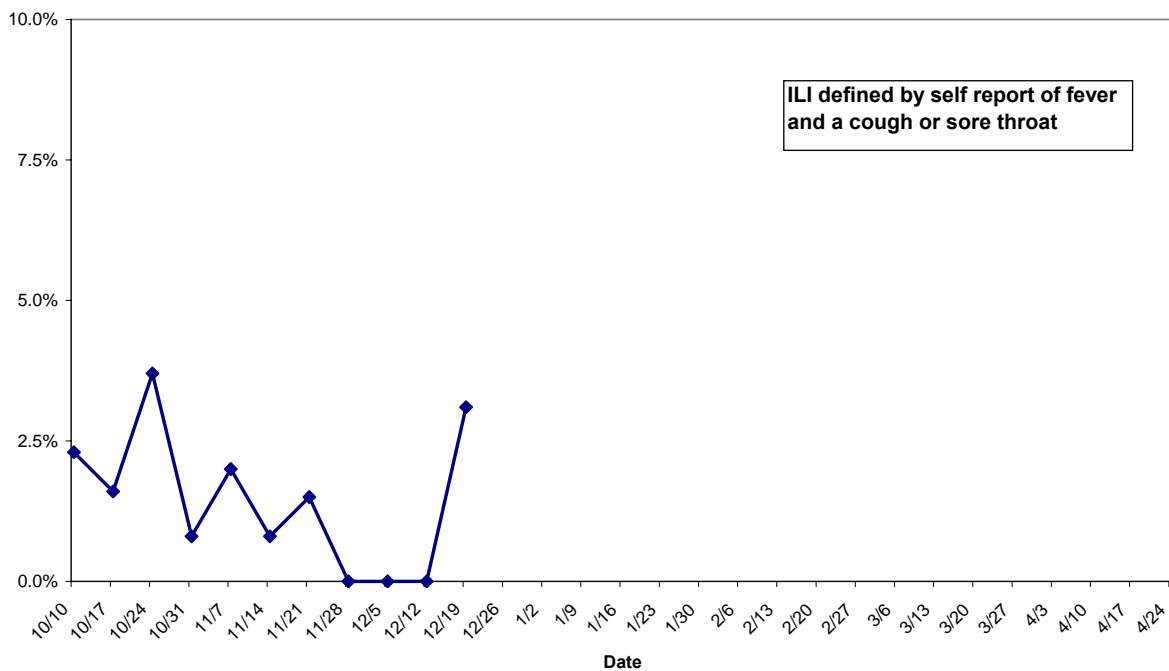
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 December 5th, two of sixty-two (3.1%) 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 1, 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N(%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	152 (57)	1,075 (62)	23 (79)	1,250 (62)	4 (40)
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	0	1 (0)	0	1 (0)	0
Undetected	113 (42)	661 (38)	6 (21)	780 (38)	6 (60)
Total Tested	266	1,739	29	2,034	10

*Submissions for hospitalized cases may include some ER visits.

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

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/>.

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/>

FLU BITES

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

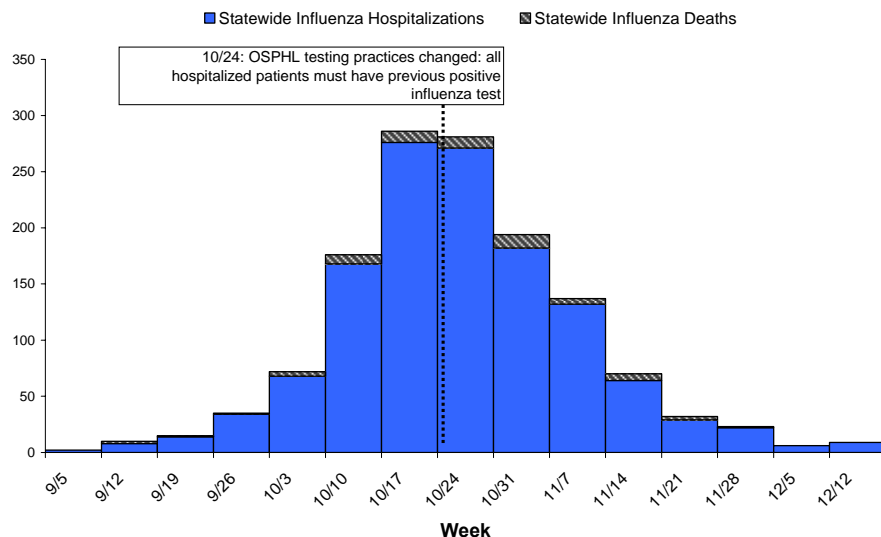
Published December 18th, 2009



Summary

- Since September 1, 2009, 1,287 patients have been hospitalized with laboratory-confirmed influenza statewide (936 adults and 351 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 neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- For the week ending December 12, 2009, nine hospitalizations were reported statewide (0.24 per 100,000 Oregonians), making this the in a row with fewer than 10 hospitalizations.
- No influenza-related deaths have been reported since last week's report. Since September 1, sixty-three people have died from influenza (59 adults and 4 children). Of the 58 individuals for whom information about underlying conditions is known, 52 (90%) had one or more underlying conditions.
- Oregon's death rate for the entire pandemic period (since April, 2009) is 1.9 deaths per 100,000 Oregonians. The Centers for Disease Control and Prevention (CDC) estimate the national rate of H1N1-related deaths from April – November 14th to be 3.2 per 100,000.
- Two of our influenza-like illness (ILI) syndromic surveillance systems showed a decrease in ILI this week. ILINet providers are reporting ILI at levels below what would be expected when influenza is circulating, and Kaiser Permanente NW is reporting rates of illness expected for this time of year in a typical influenza season.

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09



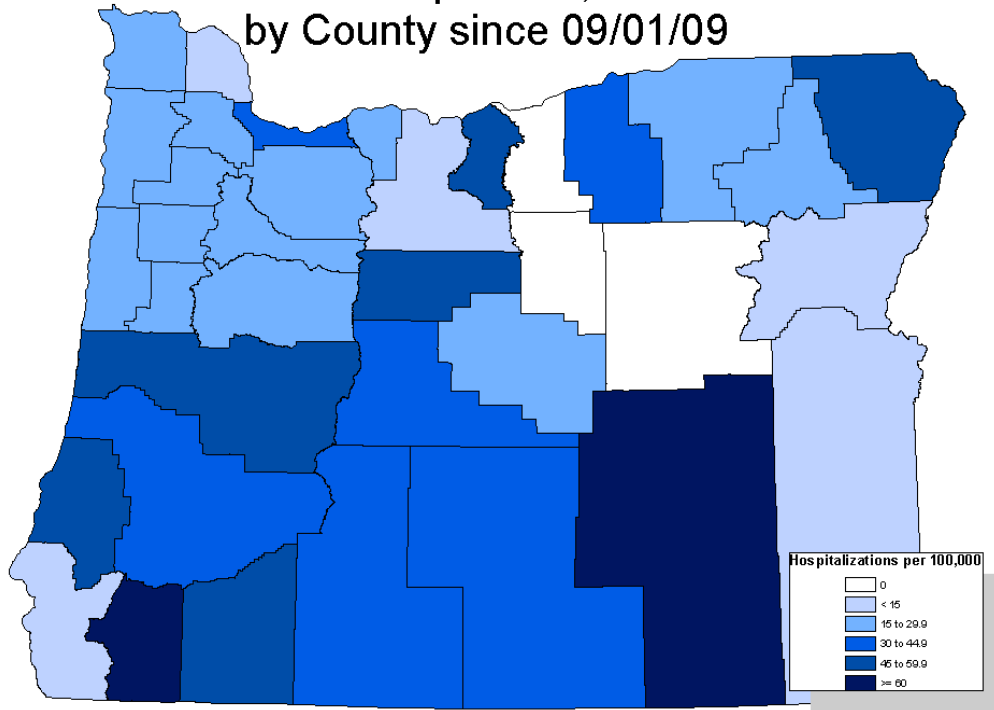
Statewide Hospitalizations and Deaths

The mean and median age of individuals hospitalized statewide for influenza since September 1, 2009 are 35 and 37, respectively. Ages range from 0 to 92 years. Females constitute 689 (54%) of hospitalized cases.

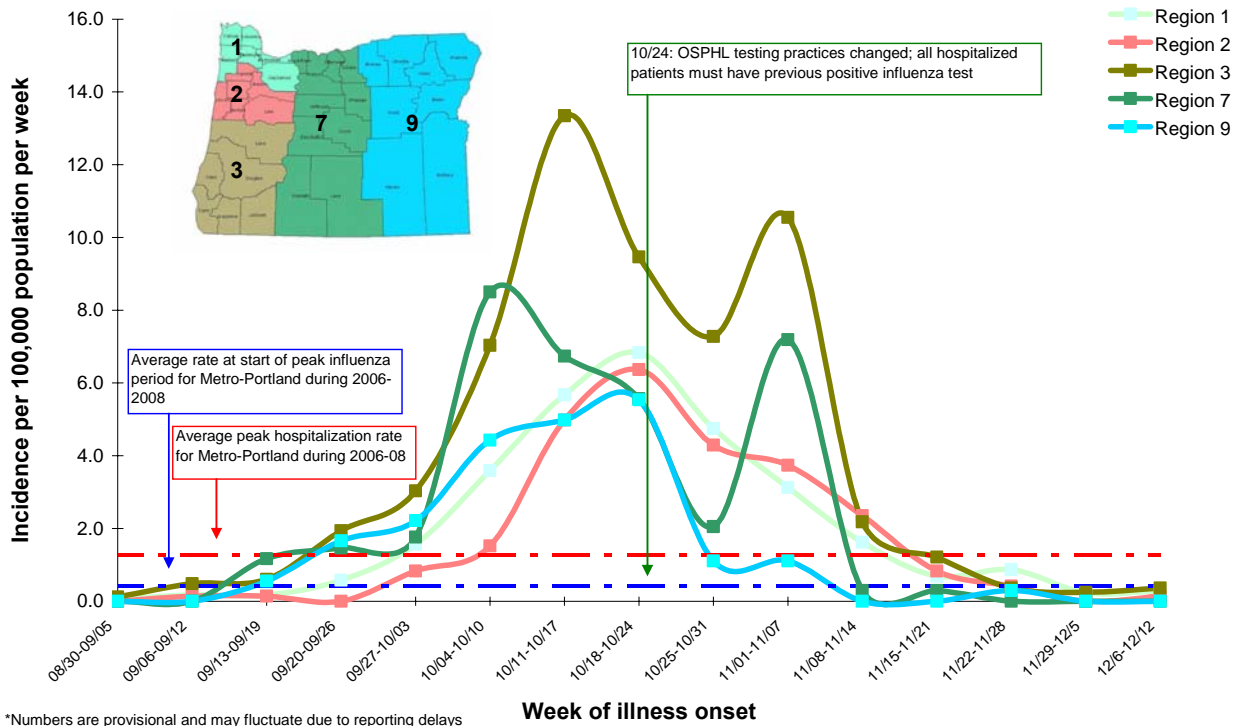
Distribution of Hospitalized Influenza Cases by County and Age Group Since September 1, 2009

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	19	1	3	3	5	5	2	0	22.1
Clackamas	109	15	20	10	36	21	7	0	28.9
Clatsop	6	0	0	2	2	1	1	0	15.9
Columbia	3	1	0	0	1	1	0	0	6.2
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	52	6	9	3	19	6	9	0	31.1
Douglas	43	4	3	4	8	19	5	0	40.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	104	13	13	8	20	34	16	0	50.7
Jefferson	13	3	2	1	6	1	0	0	57.9
Josephine	51	8	4	2	16	13	8	0	61.2
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	197	28	35	9	55	56	14	0	57.0
Lincoln	7	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	90	22	19	7	16	18	8	0	28.6
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	258	31	23	16	91	68	29	0	35.9
Polk	11	2	2	1	3	1	2	0	16.1
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	4	0	2	0	0	1	1	0	15.3
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	144	27	19	10	49	30	9	0	27.7
Wheeler	6	1	2	1	2	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1287	182	185	91	385	317	126	1	33.9
% total		14	14	7	30	25	10		
Age group rate per 100,000 pop		77.7	26.4	29.3	29.3	42.7	25.8		33.9

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



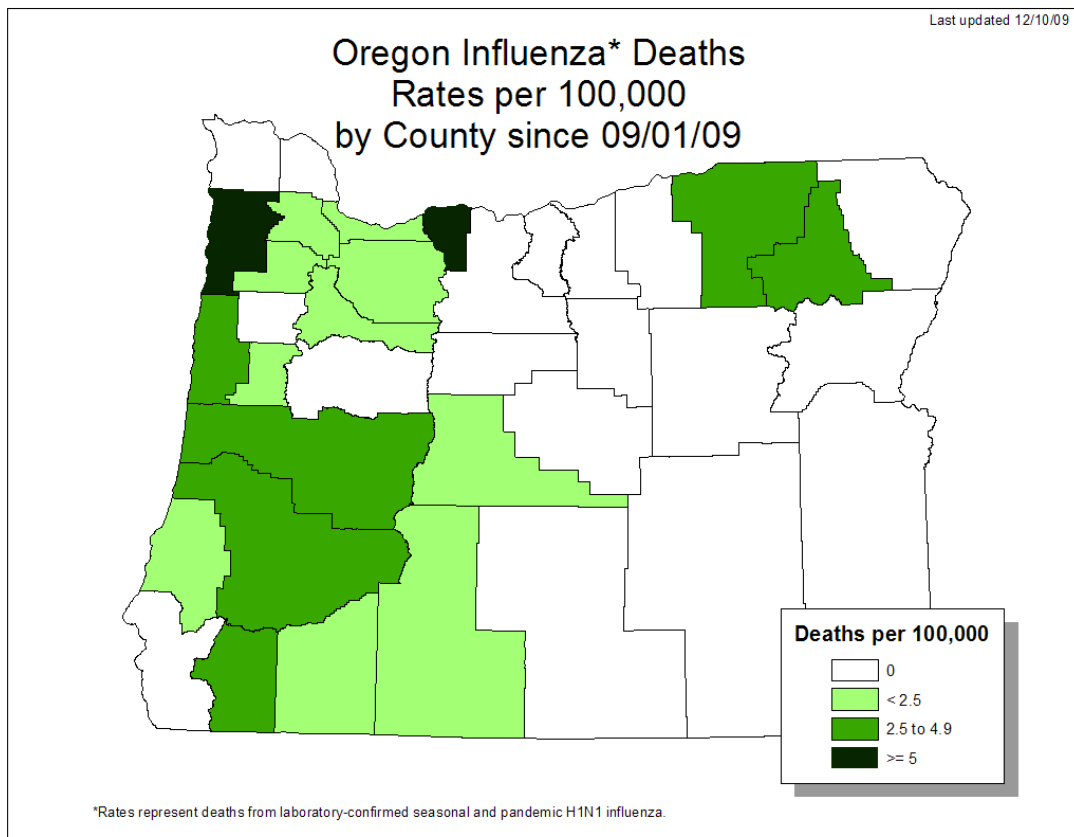
Influenza-related Hospitalization Rates by Region, Oregon, Since 09/01/09*



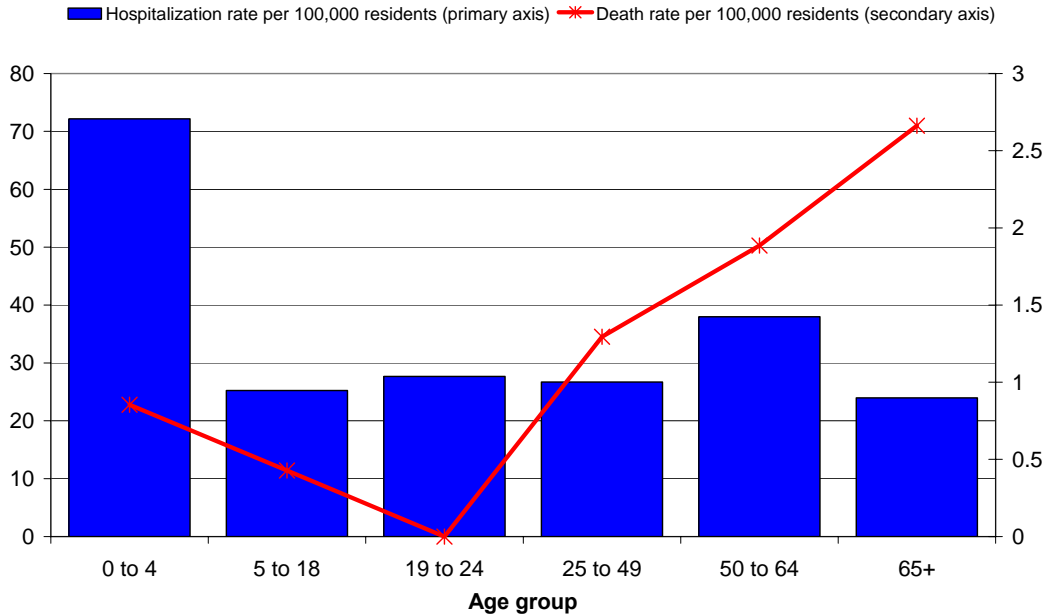
The mean and median age of influenza deaths statewide since September 1, 2009 are 51 and 50 years, respectively. Ages range from 2 to 87 years. Males constitute 59% of influenza deaths.

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+	County rate per 100,000 pop
Benton	1	0	0	0	0	1	0	1.2
Clackamas	1	0	0	0	0	0	1	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	2	0	1	0	0	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	63	2	3	1	23	18	16	1.7
Percentage		3	5	2	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.4	3.3	1.7



**Influenza Hospitalizations and Deaths,
Rates per 100,000 Oregon Residents, Since 09/01/09**



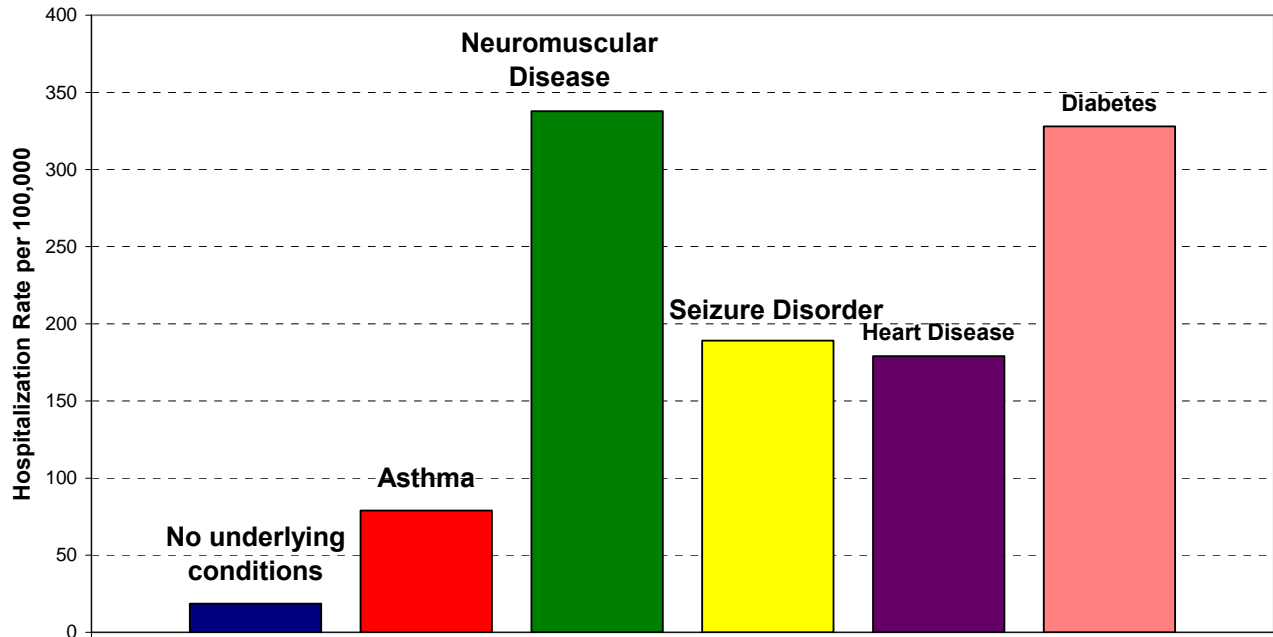
EIP Surveillance Area Hospitalizations

As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Preliminary chart reviews have been conducted for 88% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

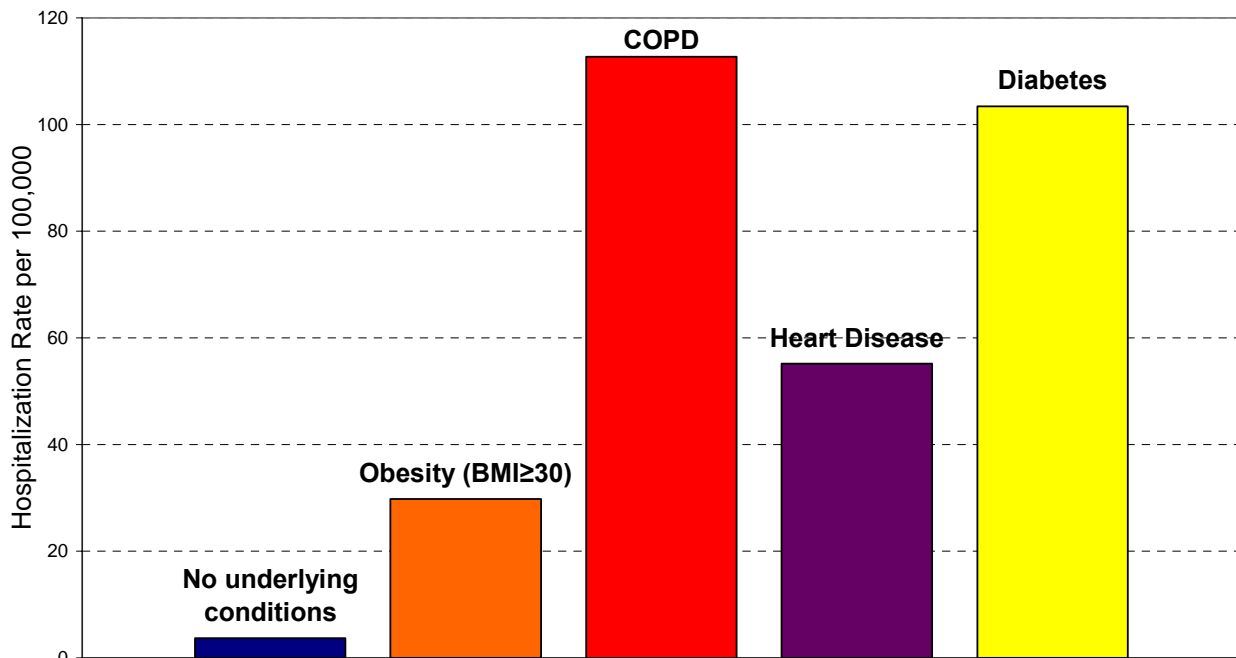
	Pediatric (ages 0 – 18) N=124 N (%)	Adult (age >18 years), N=316 N (%)
Treatment		
Received antivirals	101 (81)	280 (89)
Outcomes		
Pneumonia	35 (28)	155 (49)
Bronchiolitis	1 (1)	0
Acute encephalopathy	1 (1)	7 (2)
Admitted to ICU	19 (15)	78 (25)
ARDS	2 (2)	24 (8)
Mechanically Ventilated	7 (6)	48 (15)
ECMO	1 (1)	2 (1)
Died	3 (2)	9 (3)

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



Diseases are not mutually exclusive
 Underlying Conditions: ACIP
 Denominator: NHIS, 2003 & OR DHS, 2009

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



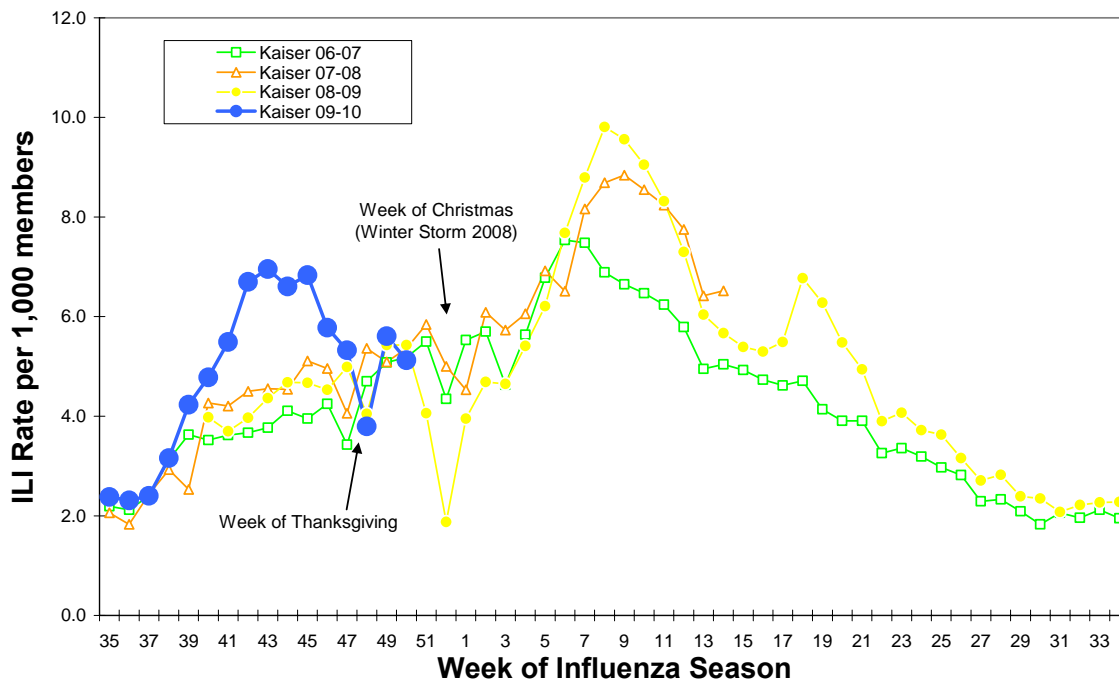
Diseases are not mutually exclusive
 Underlying Conditions: ACIP
 Denominator: BRFSS 2007, NHIS, 2003

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 slightly to 5.12 per 1,000 Kaiser members during the week ending December 12, 2009. The decrease in activity reported during the week of November 22-28th, corresponds to the Thanksgiving holidays. Decreases in activity have been seen in years prior for both Thanksgiving and Christmas holidays.

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



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

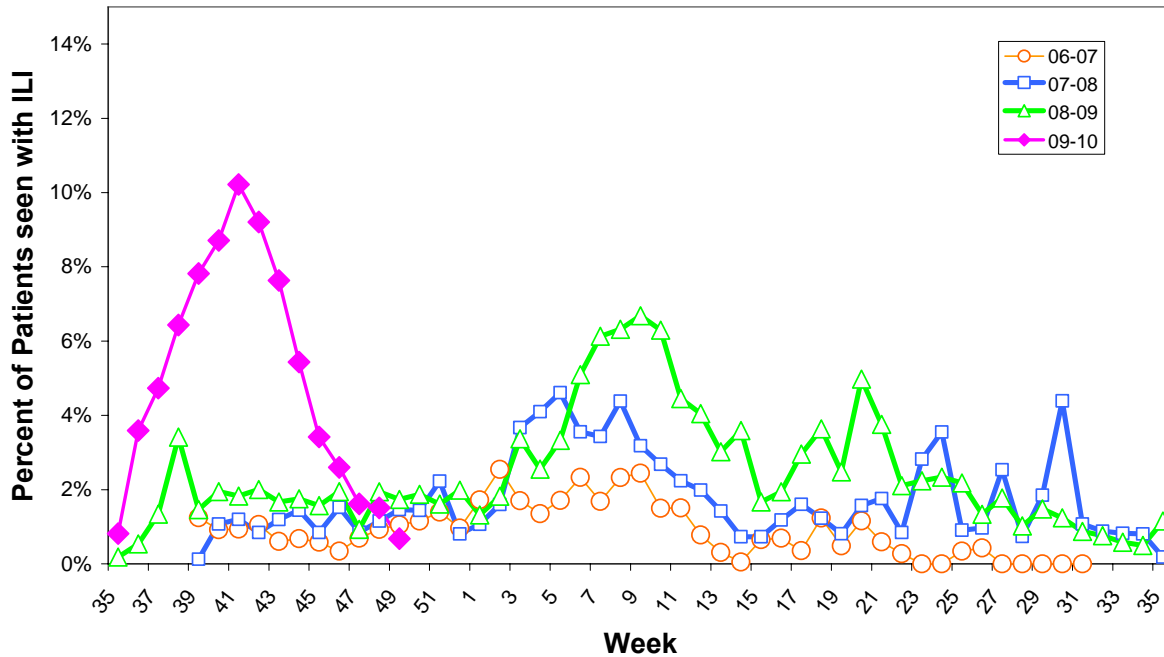
Oregon's outpatient influenza-like illness network is comprised of 30 voluntary healthcare providers from all across Oregon who report the number of patients with influenza-like illness (ILI) as well as total number of patient visits for each week during the surveillance season.

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. The average influenza-like illness reported during non-influenza weeks, when percent positive for influenza at the Oregon State Public Health Laboratory is $< 10\%$, is

1.29%. For the week ending December 5th, 0.68% of patients seen had ILI, which is well below the average for non-influenza weeks.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending December 12 th	4277	0.68	17
Week ending December 5 th	4851	1.50	19
Week ending November 28 th	3529	1.62	21

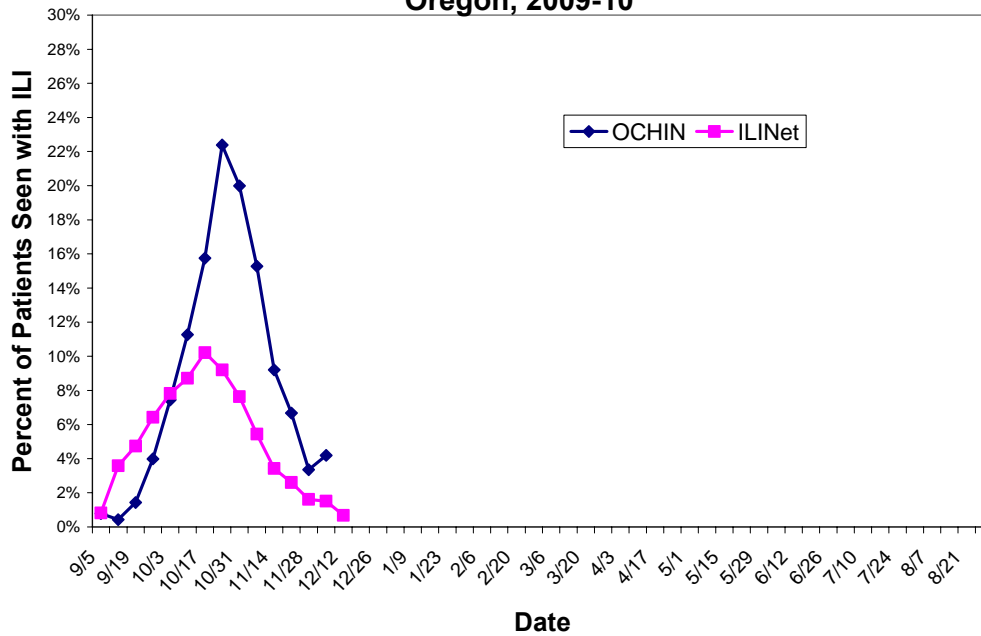
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



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. OCHIN reports of ILI are one week behind our other syndromic surveillance system reports. The percent of OCHIN patients with ILI during the week ending December 5th was 4.2%, slightly elevated from the reports of ILI from the week prior (the week of Thanksgiving).

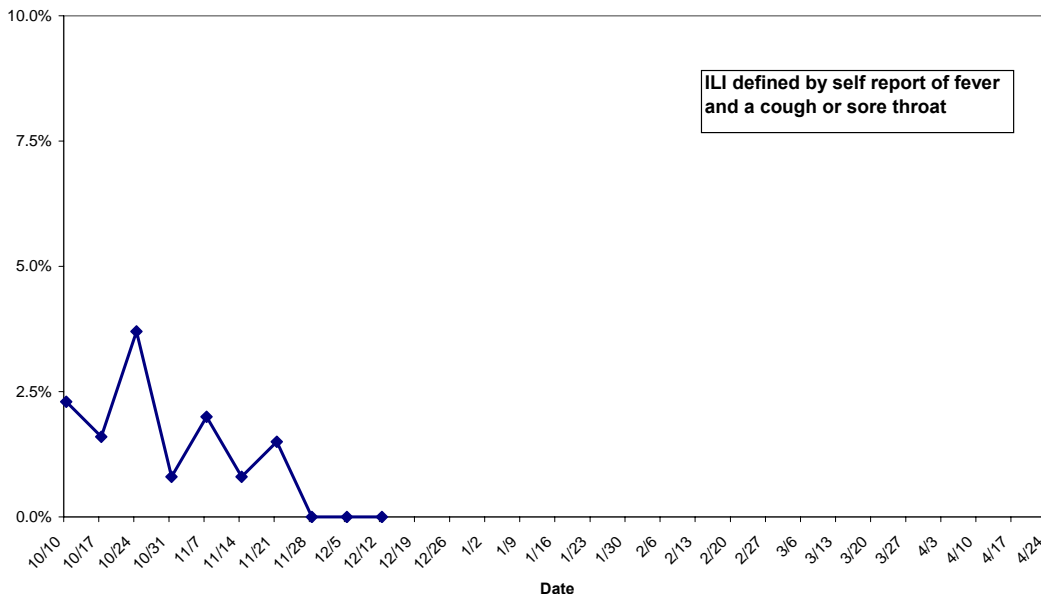
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 December 5th, none of the respondents statewide reported having symptoms of ILI with an onset in the last 7 days. This is the third consecutive week without any reports of ILI from BRFSS.

**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 1, 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N(%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	152 (57)	1,069 (62)	19 (65)	1,240 (61)	13 (54)
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	2 (1)	6 (0)	6 (21)	13 (1)	8 (33)
Undetected	111 (42)	656 (38)	4 (14)	771 (38)	3 (13)
Total Tested	265	1,733	29	2,027	24

*Submissions for hospitalized cases may include some ER visits.

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

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/>.

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/>

FLU BITES

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

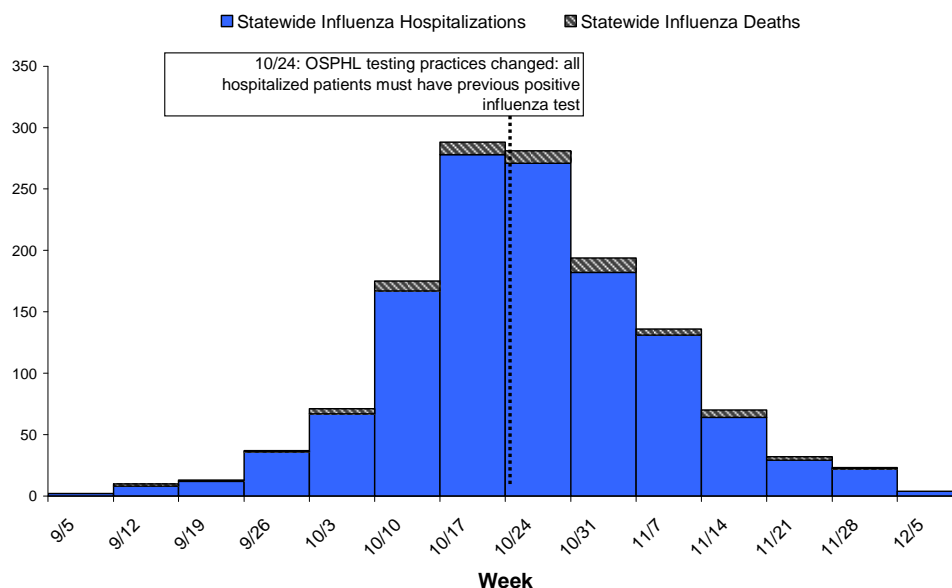
Published December 11th, 2009



Summary

- Since September 1, 2009, 1,274 patients were hospitalized with laboratory-confirmed influenza statewide (927 adults and 346 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 neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- Between November 28th and December 5th, four hospitalizations were reported statewide (0.1 per 100,000 Oregonians), the lowest number we have observed since the beginning of September. Rates of hospitalizations have been decreasing steadily since late October.
- Sixty-three people have died from influenza (59 adults and 4 children). Of the 54 individuals for whom information about underlying conditions is known, 52 (96%) had one or more underlying conditions.
- Two of our three influenza-like illness (ILI) syndromic surveillance systems showed a decrease in ILI this week. Although there was a slight increase in ILI among Kaiser members, rates are well within the expected range for this time of year in a typical influenza season.

