

Data at a Glance October 2–October 8, 2016 (Week 40)

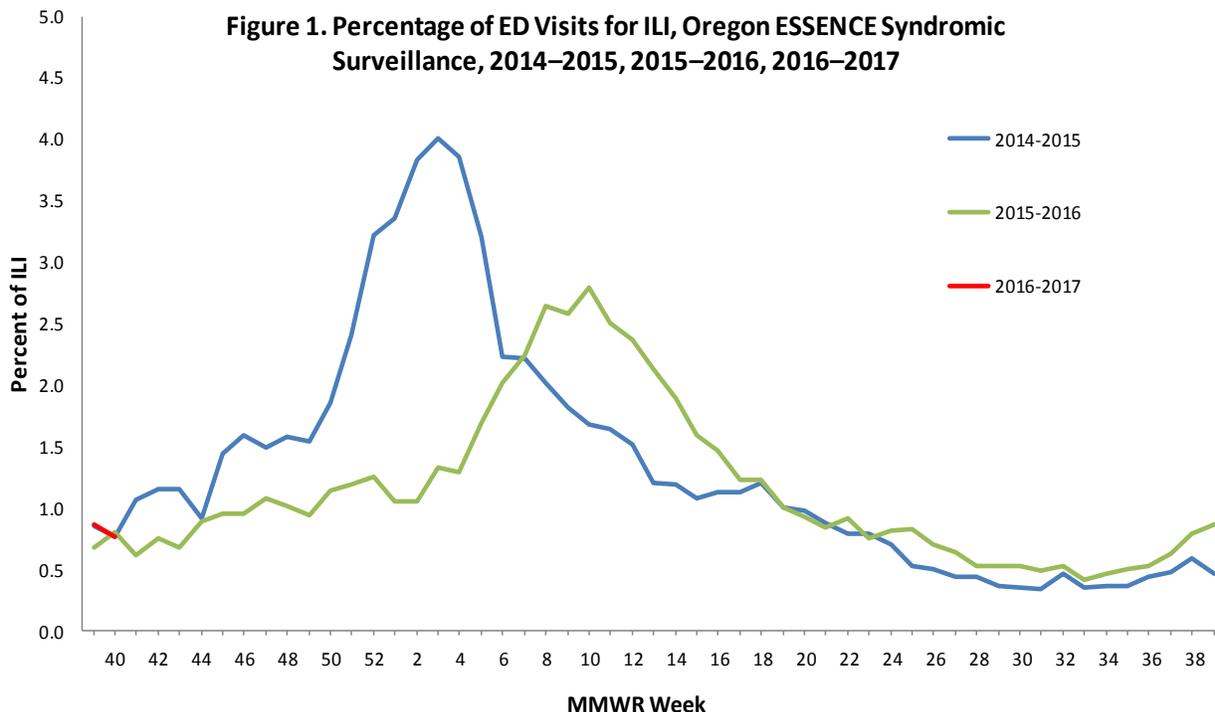
	Current Week (40)
Percentage of emergency department visits for ILI¹	0.8%
Percentage positive influenza tests²	1.2%
Influenza-associated hospitalizations³	2
Reported ILI/influenza outbreaks	0
Influenza-associated pediatric mortality	0
Percentage of outpatient visits for ILI	0.7%
Respiratory Syncytial Virus (RSV) activity⁴	<1%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 0.8% during week 40, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 1.2% of specimens tested at Oregon labs were positive for influenza during week 40, and the bar chart displays the number of influenza-positive tests by flu type.

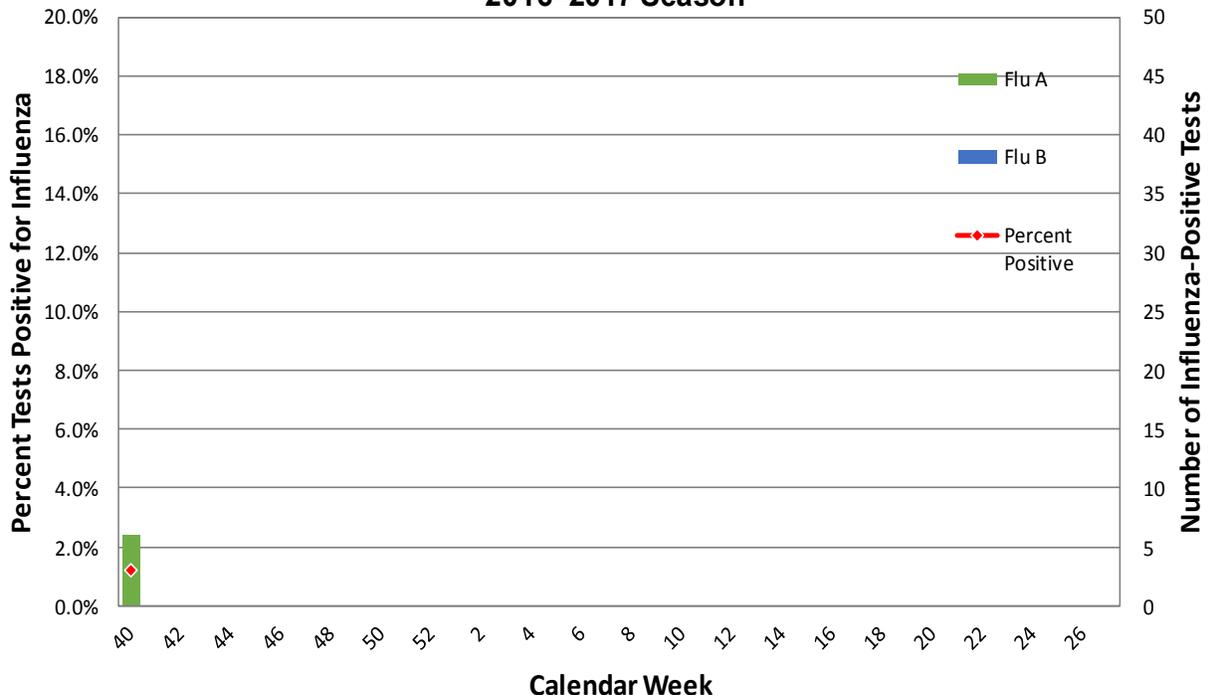
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

Current Week	
No. of specimens tested	510
No. of positive specimens (%)	6 (1.2%)
<i>Positive specimens by type</i>	
Influenza A	5 (100%)
Influenza B	0 (0%)

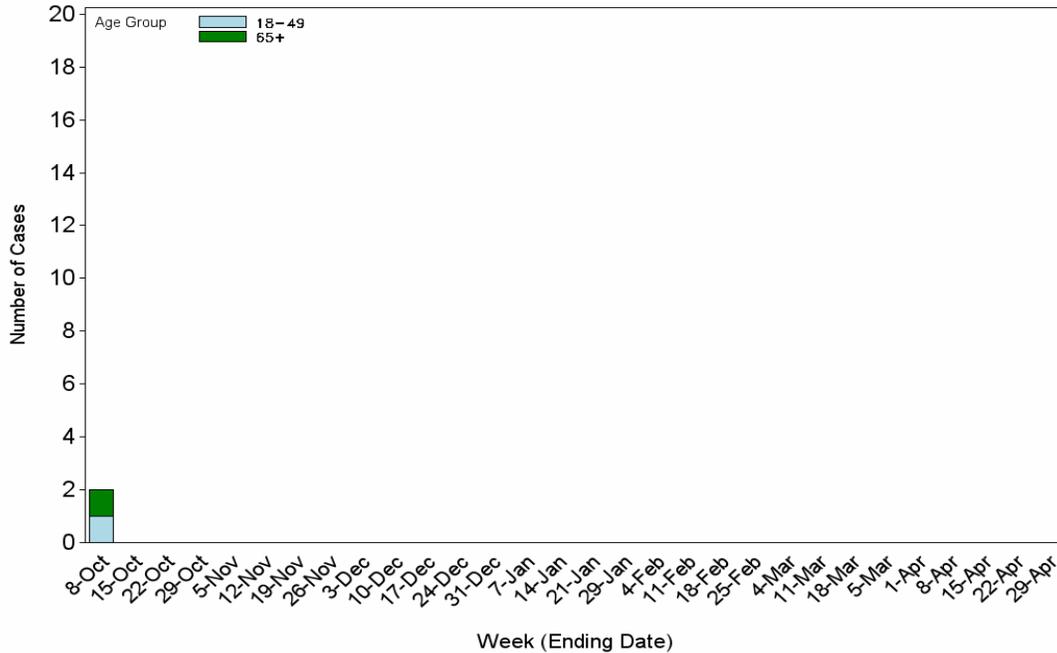
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

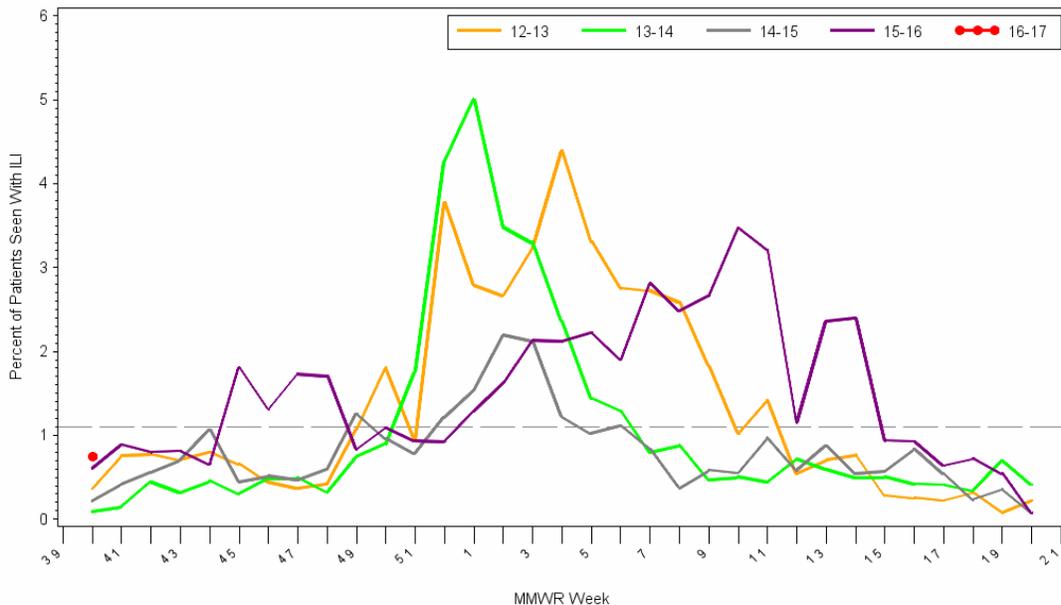
In Clackamas, Multnomah, and Washington counties 2 total reported hospitalizations occurred during the first week of surveillance, MMWR week 40. One person was infected with influenza B and the other with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 25 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 40 of 2016 was 0.7% which is below Oregon’s seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 14OCT16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