Oregon Influenza Hospitalizations and Deaths by Onset Date Since 09/01/09

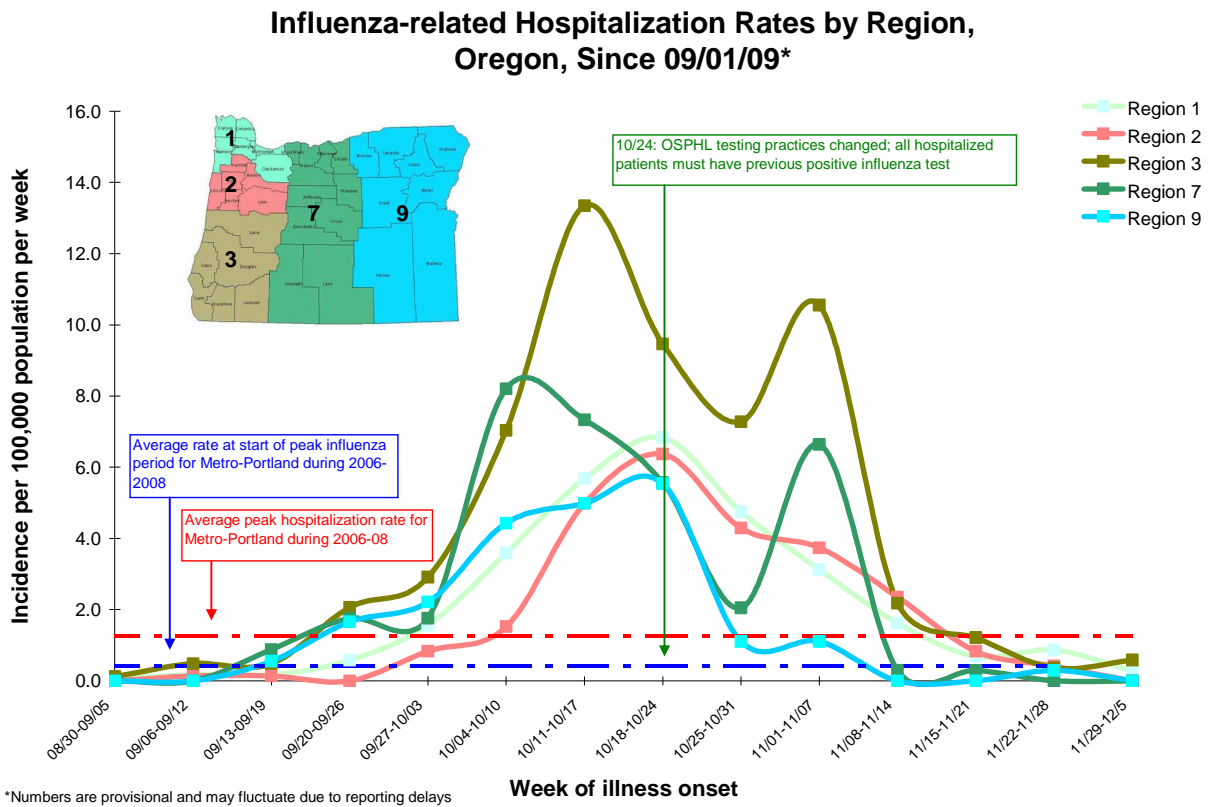
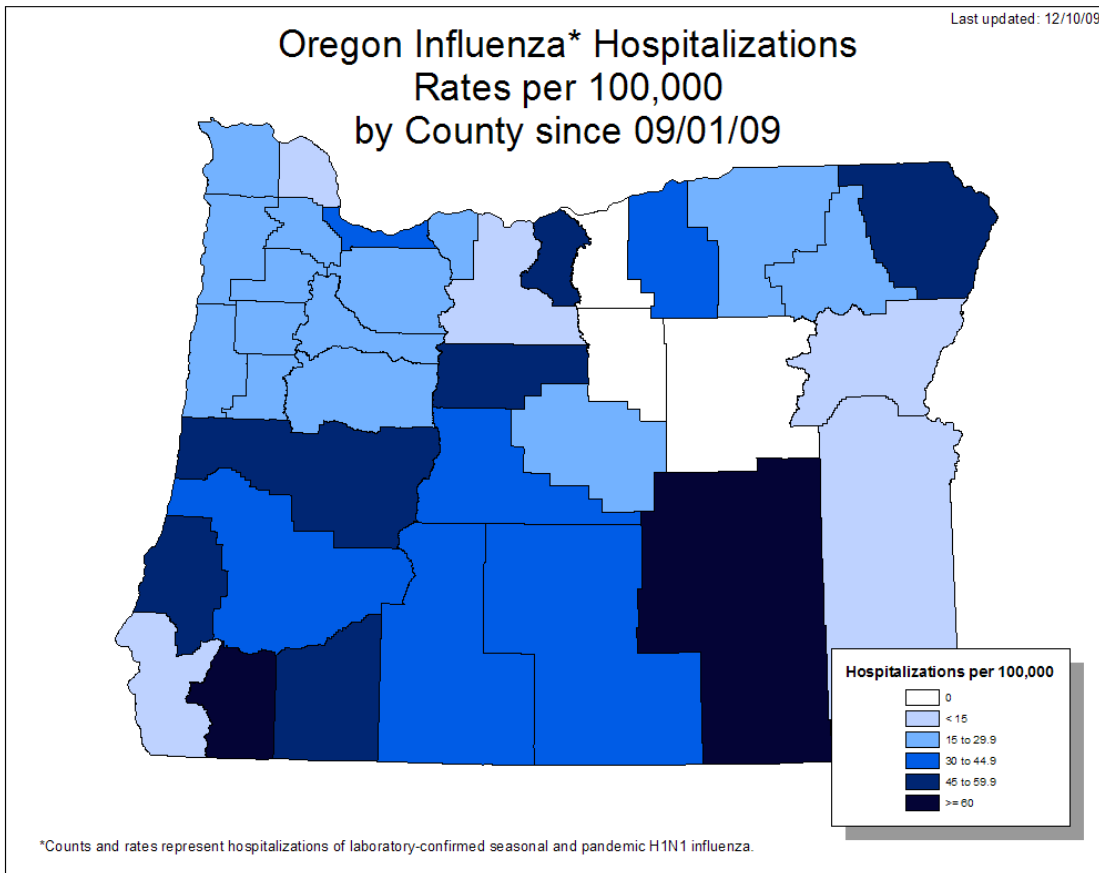


Statewide Hospitalizations and Deaths

The median age of individuals hospitalized statewide for influenza since September 1, 2009 is 37 (range, 0 to 92). Females constitute 689 (54%) of hospitalized cases.

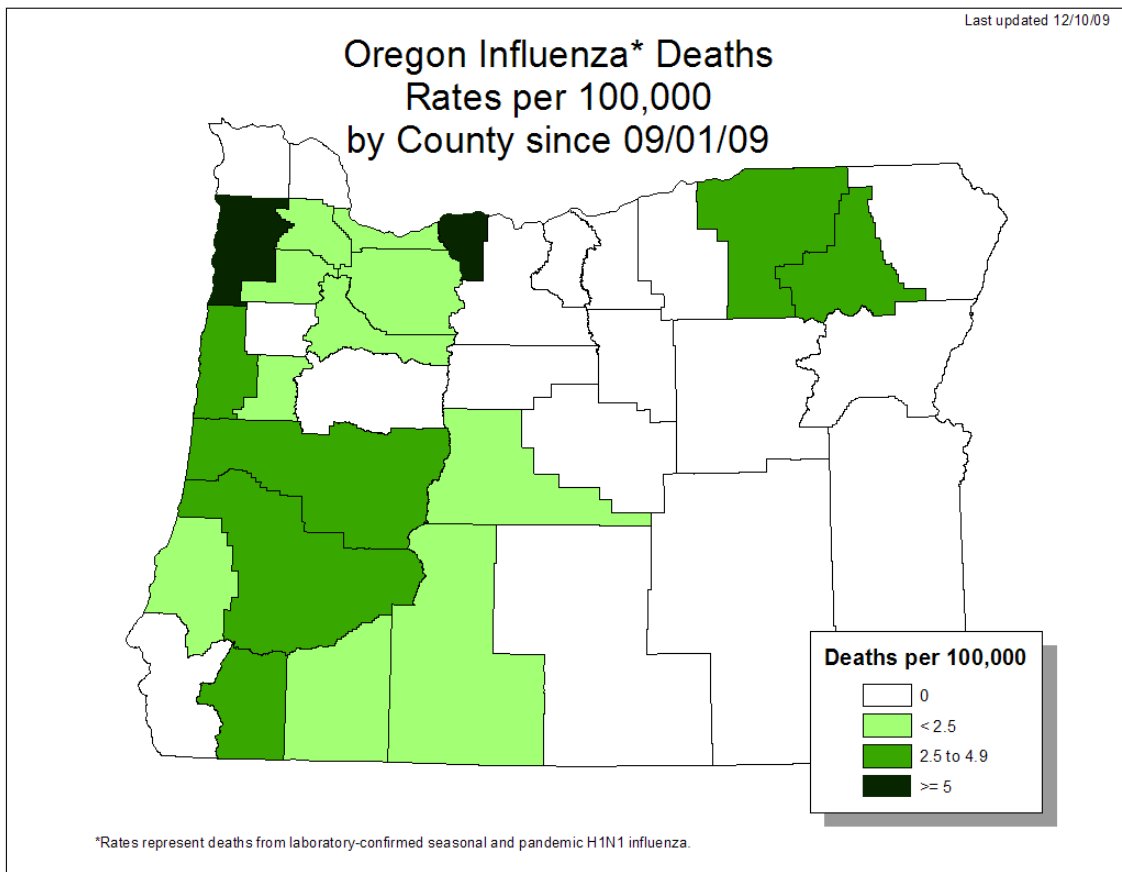
Distribution of Hospitalized Influenza Cases by County and Age Group Since September 1, 2009

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	18	1	3	3	5	4	2	0	20.9
Clackamas	109	15	20	10	36	21	7	0	28.9
Clatsop	7	0	0	2	2	1	1	0	15.9
Columbia	1	1	0	0	1	1	0	0	6.2
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	51	6	9	3	19	6	9	0	31.1
Douglas	41	4	3	4	7	19	5	0	39.9
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	104	12	13	8	20	34	16	0	50.2
Jefferson	12	3	2	1	6	1	0	0	57.9
Josephine	50	8	4	2	16	13	8	0	61.2
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	193	28	35	9	54	56	13	0	56.4
Lincoln	6	2	1	0	2	2	0	0	15.7
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	90	22	19	7	16	18	8	0	28.6
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	250	31	22	16	89	67	29	0	35.4
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	2	0	0	1	1	0	15.3
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	137	26	18	10	47	30	9	0	26.9
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1258	180	183	91	379	315	125	1	33.6
% total		14	14	7	30	25	10		
Age group rate per 100,000 pop		76.9	26.1	29.3	28.9	42.4	25.6		33.6

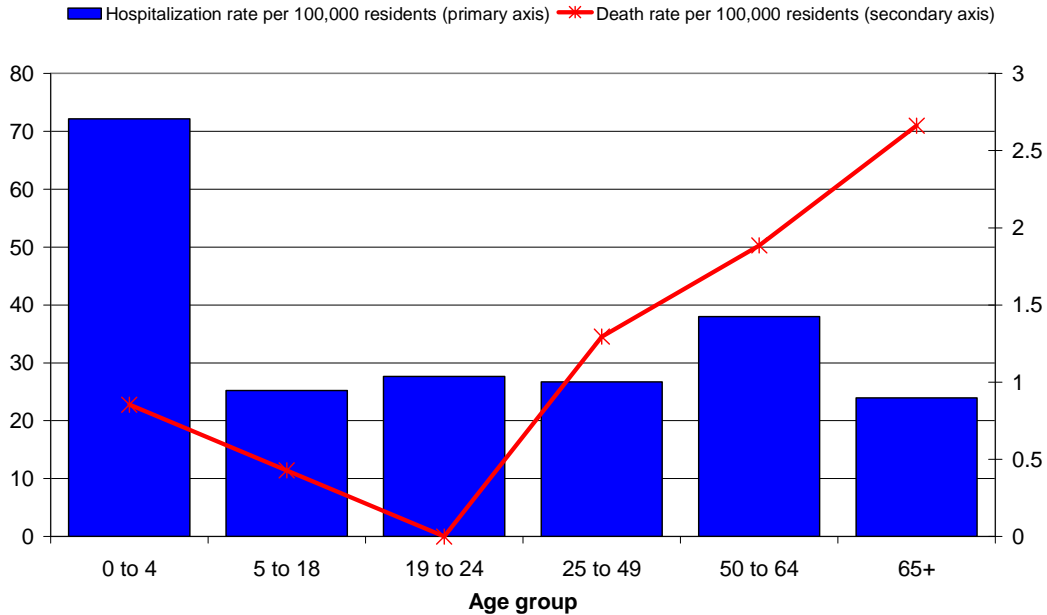


Distribution of Influenza Deaths, by County of Residence and Age Group Since September 1, 2009

County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	County rate per 100,000 pop
Benton	1	0	0	0	0	1	0	1.2
Clackamas	1	0	0	0	0	0	1	0.3
Coos	1	0	0	0	0	1	0	1.6
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	4	0	0	0	1	1	2	3.8
Hood River	2	0	0	1	1	0	0	9.2
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	12	0	0	0	4	4	4	3.5
Lincoln	2	0	0	0	2	0	0	4.5
Marion	2	0	0	0	0	1	1	0.6
Multnomah	16	1	0	0	5	7	3	2.2
Tillamook	2	0	1	0	0	1	0	7.7
Umatilla	3	0	1	0	2	0	0	4.1
Union	1	0	0	0	1	0	0	3.9
Washington	3	1	1	0	1	0	0	0.6
Yamhill	2	0	0	0	2	0	0	2.1
TOTAL #	63	2	3	1	23	18	16	1.7
Percentage		3	5	2	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.8	2.4	3.3	1.7



**Influenza Hospitalizations and Deaths,
Rates per 100,000 Oregon Residents, Since 09/01/09**



EIP Surveillance Area Hospitalizations

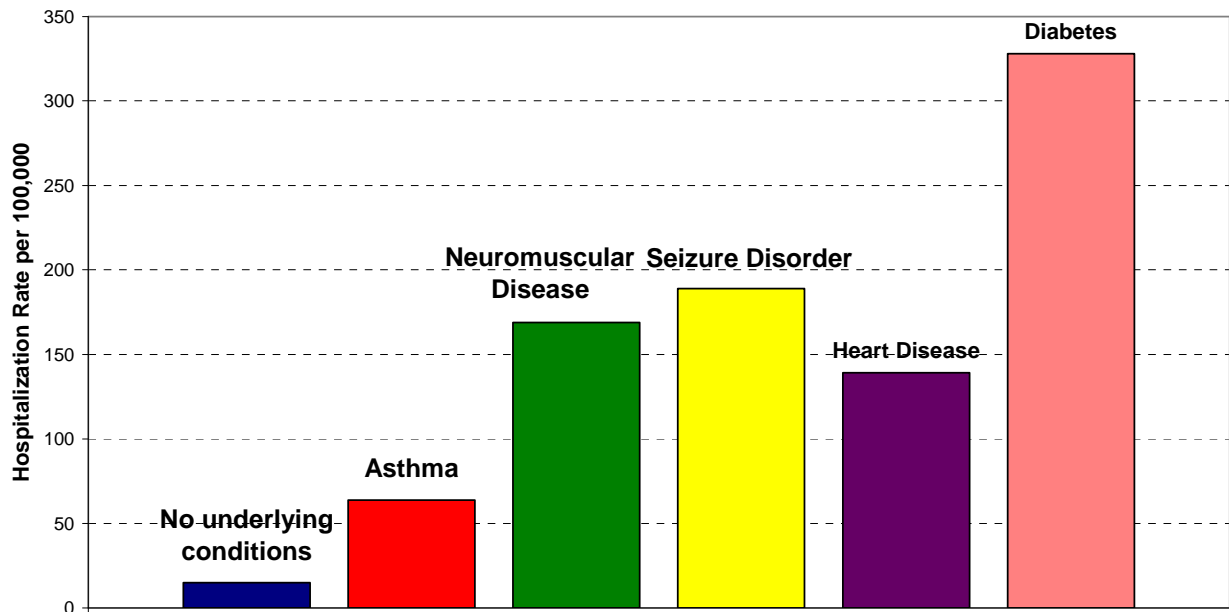
As a component of the Emerging Infections Program (EIP), extensive chart reviews are conducted for all influenza-associated hospitalizations in the Portland tri-county area (Clackamas, Multnomah and Washington counties). Chart reviews have been conducted for 73% of the cases hospitalized in the surveillance area since September 1st.

Characteristics of EIP area Hospitalized Cases

Pediatric Cases (ages 0 – 18), N=101

	N (%)
Age Group	
0 to 4	52 (51.5)
5 to 18	49 (48.5)
Sex	
Male	63 (62.4)
Female	38 (37.6)
Treatment	
Received antivirals	79 (78.2)
Outcomes	
Pneumonia	25 (24.8)
Bronchiolitis	1 (1.1)
Acute encephalopathy	1 (1.0)
Seizures (new diagnosis)	3 (3.0)
Admitted to ICU	15 (16.3)
ARDS	1 (1.0)
Mechanically Ventilated	6 (6.2)
ECMO	0
Died	3 (3.1)

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition

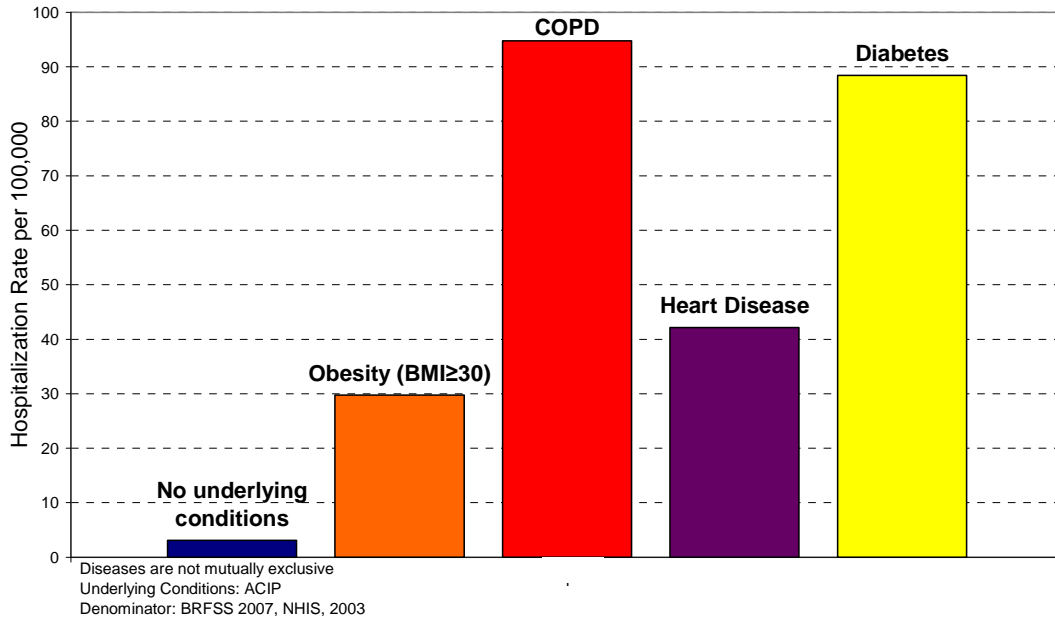


Diseases are not mutually exclusive
 Underlying Conditions: ACIP
 Denominator: NHIS, 2003 & OR DHS, 2009

Adult Cases (age >18 years), N=260

	N (%)
Age Group	
19 to 24	23 (8.8)
25 to 49	127 (48.8)
50 to 64	80 (30.8)
65+	30 (11.5)
Sex	
Male	97 (37.3)
Female	163 (62.7)
Treatment	
Received antivirals	233 (89.6)
Outcomes	
Pneumonia	121 (46.5)
Acute encephalopathy	4 (1.5)
Admitted to ICU	63 (24.6)
ARDS	20 (7.7)
Mechanically Ventilated	38 (15.2)
ECMO	1 (0.4)
Died	6 (2.4)

EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition

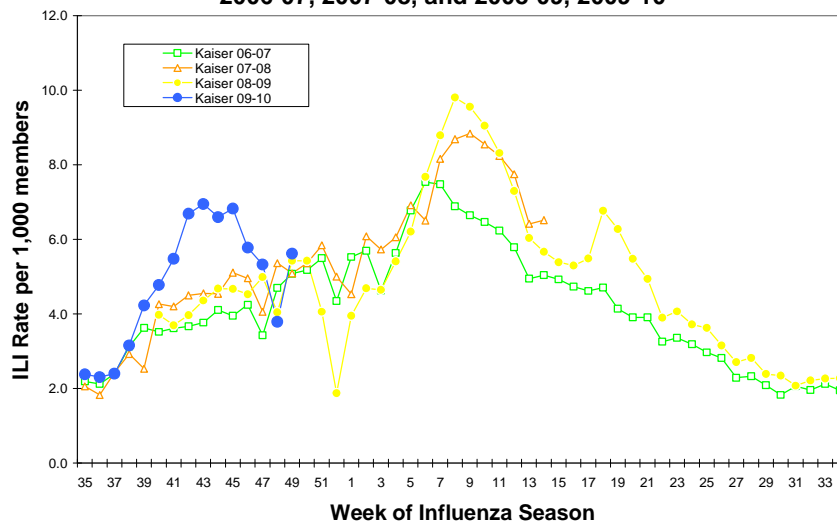


Outpatient Influenza-like Illness

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 increased slightly to 5.62 per 1,000 Kaiser members during the week ending December 5th. Despite the slight increase this week, the rate remains similar to what we expect to see this time of year during a typical influenza season.

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



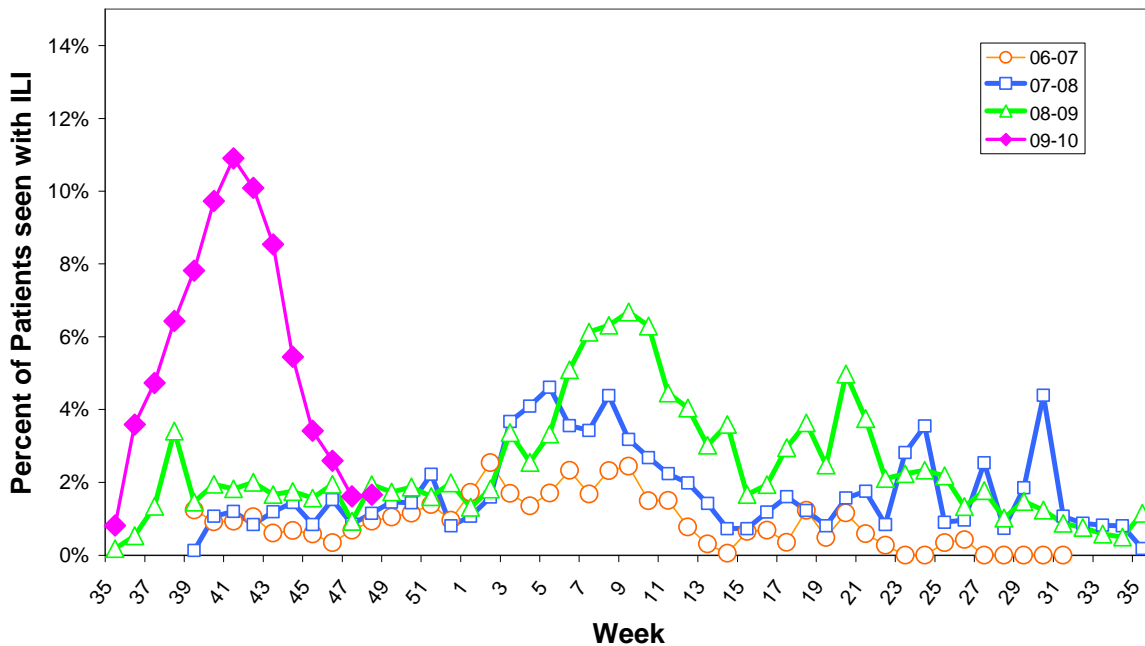
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 December 5th, 1.66% of patients seen had ILI, which is the seventh consecutive weekly decrease. Rates are what we expect to see this time of year.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending December 5th	4208	1.66	16
Week ending November 28th	3529	1.62	20
Week ending November 21st	5541	2.60	22

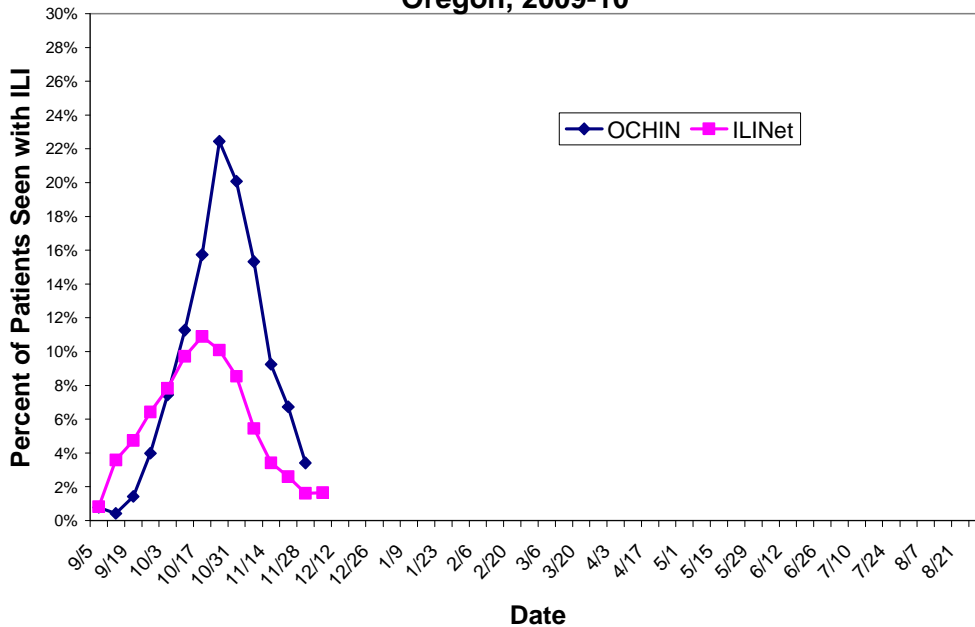
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



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 November 28th was 3.4%.

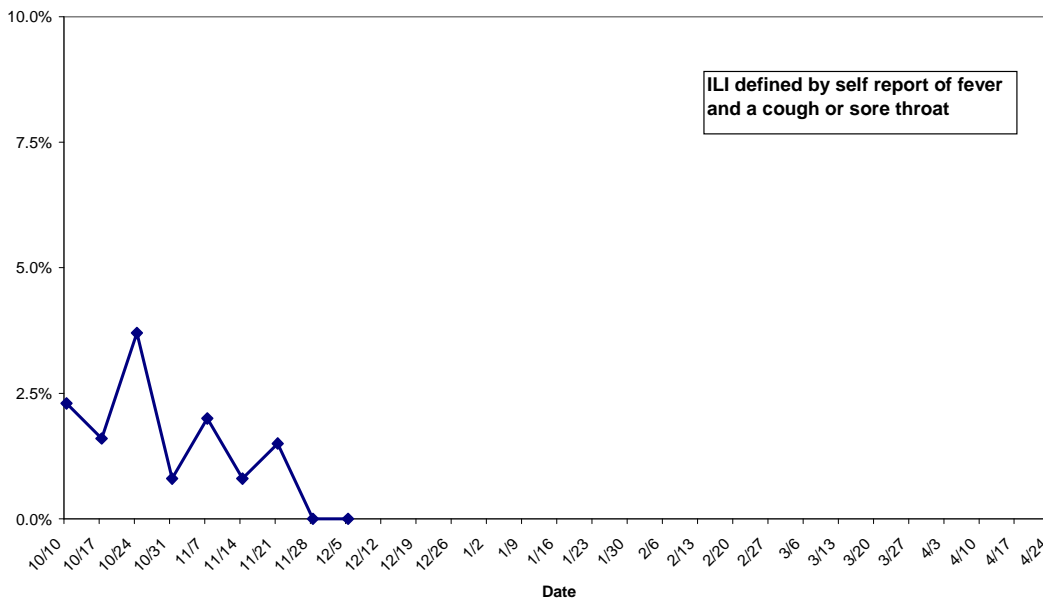
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 December 5th, none of the 82 respondents statewide reported having symptoms of ILI with an onset in the last 7 days. This is the second week consecutive week without any reports of ILI from BRFSS.

**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	146 (57)	1,062 (62)	11 (61)	1,219 (61)	7 (33)
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	2 (1)	4 (0)	4 (22)	10 (0)	5 (47)
Undetected	109 (42)	653 (38)	3 (17)	765 (38)	3 (20)
Total Tested	258	1,721	18	1,997	15

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 numbers of hospitalizations and deaths on our web page on Tuesdays and Fridays:

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/>.

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/>

Oregon Public Health Division, Acute & Communicable Disease Prevention Program 12/11/2009 3:44:19 PM

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

Published December 4th, 2009

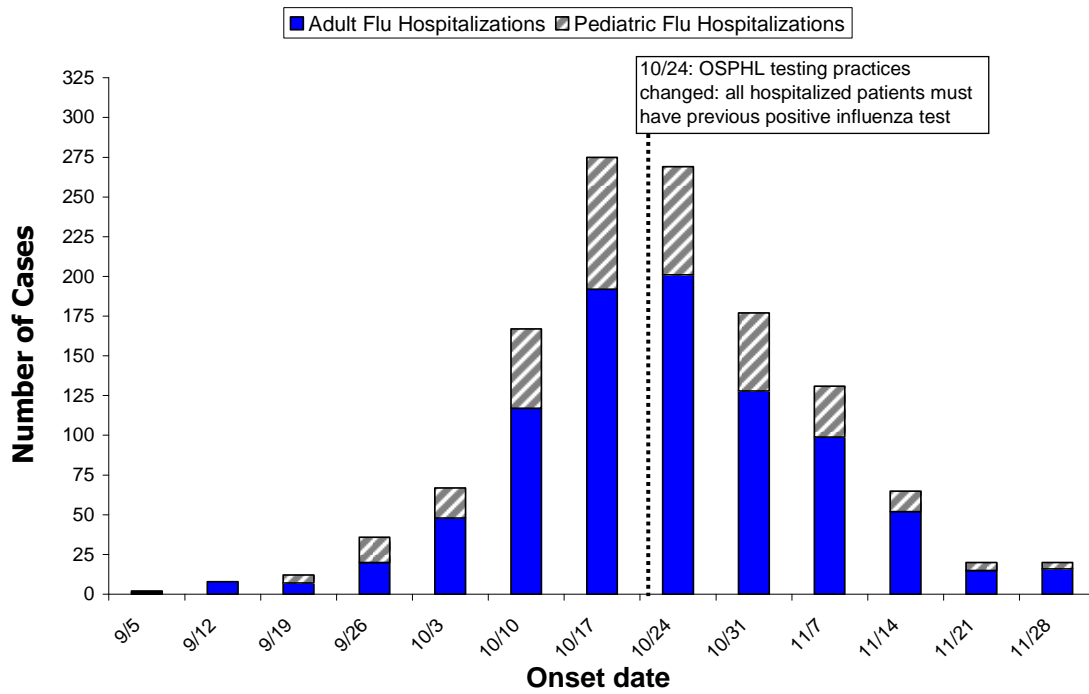


Summary

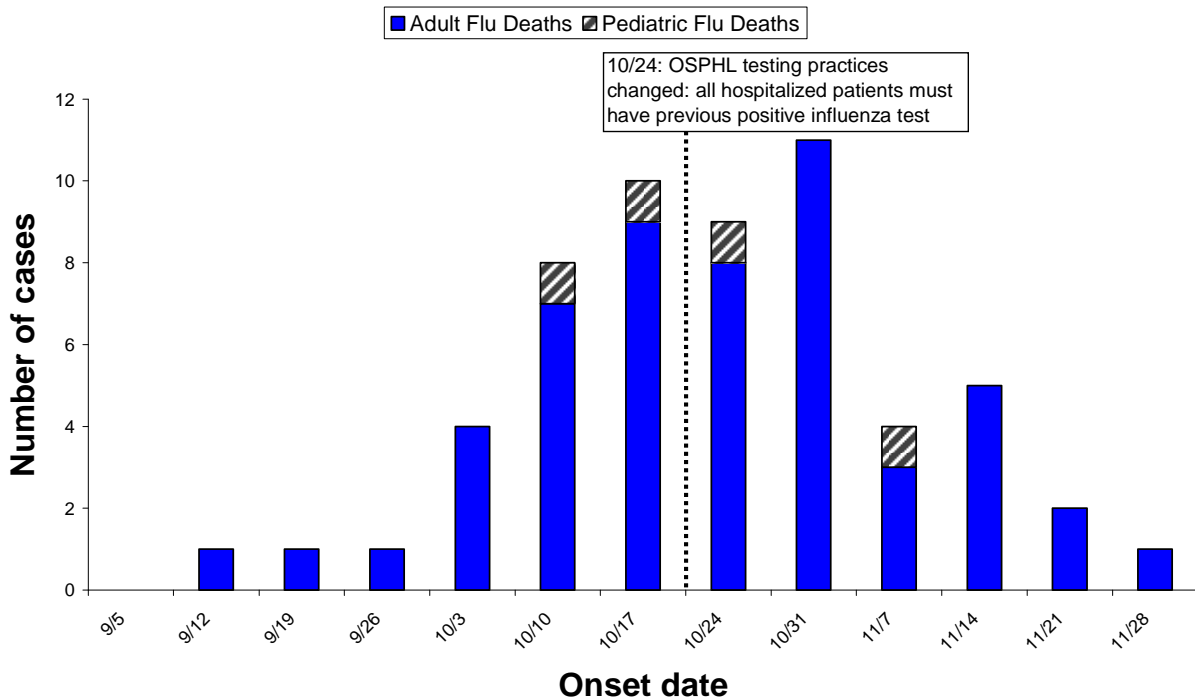
- Since September 1, 2009, 1,258 patients were hospitalized with laboratory-confirmed influenza statewide (912 adults and 346 children). Rates of hospitalization are substantially higher among individuals with underlying conditions that put them in a vaccine priority group, including pregnant women, children with neuromuscular disease or seizure disorder, children and adults with asthma, and adults with chronic lung disease or diabetes.
- Between November 22nd and 28th, 20 hospitalizations were reported (0.5 per 100,000 Oregonians), the second week in a row at this rate. Rates of hospitalizations have decreased steadily since late October and remain lower than we see during the peak of most influenza seasons.
- Fifty-seven people have died from influenza (53 adults and 4 children). Of the 53 individuals for whom information about underlying conditions is known, 51 (96%) had one or more underlying conditions.
- All three of our influenza-like illness (ILI) syndromic surveillance systems showed a decrease in ILI this week for the third week in a row. Rates are very similar to levels we would expect to see this time of year in a typical influenza season.

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

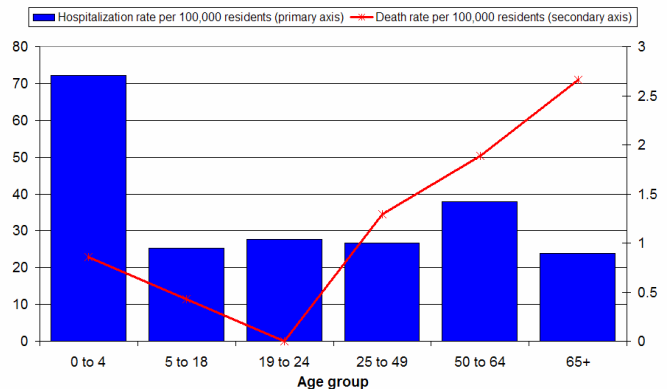
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	18	1	3	3	5	4	2	0	20.9
Clackamas	108	15	20	10	36	20	7	0	28.7
Clatsop	7	0	1	2	2	1	1	0	18.6
Columbia	1	0	0	0	0	1	0	0	2.1
Coos	31	2	4	3	12	7	3	0	49.0
Crook	6	1	1	1	3	0	0	0	22.4
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	51	6	9	3	19	5	9	0	30.5
Douglas	41	3	3	4	7	19	5	0	39.0
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	5	1	1	1	2	0	0	0	23.1
Jackson	104	13	13	8	20	34	16	0	50.7
Jefferson	12	3	2	1	5	1	0	0	53.5
Josephine	50	8	4	2	16	12	8	0	60.0
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	193	28	35	9	54	54	13	0	55.8
Lincoln	6	2	1	0	1	2	0	0	13.4
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	90	22	19	7	16	18	8	0	28.6
Morrow	4	1	1	0	1	1	0	0	32.0
Multnomah	250	31	22	16	87	66	28	0	34.8
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	137	26	18	10	45	29	9	0	26.3
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1258	179	183	91	372	308	124	1	33.2
% total		14	15	7	30	24	10		
Age group rate per 100,000 pop		76.4	26.1	29.3	28.3	41.5	25.4		33.2

Characteristics of Hospitalized Influenza Cases

Age	
Median	37
Range	0-92
Sex	N (%)
Male	575 (46)
Female	681 (54)
Unknown	2 (0)
Severity	
Admitted to ICU*	62 of 263 (24)
Pregnant	49 of 681 (7)

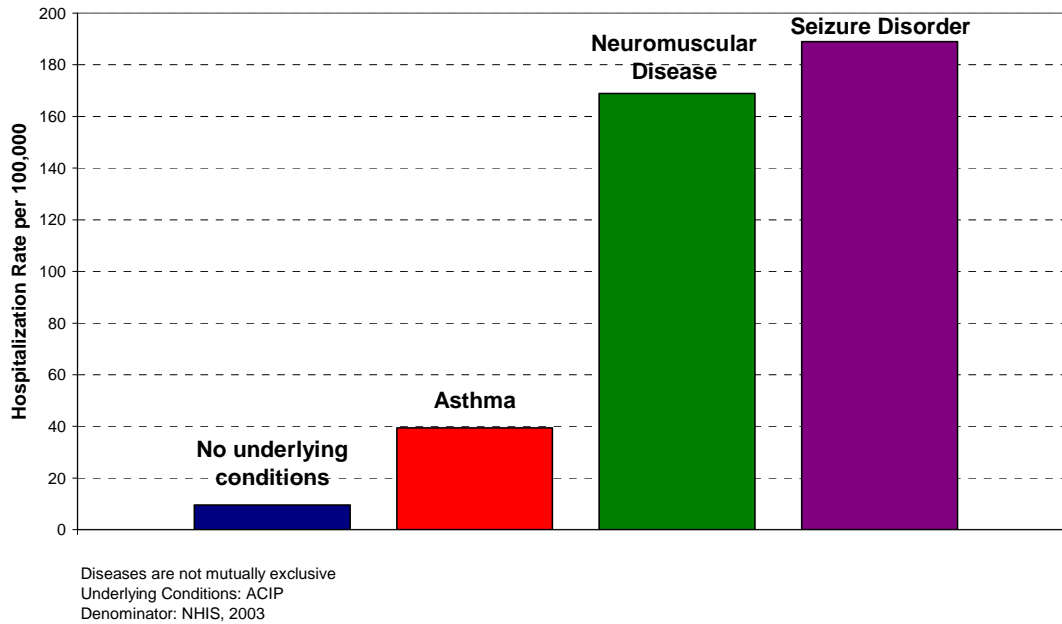
*ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties whose charts have been reviewed as a component of EIP hospitalization surveillance

Influenza Hospitalizations and Deaths, Rates per 100,000 Oregon Residents
September 1, 2009 - December 4, 2009

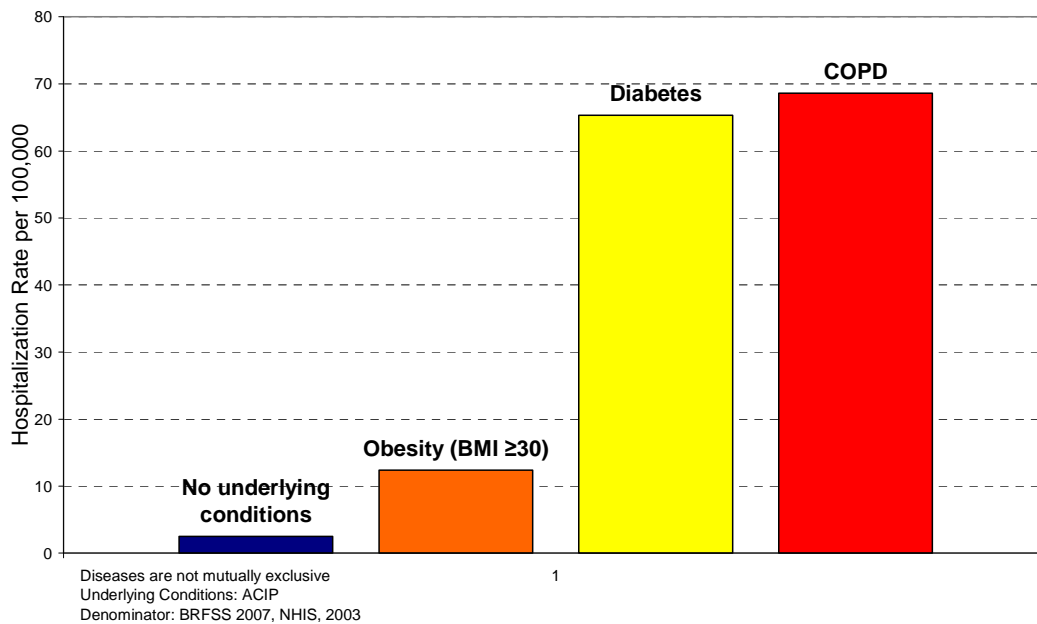


- Comprehensive chart reviews have been conducted for 53% of the cases hospitalized in the Emerging Infections Program surveillance area (Clackamas, Multnomah and Washington counties).

EIP Surveillance Area Pediatric Influenza Hospitalization Rates by Underlying Condition



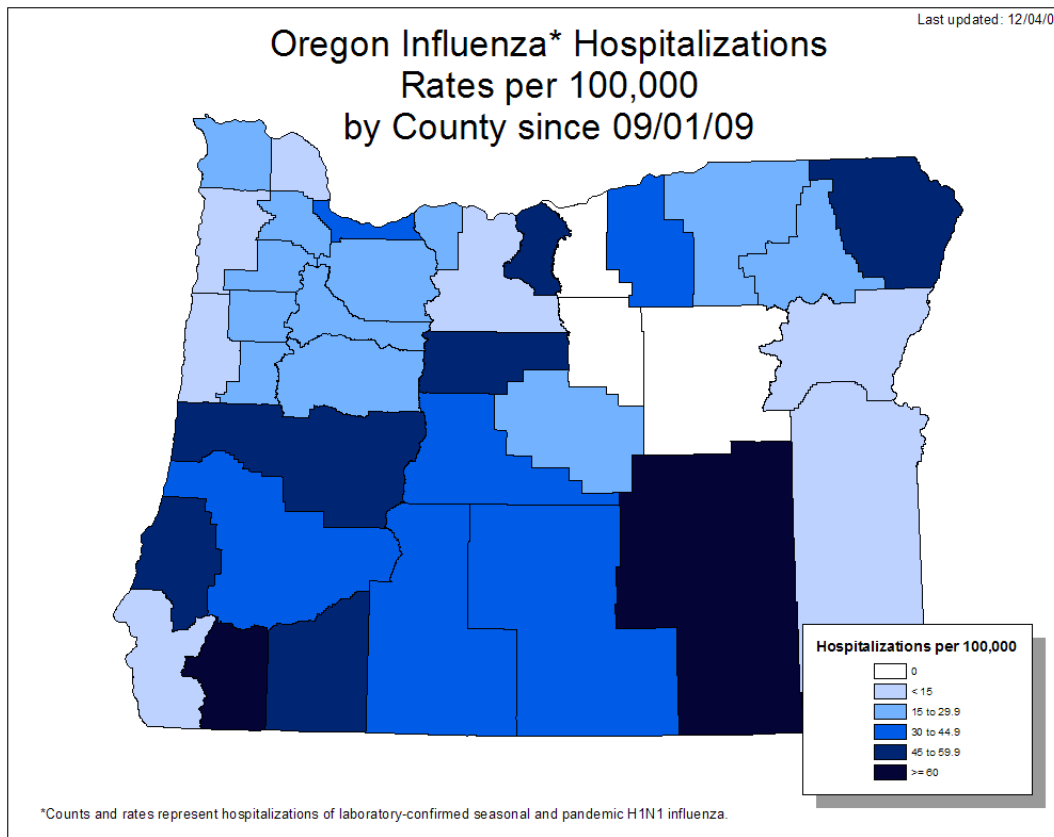
EIP Surveillance Area Adult Influenza Hospitalization Rates by Underlying Condition



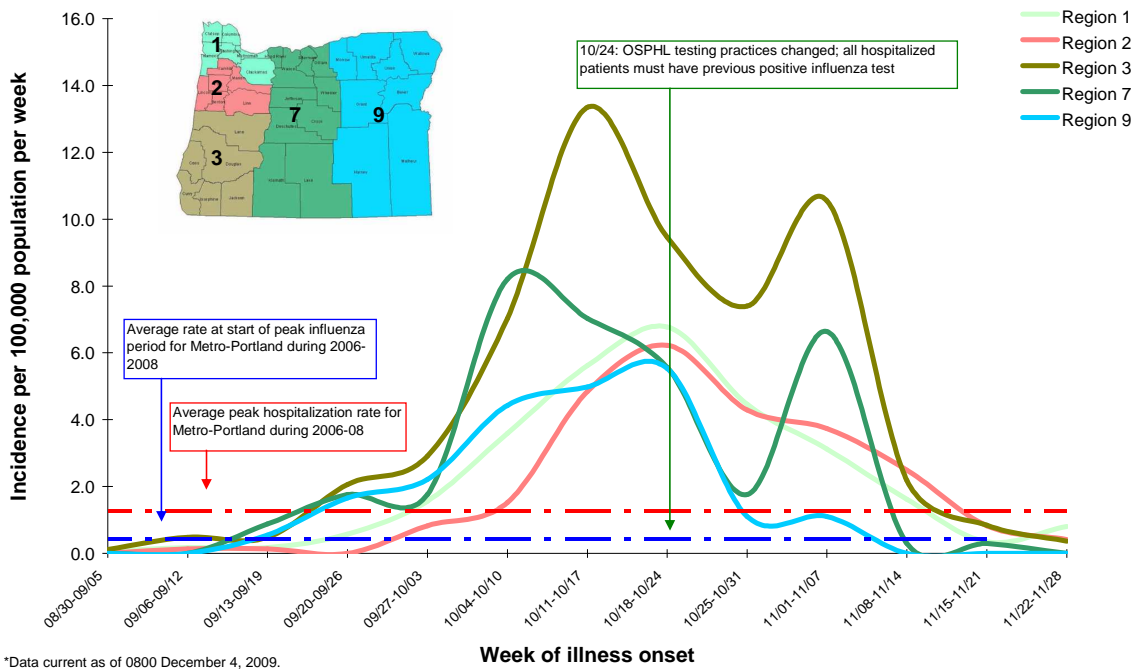
The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. We are currently updating the number of hospitalizations and deaths daily on our web page:

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/>.

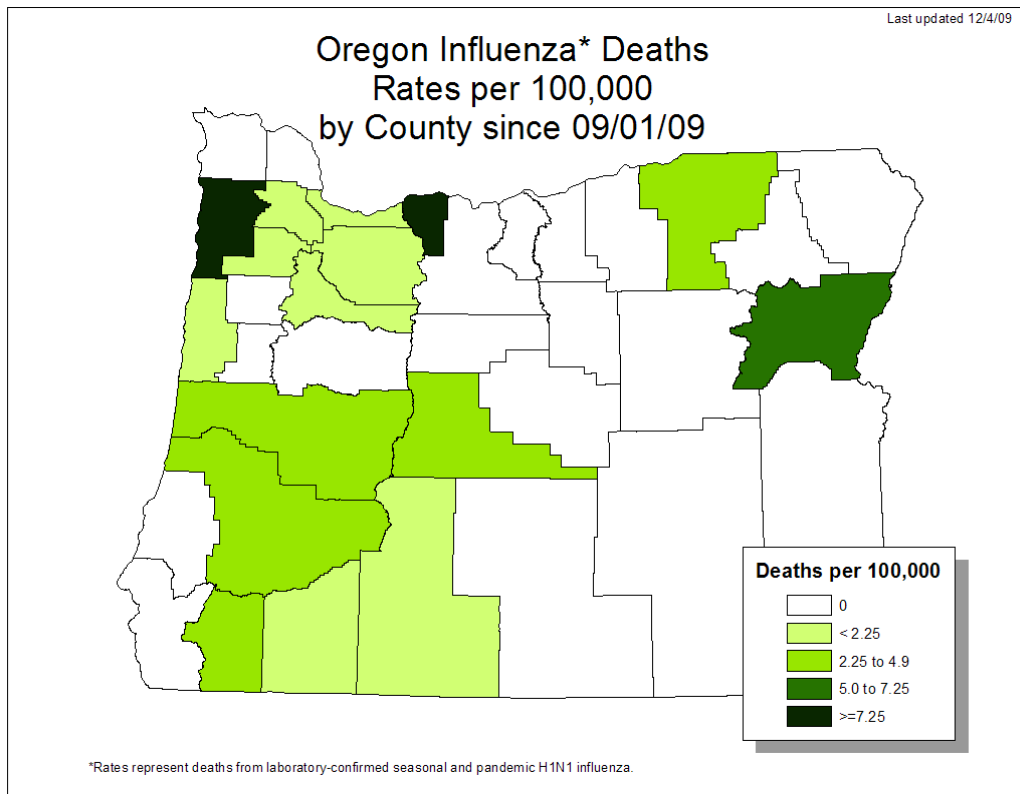


Influenza-related hospitalizations by region, Oregon, September 1, 2009 to November 28, 2009*



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+	County rate per 100,000 pop
Benton	1	0	0	0	0	1	0	1.2
Clackamas	1	0	0	0	0	0	1	0.3
Deschutes	4	0	0	0	1	0	3	2.4
Douglas	3	0	0	0	1	1	1	2.9
Hood River	2	0	0	1	1	0	0	9.2
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	11	0	0	0	4	4	3	3.2
Lincoln	1	0	0	0	1	0	0	2.2
Marion	2	0	0	0	0	1	1	0.6
Multnomah	15	1	0	0	4	7	3	2.1
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 #	57	2	3	1	20	17	14	1.5
Percentage		4	6	0	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.3	1.5	2.2	2.9	0.0

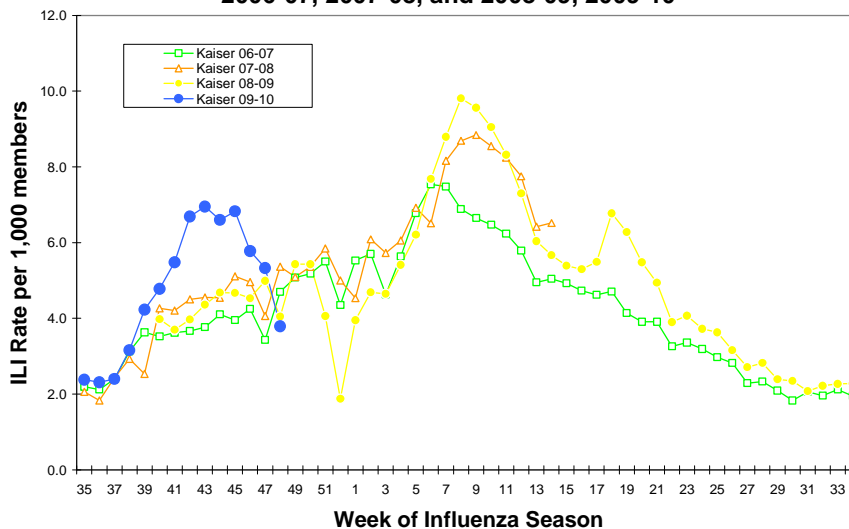


Outpatient Influenza-like Illness

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 3.79 per 1,000 Kaiser members during the week ending November 28th. This rate is what we expect to see this time of year during a typical influenza season.

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



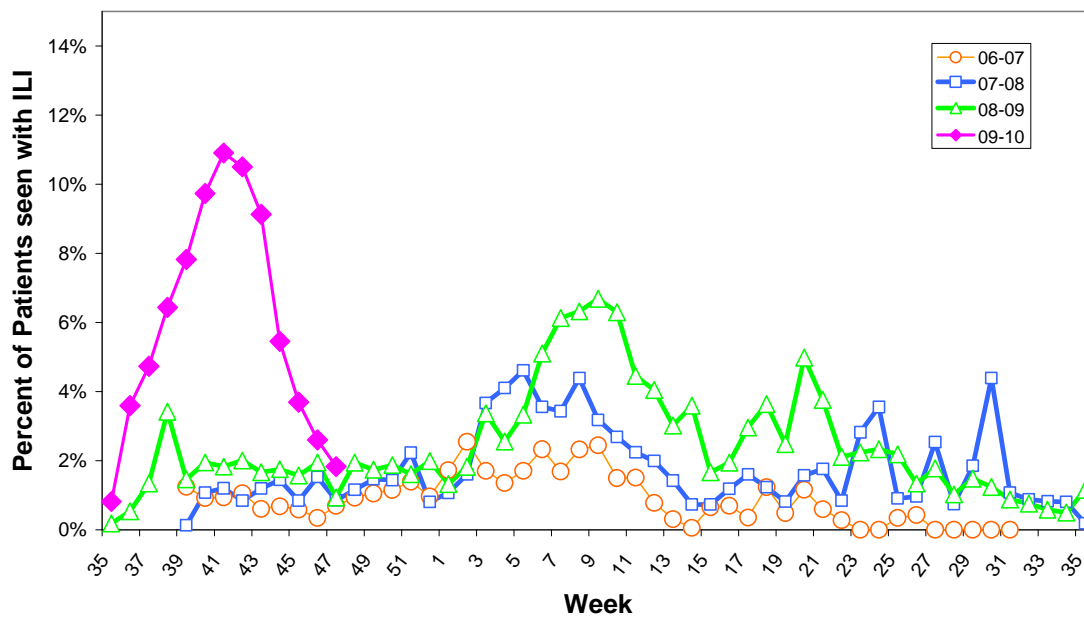
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 28th, 1.82% of patients seen had ILI, which is the sixth consecutive weekly decrease. Rates have returned to what we expect to see this time of year.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending November 28 th	3069	1.82	18
Week ending November 21 st	5541	2.60	22
Week ending November 14 th	5061	3.69	22

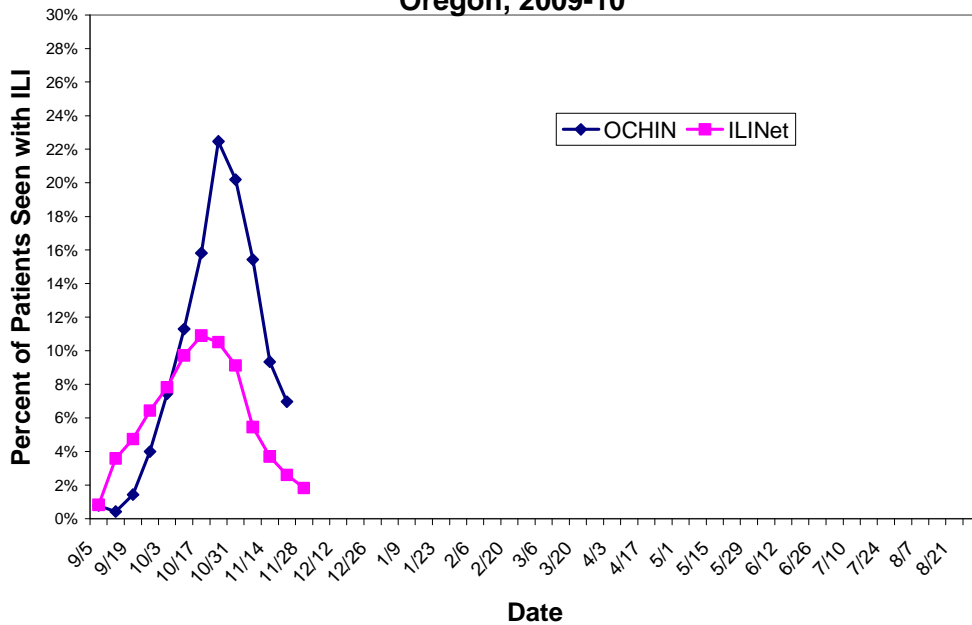
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



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 November 21st was 7.0%.

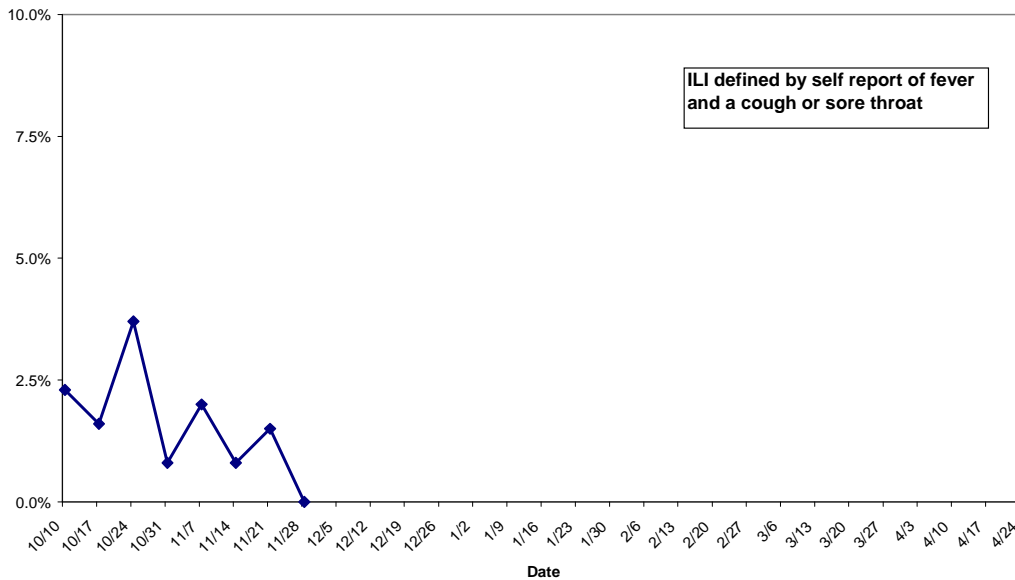
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 28th, none of the 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	145 (57)	1,052 (61)	11 (79)	1,208 (61)	17 (77)
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	5 (2)	8 (1)	0	13 (1)	4 (18)
Undetected	104 (41)	653 (38)	3 (21)	760 (38)	1 (5)
Total Tested	255	1,715	14	1,984	22

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/>

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

Published November 30th, 2009

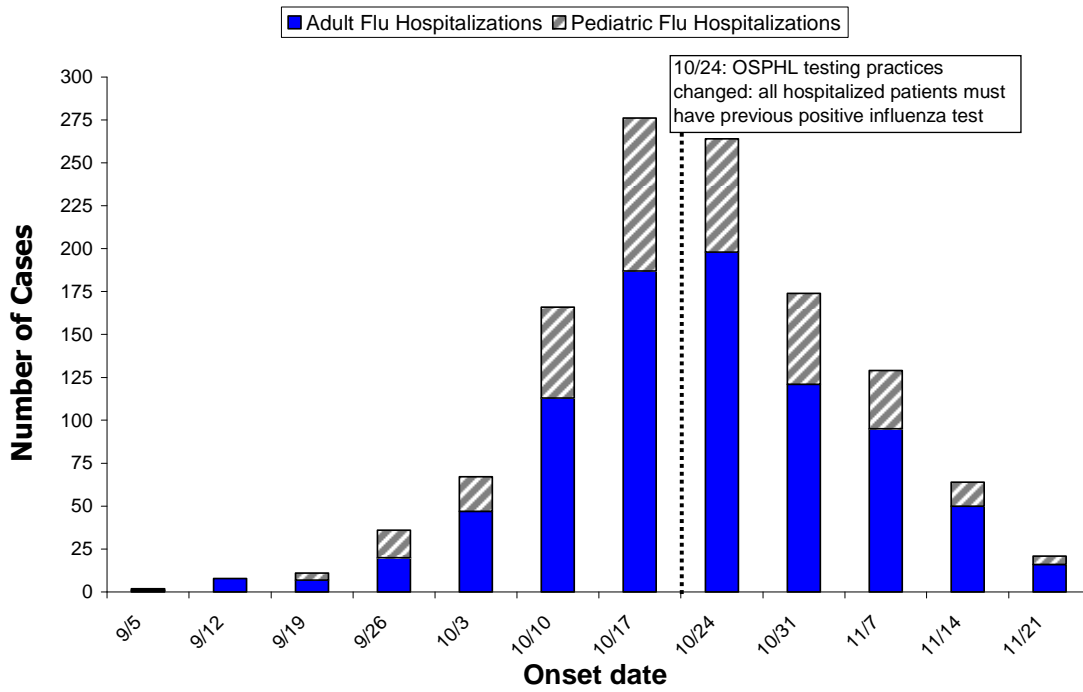


Summary

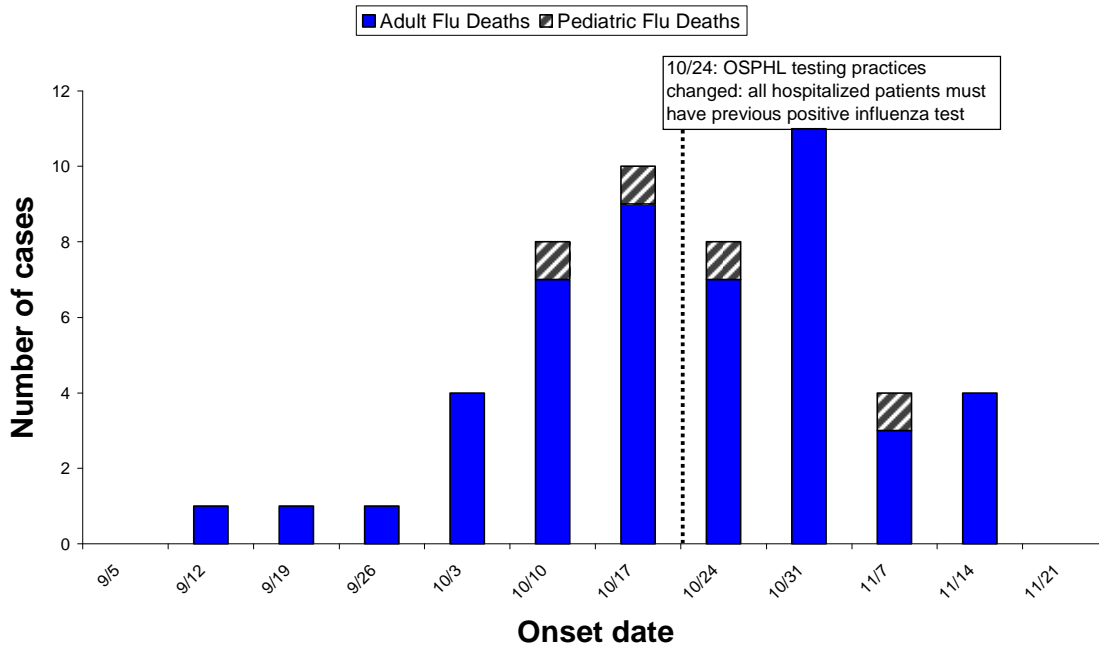
- Since September 1, 2009, 1,223 patients were hospitalized with laboratory-confirmed influenza statewide (882 adults and 339 children). Rates of hospitalization are substantially higher among individuals with underlying conditions that put them in a vaccine priority group, including pregnant women, children with developmental disabilities, children and adults with asthma, and adults with chronic cardiovascular or lung disease.
- Between November 15th and 21st, 18 hospitalizations were reported (0.4 per 100,000 Oregonians). This represents a 71% decrease in hospitalizations from the previous week. Rates of hospitalizations have decreased for the past five consecutive weeks and are now lower than we see during the peak of most influenza seasons.
- Fifty-two people have died from influenza (48 adults and 4 children). Of the 43 adults for whom information about underlying conditions is known, 98% had one or more underlying conditions. All four 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 for the second week in a row. Rates have almost returned to levels we would expect to see this time of year in a typical influenza season.

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

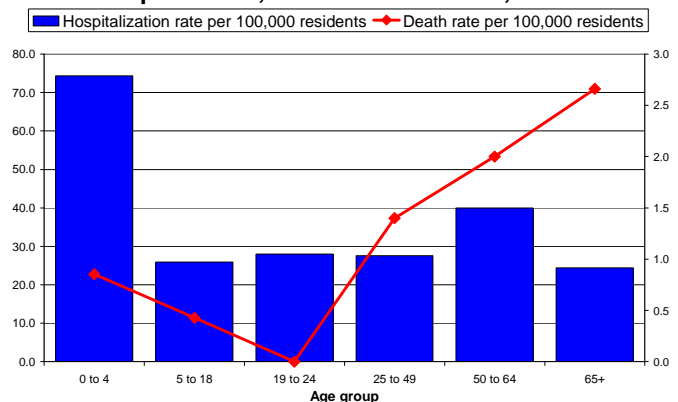
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	17	1	3	3	5	3	2	0	19.7
Clackamas	103	14	20	9	36	18	6	0	27.3
Clatsop	8	0	1	2	3	1	1	0	21.2
Columbia	1	0	0	0	0	1	0	0	2.1
Coos	31	2	4	3	12	7	3	0	49.0
Crook	1	0	1	0	0	0	0	0	3.7
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	50	6	9	3	18	5	9	0	29.9
Douglas	41	3	3	4	7	19	5	0	39.0
Gilliam	0	0	0	0	0	0	0	0	0.0
Grant	0	0	0	0	0	0	0	0	0.0
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	6	1	1	1	3	0	0	0	27.7
Jackson	104	13	13	8	20	34	16	0	50.7
Jefferson	12	3	2	1	5	1	0	0	53.5
Josephine	50	8	4	2	16	12	8	0	60.0
Klamath	25	1	8	0	4	8	4	0	37.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	190	28	34	9	54	52	13	0	54.9
Lincoln	6	2	1	0	1	2	0	0	13.4
Linn	33	4	2	3	10	10	4	0	29.9
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	85	22	19	7	15	15	7	0	27.0
Morrow	3	1	1	0	0	1	0	0	24.0
Multnomah	241	29	22	14	84	66	26	0	33.6
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	130	25	18	10	43	26	8	0	25.0
Wheeler	0	0	0	0	0	0	0	0	0.0
Yamhill	26	1	2	1	13	5	3	1	27.6
TOTAL	1223	174	182	87	363	297	119	1	32.3
% total		14	15	7	30	24	10		
Age group rate per 100,000 pop		74.3	25.9	28.0	27.6	40.0	24.4		32.3

Characteristics of Hospitalized Influenza Cases

Age	
Median	37
Range	0-92
Sex	N (%)
Male	560 (46)
Female	661 (54)
Unknown	2 (0)
Severity	
Admitted to ICU*	49 of 237 (21)
Pregnant	52 of 661 (8)

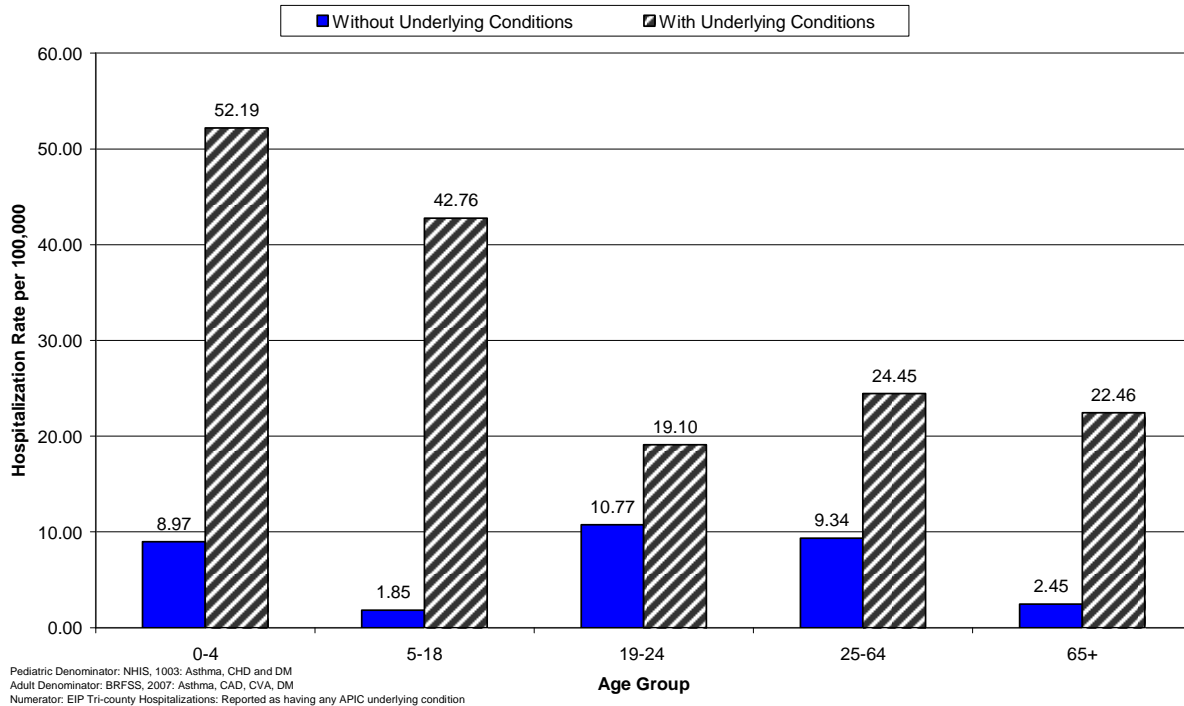
*ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties whose charts have been reviewed as a component of EIP hospitalization surveillance

Influenza Hospitalization and Deaths, September 1, 2009 - November 30, 2009



- Comprehensive chart reviews have been conducted for 50% of the cases hospitalized in the Emerging Infections Program surveillance area (Clackamas, Multnomah and Washington counties).

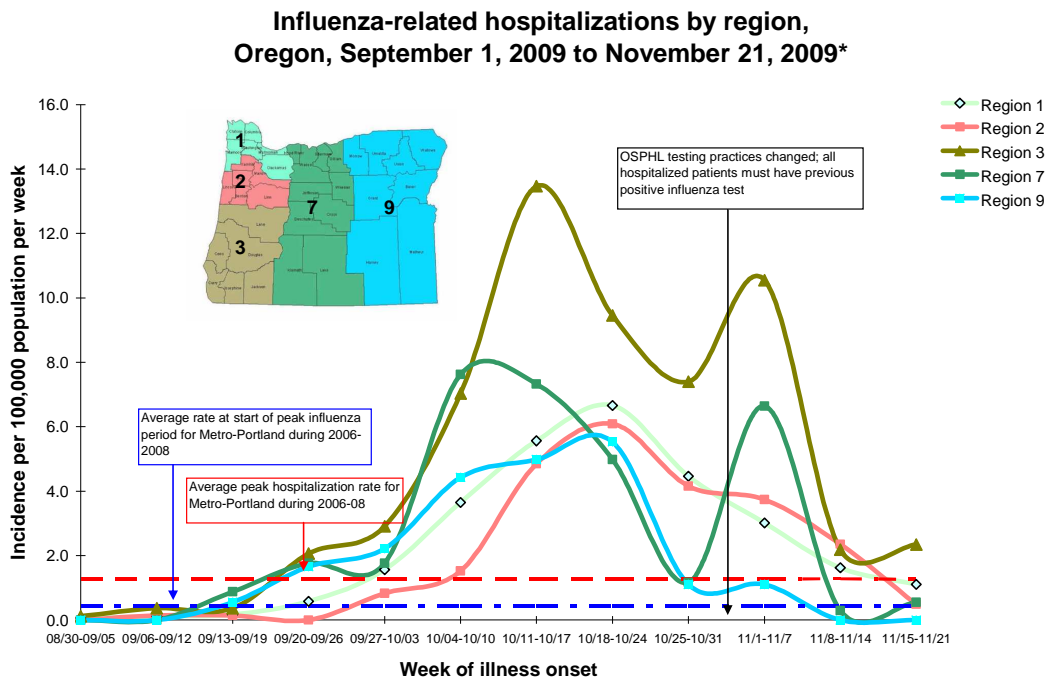
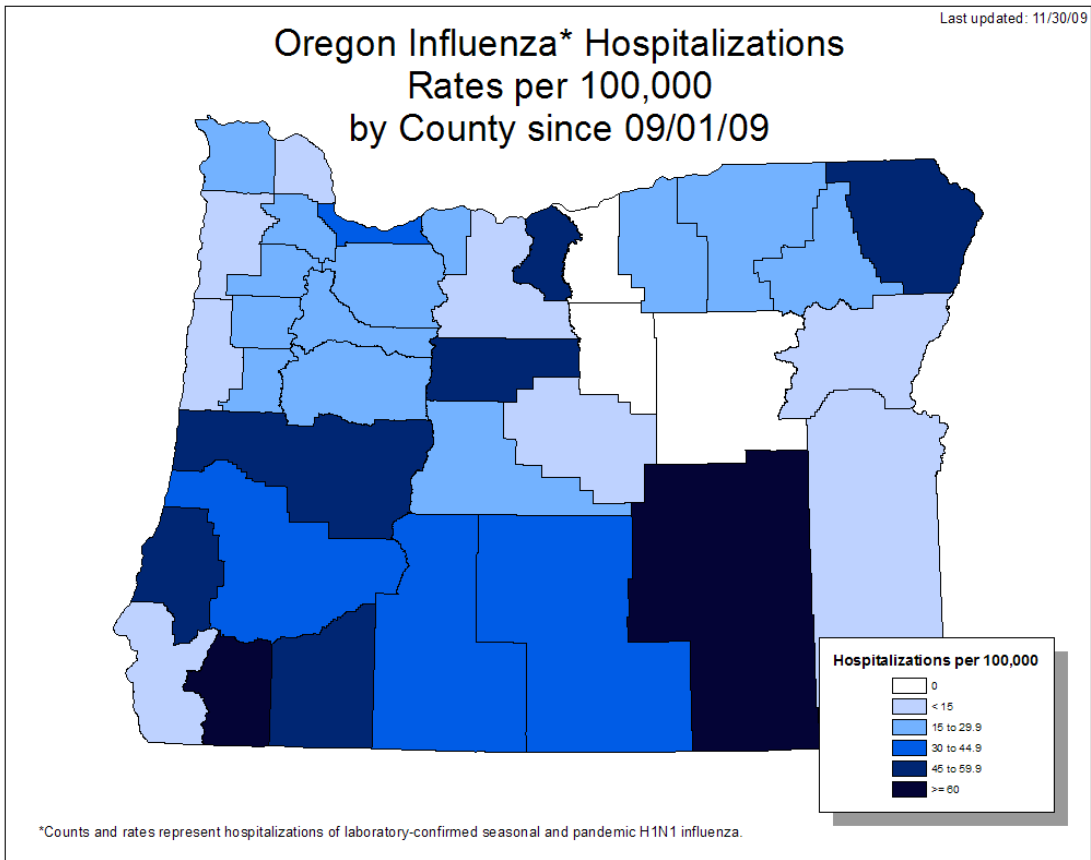
EIP Surveillance Area Influenza Hospitalization Rates Underlying Conditions by Age



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:

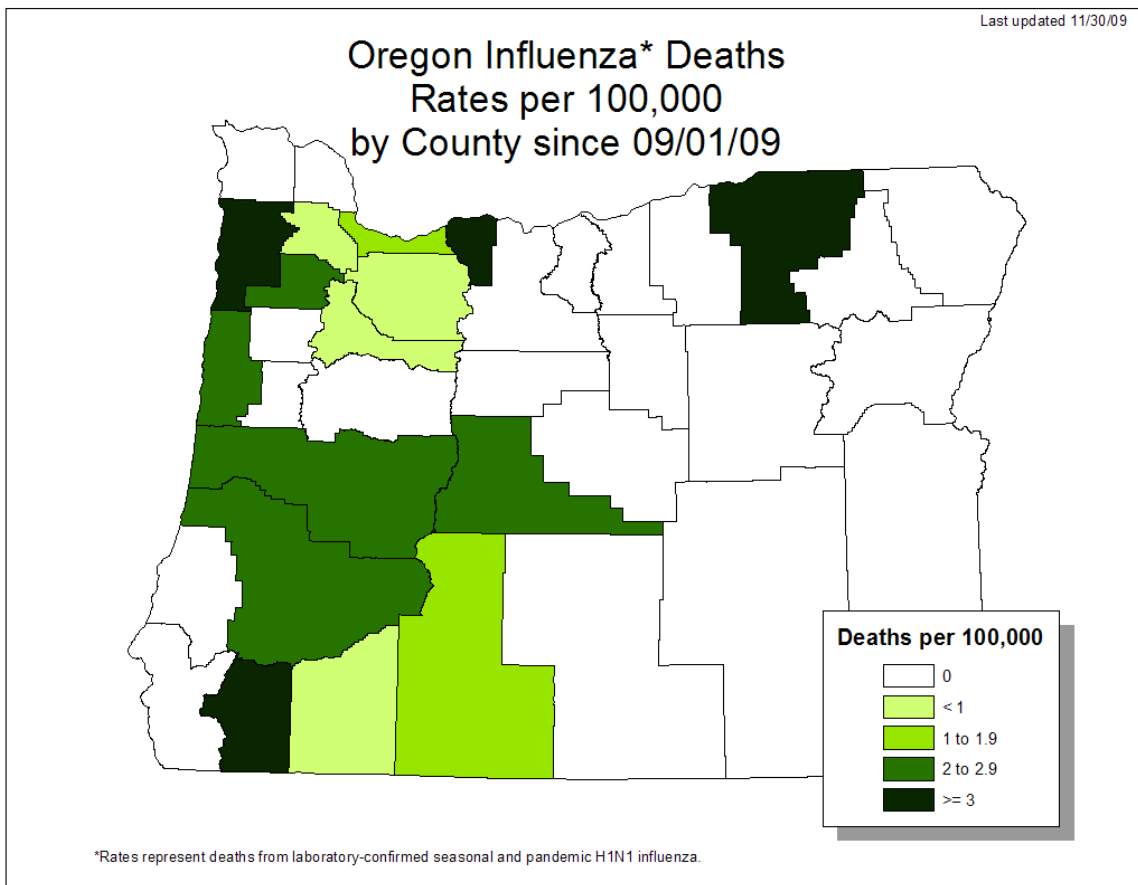
http://www.flu.oregon.gov/DHS/ph/acd/swineflu_investigation.shtml.