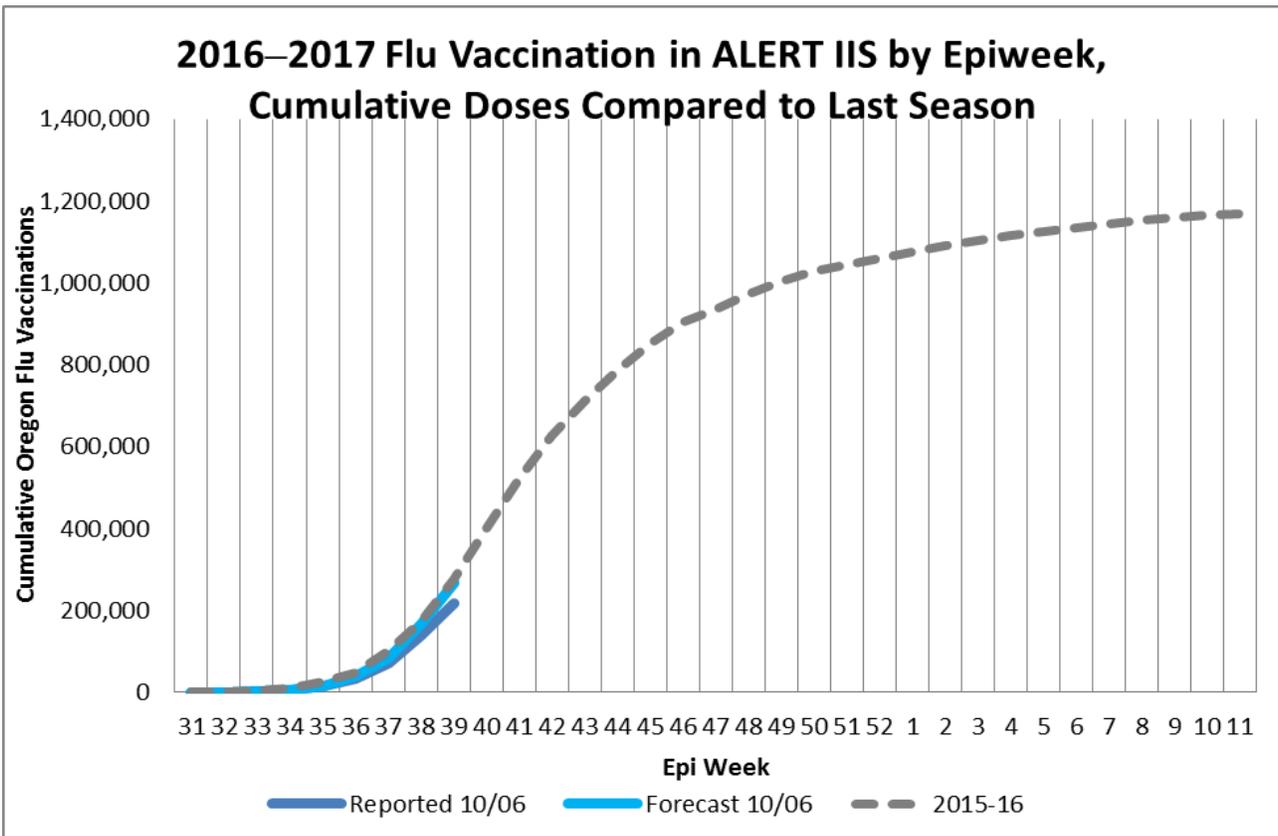
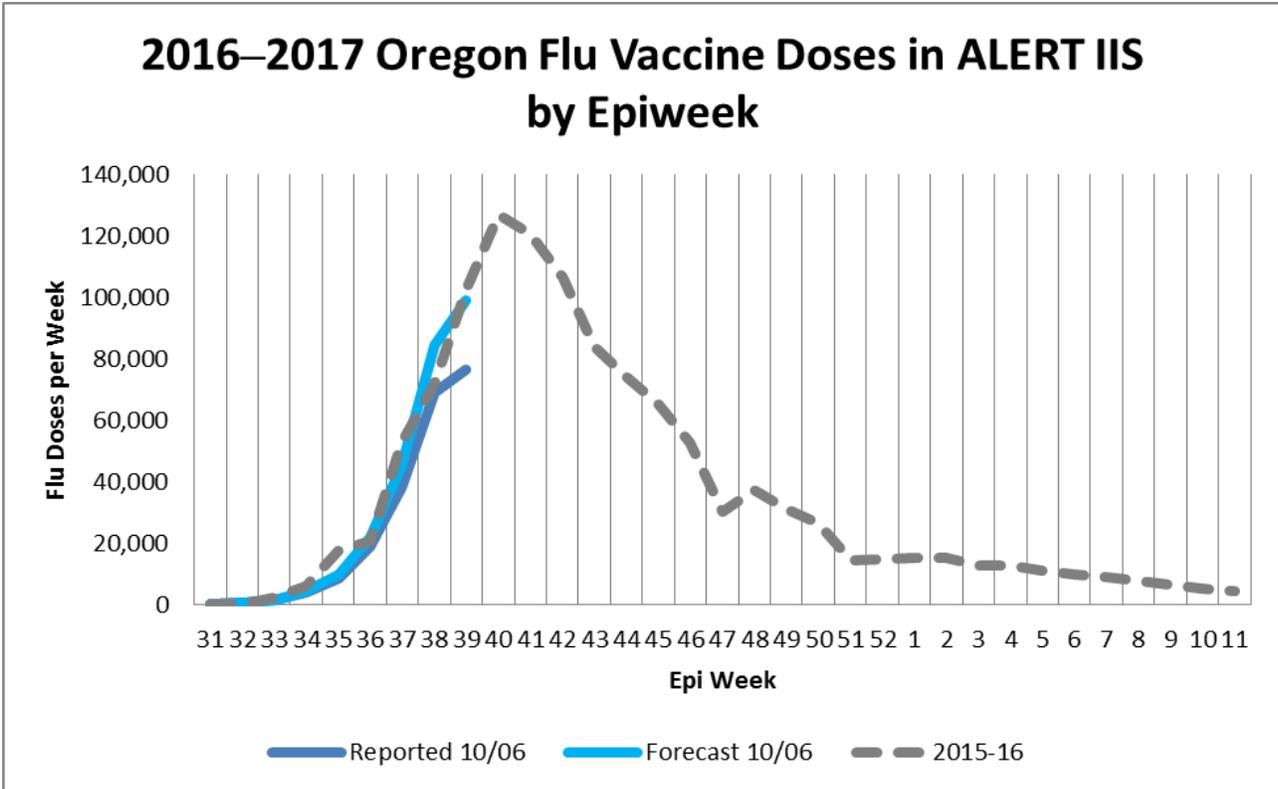
Note: ILI is defined as fever (≥100°F) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

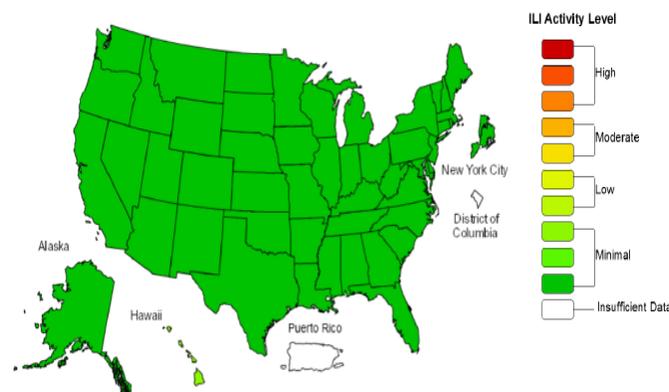
Immunizations: Influenza immunization estimates are based on data collected by the ALERT Immunization Information System (ALERT IIS). ALERT IIS receives child and adult immunization reports from most Oregon healthcare providers and payors. The ALERT IIS captures the majority of influenza immunizations given to Oregon residents; over 1.3 million influenza immunizations were reported in the 2015-2016 season. For Epiweek 39 (September 25–October 1) ALERT IIS has received over 220,000 reports of seasonal influenza immunizations for Oregon residents. In a typical season, influenza immunizations peak in mid-October. The current season to date is following a similar pattern as last season.