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



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+	County 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	3	0	0	0	1	1	1	2.9
Hood River	1	0	0	0	1	0	0	4.6
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	10	0	0	0	4	3	3	2.9
Lincoln	1	0	0	0	1	0	0	2.2
Marion	2	0	0	0	0	1	1	0.6
Multnomah	13	1	0	0	3	7	2	1.8
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 #	52	2	3	0	19	15	13	1.4
Percentage		4	6	0	37	29	25	
Age Group rate per 100,000 pop		0.9	0.4	0.0	1.4	2.0	2.7	0.0

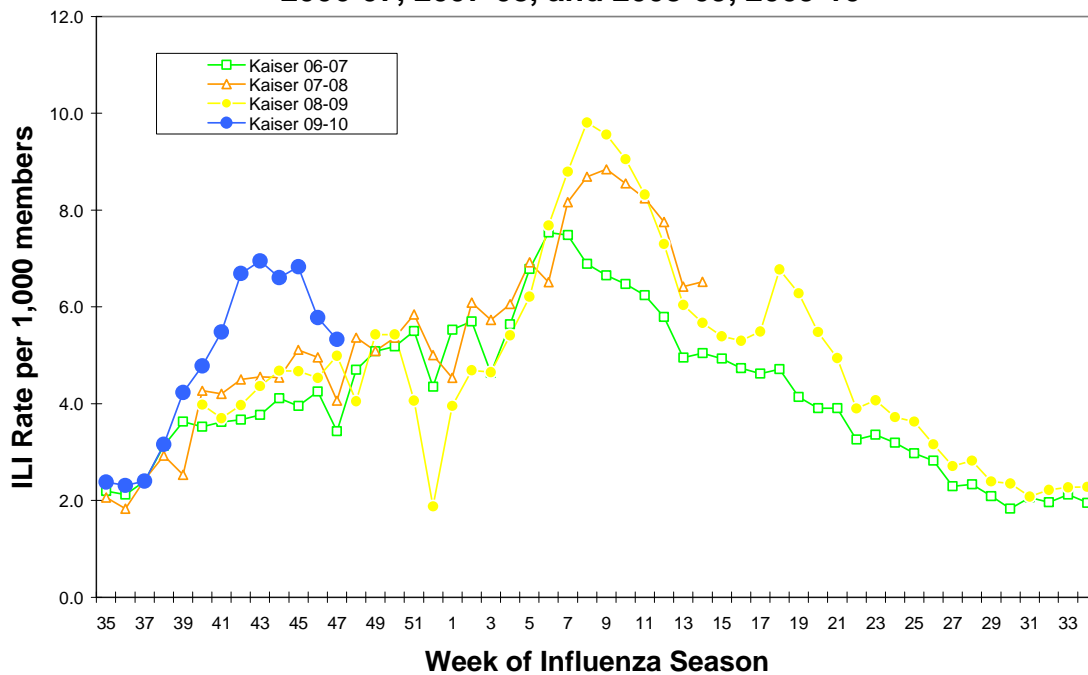


Outpatient Influenza-like Illness

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 5.33 per 1,000 Kaiser members during the week ending November 21st. These rates have declined nearly to seasonal influenza levels.

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



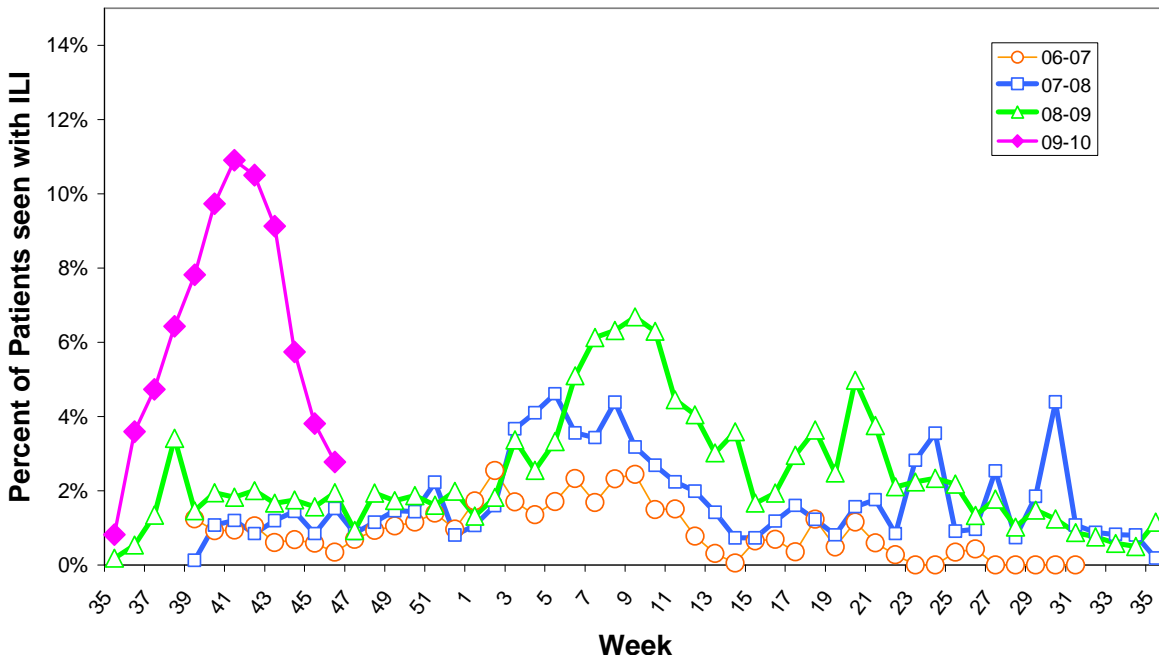
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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 21, 2.77% of patients seen had ILI, which is the fourth consecutive weekly decrease. Rates are only slightly higher than what we normally expect to see this time of year.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending November 21 st	4727	2.77	20
Week ending November 14 th	4677	3.81	21
Week ending November 7 th	4457	5.74	19

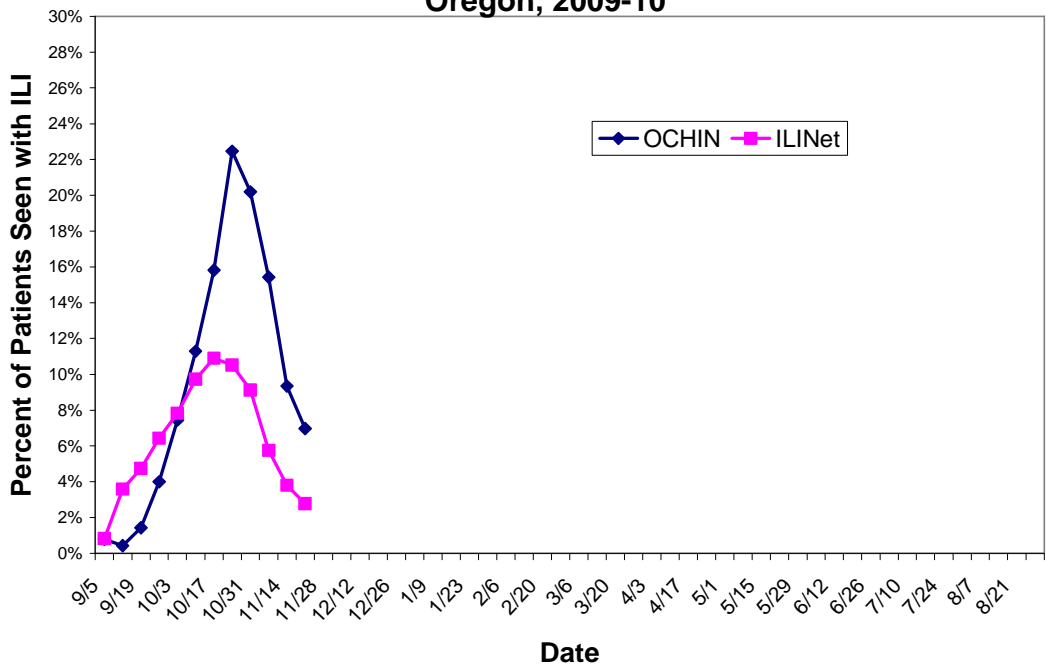
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



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 November 21st was 7.0%.

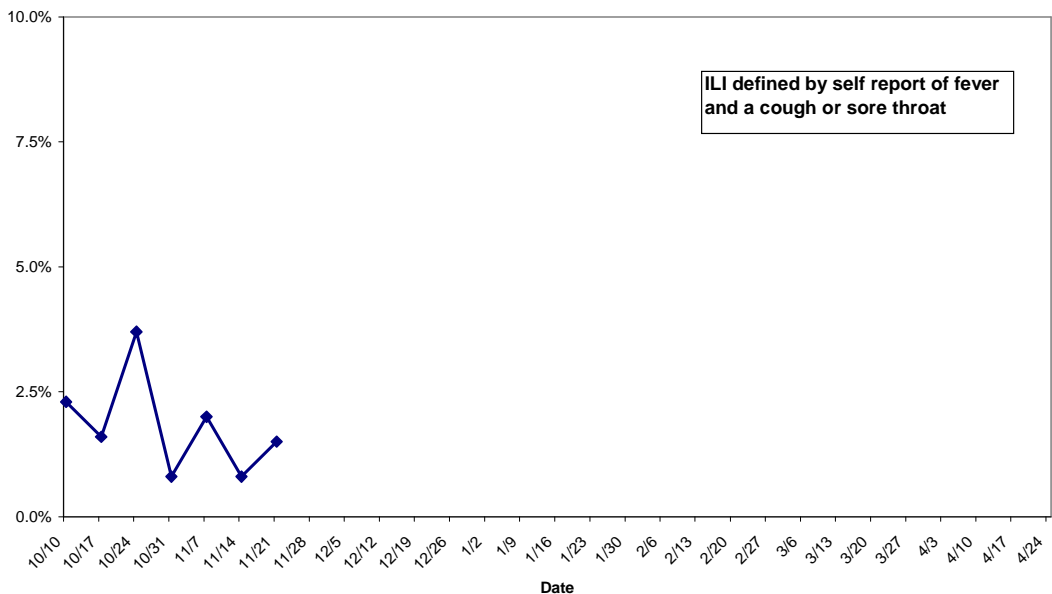
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 21st, 1.5% 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	144 (57)	1,036 (61)	11 (79)	1,191 (61)	31 (74)
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	7 (3)	5 (0)	0	70 (3)	7 (16)
Undetected	100 (40)	650 (39)	3 (21)	753 (38)	4 (10)
Total Tested	252	1,693	14	1,959	42

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/>

**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/>

FLU BITES

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

Published November 20th, 2009

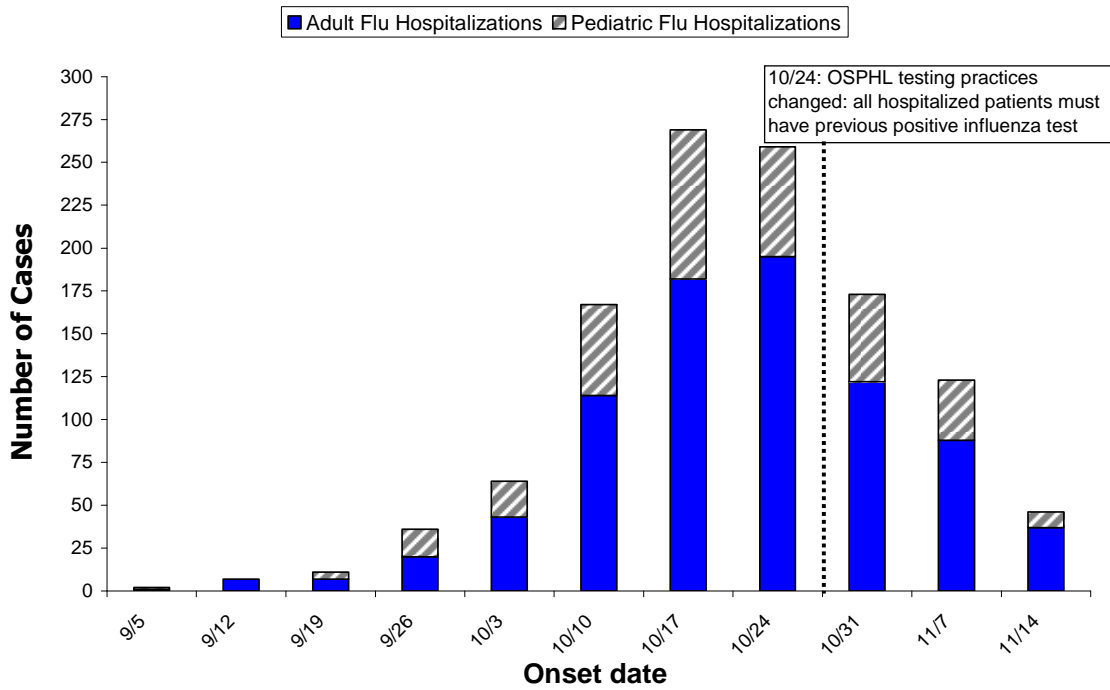


Summary

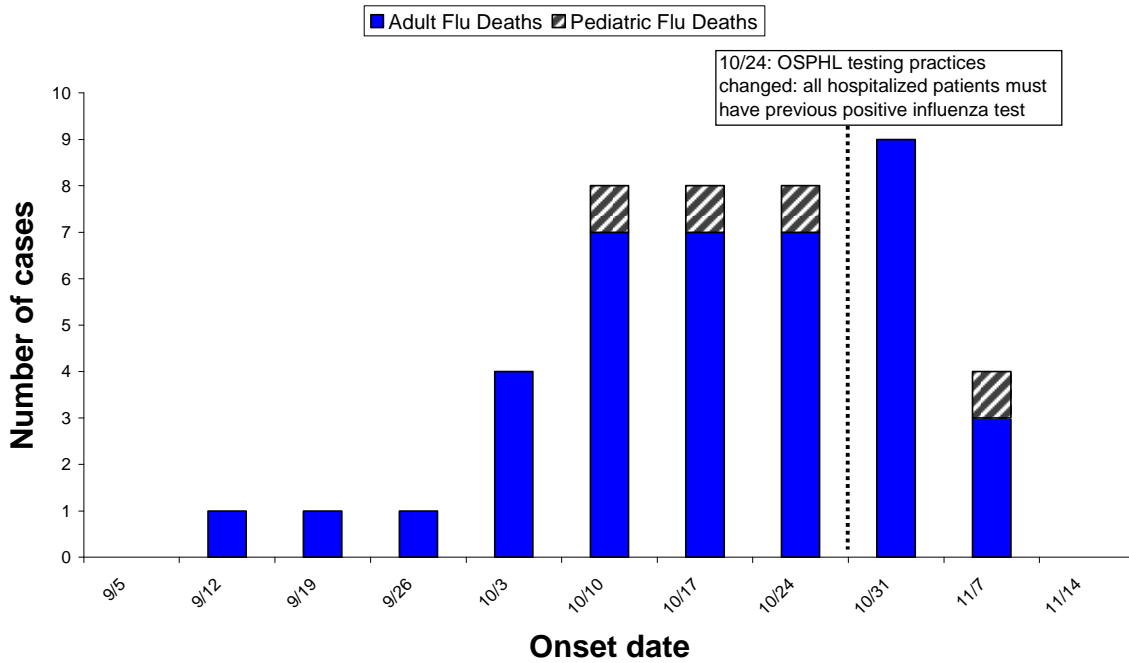
- Since September 1, 2009, 1,161 patients were hospitalized with laboratory-confirmed influenza statewide (819 adults and 342 children). Rates of hospitalization are substantially higher among individuals with underlying conditions that put them in a vaccine priority group, including pregnant women, 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 individuals 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

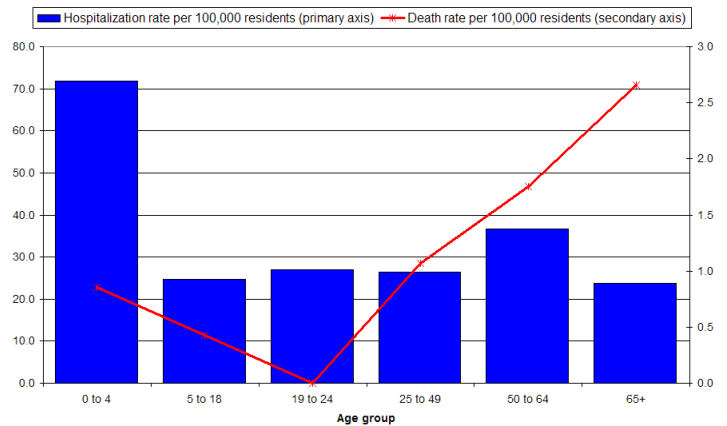
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	16	1	3	3	5	2	2	0	18.6
Clackamas	101	14	20	9	34	18	6	0	26.8
Clatsop	4	0	0	1	1	1	1	0	10.6
Columbia	1	0	0	0	0	1	0	0	2.1
Coos	31	2	4	3	12	7	3	0	49.0
Crook	1	0	1	0	0	0	0	0	3.7
Curry	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)

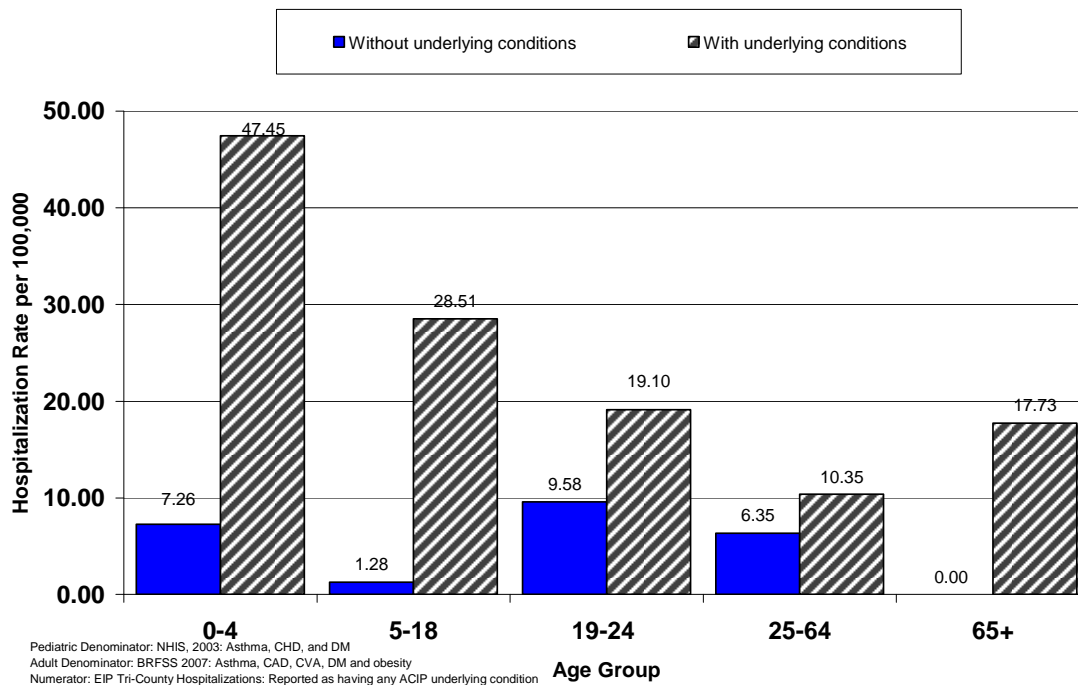
*ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties whose charts have been reviewed as a component of EIP hospitalization surveillance

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).

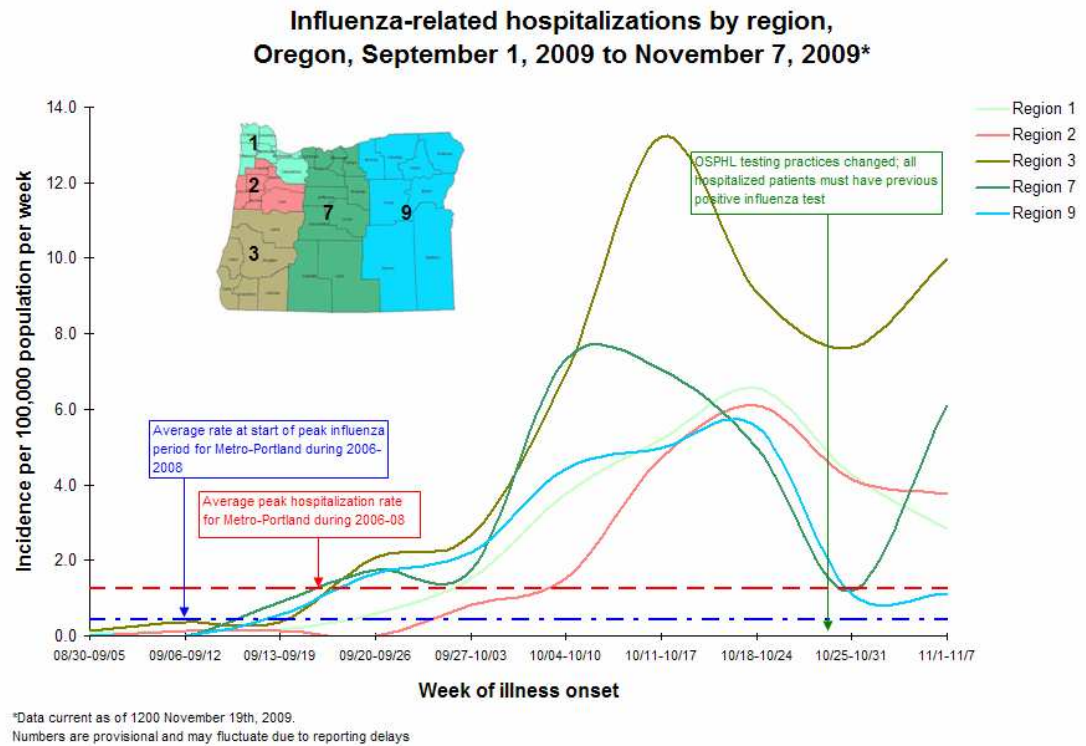
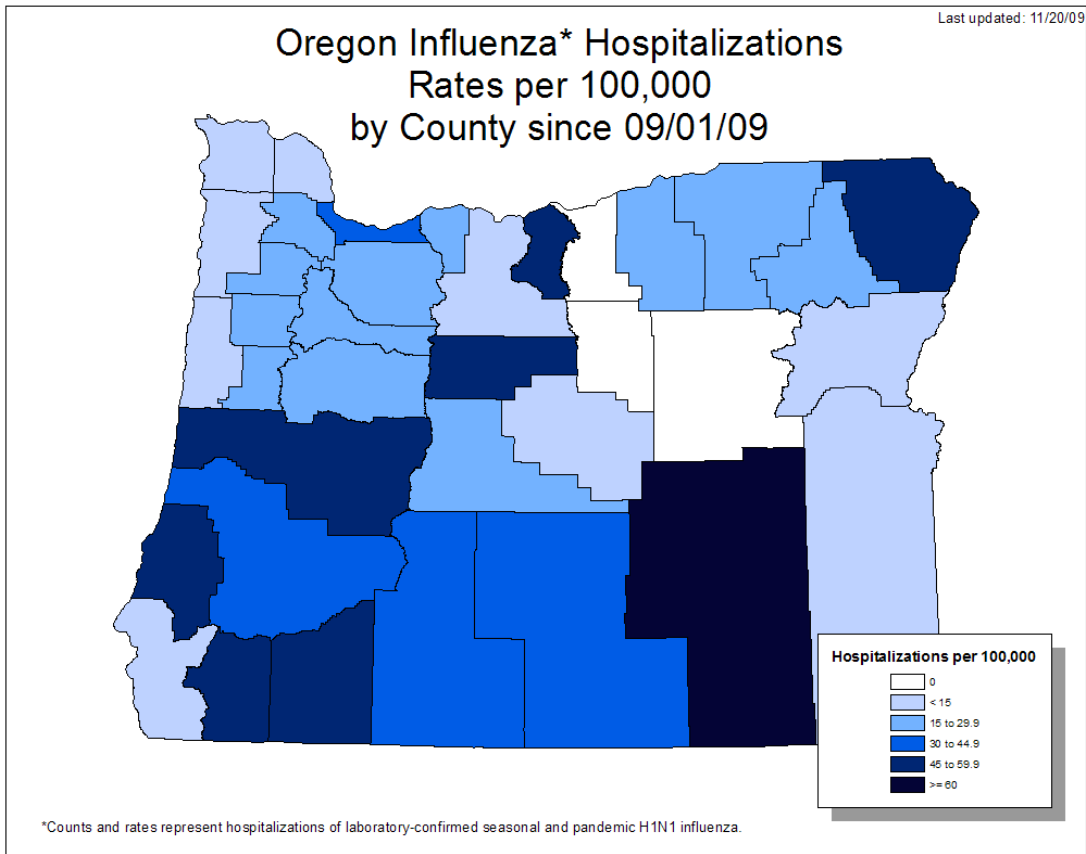
EIP Surveillance Area Influenza Hospitalization Rates Underlying Conditions by Age



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.

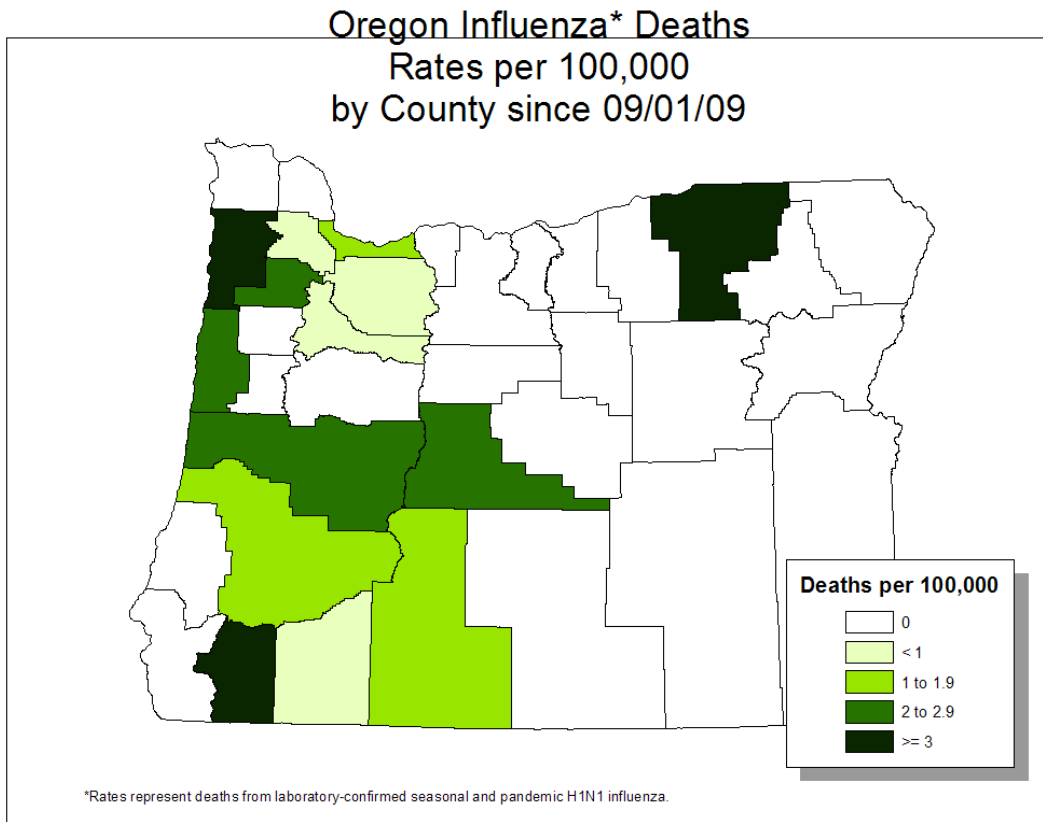
For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>.



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

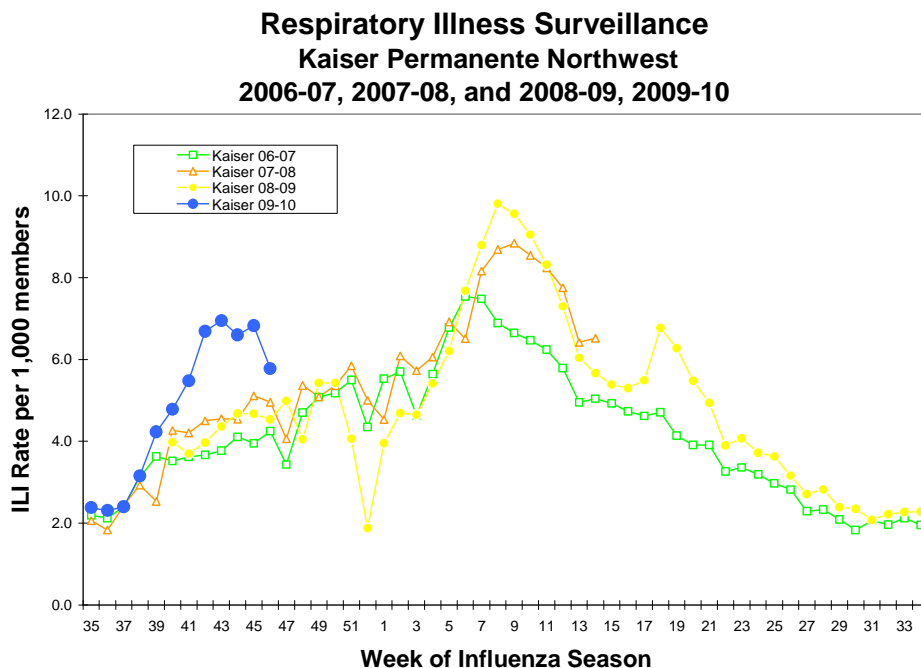
Last updated 11/20/09



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



levels.

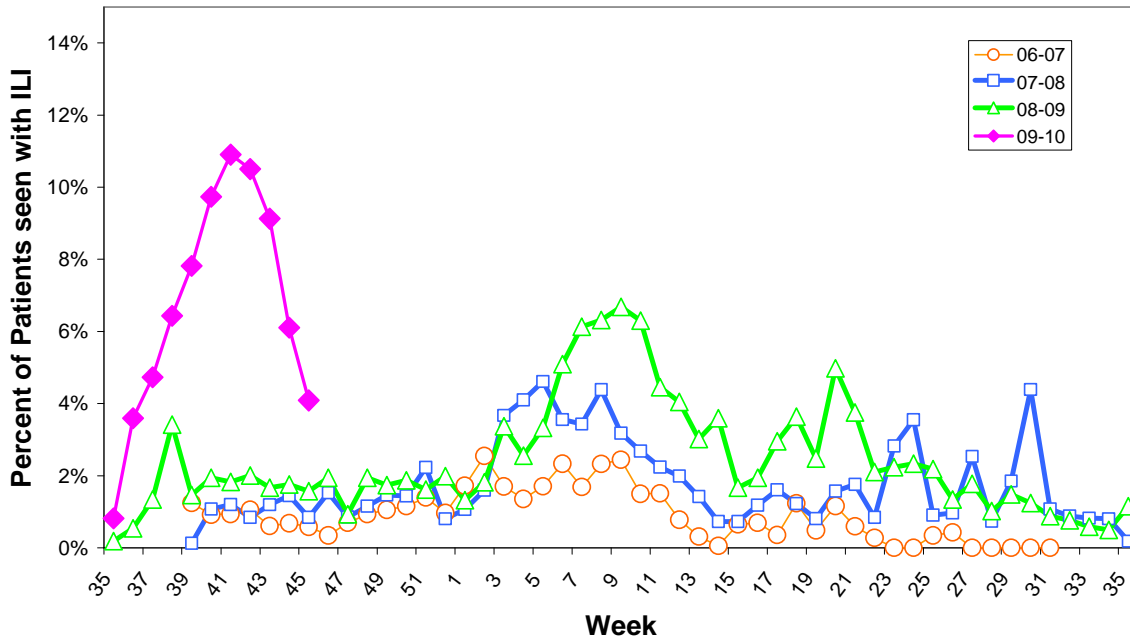
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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

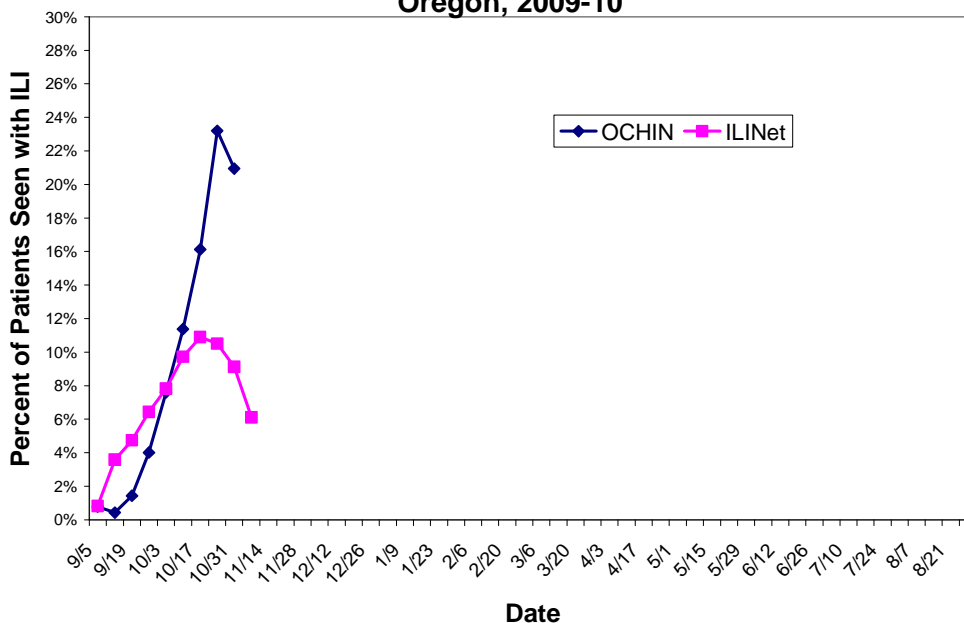
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



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%.

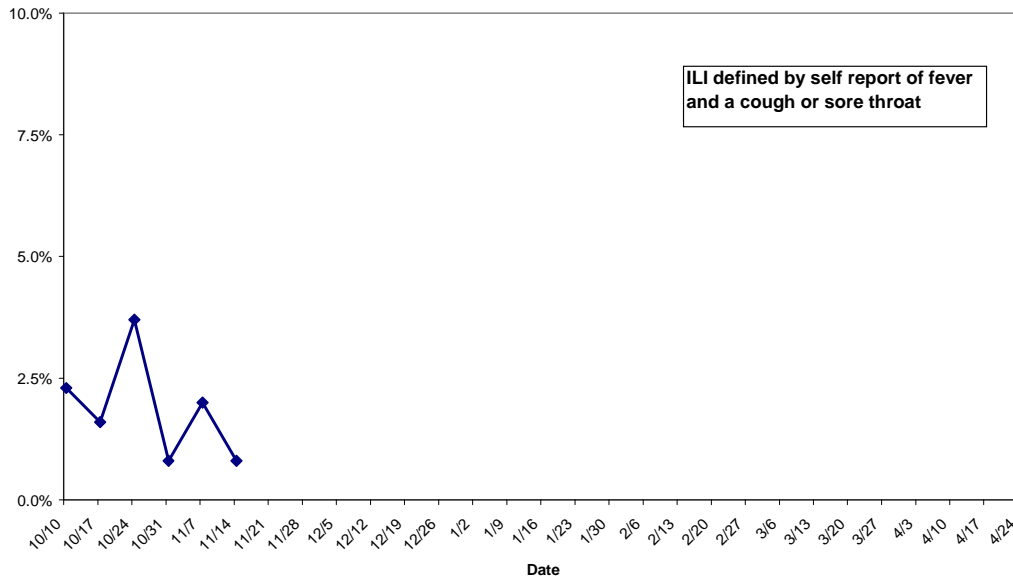
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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/>

FLU BITES

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

Published November 13th, 2009

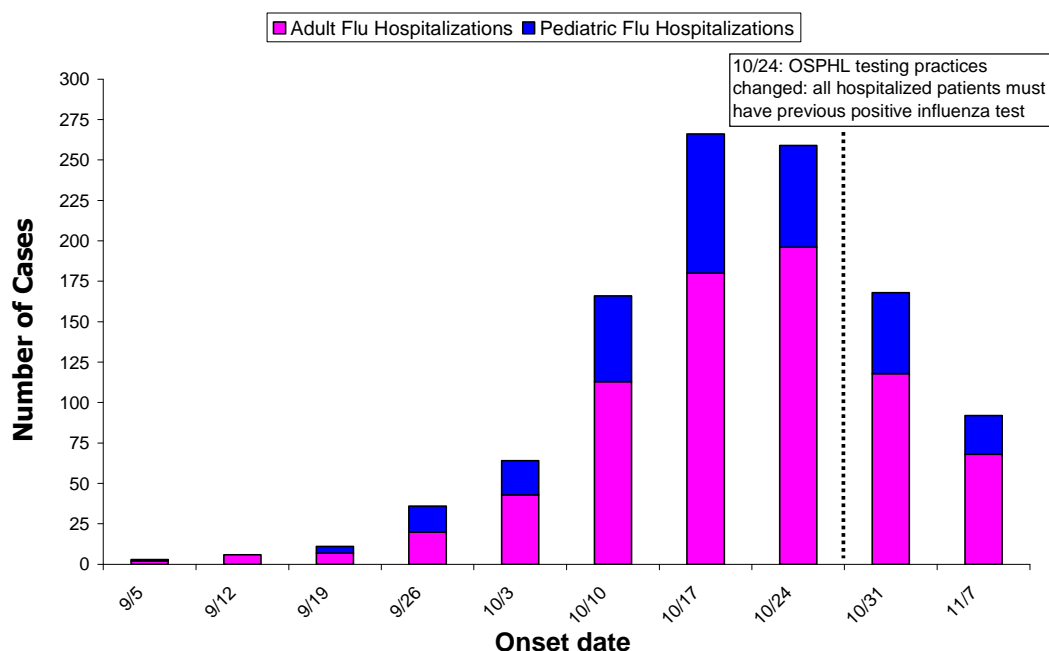


Summary

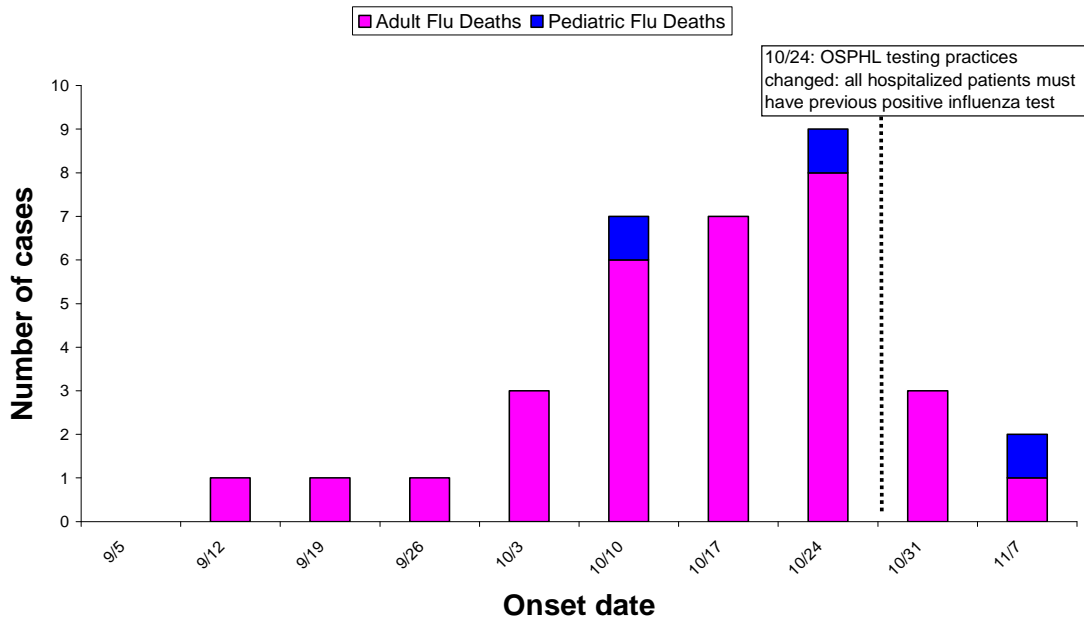
- Since September 1, 2009, 1,044 patients were hospitalized with laboratory confirmed influenza statewide. Thirty-four people have died from influenza. Between November 1st and 7th, 92 hospitalizations were reported.
- Two of our three influenza-like illness (ILI) syndromic surveillance systems showed a decrease in ILI this week, although rates still remain much higher than we would expect to see, even during the peak of a typical influenza season.
- Hospitalization and outpatient surveillance indicate that influenza activity in Oregon is declining. Rates of hospitalizations have decreased in every region for the past two weeks.
- 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.

Influenza Hospitalizations and Deaths

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

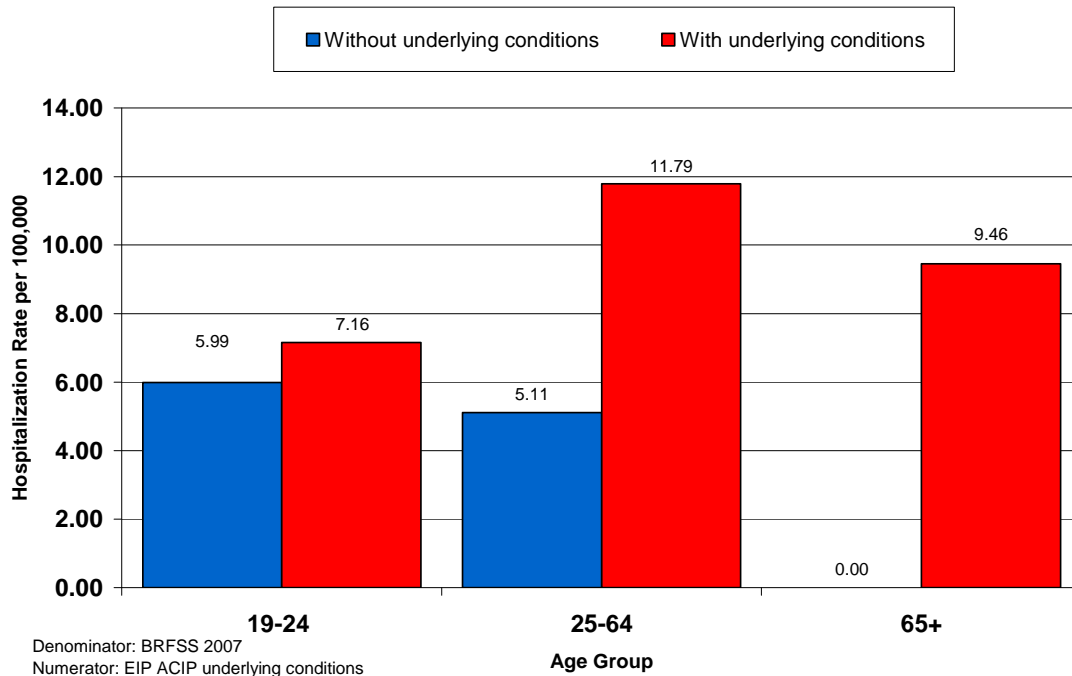


Adult and Pediatric Lab-confirmed Influenza Deaths Oregon, Since 09/01/09



- Comprehensive chart reviews have been conducted for 20% 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



Distribution of Hospitalized Influenza Cases by County and Age Group September 1, 2009 – November 12, 2009

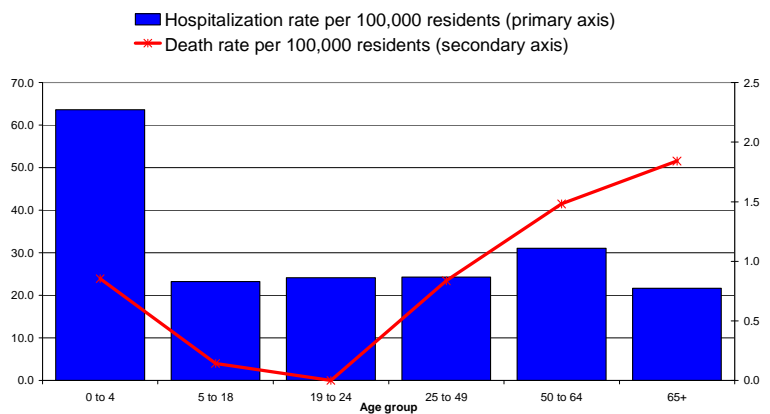
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Baker	1	0	0	0	0	1	0	0	6.1
Benton	14	1	3	3	4	1	2	0	16.3
Clackamas	92	12	19	9	32	14	6	0	24.4
Clatsop	1	0	0	0	1	0	0	0	2.7
Columbia	1	0	0	0	0	1	0	0	2.1
Coos	28	2	4	3	11	5	3	0	44.3
Crook	1	0	1	0	0	0	0	0	3.7
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	45	6	9	3	17	4	6	0	26.9
Douglas	32	2	3	3	7	14	3	0	30.4
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	4	1	0	1	2	0	0	0	18.5
Jackson	95	13	13	7	20	27	15	0	46.3
Jefferson	11	3	2	1	5	0	0	0	49.0
Josephine	49	8	4	2	15	12	8	0	58.8
Klamath	23	1	6	0	4	8	4	0	34.8
Lake	3	1	0	1	1	0	0	0	39.6
Lane	158	22	30	8	44	39	12	0	45.7
Lincoln	5	1	1	0	1	2	0	0	11.2
Linn	22	3	1	2	6	6	4	0	20.0
Malheur	3	1	0	0	0	2	0	0	9.5
Marion	69	18	17	6	13	10	5	0	21.9
Morrow	3	1	1	0	0	1	0	0	24.0
Multnomah	212	25	21	11	73	56	26	0	29.5
Polk	10	2	2	1	2	1	2	0	14.7
Sherman	1	0	0	0	1	0	0	0	54.2
Tillamook	1	0	0	0	0	0	1	0	3.8
Umatilla	15	2	4	4	3	2	0	0	20.7
Union	5	1	2	0	1	1	0	0	19.7
Wallowa	4	0	3	0	0	0	1	0	56.2
Wasco	2	1	0	0	1	0	0	0	8.3
Washington	101	17	13	9	38	19	5	0	19.4
Yamhill	24	1	2	0	13	4	3	1	25.4
TOTAL	1044	149(14%)	163(16%)	75(7%)	319(31%)	231(22%)	106(10%)	1 (0)	
Age group rate per 100,000 pop		63.6	23.2	24.1	24.3	31.1	21.7		27.5

Characteristics of Hospitalized Influenza Cases

Age	
Median	35
Range	0-92
Sex	
N (%)	
Male	465 (44.8)
Female	577 (55.2)
Unknown	2 (0)
Severity	
Admitted to ICU*	22 of 390 (6)
Pregnant	43 of 577 (7.5)

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

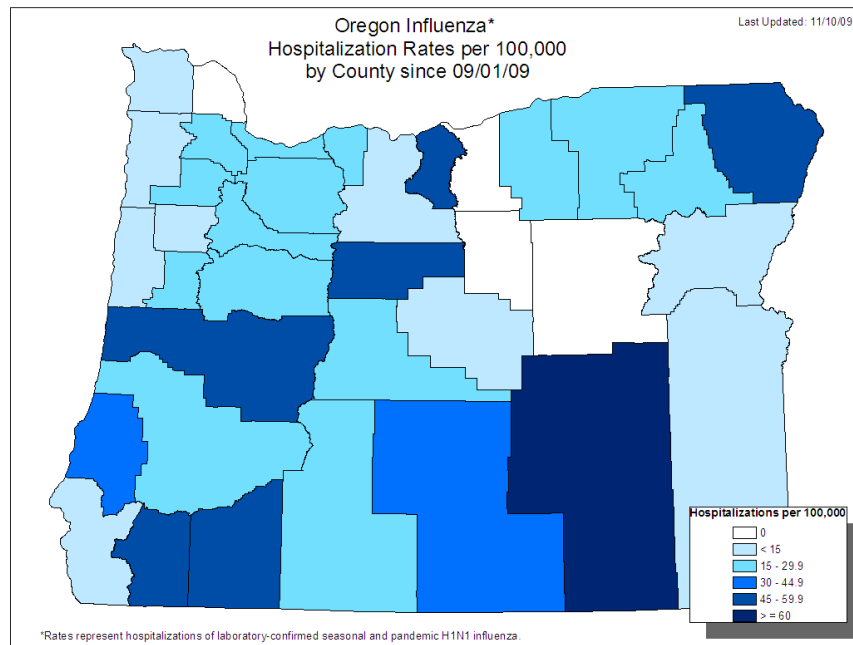
Influenza Hospitalizations and Deaths Rates per 100,000 Oregon Residents September 1, 2009 - November 12, 2009



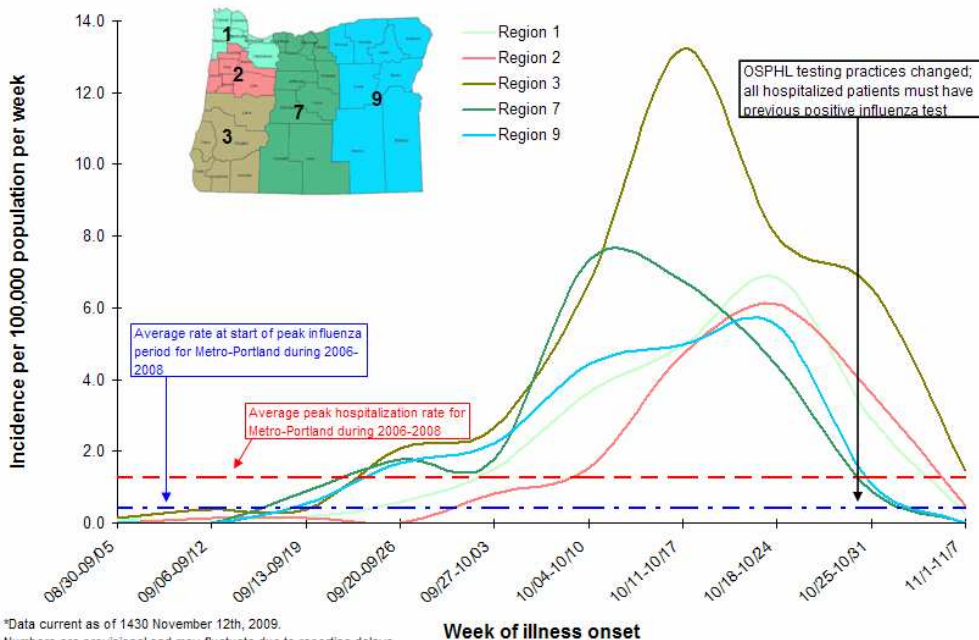
The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. We are currently updating the number of hospitalizations and deaths daily on our web page:

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/>.



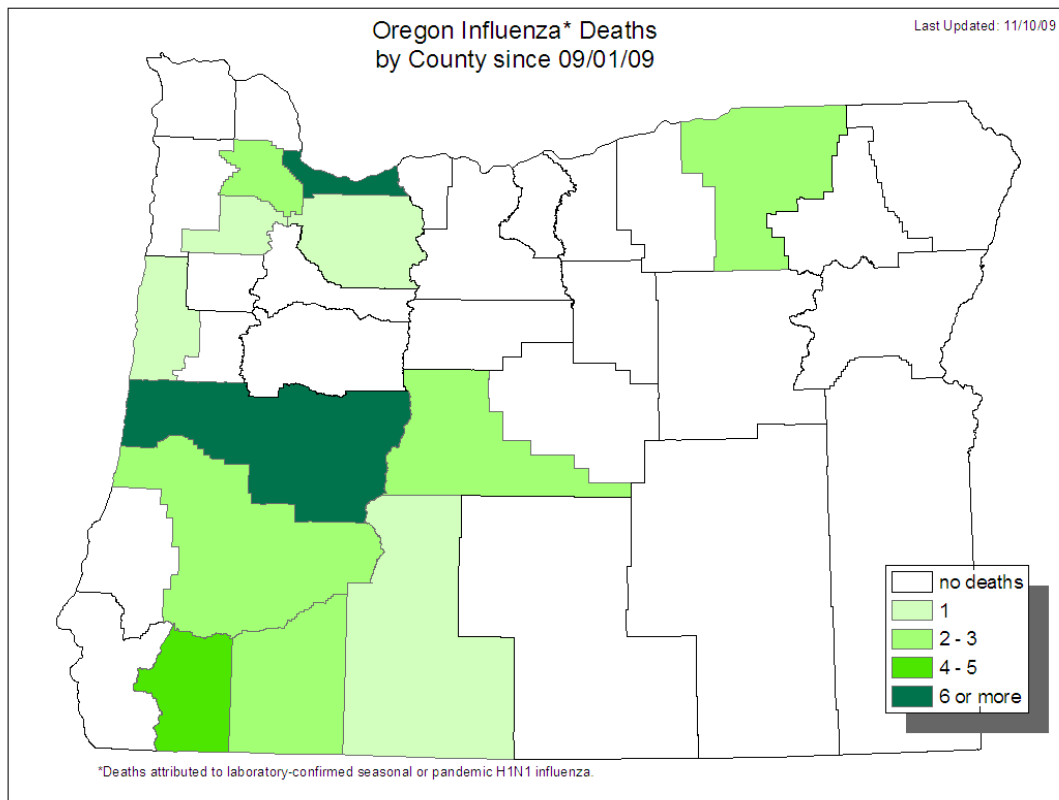
Influenza-related hospitalizations by region, Oregon, September 1, 2009 to November 7, 2009*



*Data current as of 1430 November 12th, 2009. Numbers are provisional and may fluctuate due to reporting delays

Distribution of Influenza Deaths, by County of Residence and Age Group September 1, 2009 – November 5, 2009

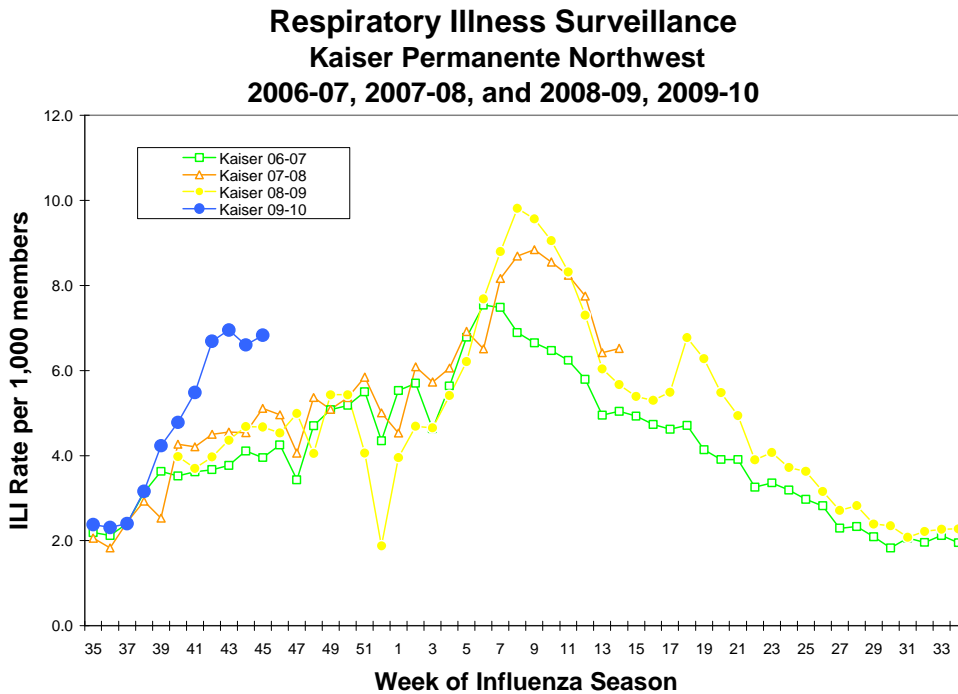
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Rate per 100,000 pop
Clackamas	1	0	0	0	0	0	1	0.3
Deschutes	3	0	0	0	1	0	2	1.8
Douglas	2	0	0	0	0	1	1	1.9
Jackson	2	0	0	0	1	0	1	1.0
Josephine	4	0	0	0	2	1	1	4.8
Klamath	1	0	0	0	0	1	0	1.5
Lane	7	0	0	0	1	3	3	2.0
Lincoln	1	0	0	0	1	0	0	2.2
Multnomah	7	1	0	0	1	5	0	1.0
Umatilla	3	0	1	0	2	0	0	4.1
Washington	2	1	0	0	1	0	0	0.4
Yamhill	1	0	0	0	1	0	0	1.1
TOTAL	34	2 (6%)	1 (3%)	0	11 (33%)	11 (33%)	9 (27%)	
Age group rate per 100,000 pop		0.9	0.1	0	0.8	1.5	1.8	0.9



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 increased very slightly to 6.83 per 1,000 Kaiser members during the week ending November 7th.



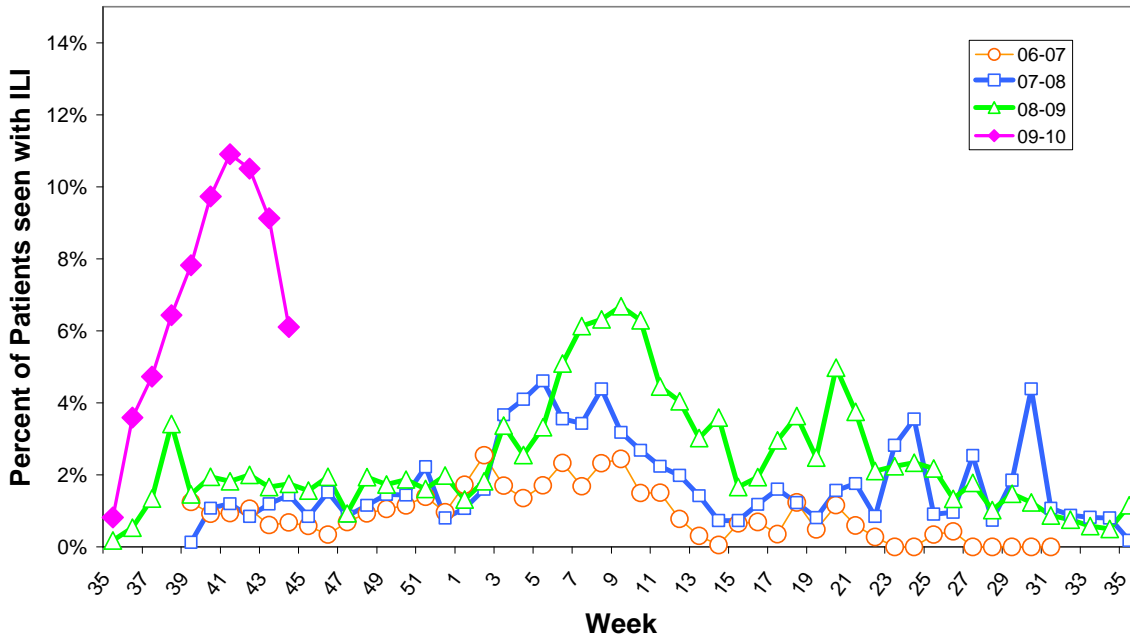
ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network

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.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending November 7th	3995	6.11	18
Week ending October 31st	5324	9.13	21
Week ending October 24th	5418	10.50	21

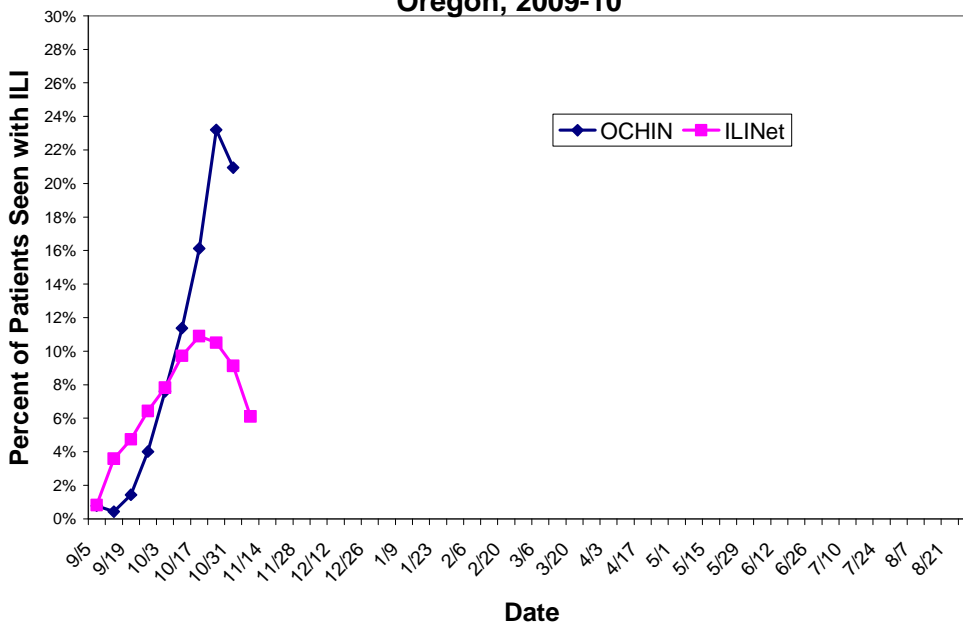
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



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%.

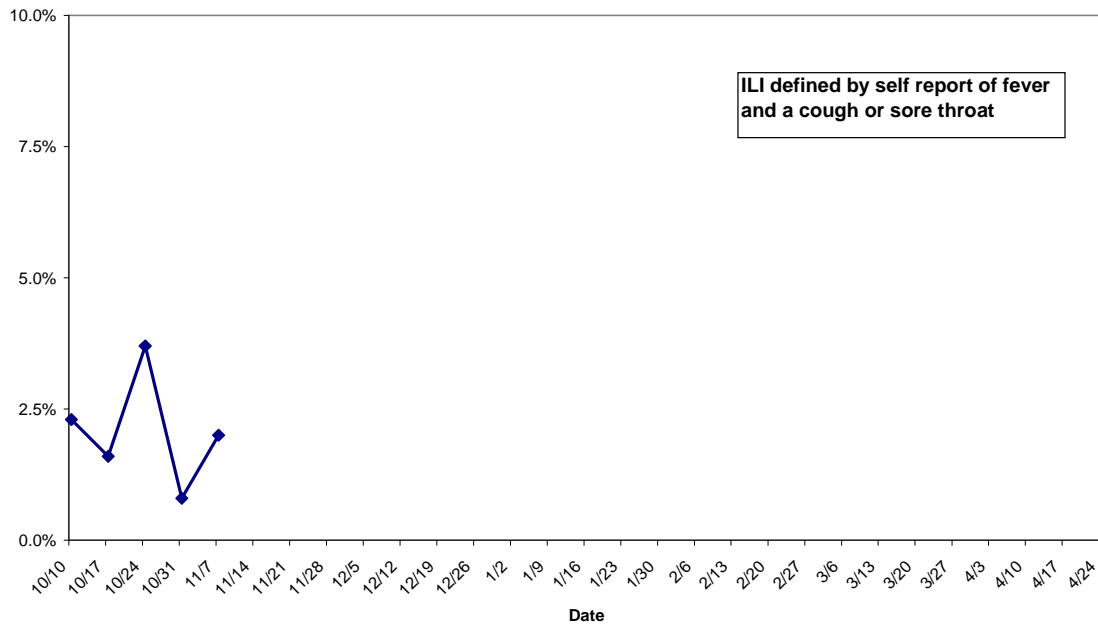
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 7th, 2.0% 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.

Over 99% 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	135 (59)	882 (56)	11 (79)	1028 (56)	72 (52)
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)	64 (4)	0	70 (4)	54 (39)
Undetected	88 (38)	640 (40)	3 (21)	731 (40)	13 (9)
Total Tested	230	1588	14	1832	139

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/>

FLU BITES

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

Published November 6th, 2009



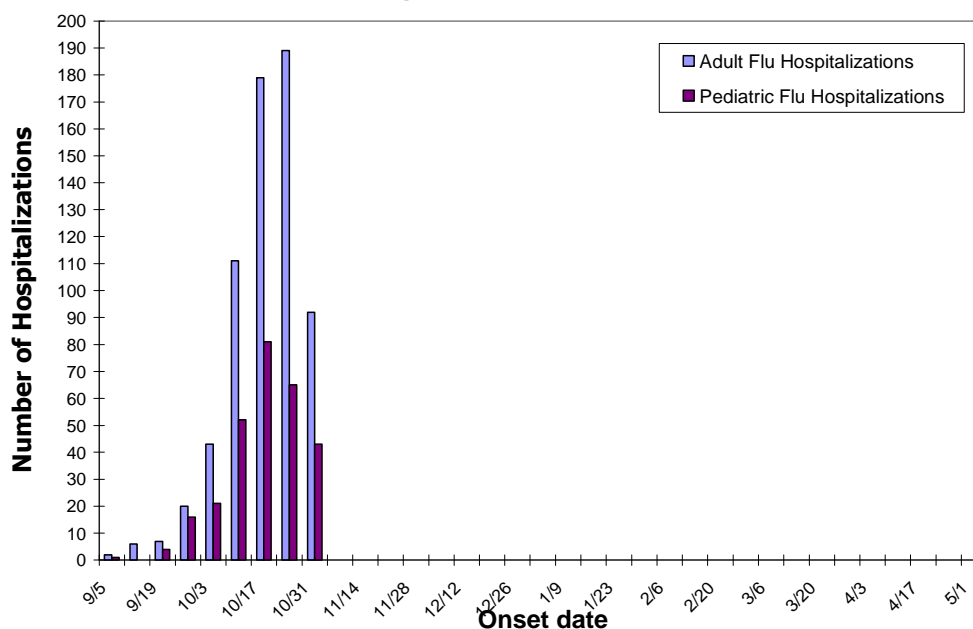
Summary

- Since September 1, 2009, 918 patients were hospitalized with laboratory confirmed influenza statewide. Twenty-nine people have died from influenza. Between October 25th and October 31st, 135 hospitalizations were reported.
- Rates of hospitalization are highest among the 0-4 year age group. Hospitalization rates decreased from last week in all regions in Oregon, although they remain above typical peak levels. Hospitalization rates have been consistently highest in southwestern Oregon since mid-October.
- Surveillance among outpatients indicates a decrease in influenza-like activity from the previous week, though rates remain much higher than we would expect to see this time of year.
- No outbreaks of influenza-like illness or school closures were reported this week.

Influenza Hospitalizations and Deaths

Since September 1, 2009 there have been 918 influenza hospitalizations among residents of 31 counties.

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



Distribution of Hospitalized Influenza Cases by County and Age Group September 1, 2009 – November 5, 2009

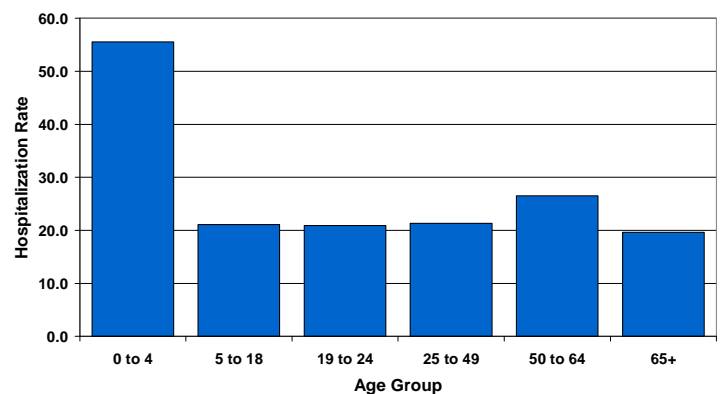
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000
Baker	1	0	0	0	0	1	0	0	6.1
Benton	13	1	2	3	4	1	2	0	15.1
Clackamas	80	10	17	7	28	12	6	0	21.2
Clatsop	1	0	0	0	1	0	0	0	2.7
Coos	27	2	4	3	10	5	3	0	42.7
Crook	1	0	1	0	0	0	0	0	3.7
Curry	3	0	0	0	2	1	0	0	13.9
Deschutes	40	5	7	3	15	4	6	0	23.9
Douglas	26	2	3	2	4	13	2	0	24.7
Harney	6	1	2	1	2	0	0	0	77.9
Hood River	3	0	0	1	2	0	0	0	13.9
Jackson	91	13	13	6	20	24	15	0	44.3
Jefferson	11	3	2	1	5	0	0	0	49.0
Josephine	44	8	4	1	15	8	8	0	52.8
Klamath	17	1	5	0	2	5	4	0	25.7
Lake	3	1	0	1	1	0	0	0	39.6
Lane	138	19	28	6	38	35	12	0	39.9
Lincoln	4	1	1	0	1	1	0	0	8.9
Linn	14	2	1	2	4	4	1	0	12.7
Malheur	2	1	0	0	0	1	0	0	6.3
Marion	63	18	15	4	12	10	4	0	20.0
Morrow	3	1	1	0	0	1	0	0	24.0
Multnomah	179	22	17	11	60	47	22	0	24.9
Polk	8	1	2	1	2	1	1	0	11.7
Tillamook	1	0	0	0	0	0	1	0	3.8
Umatilla	15	2	4	4	3	2	0	0	20.7
Union	5	1	2	0	1	1	0	0	19.7
Wallowa	4	0	3	0	0	0	1	0	56.2
Wasco	1	0	0	0	1	0	0	0	4.1
Washington	93	15	12	8	36	16	5	1	17.9
Yamhill	21	1	2	0	11	4	3	1	22.3
TOTAL	918	130(14%)	148(16%)	65(7%)	280(31%)	197(21%)	96(11%)	2(0)	
Age group rate per 100,000		55.5	21.1	20.9	21.3	26.5	19.7		24.2

Characteristics of Hospitalized Influenza Cases

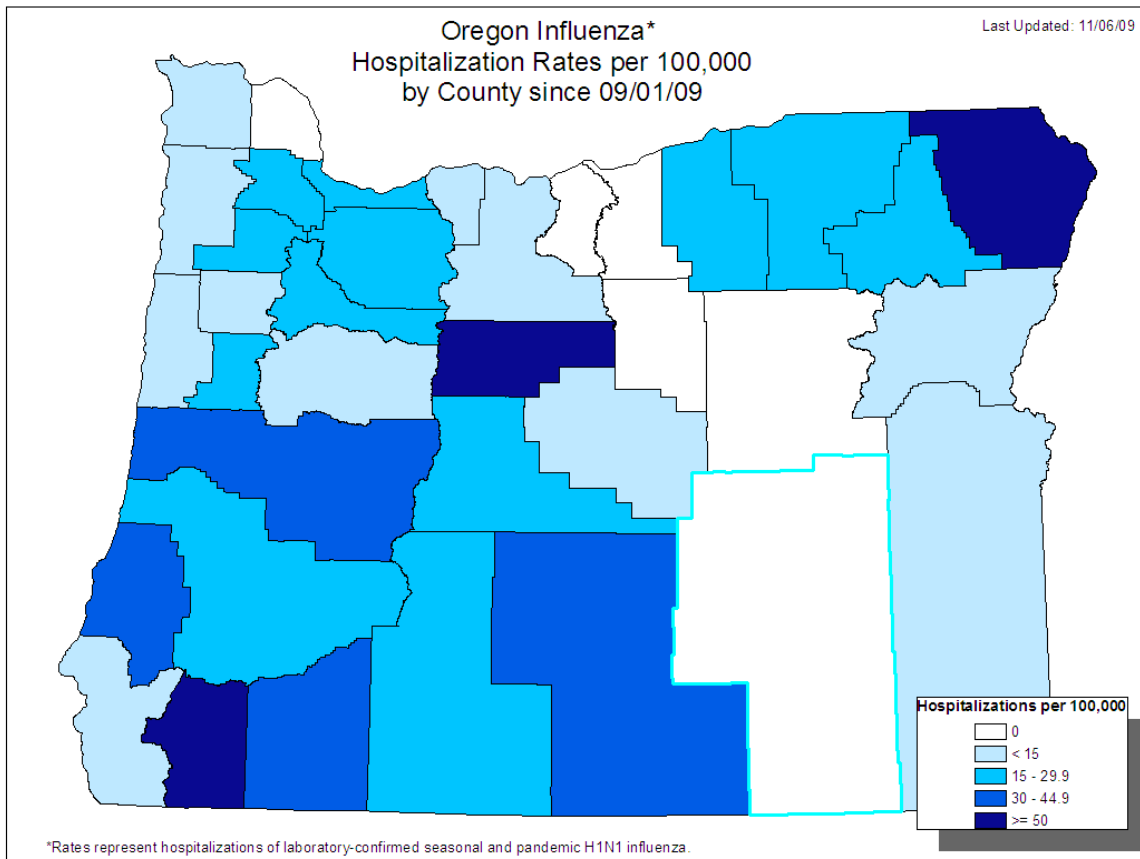
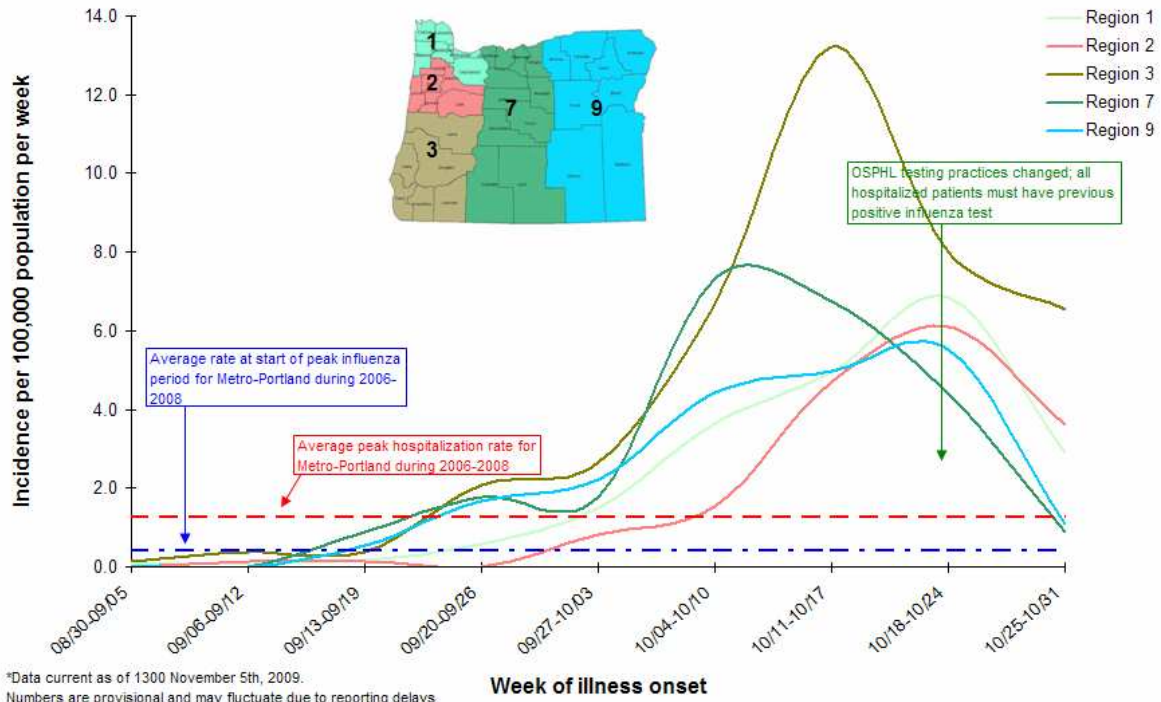
Age	
Median	34
Range	0-92
Sex	N (%)
Male	405 (44.1)
Female	511 (55.7)
Unknown	2 (0.2)
Severity	
Admitted to ICU*	16 of 352 (5)
Pregnant	43 of 511 (8)

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

Oregon Influenza Hospitalizations, Rate per 100,000 Residents
September 1, 2009 - November 5, 2009

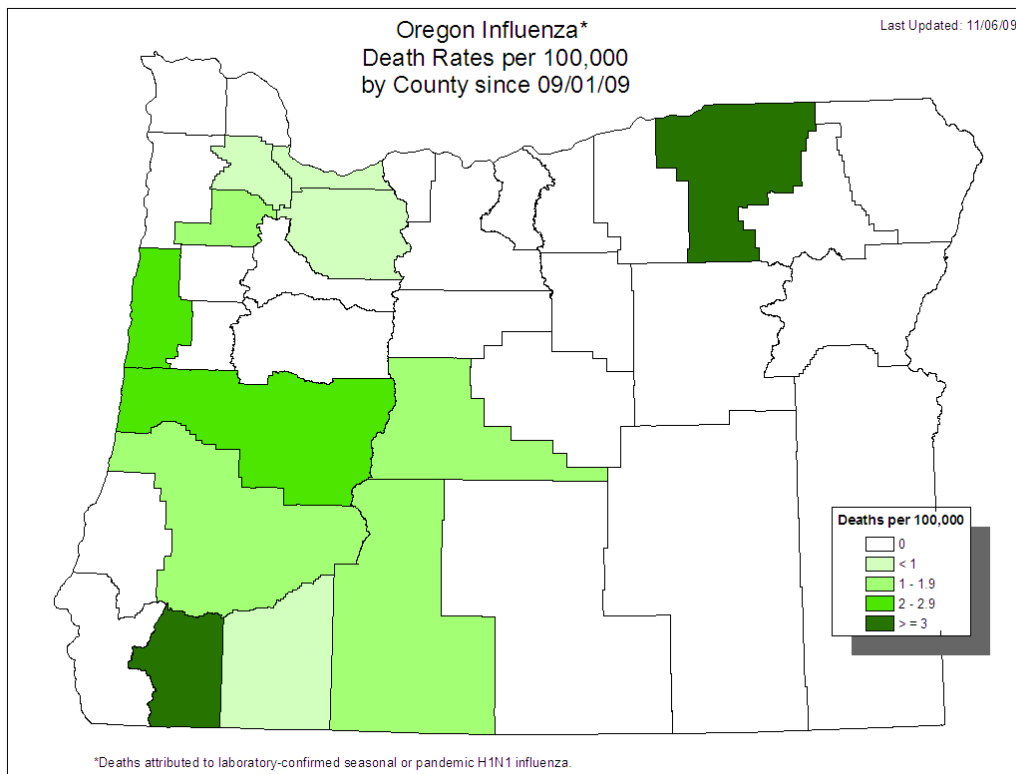


Influenza-related hospitalizations by region, Oregon, September 1, 2009 to October 31, 2009*



**Distribution of Influenza Deaths, by County of Residence and Age Group
September 1, 2009 – November 5, 2009**

County	Total	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Clackamas	1	0	0	0	0	0	1
Deschutes	3	0	0	0	1	0	2
Douglas	2	0	0	0	0	1	1
Jackson	2	0	0	0	1	0	1
Josephine	3	0	0	0	2	0	1
Klamath	1	0	0	0	0	1	0
Lane	7	0	0	0	1	3	3
Lincoln	1	0	0	0	1	0	0
Multnomah	4	0	0	0	0	4	0
Umatilla	3	0	1	0	2	0	0
Washington	1	0	0	0	1	0	0
Yamhill	1	0	0	0	1	0	0
TOTAL	29	0	1	0	10	9	9



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.