US Data (from CDC FluView): During week 40 (October 2-8, 2016), influenza activity was low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 40 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.1%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. New York City and 50 states experienced minimal ILI activity and the District of Columbia and Puerto Rico had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam was reported as widespread; Puerto Rico and one state reported local activity; the U.S. Virgin Islands and 36 states reported sporadic activity; and the District of Columbia and 13 states reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 40 ending Oct 08, 2016



Map above left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending October 8, 2016 - Week 40



Map above right: This map measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Additional resources:

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

Data at a Glance October 9–October 15, 2016 (Week 41)

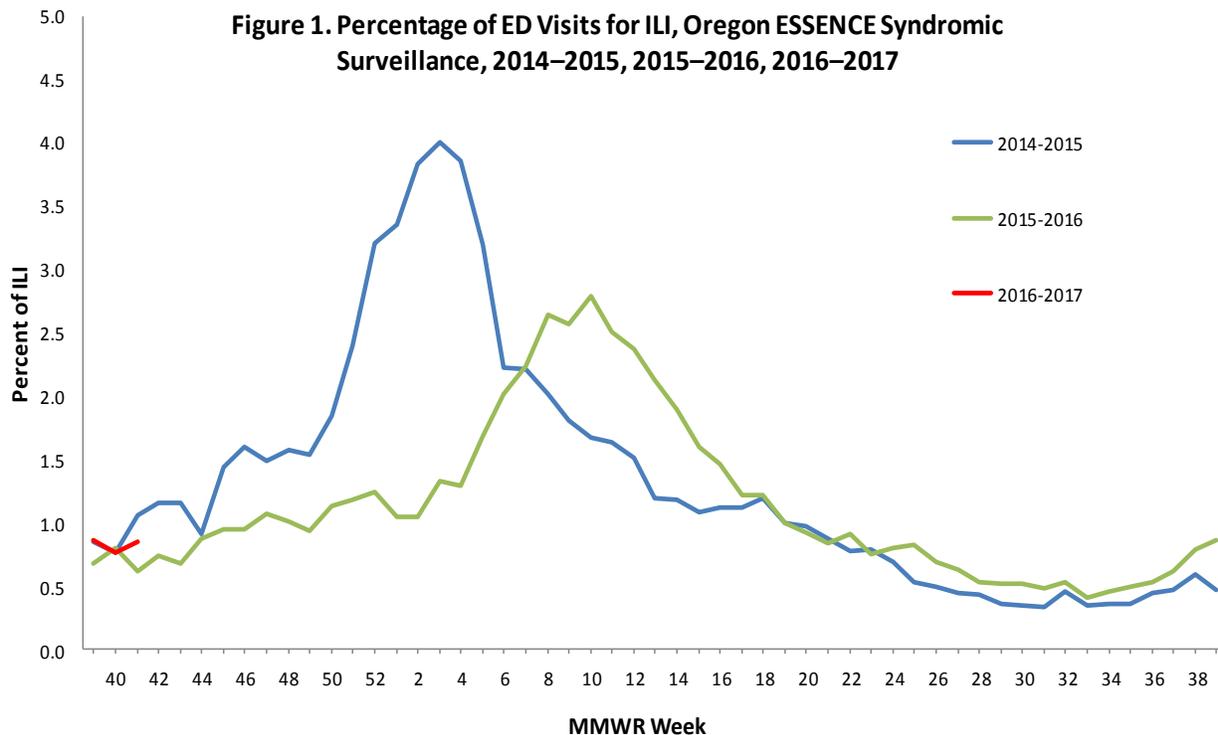
	Current Week (41)	Previous Week (40)
Percentage of emergency department visits for ILI ¹	0.9%	0.8%
Percentage positive influenza tests ²	3.0%	1.2%
Influenza-associated hospitalizations ³	0	2
Reported ILI/influenza outbreaks	0	0
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	0.5%	0.7%
Respiratory Syncytial Virus (RSV) activity ⁴	<1%	<1%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 0.9% during week 41, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

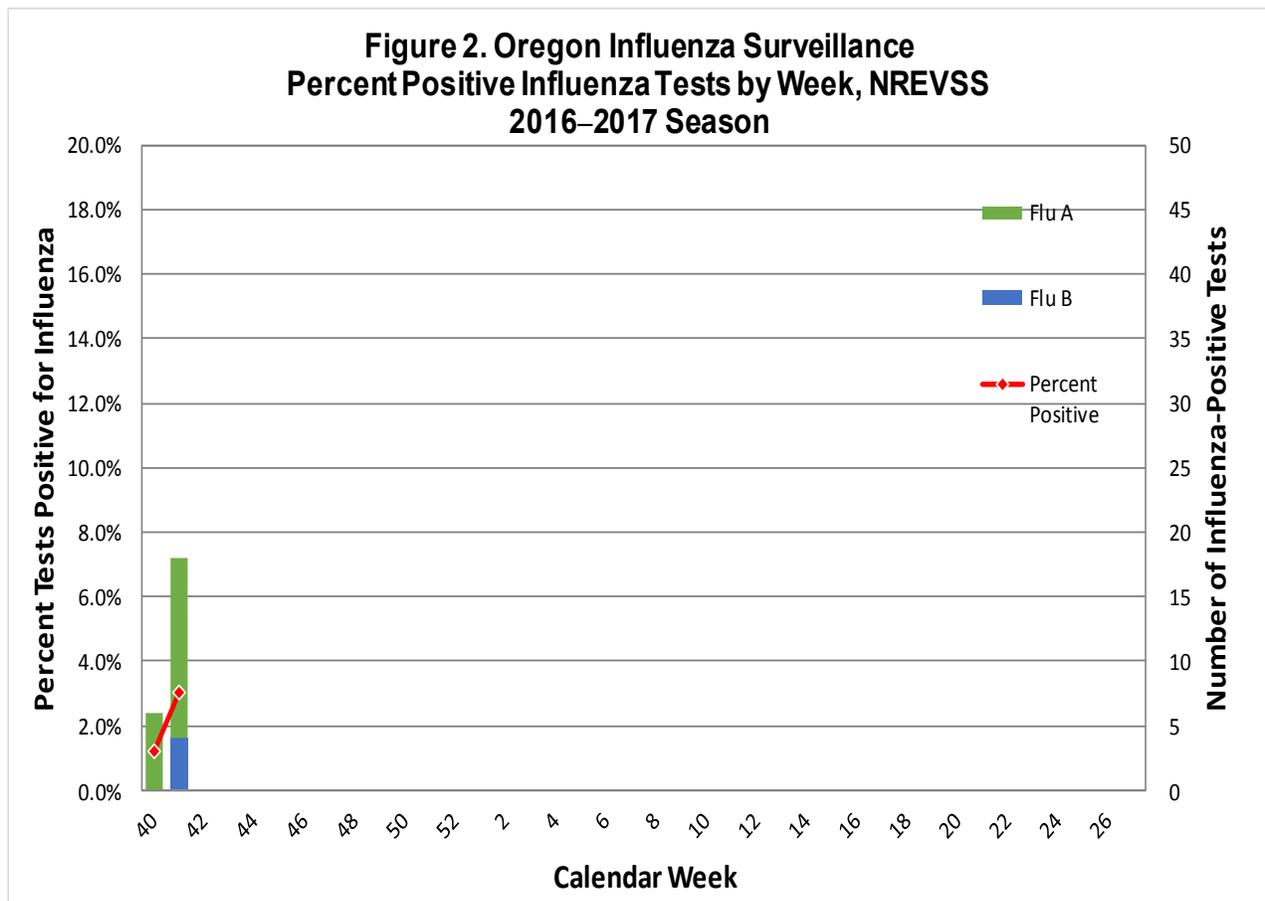
Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 3.0% of specimens tested at Oregon labs were positive for influenza during week 41, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

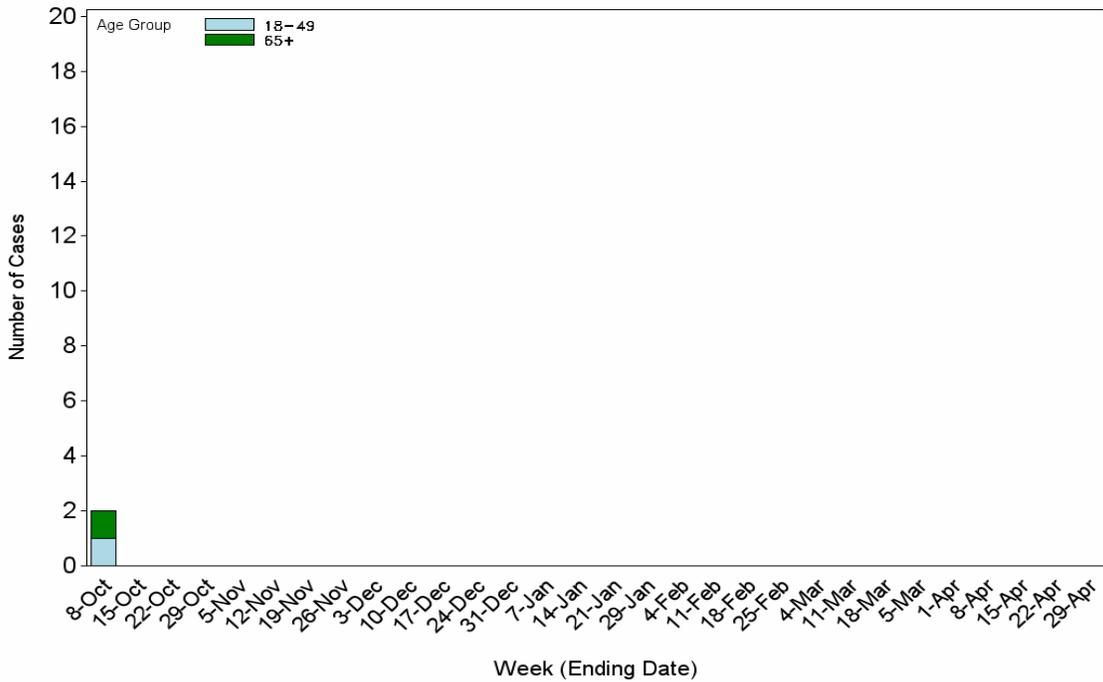
	Current Week	Cumulative
No. of specimens tested	591	1,102
No. of positive specimens (%)	18 (3.0%)	24 (2.2%)
<i>Positive specimens by type</i>		
Influenza A	14 (78%)	20 (83%)
Influenza B	4 (22%)	4 (17%)



Hospitalizations:

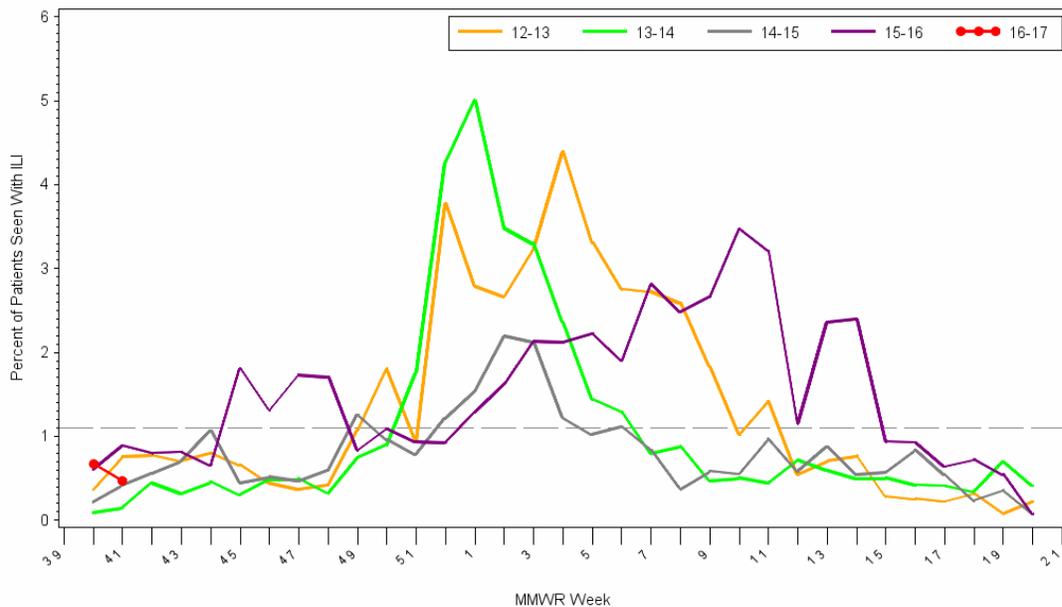
In Clackamas, Multnomah, and Washington counties 2 total reported influenza-associated hospitalizations occurred up through MMWR week 41, but no cases were reported during week 41. One person has been infected with influenza B and the other with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 25 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 41 of 2016 was 0.5% which is below Oregon’s seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 21OCT16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever (≥100°F) and cough or sore throat.