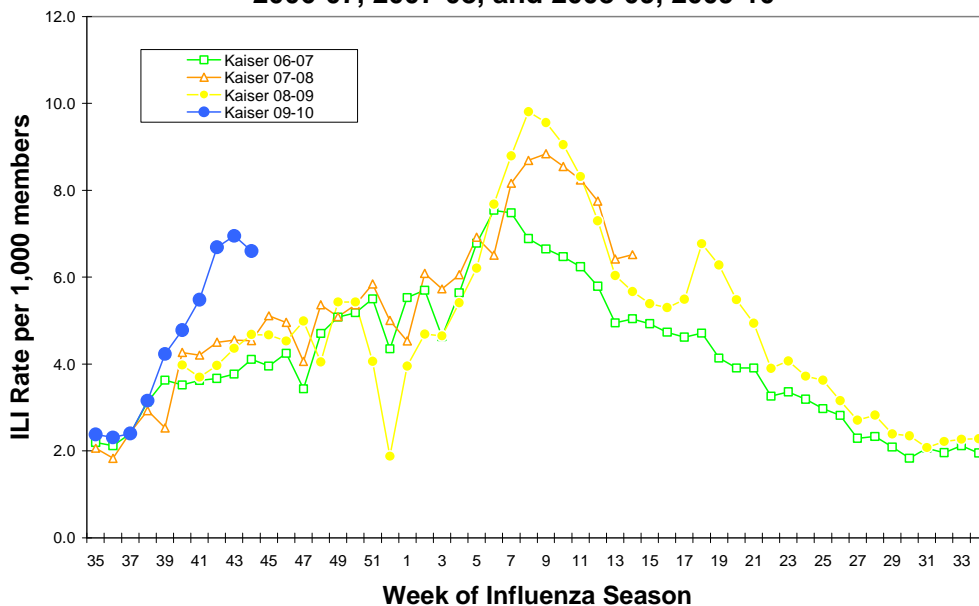
For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>.

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 slightly to 6.60 per 1,000 Kaiser members during the week ending October 31st.

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



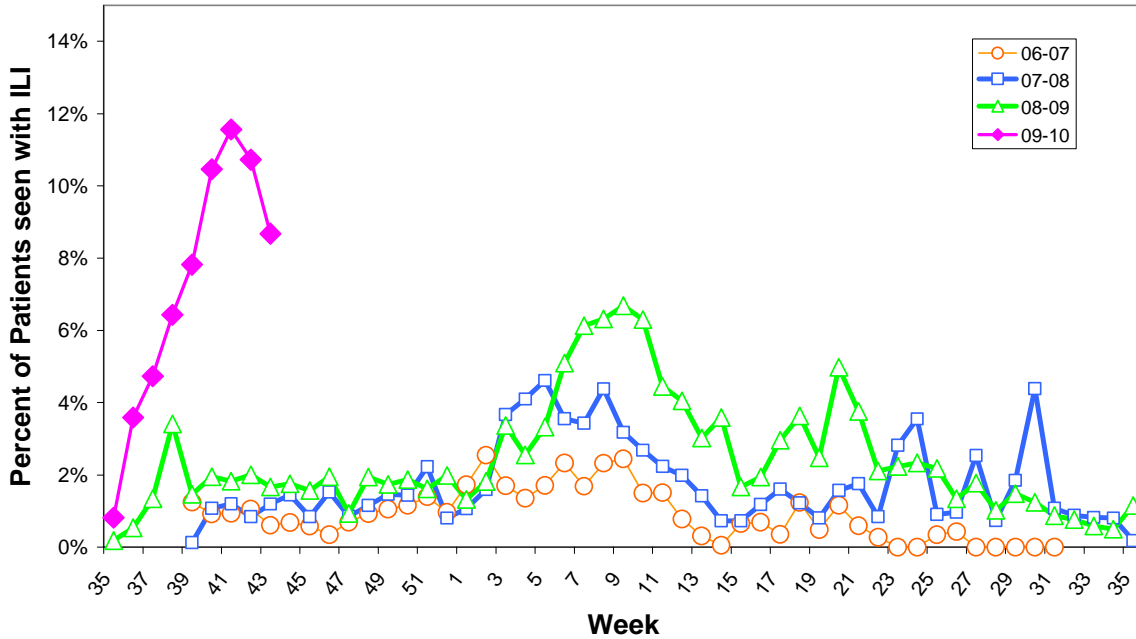
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

	Number of Patients Visits	Percent Patients with ILI	Number of Provider Reports
Week ending October 31st	4079	8.69	17
Week ending October 24th	4504	10.72	18
Week ending October 17th	5138	11.56	19

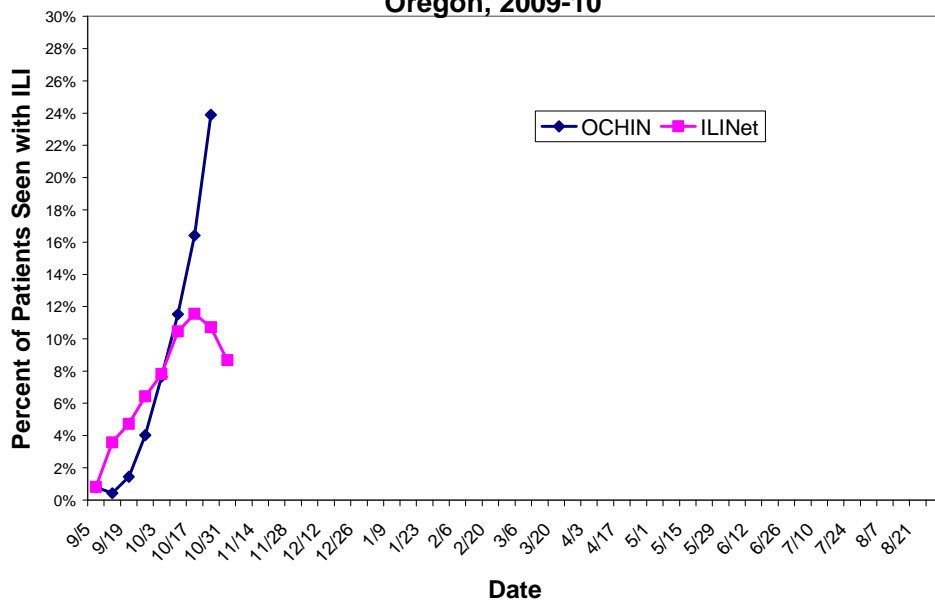
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



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 24th was 23.9%.

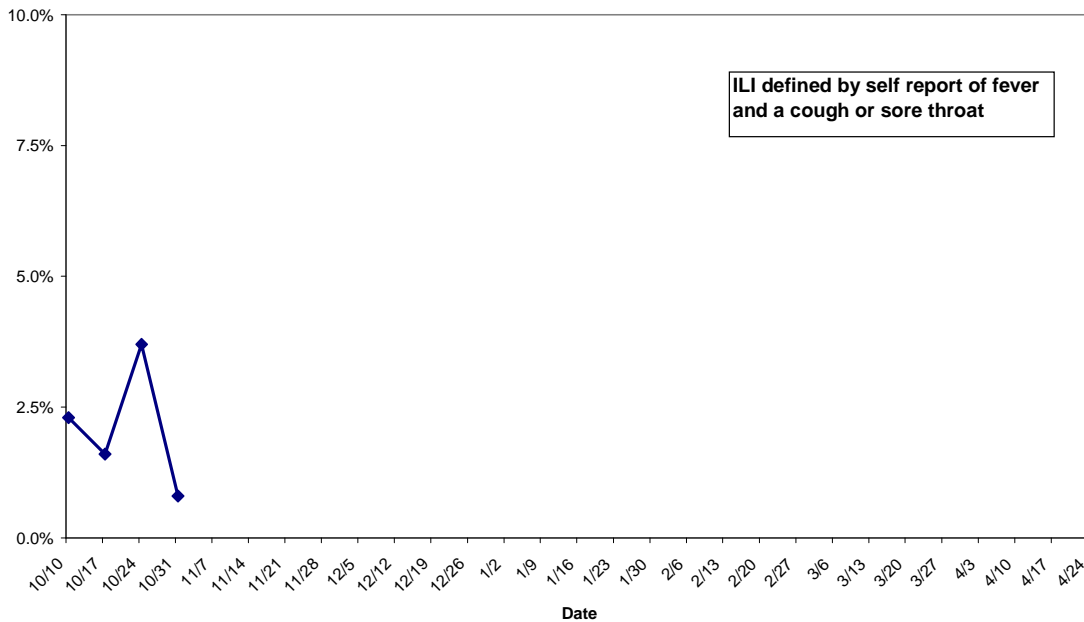
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 October 31st, 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

During the week of October 25th and October 31, 227 specimens were tested for influenza at the Oregon State Public Health Laboratory (OSPHL). Ninety-five (42%) were positive for influenza A (H1N1). Ninety-nine percent of all influenza identified at OSPHL since September 1st have been 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	118 (55)	741 (50)	11 (79)	870 (51)	95 (42)
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	19 (9)	111 (8)	0	130 (8)	89 (39)
Undetected	77 (36)	630 (42)	3 (21)	710 (41)	43 (19)
Total Tested	215	1484	14	1713	227

OSPHL 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. **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/>

FLU BITES

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

Published October 30th, 2009



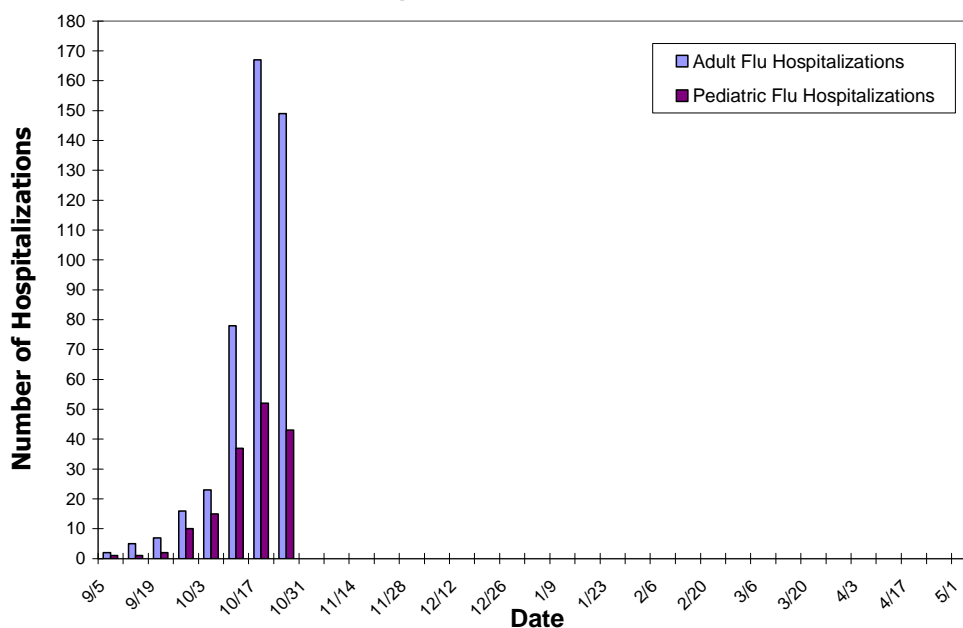
Summary

- Since September 1, 2009, 698 patients were hospitalized with influenza statewide. Eighteen people have died from influenza.
- Surveillance among outpatients and Oregon residents continue to show elevated rates of influenza-like illness.
- Outbreaks of influenza-like illness were reported this week at schools in Benton and Washington counties.
- No school closures occurred this week.

Influenza Hospitalizations and Deaths

Since September 1, 2009 there have been 698 influenza hospitalizations among residents of 25 counties.

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



*Hospitalizations with known admission date

Distribution of Hospitalized Influenza Cases by County and Age Group September 1, 2009 – October 30, 2009

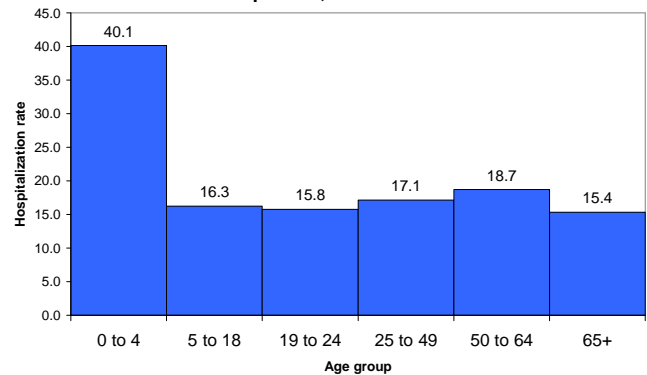
County	Total	0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	Unknown	County rate per 100,000 pop
Benton	13	1	2	3	4	1	2	0	15.1
Clackamas	66	8	13	8	23	9	5	0	17.5
Coos	16	1	2	1	6	4	2	0	25.3
Curry	2	0	0	0	1	1	0	0	9.3
Deschutes	29	3	6	3	11	2	4	0	17.4
Douglas	14	1	3	0	1	7	2	0	13.3
Harney	5	1	2	1	1	0	0	0	64.9
Hood River	1	0	0	0	1	0	0	0	4.6
Jackson	82	12	13	4	21	19	13	0	39.9
Jefferson	6	1	1	1	3	0	0	0	26.7
Josephine	41	7	4	1	14	8	7	0	49.2
Klamath	17	1	5	0	2	5	4	0	25.7
Lake	2	1	0	1	0	0	0	0	26.4
Lane	111	14	21	5	32	30	9	0	32.1
Linn	7	2	1	0	2	2	0	0	6.4
Malheur	2	1	0	0	0	1	0	0	6.3
Marion	36	10	10	1	7	5	3	0	11.4
Morrow	3	1	1	0	0	1	0	0	24.0
Multnomah	124	10	12	9	47	29	17	0	17.3
Polk	7	1	2	1	2	0	1	0	10.3
Umatilla	12	2	2	4	3	1	0	0	16.6
Union	5	1	2	0	1	1	0	0	19.7
Wasco	1	0	0	0	1	0	0	0	4.1
Washington	78	15	10	6	32	9	5	1	15.0
Yamhill	18	0	2	0	10	4	1	1	19.1
TOTAL	698	94 (13%)	114 (16%)	49 (7%)	225 (32%)	139 (20%)	75 (11%)	2 (1%)	18.4
Age group rate per 100,000 pop	18.4	40.1	16.3	15.8	17.1	18.7	15.4		

Characteristics of Hospitalized Influenza Cases

Age	
Median	34
Range	0-92
Sex	N (%)
Male	315 (45)
Female	370 (53)
Unknown	13 (2)
Severity	
Admitted to ICU*	16 of 268 (6)
Pregnant	35 of 370 (9)

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

Oregon Influenza Hospitalizations, 09/01/09 - 10/30/09
Rate per 100,000 residents



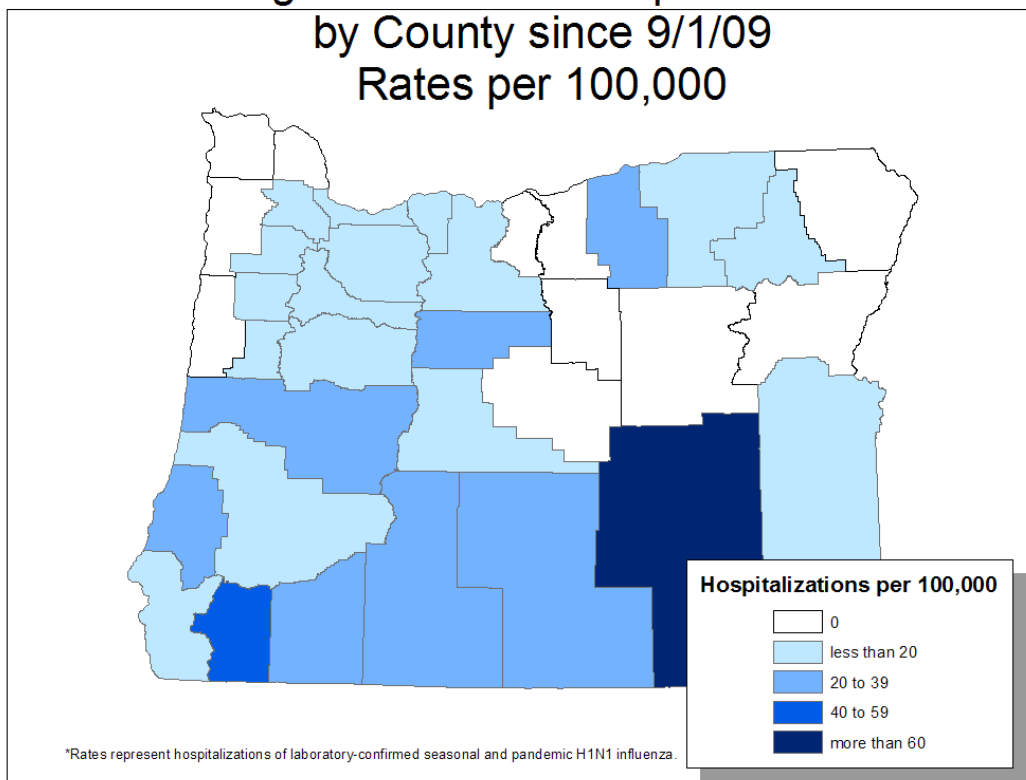
The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. We are currently updating the number of hospitalizations and deaths daily on our web page:

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

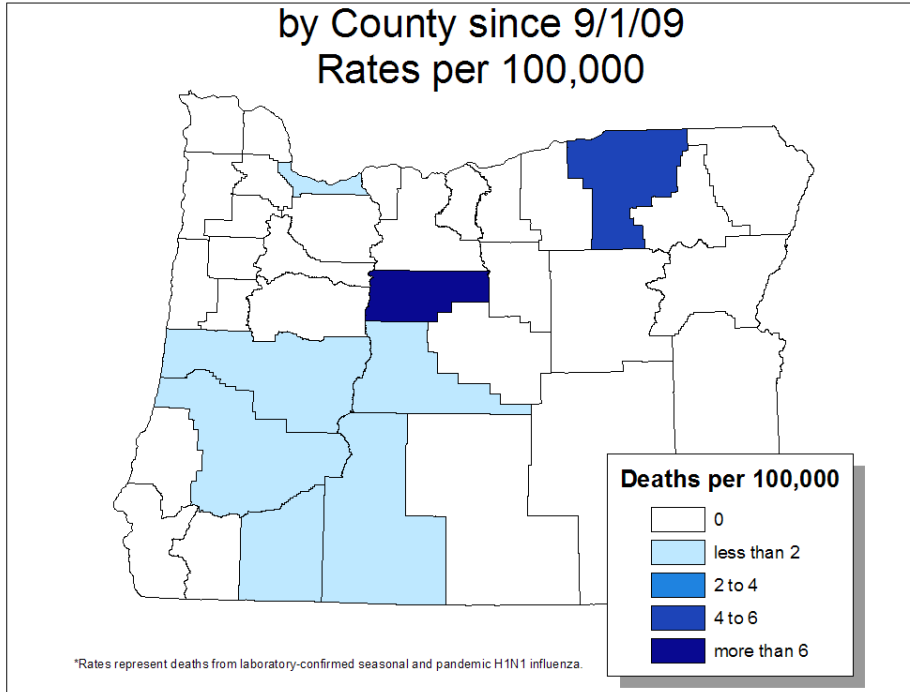
Last updated 10/30/09



Distribution of Influenza Deaths*, by County of Residence and Age Group September 1, 2009 – October 30, 2009

County	Total	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Deschutes	2	0	0	0	1	0	1
Douglas	1	0	0	0	0	0	1
Jackson	1	0	0	0	1	0	0
Josephine	2	0	0	0	1	0	1
Klamath	1	0	0	0	0	1	0
Lane	6	0	0	0	1	2	3
Multnomah	2	0	0	0	0	2	0
Umatilla	3	0	1	0	2	0	0
TOTAL	18	0	1	0	6	5	6

Oregon Influenza* Deaths by County since 9/1/09 Rates per 100,000

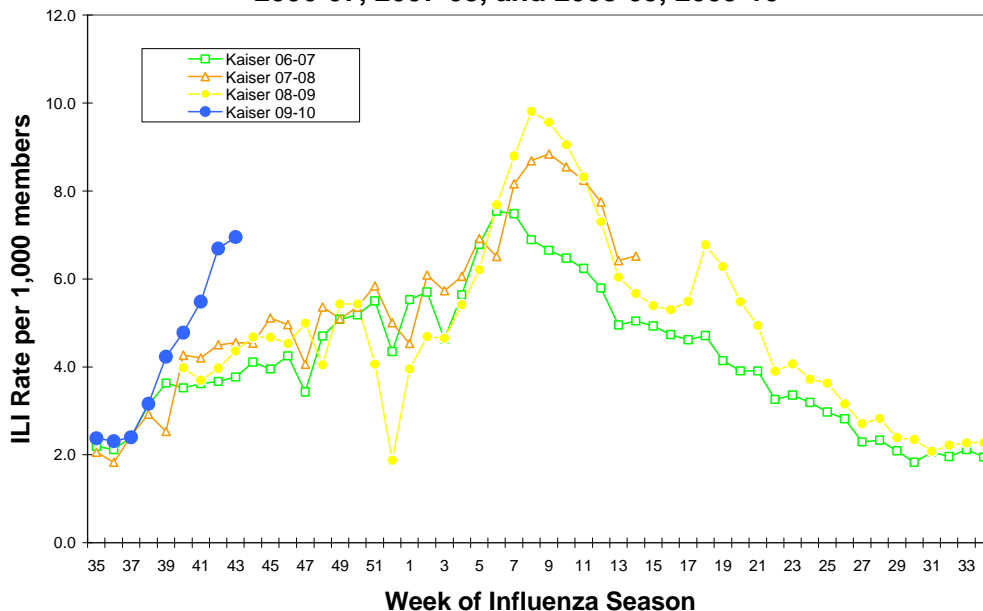


Outpatient Influenza-like Illness

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 increased to 6.96 per 1,000 Kaiser members during the week ending October 24th.

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



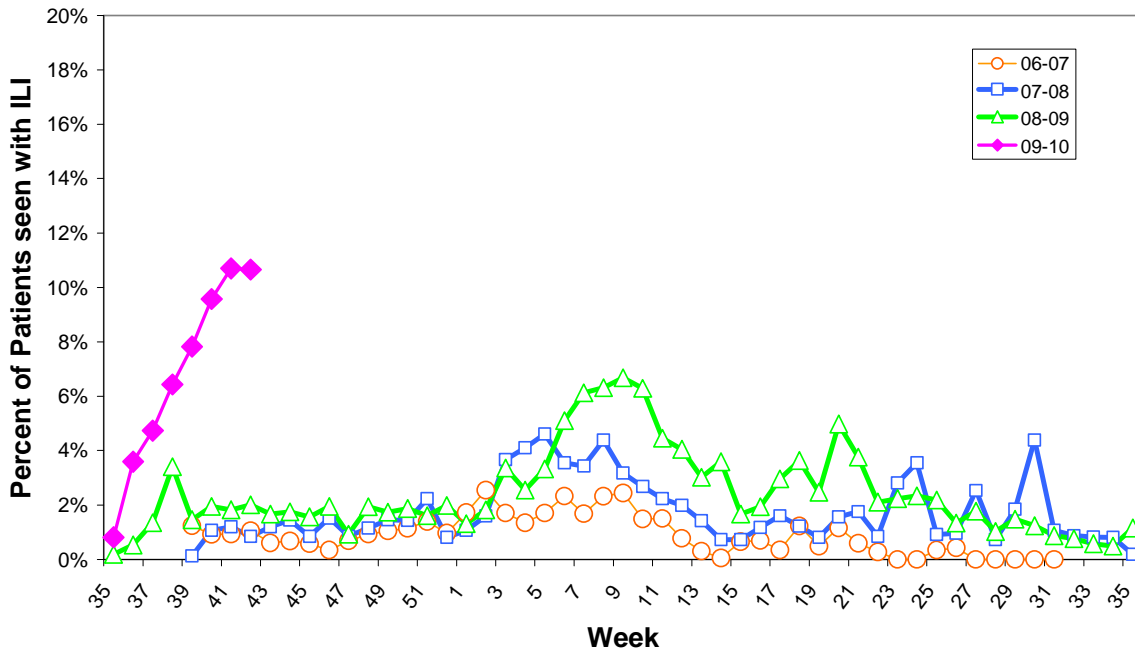
ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network

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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending October 24 th	2872	10.65	13
Week ending October 17 th	4983	10.70	18
Week ending October 10 th	4764	9.57	18

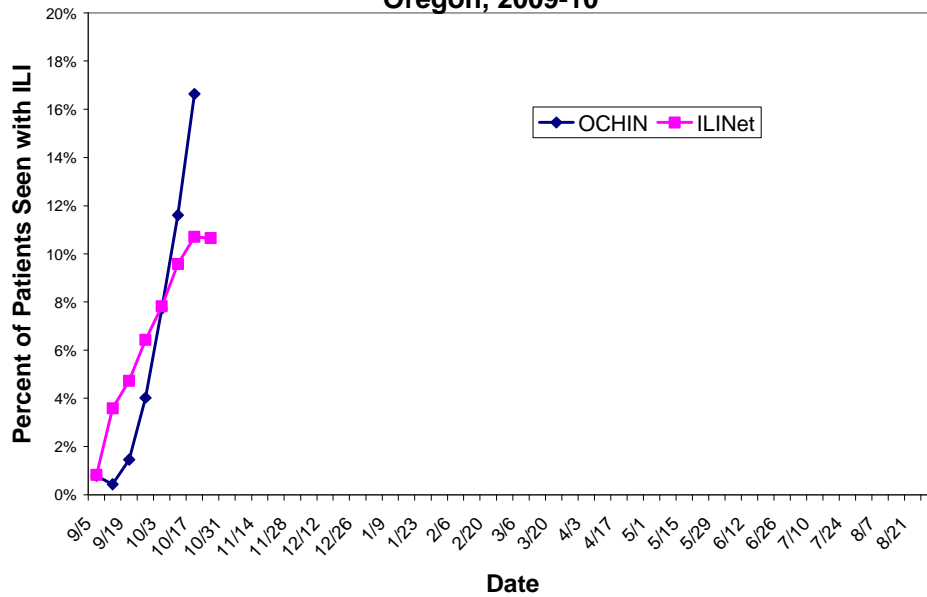
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10



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 10th was 16.6%.

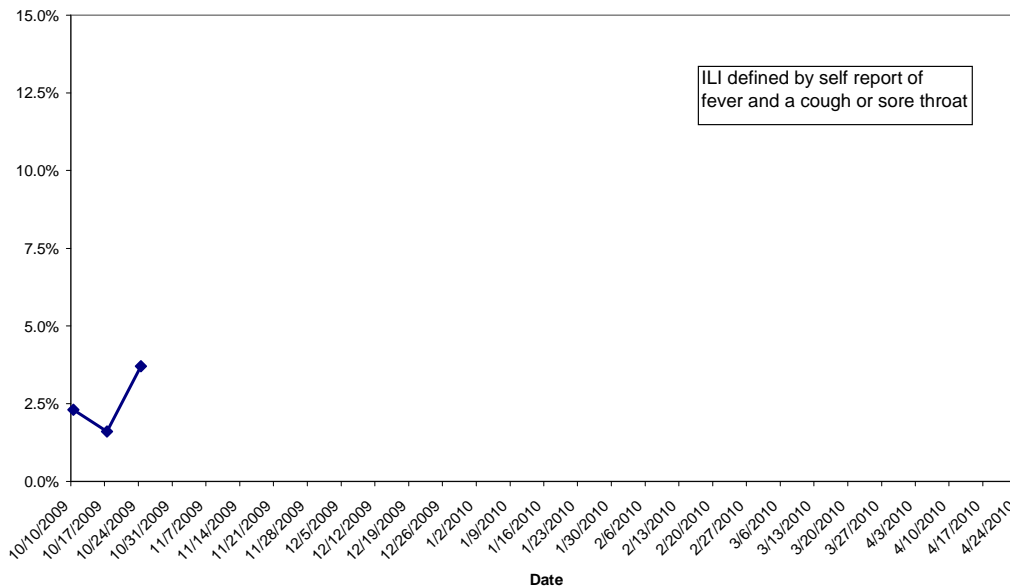
**Oregon Outpatient Influenza-Like Illness (ILI) Surveillance
ILINet & OCHIN
Oregon, 2009-10**



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 October 24th, 3.7% 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.

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	94 (55)	490 (37)	11 (79)	595 (40)	140 (57)
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	14 (8)	335 (26)	0	349 (23)	1 (0.5)
Undetected	63 (37)	485 (37)	3 (21)	551 (37)	104 (42.5)
Total Tested	172	1312	14	1498	245

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/>

FLU BITES

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

Published October 23rd, 2009



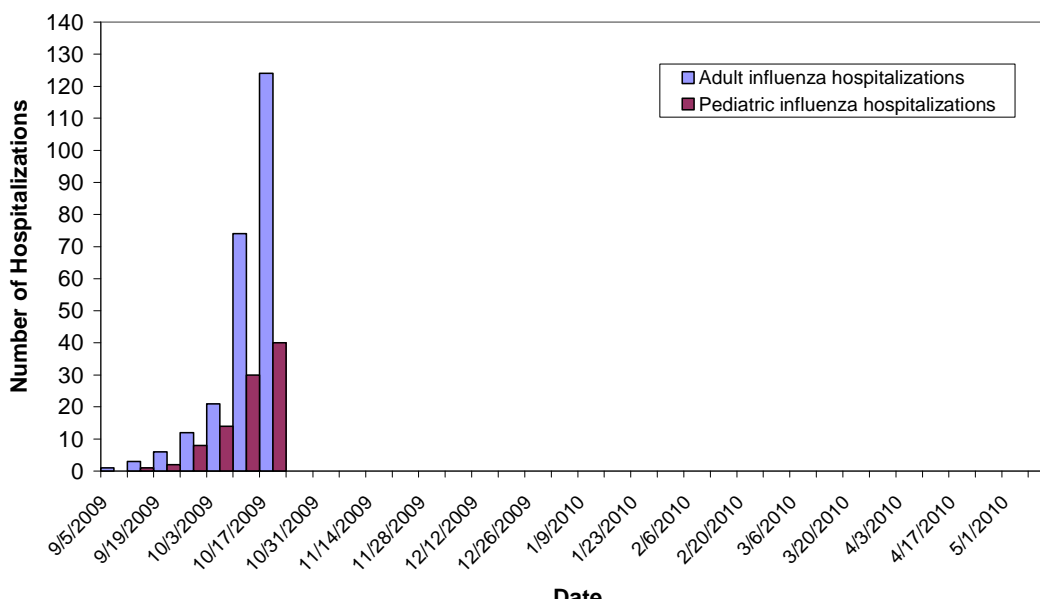
Summary

- Since September 1, 2009, 449 patients were hospitalized with influenza statewide. Fourteen people have died from influenza.
- Surveillance among outpatients continues to show elevated rates of influenza-like illness.
- Outbreaks of influenza-like illness were reported this week at schools in Clatsop, Lincoln and Multnomah counties and at a retreat center in Marion county.
- No school closures occurred this week.

Influenza Hospitalizations and Deaths

Since September 1, 2009 there have been 449 influenza hospitalizations among residents of 24 counties.

**Adult and Pediatric Lab-confirmed Influenza Hospitalizations*
Oregon, admitted 09/01/09 - 10/17/09**



*Hospitalizations with known admission date

Distribution of Hospitalized Influenza Cases* by County and Age Oregon, N=449

County	Total	Age						Unknown
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+	
Benton	9	1	2	2	3	0	1	0
Clackamas	46	9	3	8	17	7	2	0
Coos	6	0	0	1	1	3	1	0
Deschutes	19	0	4	3	7	2	3	0
Douglas	12	1	3	0	0	6	2	0
Harney	4	0	2	1	1	0	0	0
Hood River	1	0	0	0	1	0	0	0
Jackson	70	9	13	4	18	14	8	4
Jefferson	3	1	0	0	2	0	0	0
Josephine	26	3	4	1	9	6	3	0
Klamath	17	1	5	0	2	5	4	0
Lake	2	1	0	1	0	0	0	0
Lane	64	7	10	2	16	20	9	0
Linn	5	1	0	0	2	2	0	0
Malheur	2	1	0	0	0	1	0	0
Marion	15	4	4	1	3	1	2	0
Morrow	2	1	0	0	0	1	0	0
Multnomah	62	5	9	4	18	18	8	0
Polk	5	0	2	1	1	0	1	0
Umatilla	10	2	2	3	2	1	0	0
Union	2	0	1	0	0	1	0	0
Wasco	1	0	0	0	1	0	0	0
Washington	54	10	9	4	24	3	4	0
Yamhill	7	0	2	0	4	1	0	0
Unknown	5	1	0	0	4	0	0	0
TOTAL	449	58 (13%)	75 (17%)	36 (8%)	136 (30%)	92 (20%)	48 (11%)	4 (1%)

*Since September 1st, 2009

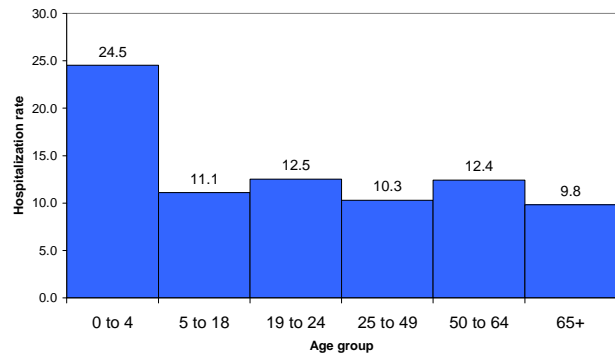
Characteristics of Hospitalized Influenza Cases*

Age	
Median	33
Range	0-92
Sex	N (%)
Male	206 (46)
Female	237 (53)
Unknown	6 (1)
Severity	
Admitted to ICU*	11 of 162 (7)
Pregnant	25 (6)

*Since September 1st, 2009

†ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties as a component of EIP hospitalization surveillance

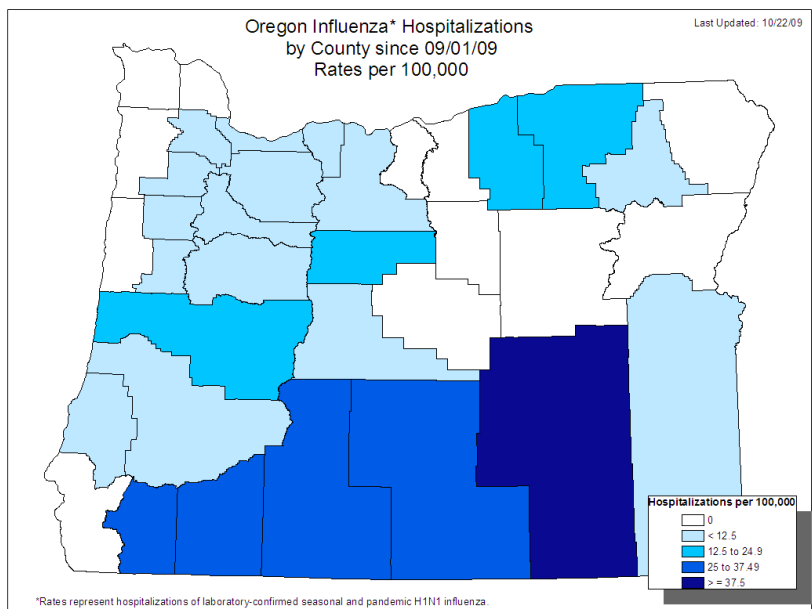
Oregon Influenza Hospitalizations, 09/01/09 - 10/17/09
Rate per 100,000 residents



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.

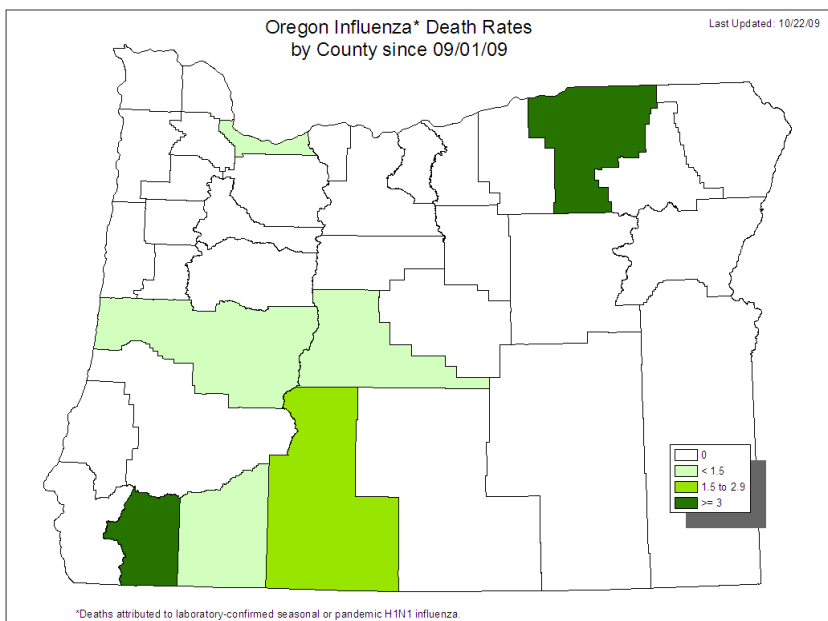
For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>.



Distribution of Influenza Deaths*, by County of Residence and Age Group, N=14

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Deschutes	1	0	0	0	1	0	0
Jackson	1	0	0	0	1	0	0
Josephine	4	0	0	0	2	2	0
Klamath	1	0	0	0	0	1	0
Lane	3	0	0	0	0	1	2
Multnomah	1	0	0	0	0	1	0
Umatilla	3	0	1	0	2	0	0
TOTAL	14	0	1 (7%)	0	6 (43%)	5 (36%)	2 (14%)

*Since September 1st, 2009

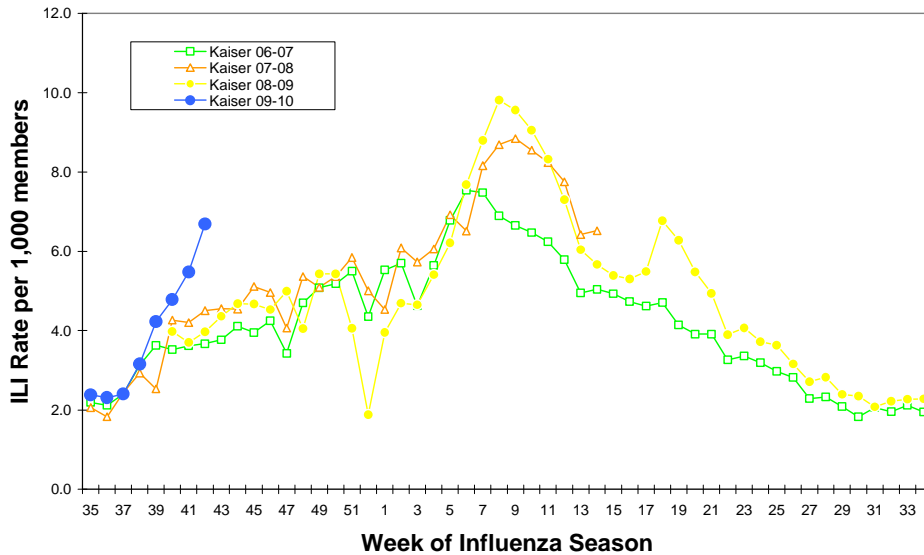


Outpatient Influenza-like Illness

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 increased to 6.69 per 1,000 Kaiser members during the week ending October 17th.

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



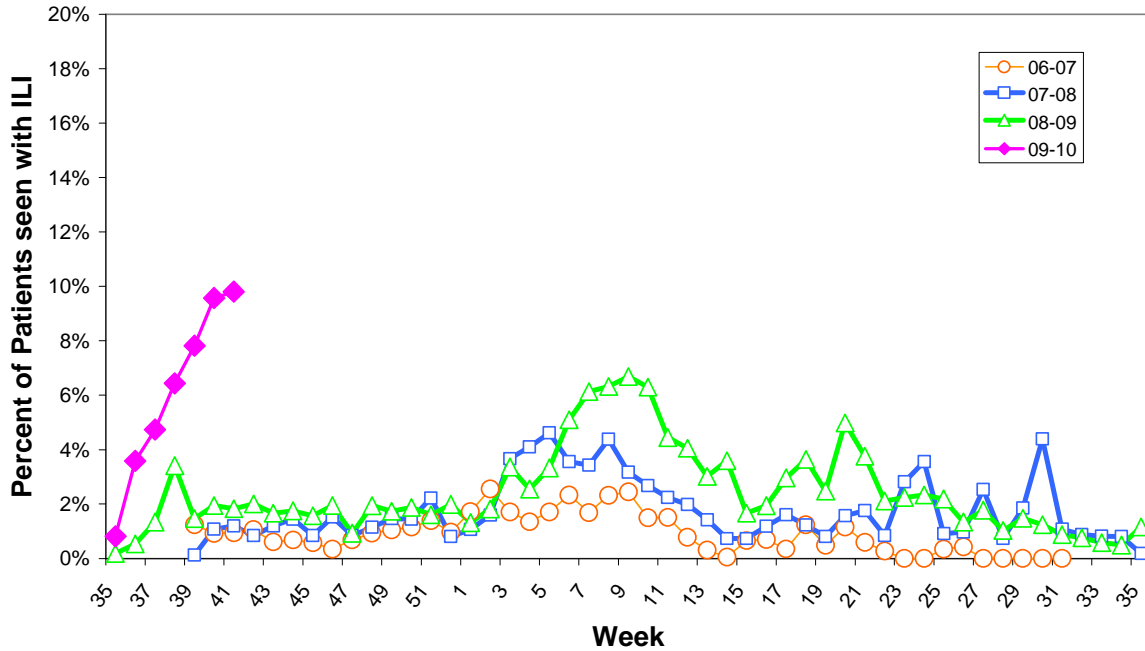
ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network

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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending October 17th	5435	9.81	18
Week ending October 10th	4764	9.57	18
Week ending October 3rd	1074	7.82	8

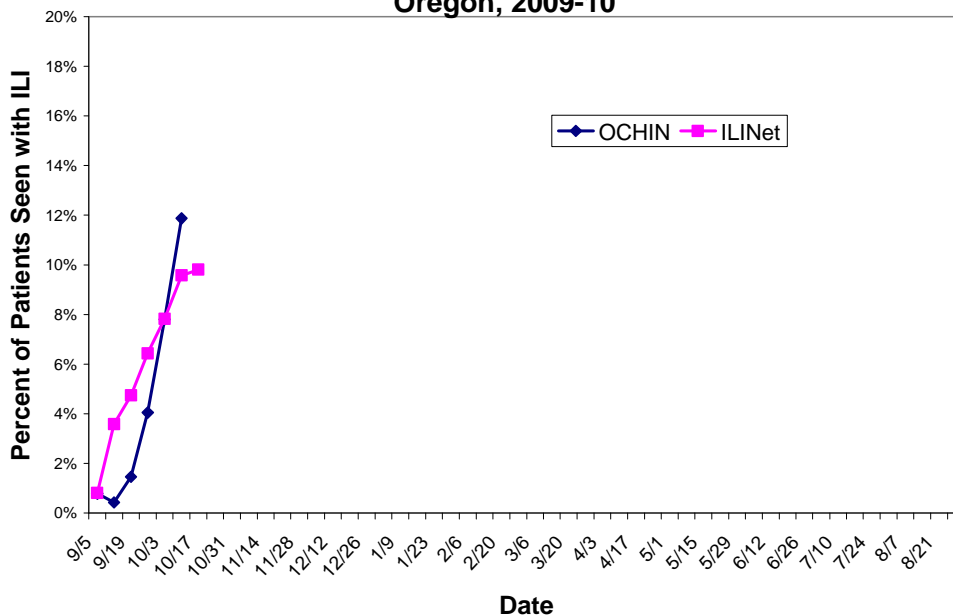
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



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 10th was 11.86%.

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



Community Surveillance for Influenza-like Illness – Coming Soon!

The Oregon State Public Health Division collects community level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). Data from this survey will be available in the October 30th version of FluBites.

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 and 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.

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

	Cumulative since September 1 st , 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N (%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	80 (54)	352 (38)	10 (72)	442 (40)	141 (58)
Seasonal A (H1)	1 (0)	0	0	1 (0)	0
Seasonal A (H3)	10	1 (0)	0	1 (0)	0
Influenza B	0	0	0	0	0
Pending	16 (11)	225 (24)	1 (7)	242 (22)	6 (2)
Undetected	52 (35)	360 (38)	3 (21)	415 (38)	98 (40)
Total Tested	149	938	14	1101	245

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/>

FLU BITES

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

Published October 19th, 2009



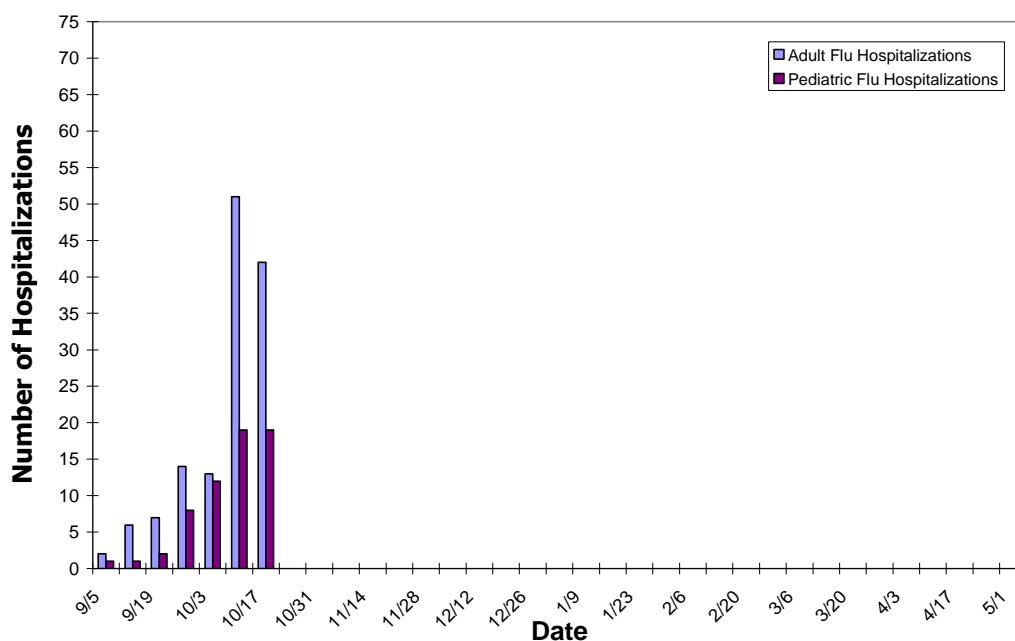
Summary

- Since September 1, 2009, 239 patients were hospitalized with influenza statewide. Six people have died from influenza.
- Since October 4th, 38 pediatric and 93 adult influenza hospitalizations have occurred statewide.
- Surveillance among outpatients continues to show increased rates of influenza-like illness. Rates are highest in the Portland metropolitan area.
- No school closures occurred this week.

Influenza Hospitalizations and Deaths

Since September 1, 2009 there have been 239 influenza hospitalizations among residents of 20 counties.

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



The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. The numbers reported on CDC's website might differ

from numbers posted here or on our website. If there is a discrepancy, data from our website and this publication should be considered as being the most accurate and up to date. For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>

**Distribution of Hospitalized Influenza Cases* by County and Age
Oregon, N=239**

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Benton	2	0	1	0	1	0	0
Clackamas	21	5	2	3	9	2	0
Coos	4	0	0	1	1	2	0
Deschutes	11	0	3	3	4	0	1
Douglas	9	1	2	0	0	5	1
Harney	3	0	2	1	0	0	0
Hood River	1	0	0	0	1	0	0
Jackson	32	6	8	3	5	7	3
Jefferson	1	0	0	0	1	0	0
Josephine	13	2	1	1	4	4	1
Klamath	9	1	4	0	0	1	3
Lake	2	1	0	1	0	0	0
Lane	24	2	6	2	7	3	4
Linn	4	0	0	0	2	2	0
Malheur	1	0	0	0	0	0	1
Marion	7	2	1	0	2	0	2
Morrow	2	1	0	0	0	1	0
Multnomah	41	4	10	2	12	10	3
Polk	2	0	1	1	0	0	0
Umatilla	9	2	2	2	2	1	0
Union	2	0	1	0	0	1	0
Wasco	1	0	0	0	0	1	0
Washington	29	4	4	3	13	2	3
Yamhill	3	0	1	0	1	1	0
Unknown	6	1	0	0	5	0	0
TOTAL	239	32	49	23	71	43	21

*Since September 1st, 2009

Characteristics of Hospitalized Influenza Cases*, N=239

Age	
Median	31
Range	0-90
Sex	N (%)
Male	102 (43)
Female	132 (55)
Unknown	5 (2)
Severity	
Admitted to ICU*	9 of 91 (10)
Died	6 (3)
Pregnant	20 (8)

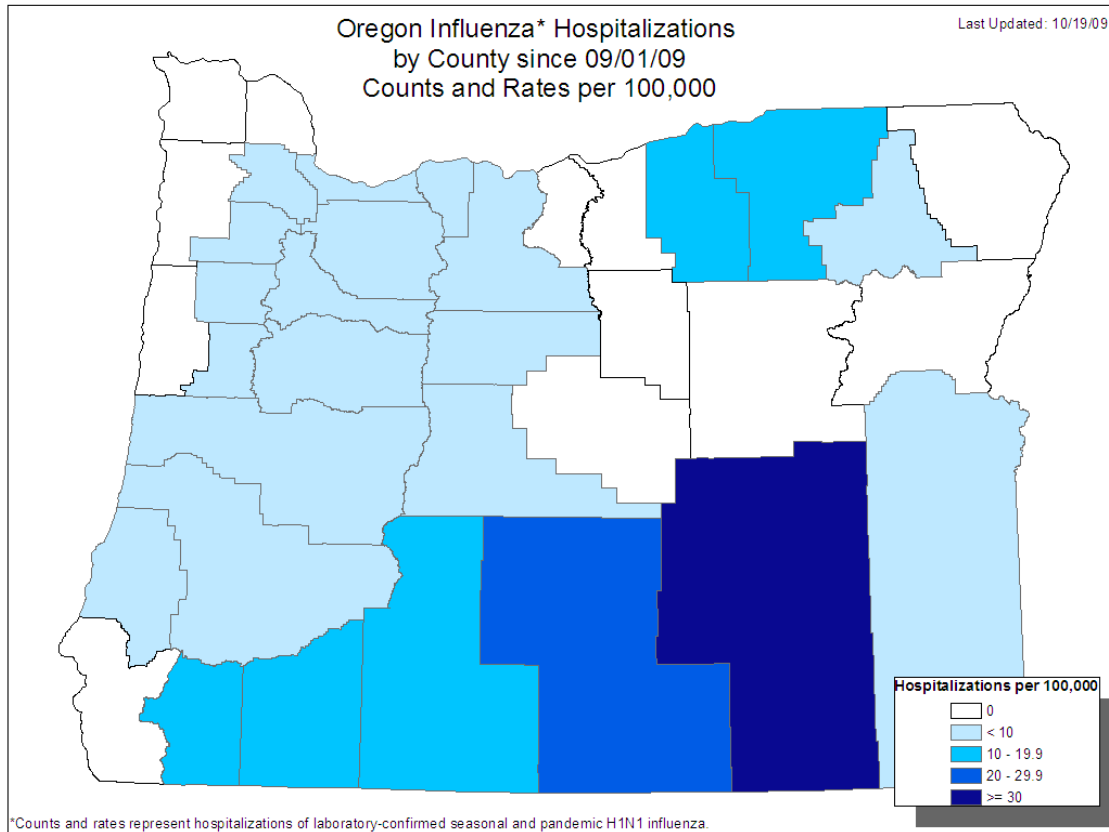
*Since September 1st, 2009

†ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties as a component of EIP hospitalization surveillance

Distribution of Influenza Deaths*, by County of Residence and Age Group, N=6

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Deschutes	1	0	0	0	1	0	0
Jackson	1	0	0	0	1	0	0
Lane	1	0	0	0	0	0	1
Multnomah	1	0	0	0	0	1	0
Umatilla	2	0	1	0	1	0	0
TOTAL	6	0	1	0	3	1	1

*Since September 1st, 2009

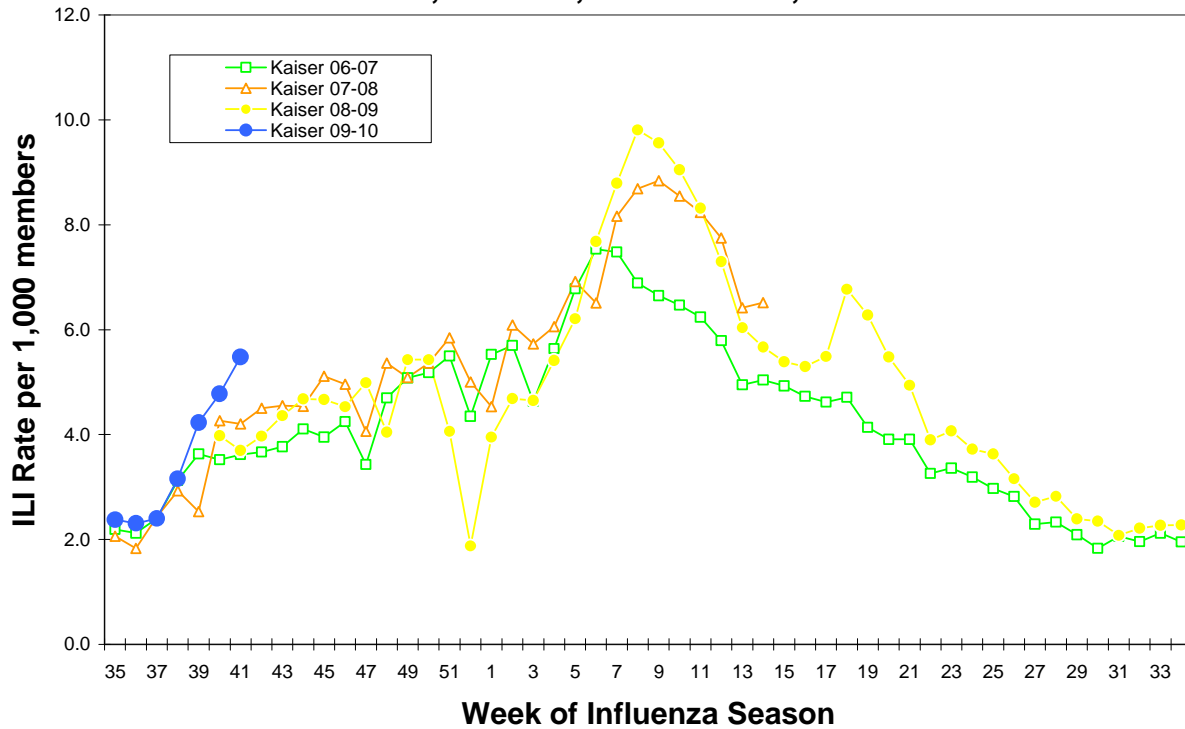


Outpatient Influenza-like Illness

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 increased to 5.48 per 1,000 Kaiser members during the week ending October 10th.

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



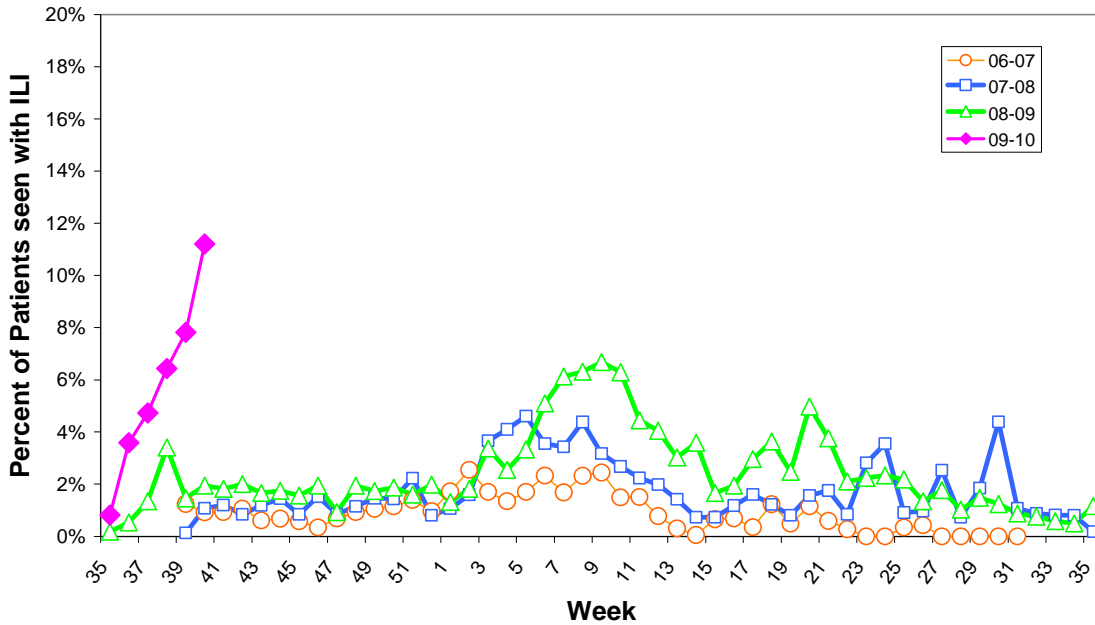
ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network

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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending October 10 th	3469	11.21	13
Week ending October 3 rd	1074	7.82	8
Week ending September 26 th	653	7.46	7

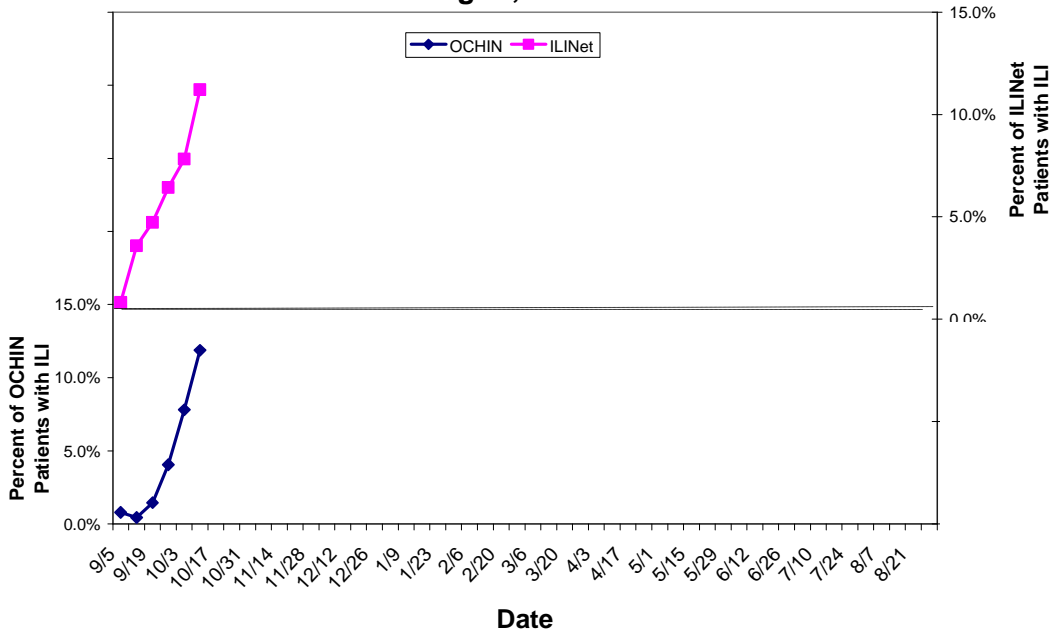
**Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
Percent of Outpatients with Influenza-like Illness (ILI)
2006-07, 2007-08, 2008-09, 2009-10**



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 3rd was 4.16%.

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



Community Surveillance for Influenza-like Illness – Coming Soon!

The Oregon State Public Health Division collects community level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). Data from this survey will be available in the October 30th version of FluBites.

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 and 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.

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

	Cumulative since September 1 st , 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N (%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	64 (50)	187 (33)	6 (100)	254 (44)	115 (47)
Seasonal A (H1)	1 (0)	0	0	1 (0)	0
Seasonal A (H3)	0	0	0	0	0
Influenza B	0	0	0	0	0
Pending	11 (9)	154 (27)	0	165 (28)	78 (32)
Undetected	51 (40)	233 (41)	0	284 (48)	53 (22)
Total Tested	127	574	6	582	246

*Submissions for hospitalized cases include some ER visits. Please be patient as we continue to educate our submitters.

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/>

FLU BITES

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

For week ending October 3rd, 2009
(calendar week 39)



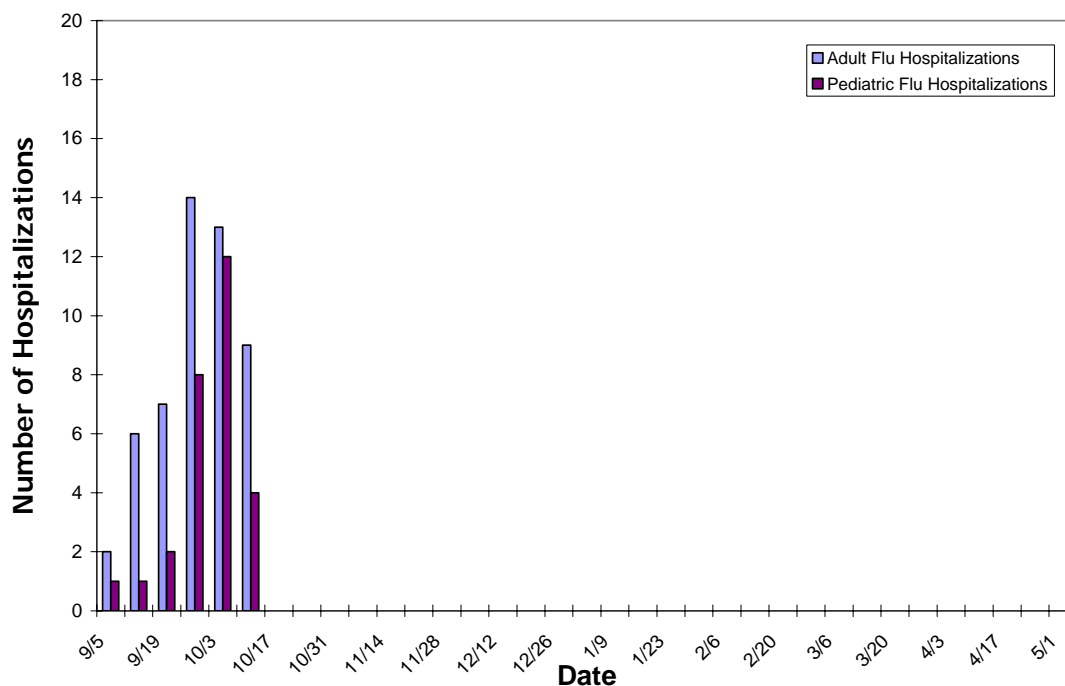
Summary

- Since September 1, 2009, 84 patients were hospitalized with influenza statewide. Three people have died from influenza.
- During week 39 (September 27th - October 3rd) 12 pediatric and 13 adult influenza hospitalizations occurred statewide. Four pediatric and nine adult hospitalizations have been reported already for week 40.
- Surveillance among outpatients shows increased rates of influenza-like illness.
- No school closures occurred this week (week 40). Two school closures occurred during week 39.

Influenza Hospitalizations and Deaths

Since September 1, 2009 there have been 84 influenza hospitalizations among residents of 14 counties. H1N1 has been confirmed in 41 (49%) of these cases, although several specimens are pending at the public health lab.

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



The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. The numbers reported on CDC's website might differ from numbers posted here or on our website. If there is a discrepancy, data from our website and this publication should be considered as being the most accurate and up to date. For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>

**Distribution of Hospitalized Influenza Cases* by County and Age
Oregon, N=84**

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Clackamas	5	1	1	0	3	0	0
Deschutes	2	0	1	0	1	0	0
Douglas	2	0	0	0	0	0	2
Jackson	17	3	3	2	4	4	1
Josephine	2	0	1	0	0	1	0
Klamath	7	1	3	0	0	0	3
Lane	11	1	2	1	2	1	4
Marion	2	1	0	0	0	0	1
Multnomah	13	1	4	1	4	1	2
Polk	1	0	0	1	0	0	0
Umatilla	5	1	0	2	1	1	0
Union	1	0	1	0	0	0	0
Washington	15	2	2	2	5	2	2
Yamhill	1	0	1	0	0	0	0
TOTAL	84	11	19	9	20	10	15

*Since September 1st, 2009

Characteristics of Hospitalized Influenza Cases*, N=84

Age	
Median	28
Range	0-90
Sex	N (%)
Male	40 (48)
Female	44 (52)
Severity	
Admitted to ICU [†]	2 of 22 (9)
Died	3 (3)
Pregnant	4 (5)

*Since September 1st, 2009

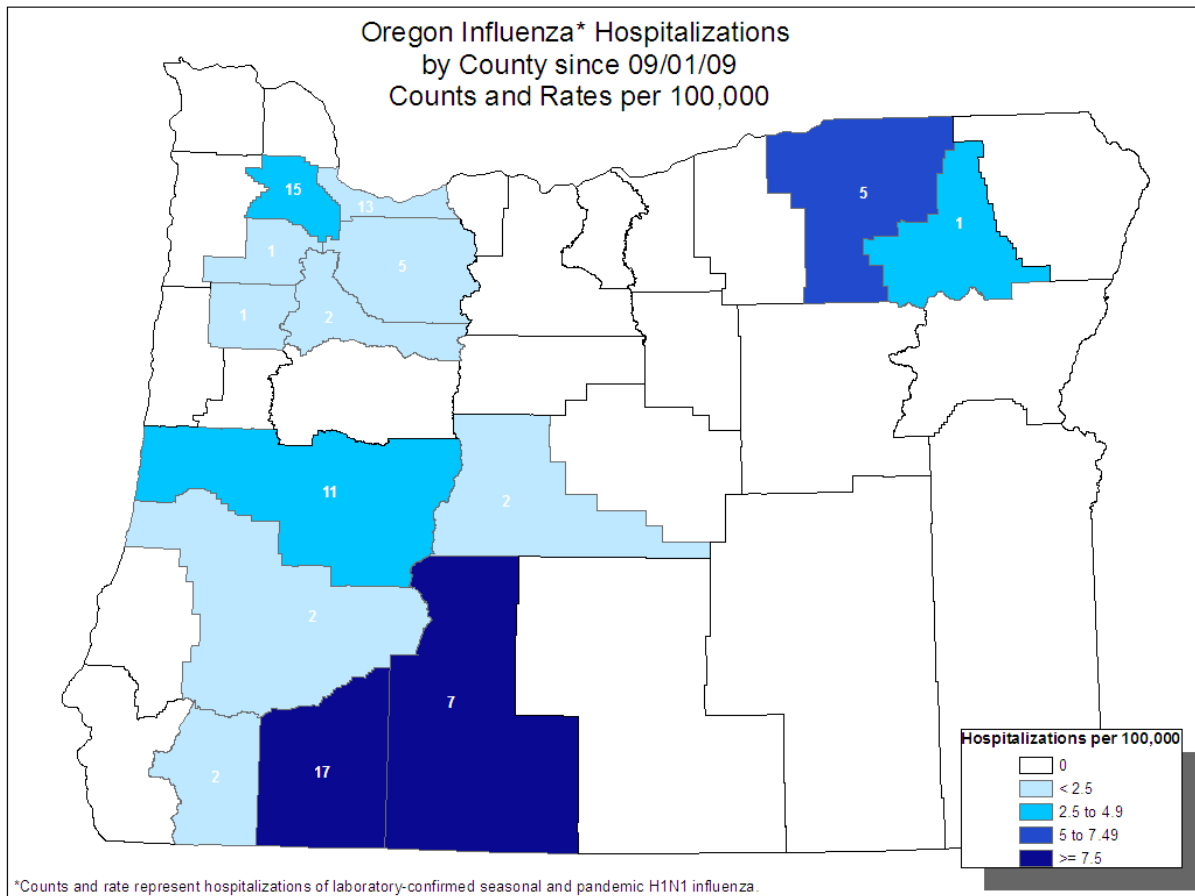
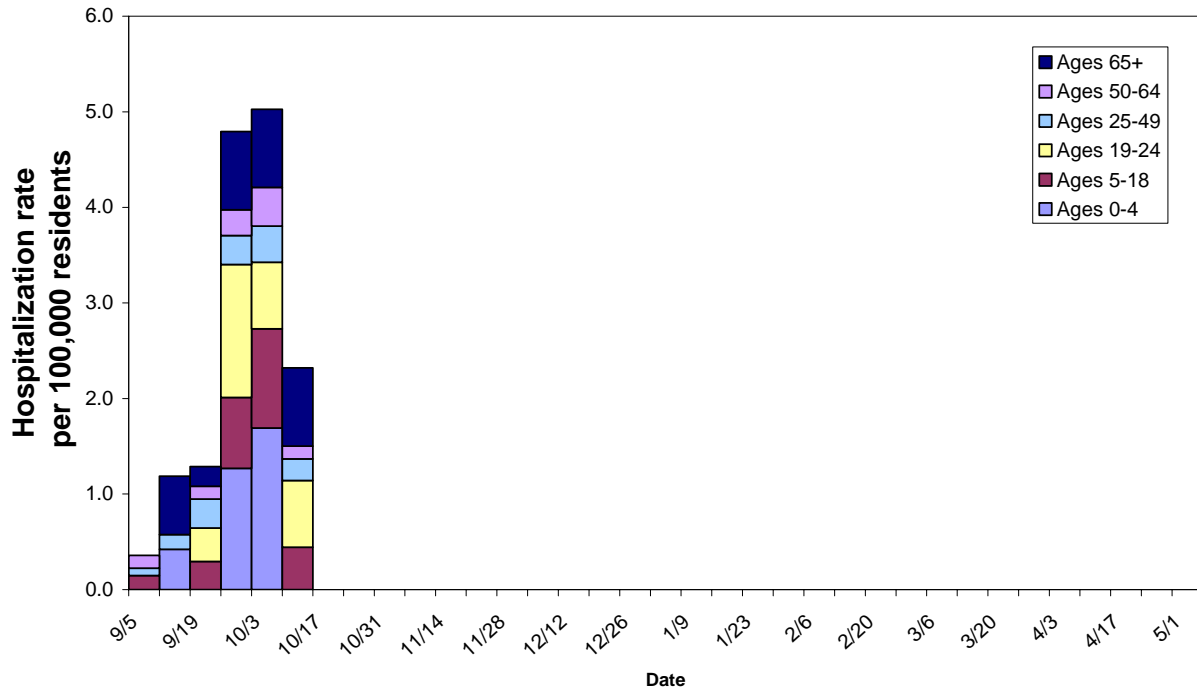
[†]ICU status is only available for hospitalized patients in Clackamas, Multnomah and Washington Counties as a component of EIP hospitalization surveillance

Distribution of Influenza Deaths*, by County of Residence and Age Group, N=3

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Deschutes	1	0	0	0	1	0	0
Jackson	1	0	0	0	1	0	0
Lane	1	0	0	0	0	0	1
TOTAL	3	0	0	0	2	0	1

*Since September 1st, 2009

Lab-confirmed Influenza Hospitalization Rates by Age Oregon, Since 09/01/09

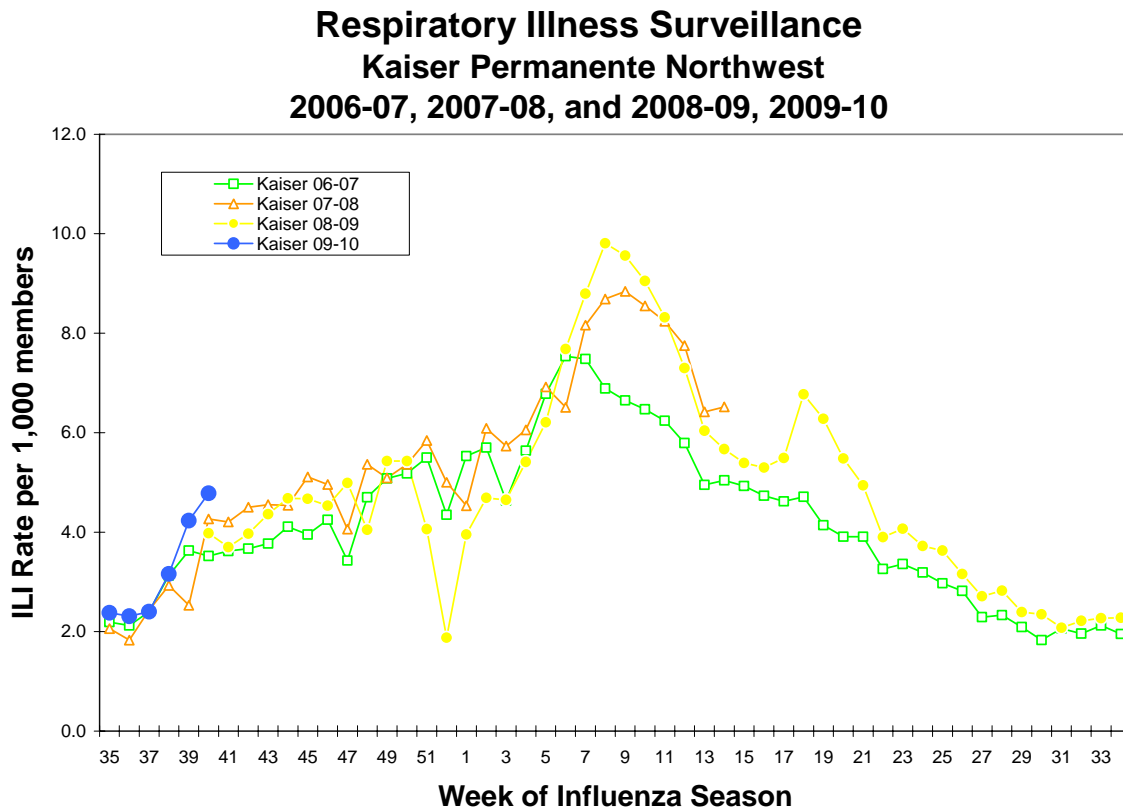


*Counts and rate represent hospitalizations of laboratory-confirmed seasonal and pandemic H1N1 influenza.