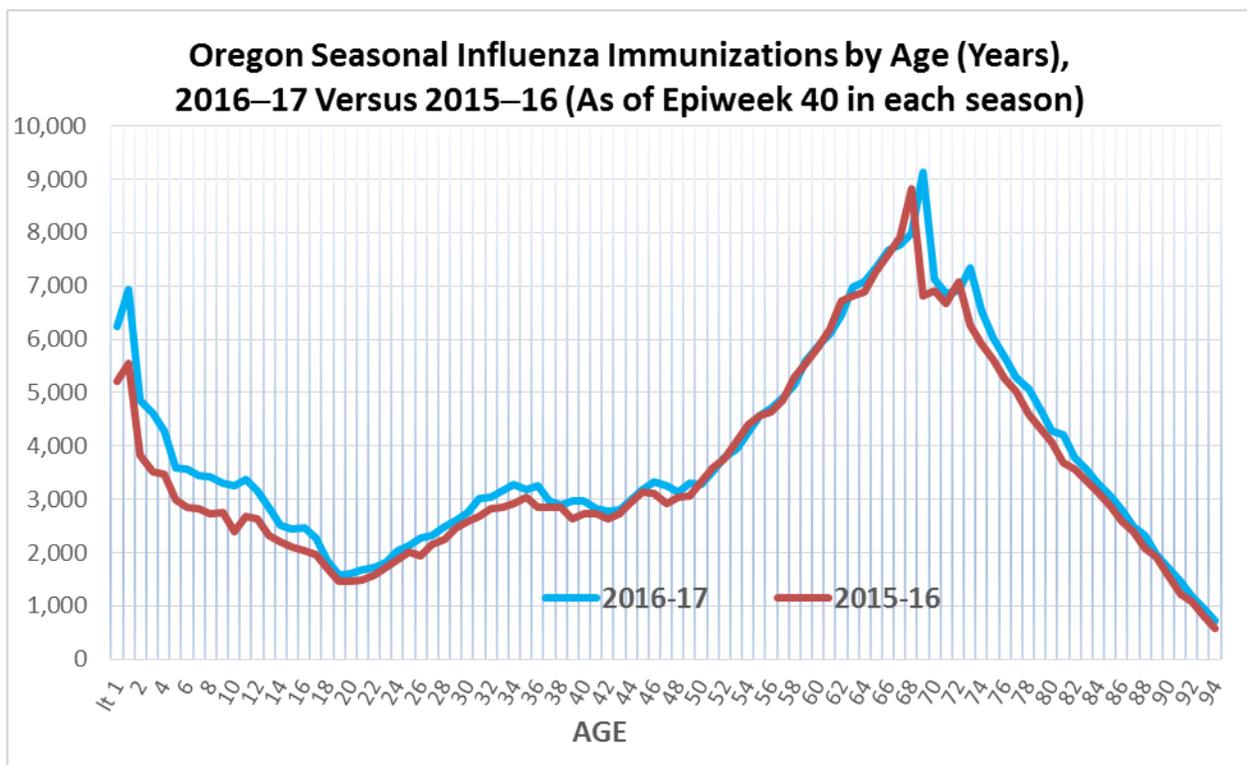
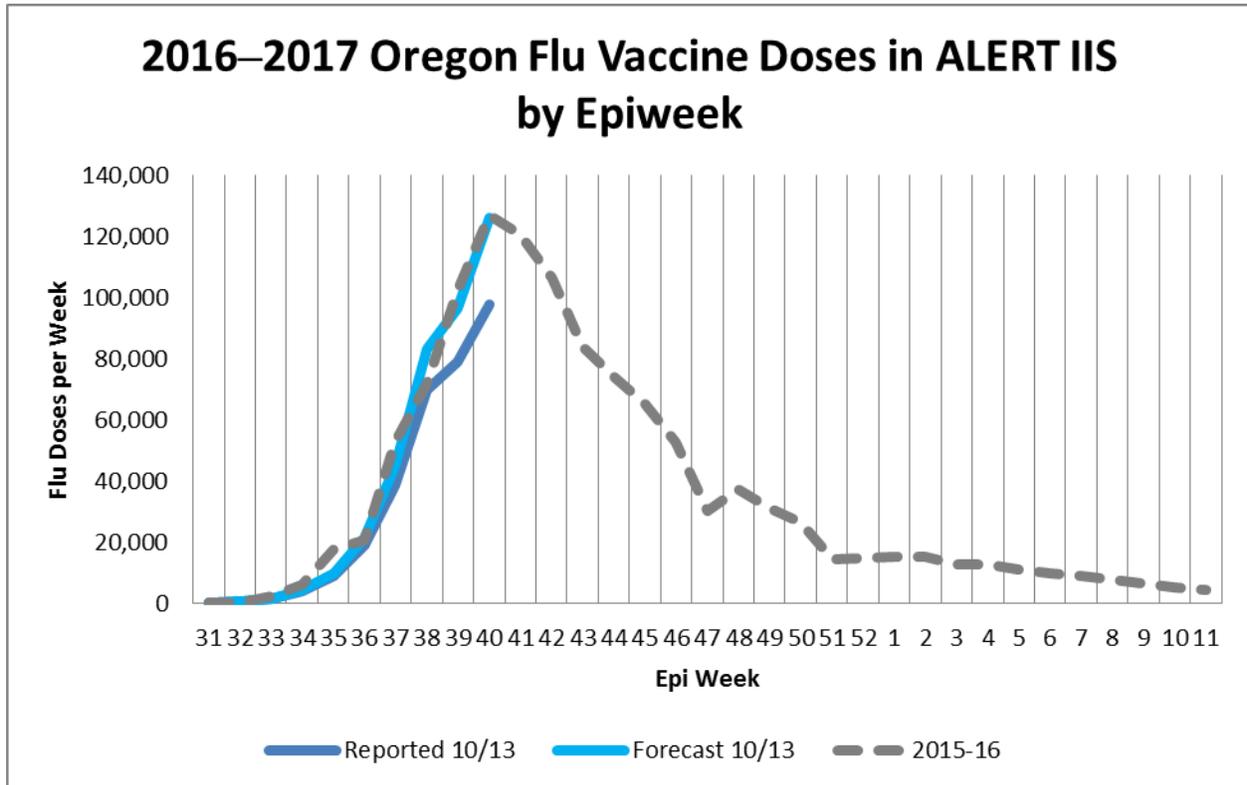
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This seasonal influenza immunization report is based on ALERT IIS data through Epiweek 40 (October 2nd to October 8th). Through October 8th the ALERT IIS has received 320,000 reports of seasonal influenza immunizations for Oregon residents, which is slightly below last season, though the peak of the immunization season is not expected for another week or two.

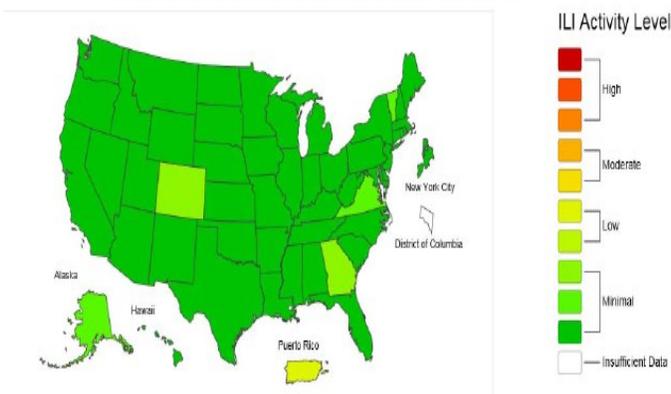
Also included is a comparison of immunization totals by Epiweek 40 in the current season to the total for last season at this time. Overall the age distribution of immunization totals is a close match, with a small improvement in childhood immunization in the current season. Generally senior adults get influenza immunizations earlier in the season, while other adults may wait.



US Data (from CDC FluView): During week 41 (October 9-15, 2016), influenza activity was low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 41 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.2%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. Puerto Rico experienced low ILI activity, New York City and 50 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam was reported as widespread; one state reported local activity; the District of Columbia, the U.S. Virgin Islands and 41 states reported sporadic activity; eight states reported no activity; and Puerto Rico did not report.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 41 ending Oct 15, 2016



Map above left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending October 15, 2016 - Week 41



Map above right: This map measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Additional resources:

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

Data at a Glance October 16–October 22, 2016 (Week 42)

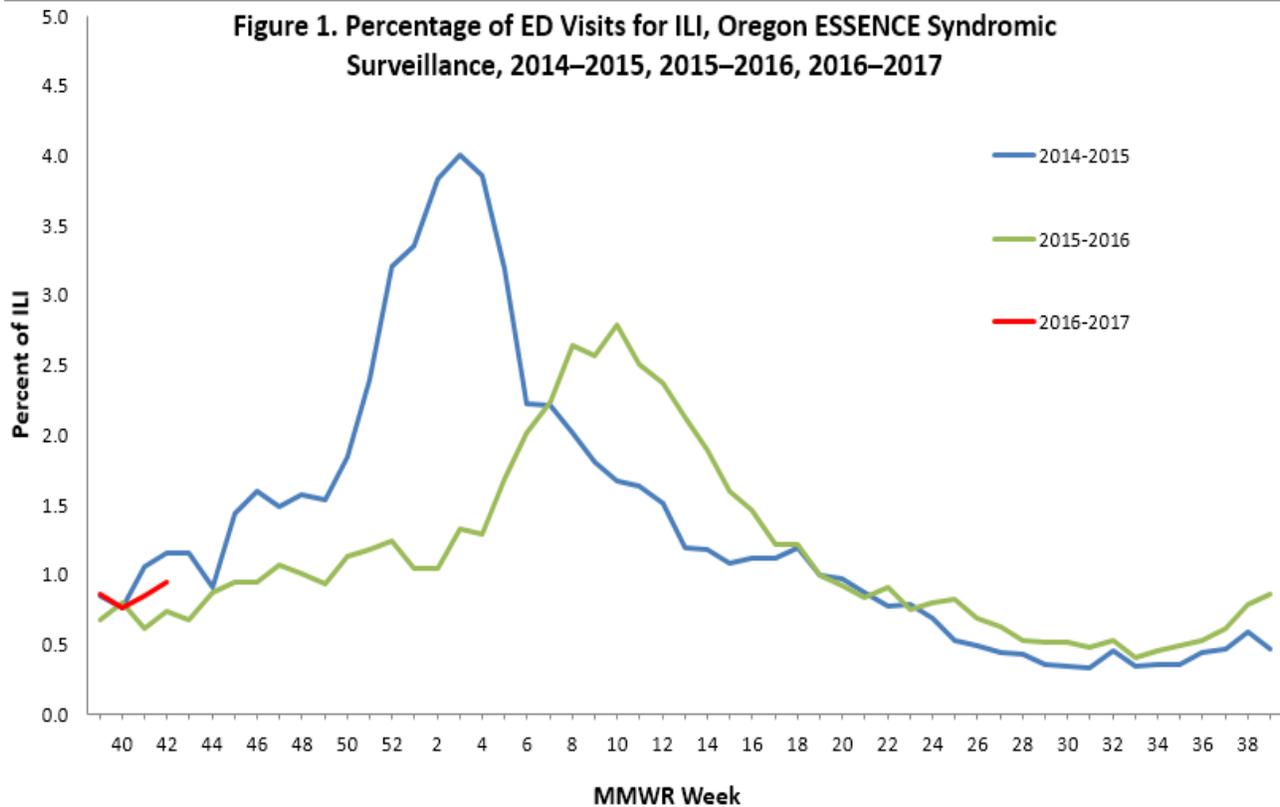
	Current Week (42)	Previous Week (41)
Percentage of emergency department visits for ILI ¹	0.9%	0.9%
Percentage positive influenza tests ²	3.1%	3.0%
Influenza-associated hospitalizations ³	1	0
Reported ILI/influenza outbreaks	0	0
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	0.7%	0.4%
Respiratory Syncytial Virus (RSV) activity ⁴	2%	<1%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 0.9% during week 42, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 3.1% of specimens tested at Oregon labs were positive for influenza during week 42, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

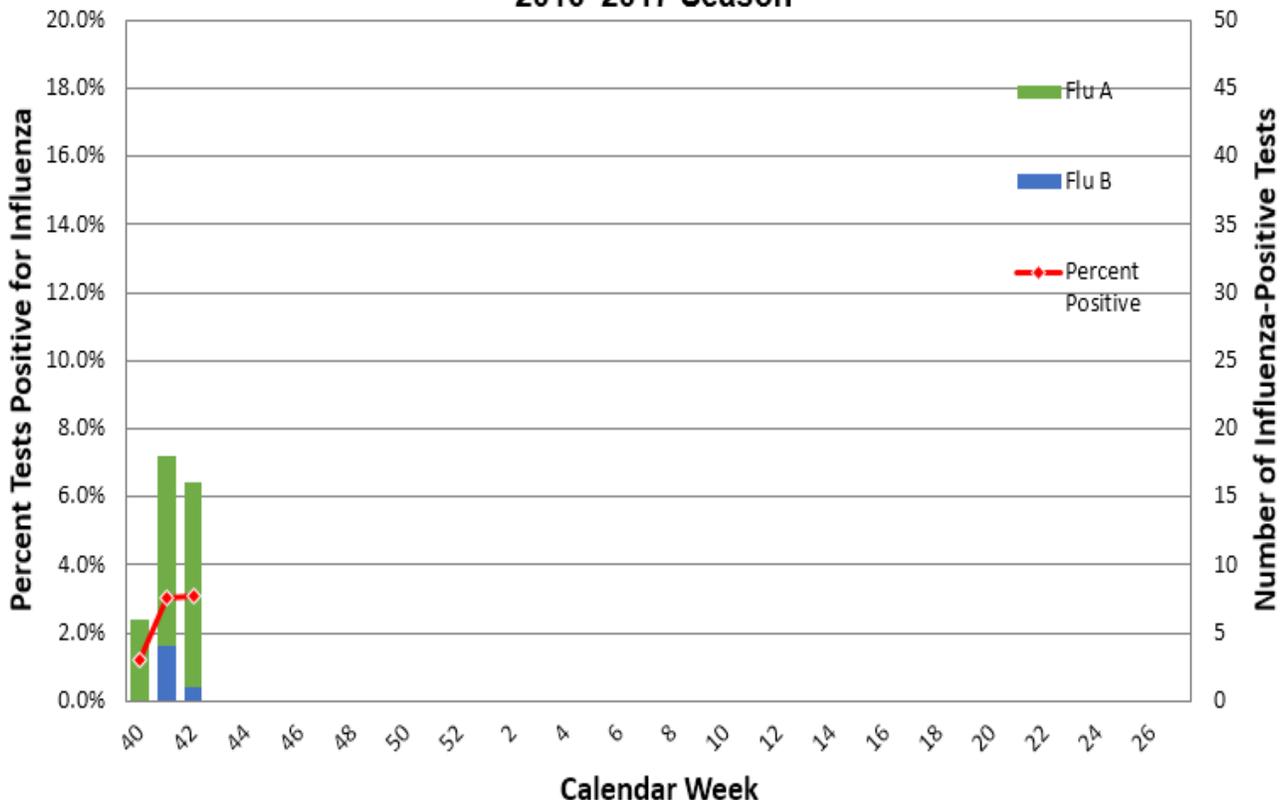
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	621	1,724
No. of positive specimens (%)	19 (3.1%)	43 (2.5%)
<i>Positive specimens by type</i>		
Influenza A	15 (79%)	35 (83%)
Influenza B	1 (5%)	5 (12%)

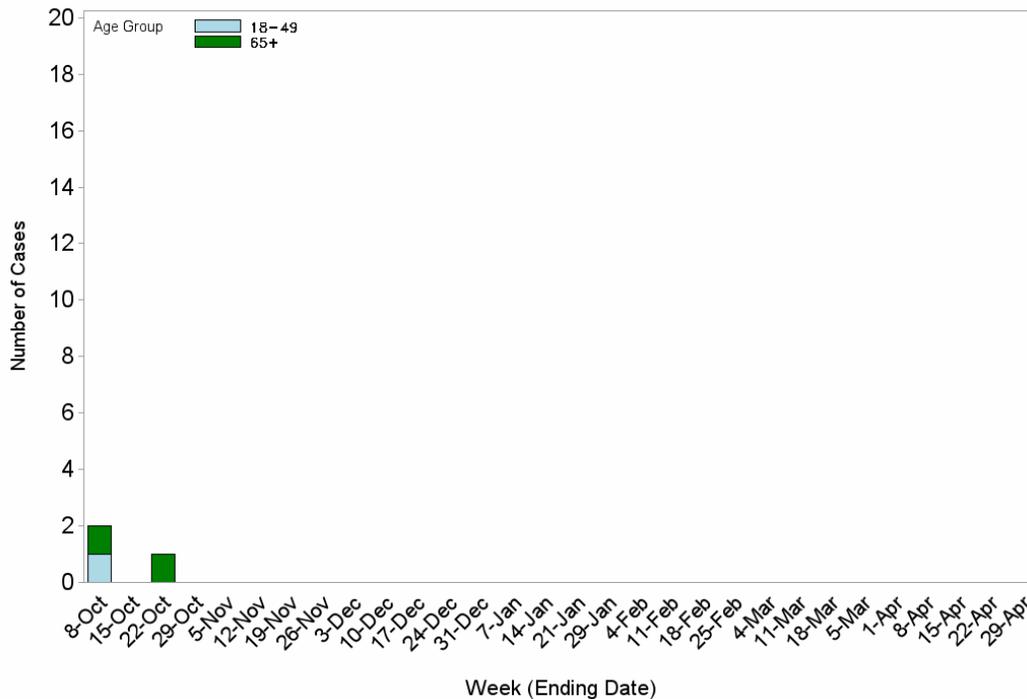
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

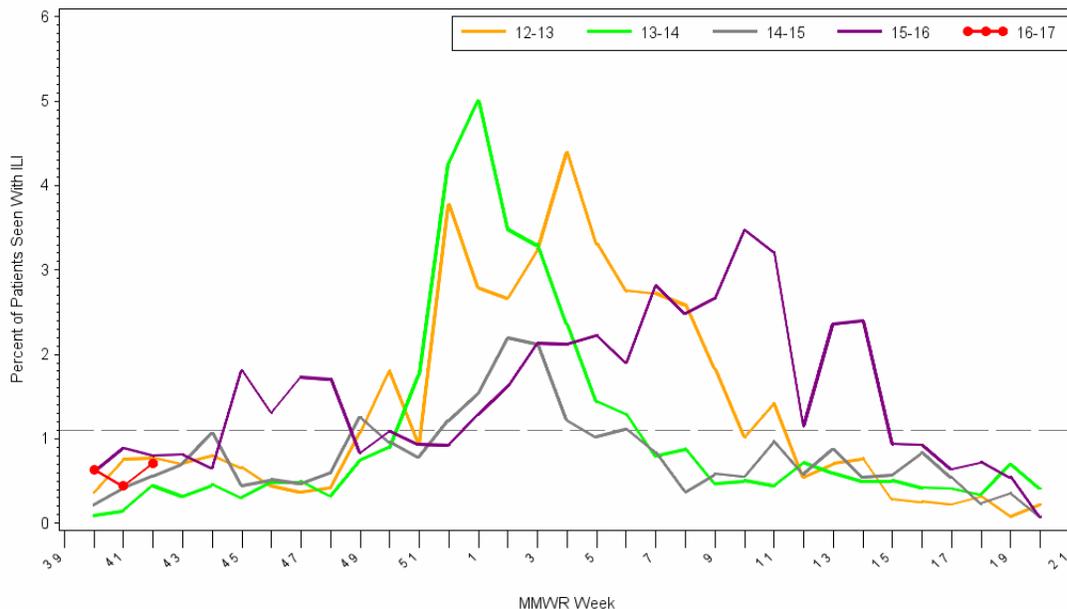
In Clackamas, Multnomah, and Washington counties 3 total reported influenza-associated hospitalizations occurred up through MMWR week 42, with 1 case reported during week 42. One person has been infected with influenza B and the other two with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 25 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 42 of 2016 was 0.7% which is below Oregon's seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 28OCT16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