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 increased to 4.23 per 1,000 Kaiser members during week 39.



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

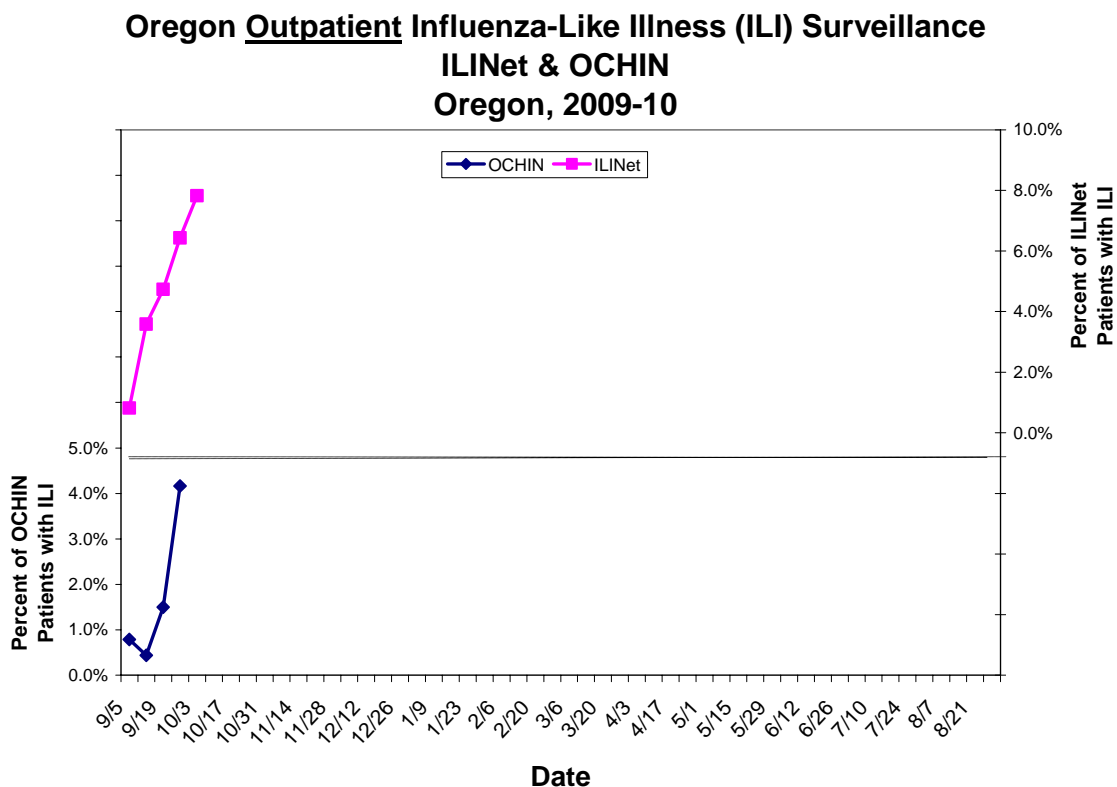
Oregon's outpatient influenza-like illness network is comprised of 30 voluntary healthcare providers from all across Oregon who report the number of patients with influenza-like illness (ILI) as well as total number of patient visits for each week during the surveillance season.

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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending October 3 rd	1075	7.82	8
Week ending September 26 th	653	7.46	7
Week ending September 19 th	507	4.73	5

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 week 38 was 4.16%.



Community Surveillance for Influenza-like Illness – Coming Soon!

The Oregon State Public Health Division collects community level data on influenza-like illness via the Behavioral Risk Factor Assessment Surveillance System (BRFSS). Data from this survey will be available in the October 30th version of FluBites.

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 and 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.

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

	Cumulative since September 1 st , 2009				Current Week
	ILINet N (%)	Hospitalized* or Died N (%)	Outbreaks N (%)	Total N (%)	Total N (%)
Influenza A					
Pandemic H1N1	39 (38)	74 (24)	6 (100)	119 (28)	36 (31)
Seasonal A (H1)	1 (1)	0	0	1 (0)	0
Seasonal A (H3)	0	0	0	0	0
Influenza B	0	0	0	0	0
Pending	18(17)	91 (29)	0	109 (25)	41 (35)
Undetected	46 (44)	149 (48)	0	201 (47)	39 (34)
Total Tested	104	314	6	430	116

*Submissions for hospitalized cases include some ER visits. Please be patient as we continue to educate our submitters.

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/>

FLU BITES

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

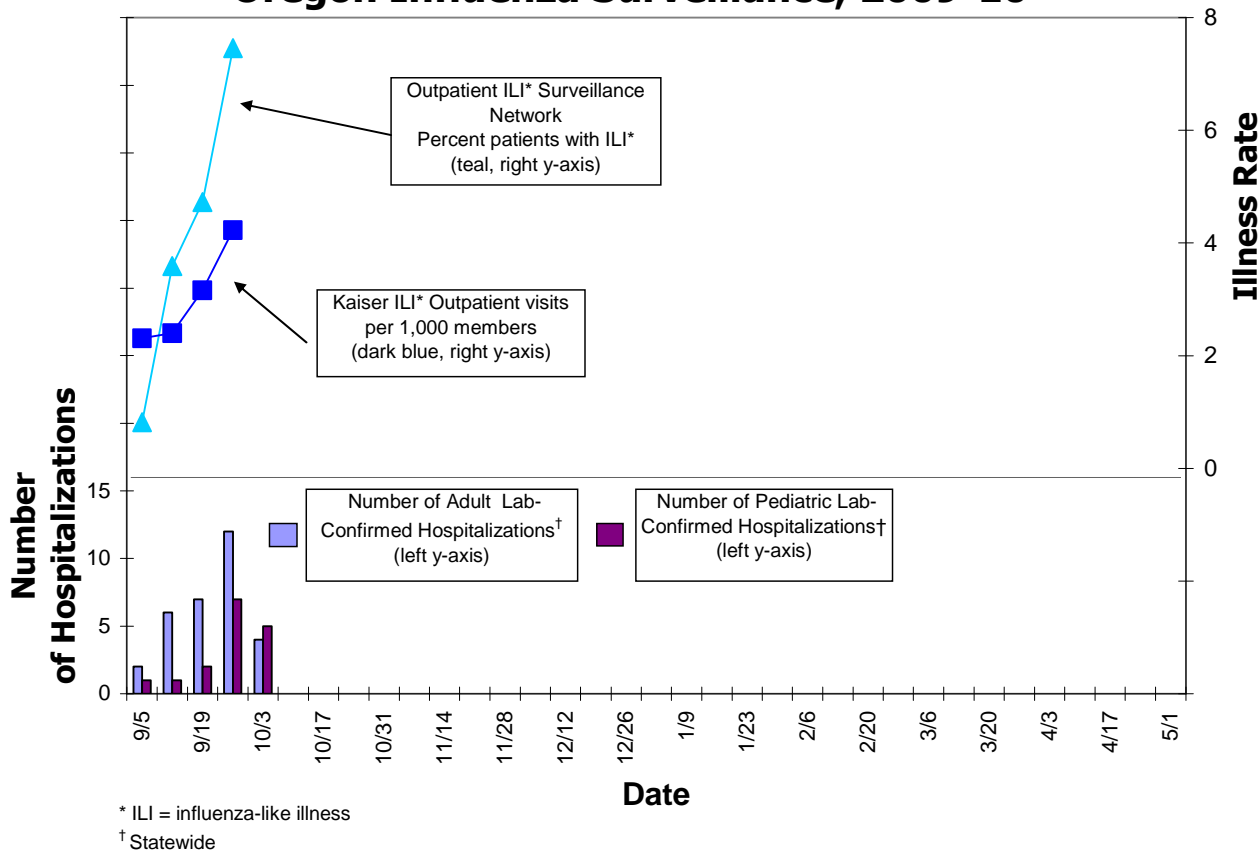
For week ending September 26th, 2009
(calendar week 38)



Summary

Influenza activity rose dramatically this week. During week 38 (September 18th - September 26th) seven pediatric and 12 adult influenza hospitalizations were reported statewide. One adult death was reported during week 38. In addition, five pediatric and four adult hospitalizations have been reported already for week 39, bringing the statewide total to 48 hospitalizations since September 1st. Sentinel rates of influenza-like illness increased to 7.46%, which is the highest rate ever on record. Kaiser outpatient rates of influenza-like illness also increased again this week. The increased influenza activity produced community-wide impacts - school closures were reported this week in Jackson and Lake Counties.

Oregon Influenza Surveillance, 2009-10



Influenza Hospitalizations and Deaths:

Since September 1, 2009 there have been 48 influenza hospitalizations among residents of 10 counties. H1N1 has been confirmed in 23 (48%) of these cases, and the rest are unsubtype influenza A.

Distribution of Hospitalized Influenza Cases, by County of Residence and Age, Oregon

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Clackamas	2	0	1	0	1	0	0
Deschutes	2	0	1	0	1	0	0
Douglas	1	0	0	0	0	0	1
Jackson	7	0	2	1	2	2	0
Klamath	7	1	3	0	0	0	3
Lane	7	1	0	0	2	1	3
Marion	1	0	0	0	0	0	1
Multnomah	7	1	3	1	1	0	1
Umatilla	4	1	0	2	1	0	0
Washington	9	1	1	1	4	1	1
Unknown	1	0	0	0	1	0	0
TOTAL	48	5	11	5	13	4	10

Characteristics of Hospitalized Influenza Cases

Age	
Median	30
Range	0-90
Sex	N (%)
Male	21 (44)
Female	27 (56)
Severity	
Admitted to ICU*	1 of 18 (6)
Died	3 (6)
Pregnant	3 (6)

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

Laboratory Data: Influenza Type and Subtype, Hospitalized Cases

	N (%)
Influenza A	48 (100)
Pandemic H1N1	23 (48)
A (unable to subtype)	2 (4)
A (not subtyped)	23 (48)
A (H3)	0
A (H1)	0
Influenza B	0

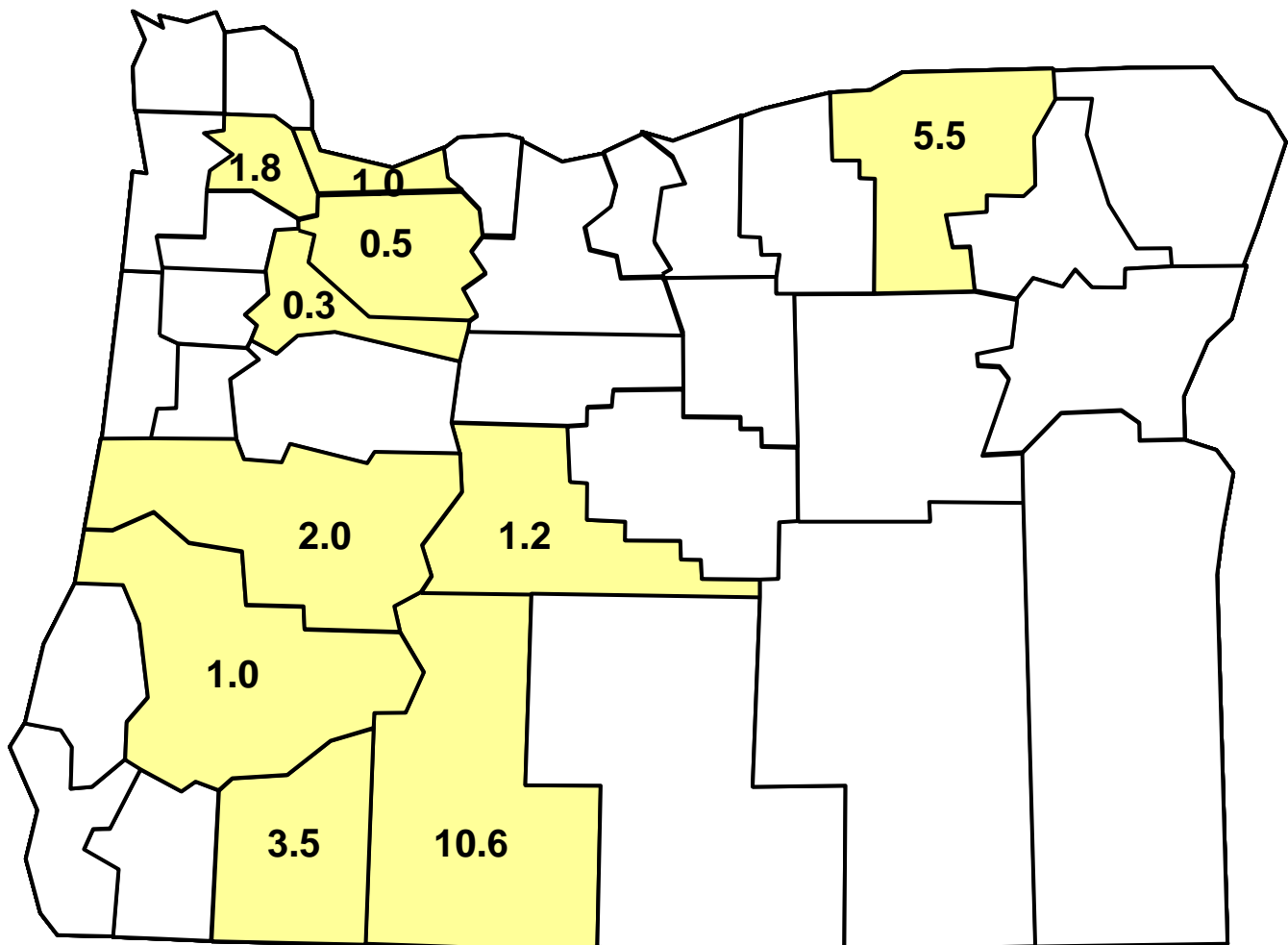
Distribution of Influenza Deaths, by County of Residence and Age Group

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Deschutes	1	0	0	0	1	0	0
Jackson	1	0	0	0	1	0	0
Lane	1	0	0	0	0	0	1
TOTAL	3	0	0	0	2	0	1

The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. The numbers reported on CDC's website might differ from numbers posted here or on our website. If there is a discrepancy, data from our website and this publication should be considered as being the most accurate and up to date. For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>

Influenza Hospitalization Rates by County since September 1, 2009

The following map shows total number of influenza hospitalizations per 100,000 residents by county since September 1, 2009. All types of influenza are included.



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 increased to 4.23 per 1,000 Kaiser members during week 38.

More information is available at: <http://egov.oregon.gov/DHS/ph/acd/flu/kaiserflu.shtml>.

Oregon Outpatient Influenza-like Illness Surveillance Network

Oregon's outpatient influenza-like-illness network is comprised of 21 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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending September 26th	523	7.46	5
Week ending September 19th	507	4.73	5
Week ending September 12th	418	3.59	6

More information is available at: <http://www.oregon.gov/DHS/ph/acd/flu/flusurv.shtml>.

Additional resources:

More Oregon influenza surveillance data is available at: <http://egov.oregon.gov/DHS/ph/acd/flu/flusurv.shtml>

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

FLU BITES

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

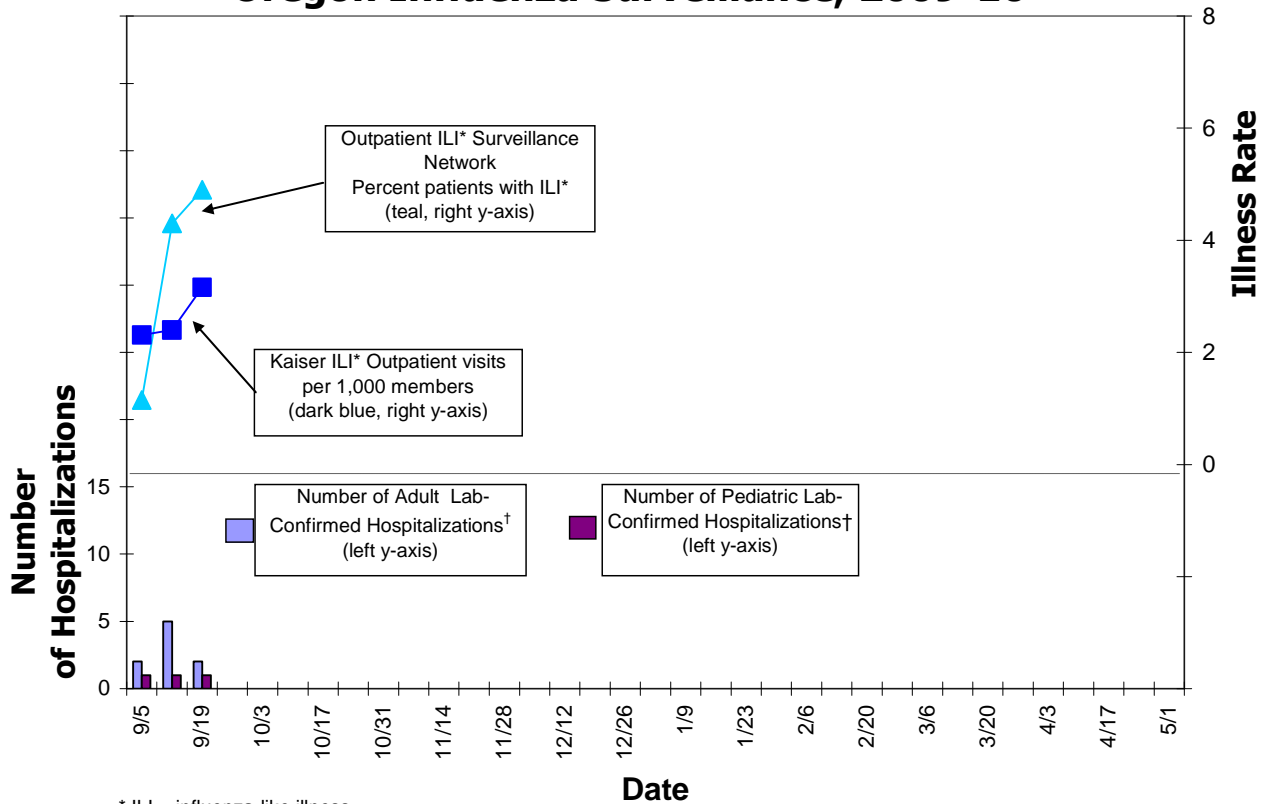
For week ending September 19th, 2009
(calendar week 37)



Summary

During week 37 (September 13th- September 19th) one pediatric and two adult influenza hospitalizations were reported statewide. One adult died during week 37. In addition, one adult and one pediatric hospitalization have been reported already for week 38. Of the five new hospitalizations, two have been confirmed pandemic H1N1 and the others are influenza A but not subtyped. Since the beginning of the reporting season, there have been 16 hospitalizations and two deaths statewide. Kaiser outpatient rates of influenza-like illness increased again this week. Sentinel rates of influenza-like illness were above baseline for the second week in a row, although only three providers have reported so far. Most of the sentinel ILI activity continues to come from southern Oregon.

Oregon Influenza Surveillance, 2009-10



* ILI = influenza-like illness
† Statewide

Influenza Hospitalizations and Deaths:

Since September 1, 2009 there have been 16 influenza hospitalizations among residents of five counties. Six of these have been confirmed H1N1, and the rest were unsubtype influenza A. One influenza related death occurred during week 37.

Distribution of Hospitalized Influenza Cases, by County of Residence and Age, Oregon

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Deschutes	1	0	1	0	0	0	0
Douglas	1	0	0	0	0	0	1
Jackson	1	0	0	0	1	0	0
Lane	5	1	0	0	1	0	3
Multnomah	2	0	1	1	0	0	0
Washington	5	0	1	0	2	1	1
Unknown	1	0	0	0	1	0	0
TOTAL	16	1	3	1	5	1	5

Characteristics of Hospitalized Cases

Age	
Median	30
Range	0-87
Sex	N (%)
Male	6 (38)
Female	10 (62)
Severity	
Admitted to ICU	3 (19)
Died	2 (13)
Pregnant	1 (6)

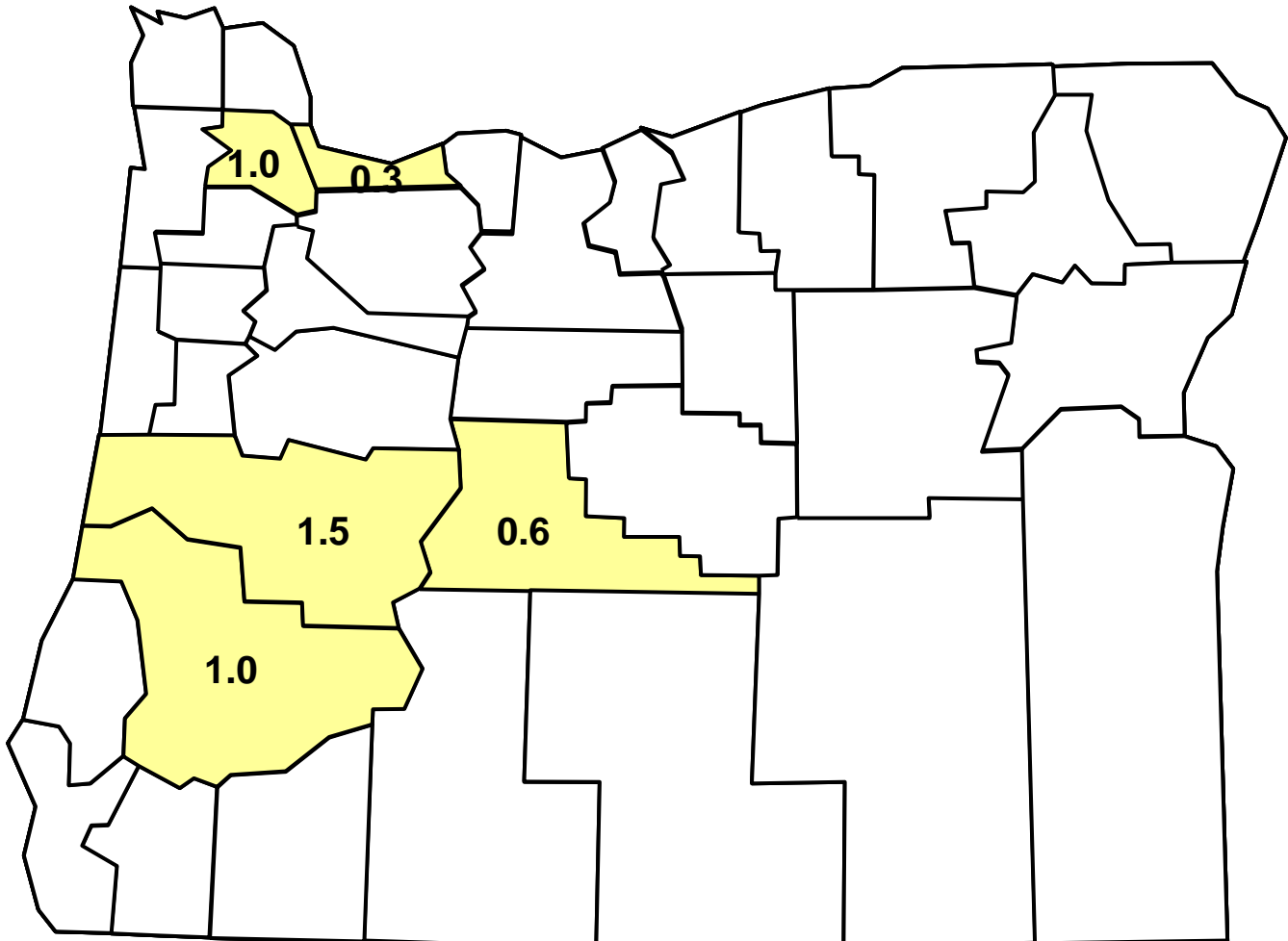
Laboratory Data: Influenza Type and Subtype, Hospitalized Cases

	N (%)
Influenza A	16 (100)
Pandemic H1N1	6 (38)
A (unable to subtype)	2 (12)
A (not subtyped)	8 (50)
A (H3)	0
A (H1)	0
Influenza B	0

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Influenza Hospitalization Rates by County since September 1, 2009

The following map shows total number of influenza hospitalizations per 100,000 residents by county since September 1, 2009. All types of influenza are included.



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 increased to 3.16 per 1,000 Kaiser members during week 37.

More information is available at: <http://egov.oregon.gov/DHS/ph/acd/flu/kaiserflu.shtml>.

Oregon Outpatient Influenza-like Illness Surveillance Network

Oregon's outpatient influenza-like-illness network is comprised of 21 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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending September 19 th	367	4.90	3
Week ending September 12 th	302	4.30	4
Week ending September 5 th	1291	0.77	7

More information is available at: <http://www.oregon.gov/DHS/ph/acd/flu/flusurv.shtml>.

Additional resources:

More Oregon influenza surveillance data is available at:
<http://egov.oregon.gov/DHS/ph/acd/flu/flusurv.shtml>

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

FLU BITES

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

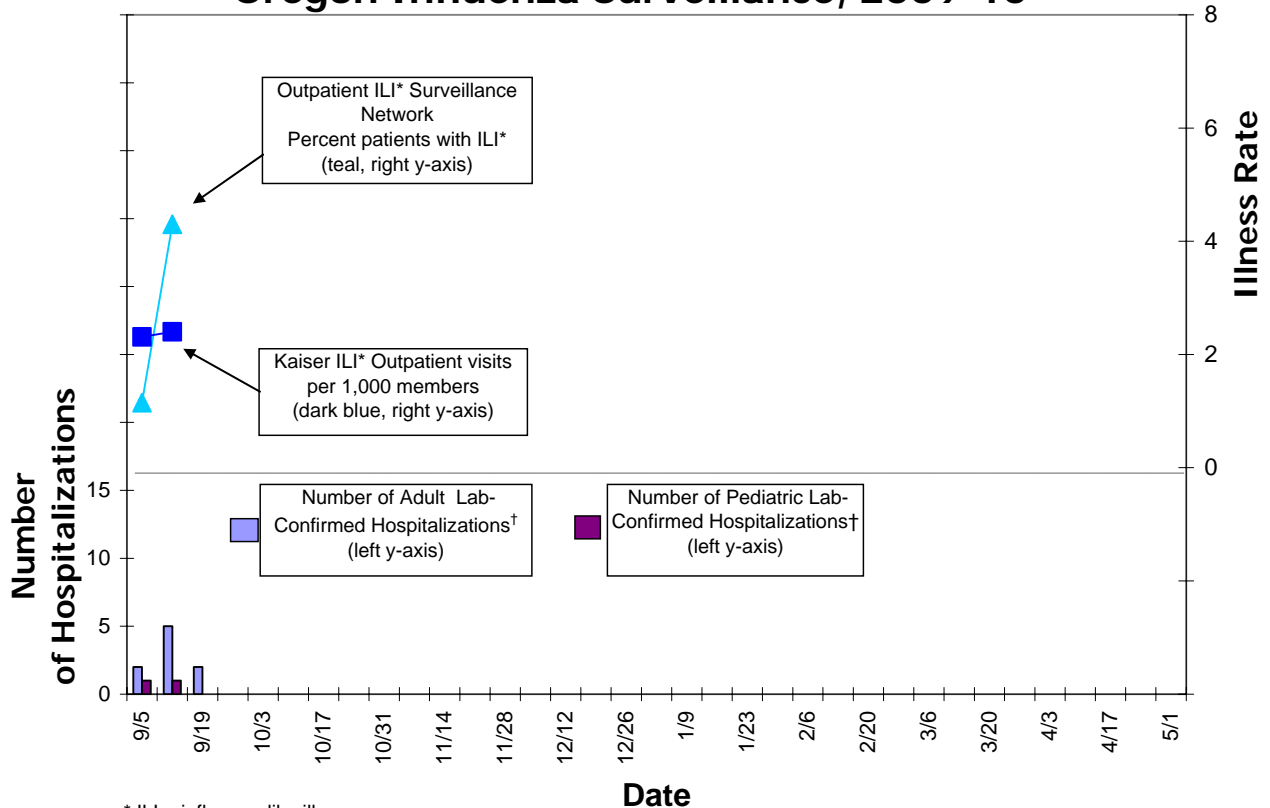
For week ending September 12th, 2009
(calendar week 36)



Summary

During week 36 (September 6th- September 12th) one pediatric and five adult influenza hospitalizations were reported statewide. One death was reported among the hospitalized adults. Three additional adult hospitalizations have already been reported for week 37. Of the nine new hospitalizations, three have been confirmed pandemic H1N1 and the others are influenza A but not (yet) subtyped. Since the beginning of the reporting season, there have been 13 hospitalizations statewide. Kaiser outpatient rates of influenza-like illness continue near baseline levels, though Kaiser provider rates increased slightly this week. Sentinel rates of influenza-like illness were much higher this week with most activity coming from southern Oregon.

Oregon Influenza Surveillance, 2009-10



* ILI = influenza-like illness
† Statewide

Influenza Hospitalizations and Deaths:

Since September 1, 2009 there have been 13 influenza hospitalizations among residents of five counties. Six of these have been confirmed H1N1, and the rest were untyped influenza A. One influenza related death was reported during week 36.

Distribution of Hospitalized Influenza Cases, by County of Residence and Age, Oregon

County	Number	Age					
		0 to 4	5 to 18	19 to 24	25 to 49	50 to 64	65+
Douglas	1	0	0	0	0	0	1
Lane	5	1	0	0	2	0	2
Multnomah	2	0	0	1	0	0	1
Umatilla	1	0	1	0	0	0	0
Washington	4	0	0	0	3	1	0
TOTAL	13	1	1	1	5	1	4

Characteristics of Hospitalized Cases

Age	
Median	48
Range	0-87
Sex	N (%)
Male	6 (46)
Female	7 (54)
Severity	
Admitted to ICU	2 (15)
Died	1 (8)
Pregnant	1 (8)

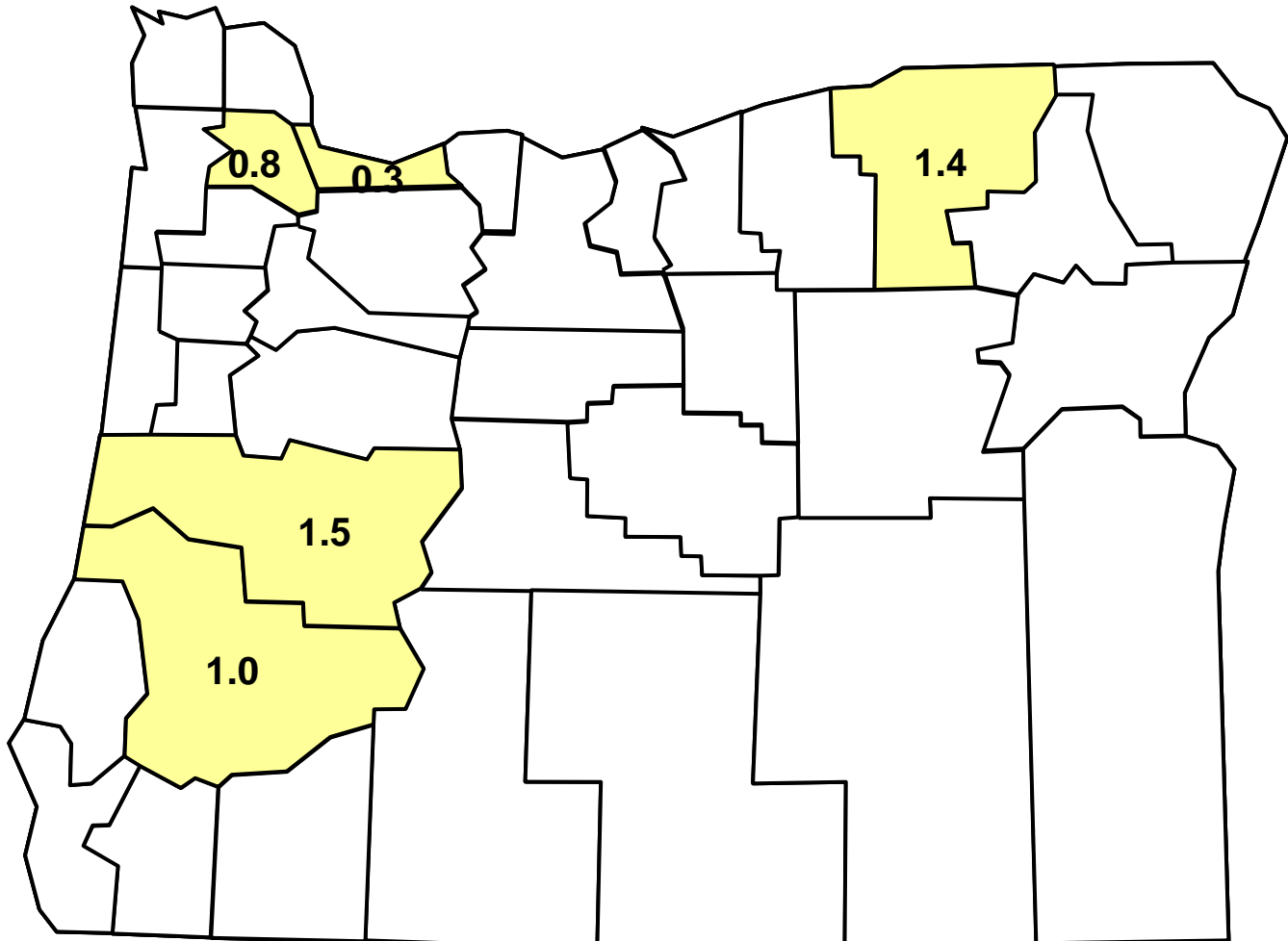
Laboratory Data: Influenza Type and Subtype, Hospitalized Cases

	N (%)
Influenza A	13 (100)
Pandemic H1N1	6 (46)
A (unable to subtype)	0
A (not subtyped)	7 (54)
A (H3)	0
A (H1)	0
Influenza B	0

The pandemic influenza A (H1N1) situation in Oregon continues to evolve on a daily basis and these numbers are provisional. The numbers reported on CDC's website might differ from numbers posted here or on our website. If there is a discrepancy, data from our website and this publication should be considered as being the most accurate and up to date. For more information on pandemic influenza A (H1N1) and seasonal influenza in Oregon please see: <http://www.flu.oregon.gov/>

Influenza Hospitalization Rates by County since September 1, 2009

The following map shows total number of influenza hospitalizations per 100,000 residents by county since September 1, 2009. All types of influenza are included.



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 increased slightly to 2.40 per 1,000 Kaiser members during week 36.

More information is available at: <http://egov.oregon.gov/DHS/ph/acd/flu/kaiserflu.shtml>.

Oregon Outpatient Influenza-like Illness Surveillance Network

Oregon's outpatient influenza-like-illness network is comprised of 21 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.

	Number of Patients Visits	Percent Patients with ILI	No. of Provider Reports
Week ending September 12 th	302	4.30	4
Week ending September 5 th	1291	0.77	7
Week ending August 29 th	1673	0.71	9

More information is available at: <http://www.oregon.gov/DHS/ph/acd/flu/flusurv.shtml>.

Additional resources:

More Oregon influenza surveillance data is available at:
<http://egov.oregon.gov/DHS/ph/acd/flu/flusurv.shtml>

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