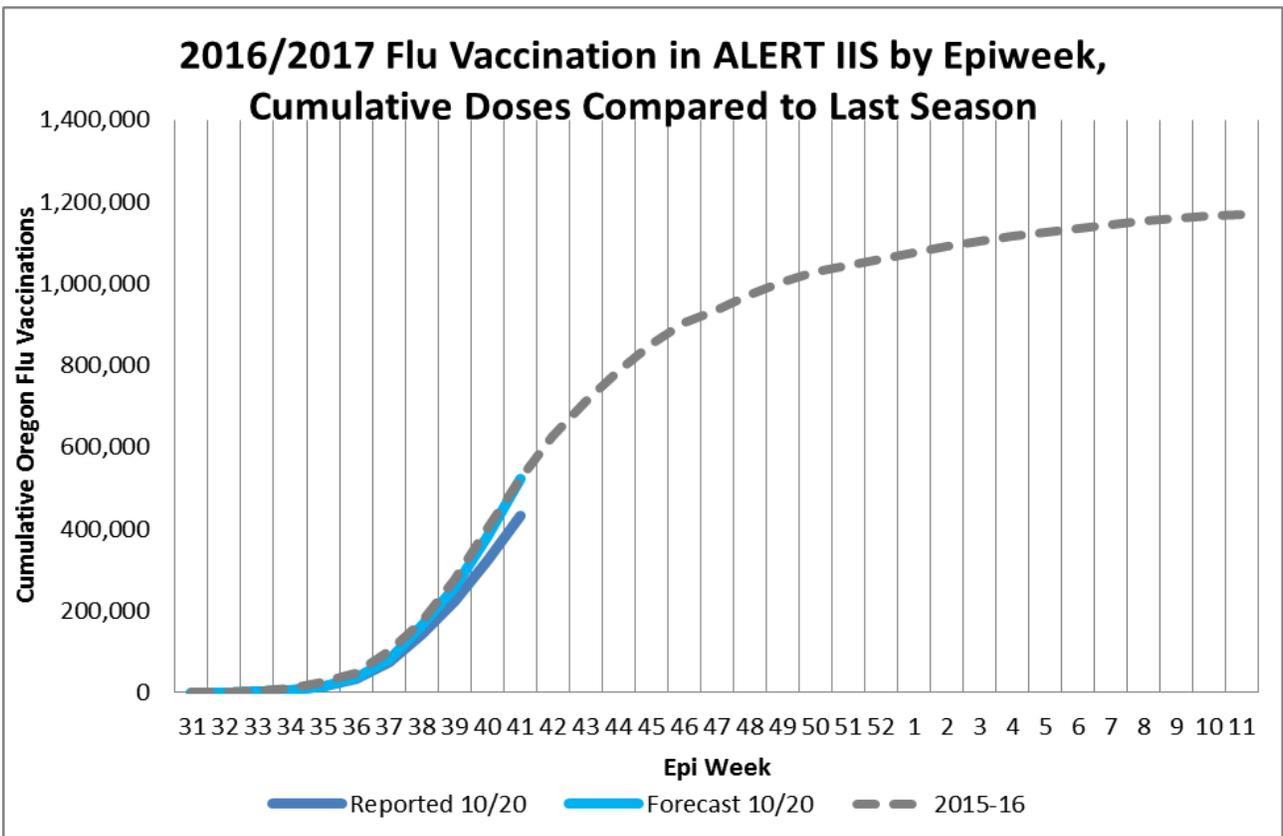
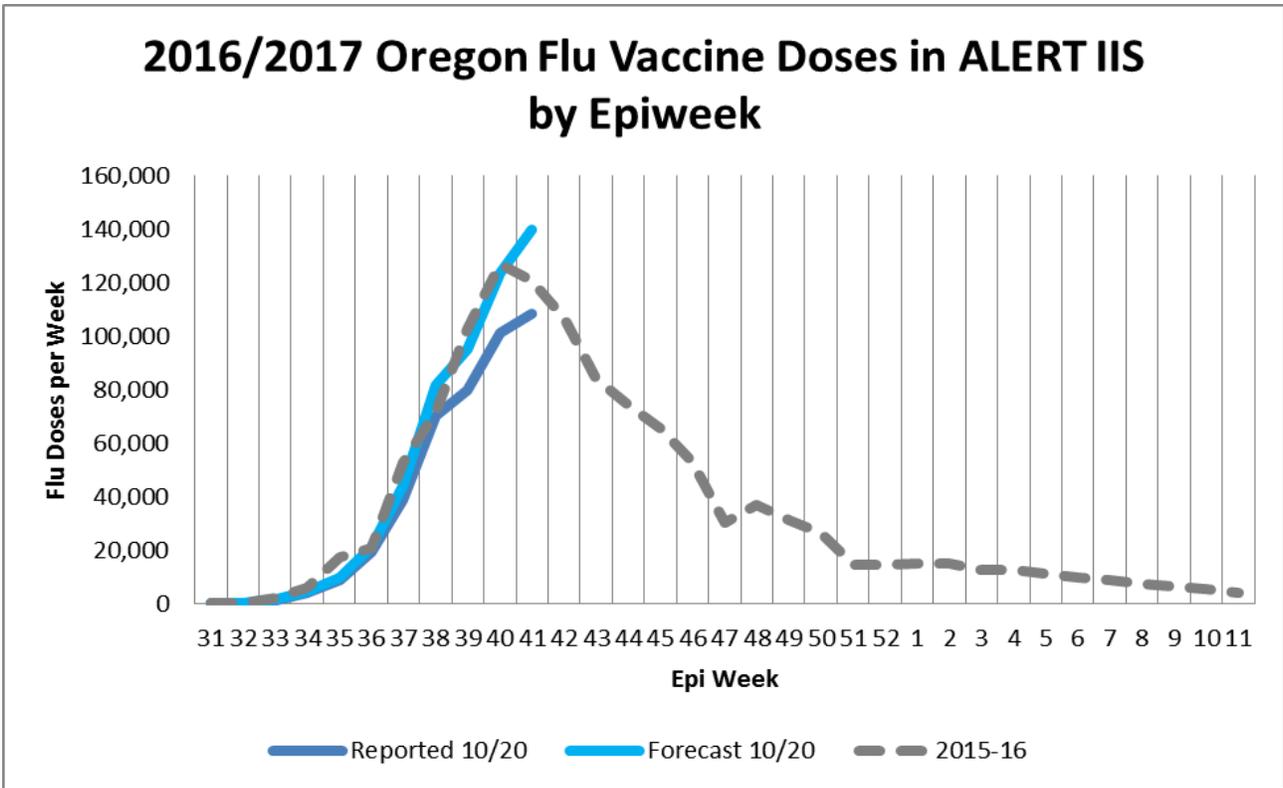
Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

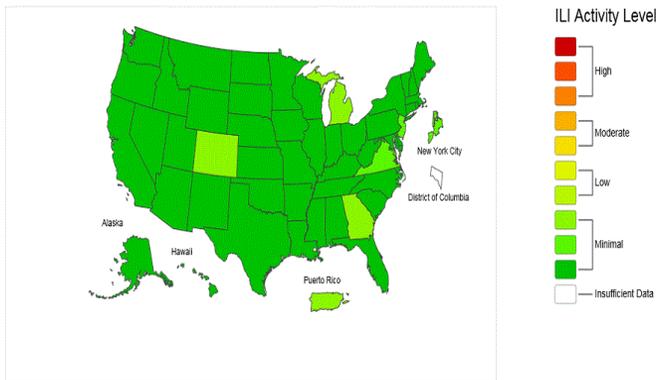
Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 41 (October 9th to October 15th). To date the ALERT IIS has received over 475,000 reports of seasonal influenza immunizations for Oregon residents. In comparison, by this time of the last season ALERT IIS had received over 477,000 influenza immunization reports. Current immunization levels are forecast to match closely to last season's immunizations. It is expected that influenza immunization delivery for this season is peaking as of epiweek 41.



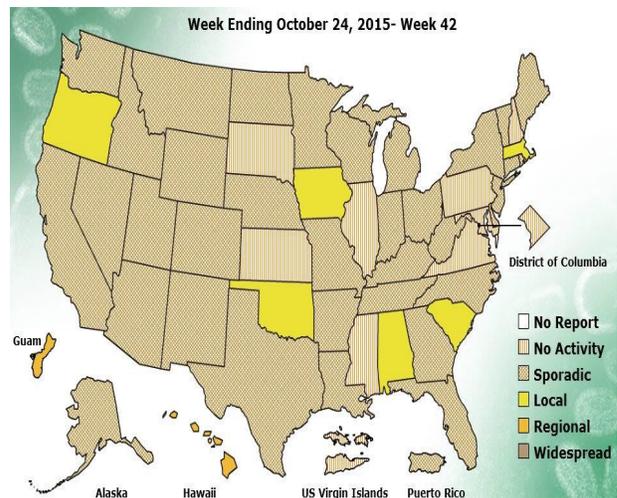
US Data (from CDC FluView): During week 42 (October 16-22, 2016), influenza activity was low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 42 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.3%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. New York City, Puerto Rico, and all 50 states experienced minimal ILI activity and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam was reported as widespread; Puerto Rico reported regional activity; one state reported local activity; the District of Columbia, the U.S. Virgin Islands and 41 states reported sporadic activity; and eight states reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 42 ending Oct 22, 2016



Map above left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.



Map above right: This map measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Additional resources:

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

Data at a Glance October 23–October 29, 2016 (Week 43)

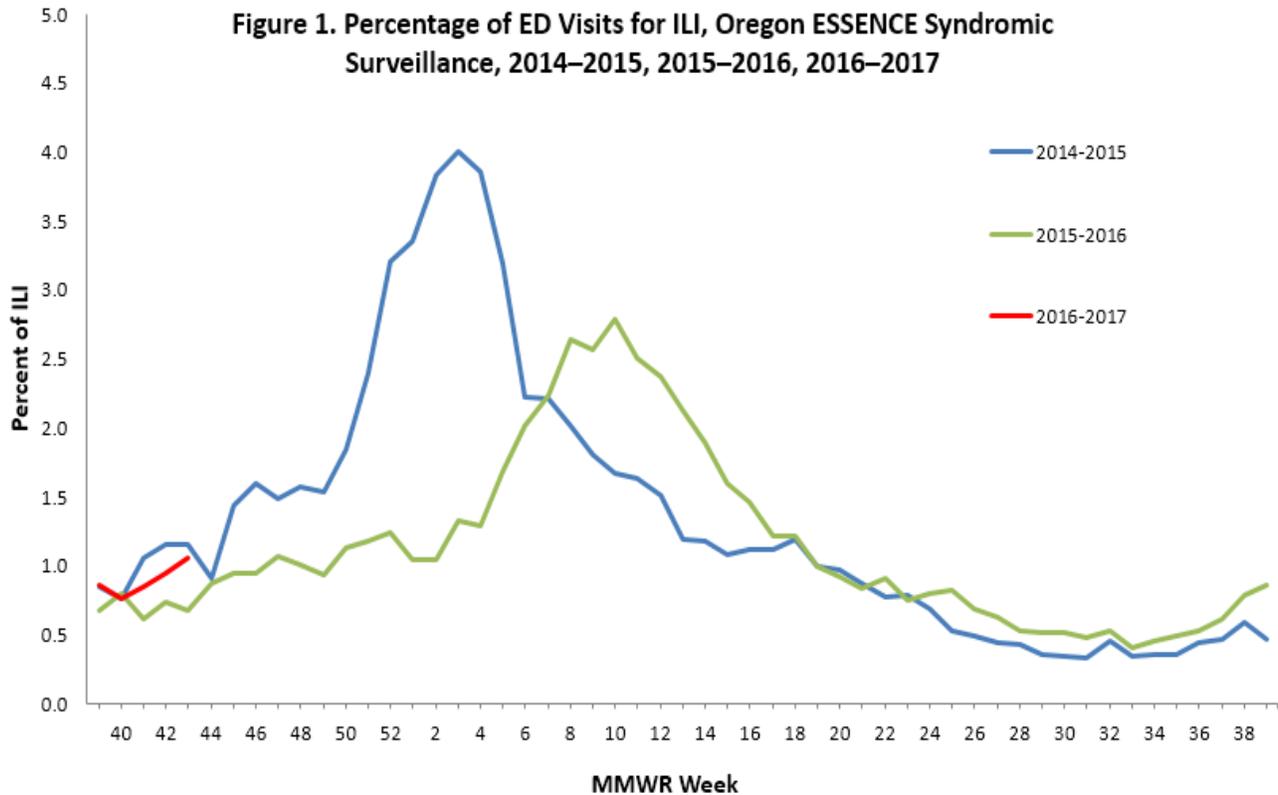
	Current Week (43)	Previous Week (42)
Percentage of emergency department visits for ILI ¹	1.1%	0.9%
Percentage positive influenza tests ²	4.7%	3.7%
Influenza-associated hospitalizations ³	2	1
Reported ILI/influenza outbreaks	0	0
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	0.6%	0.7%
Respiratory Syncytial Virus (RSV) activity ⁴	1%	2%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 1.1% during week 43, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 4.7% of specimens tested at Oregon labs were positive for influenza during week 43, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

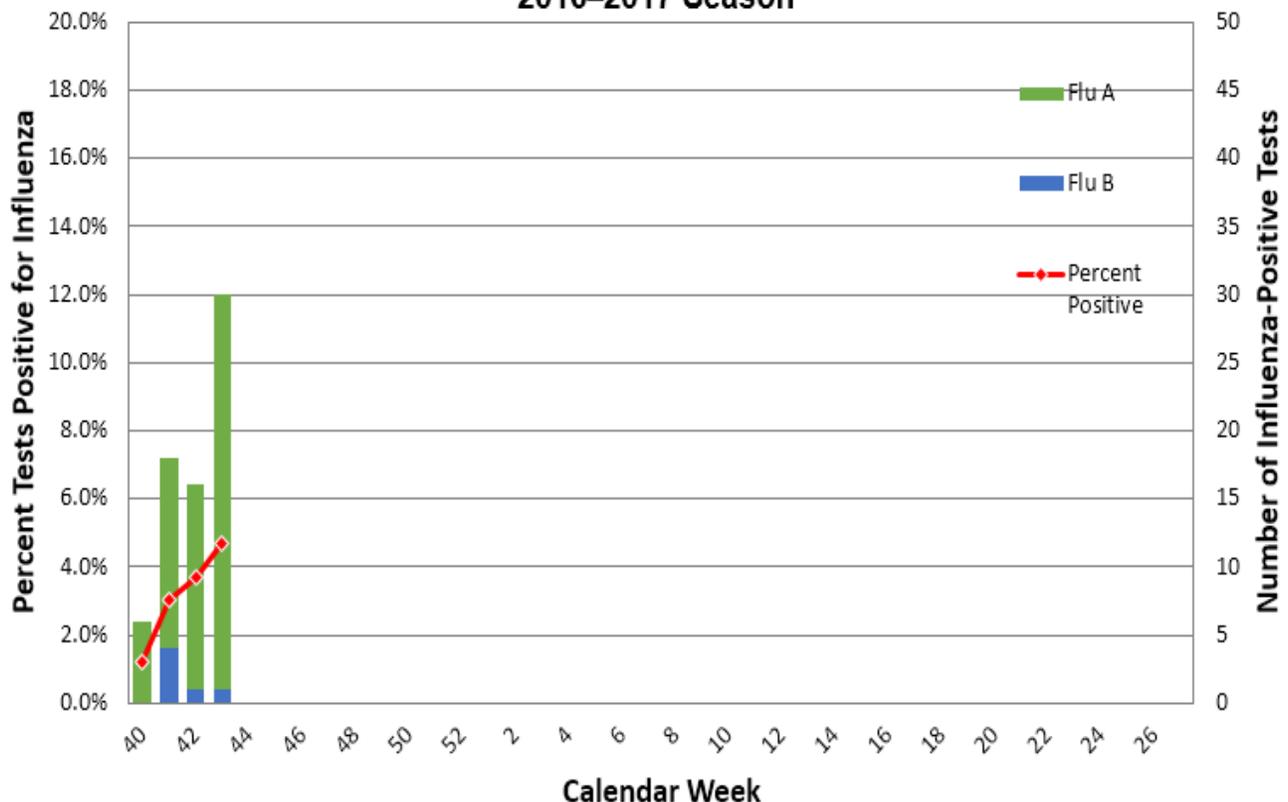
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	643	2,374
No. of positive specimens (%)	30 (4.7%)	77 (3.2%)
<i>Positive specimens by type</i>		
Influenza A	29 (97%)	64 (89%)
Influenza B	1 (3%)	6 (8%)

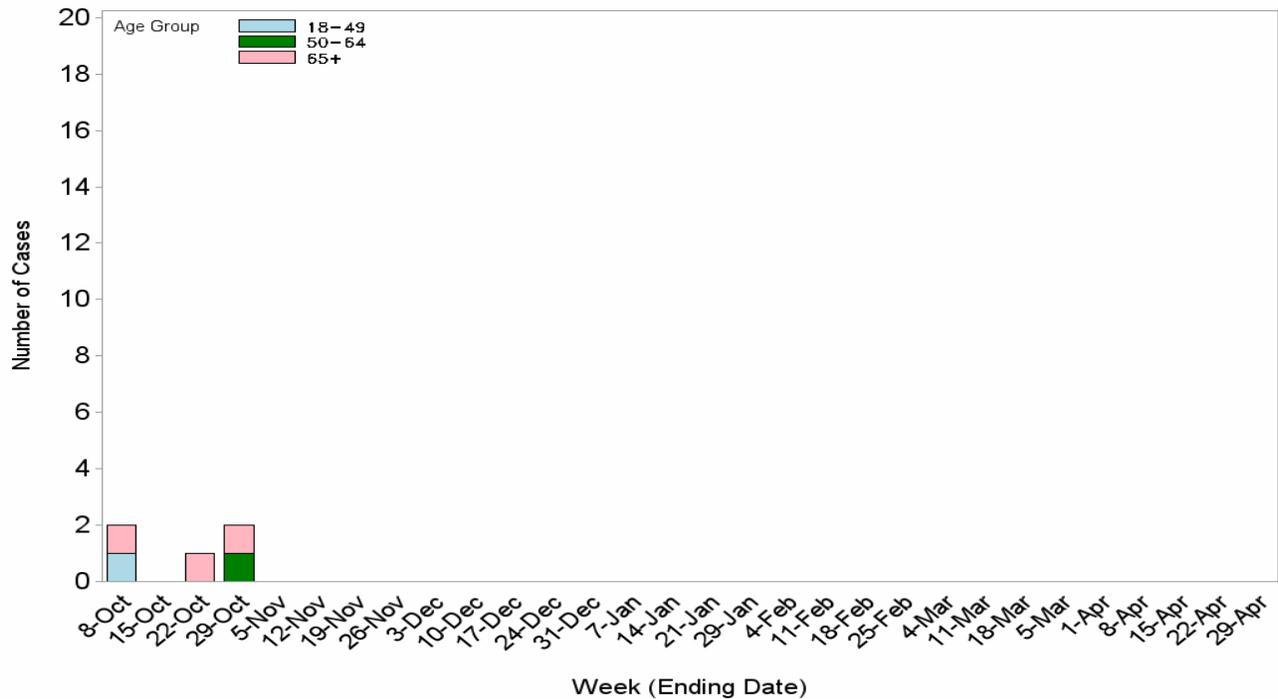
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

In Clackamas, Multnomah, and Washington counties 5 total reported influenza-associated hospitalizations occurred up through MMWR week 43, with 2 cases reported during week 43. One person has been infected with influenza B and the other four with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017

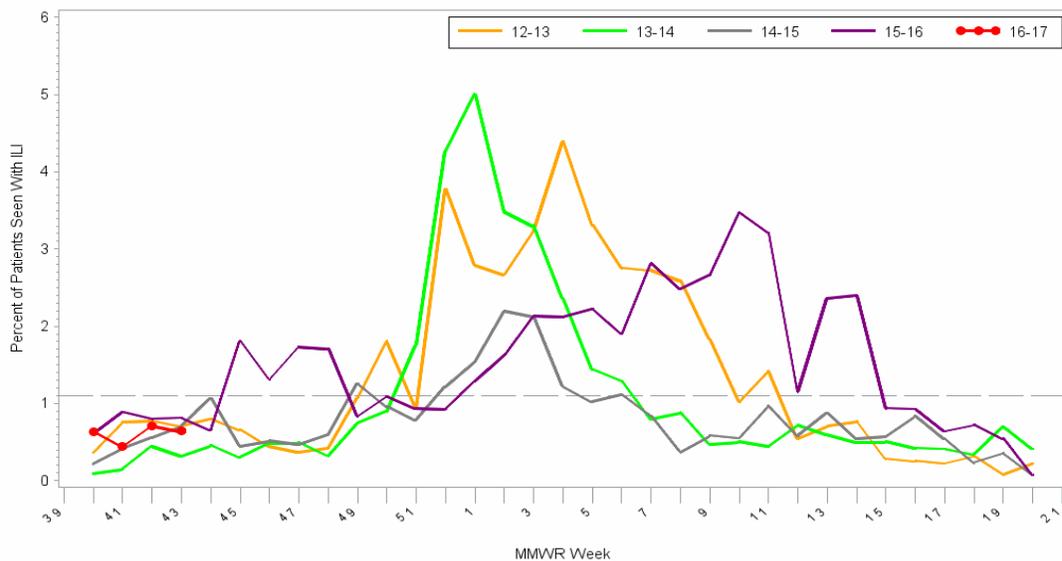


ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 25 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 43 of 2016 was 0.6% which is below Oregon's seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 04NOV16

Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)

Percent of Outpatients with Influenza-like Illness (ILI)
2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

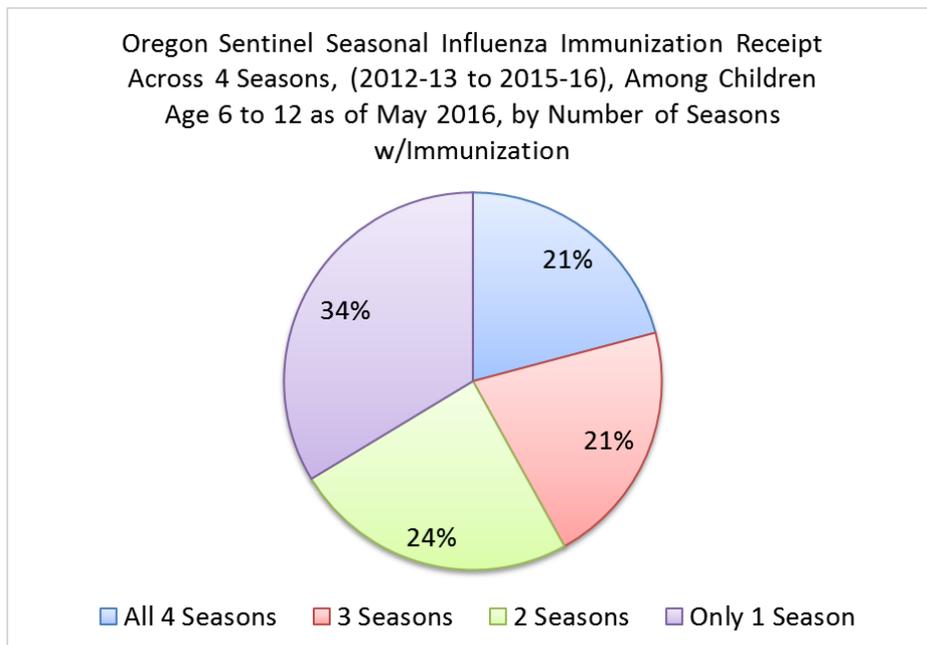
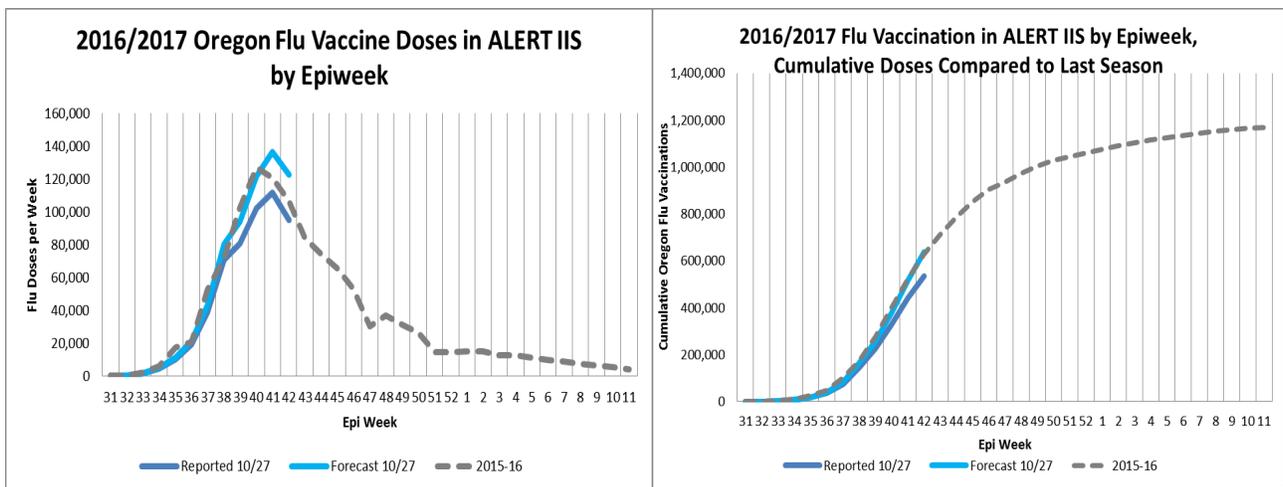
All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday

Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 42 (October 16th to October 22nd). To date the ALERT IIS has received over 570,000 reports of seasonal influenza immunizations for Oregon residents. To date roughly half of this season's influenza immunizations have been given in Oregon. The previous tracking week, Epiweek 41, was likely the busiest week of the season for influenza immunization. From now until early December we expect that immunization totals per week will gradually decline.

One question that is often asked about influenza immunization is how consistently across seasons do people get immunized. An observation from ALERT IIS is that most Oregonians are typically inconsistent across seasons in receiving influenza immunizations. For children from the 2014-15 to 2015-16 seasons, 61% of those who got an influenza immunization in the first season returned in the second season for another one. For this week we've also used our Oregon Sentinel region to look at consistent influenza immunization receipt across the last four seasons, for children age 6 to 12 at the end of last season. The Oregon Sentinel region is part of a CDC sponsored immunization surveillance network, and consists of six Oregon counties (Multnomah, Washington, Clackamas, Yamhill, Marion, & Polk). Among children that received at least one influenza immunization in the last four seasons, only 21% consistently received one in all four seasons.



US Data (from CDC FluView): During week 43 (October 23-29, 2016), influenza activity was low in the United States.

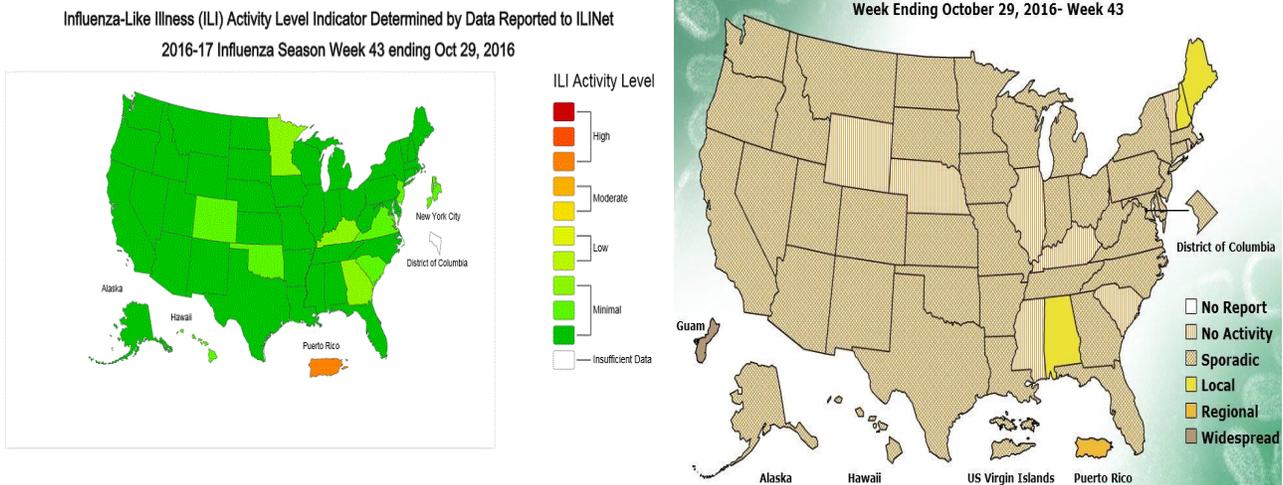
Viral Surveillance: The most frequently identified influenza virus subtype reported by public health laboratories during week 43 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low.

Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.

Influenza-associated Pediatric Deaths: Two influenza-associated pediatric deaths were reported that occurred during the 2015-2016 season.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 1.3%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. Puerto Rico experienced high ILI activity, New York City and all 50 states experienced minimal ILI activity, and the District of Columbia had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in Guam was reported as widespread; Puerto Rico reported regional activity; three states reported local activity; the District of Columbia, the U.S. Virgin Islands and 39 states reported sporadic activity; and eight states reported no activity.



Map above left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

Map above right: This map measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Additional resources:

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

Data at a Glance October 30–November 5, 2016 (Week 44)

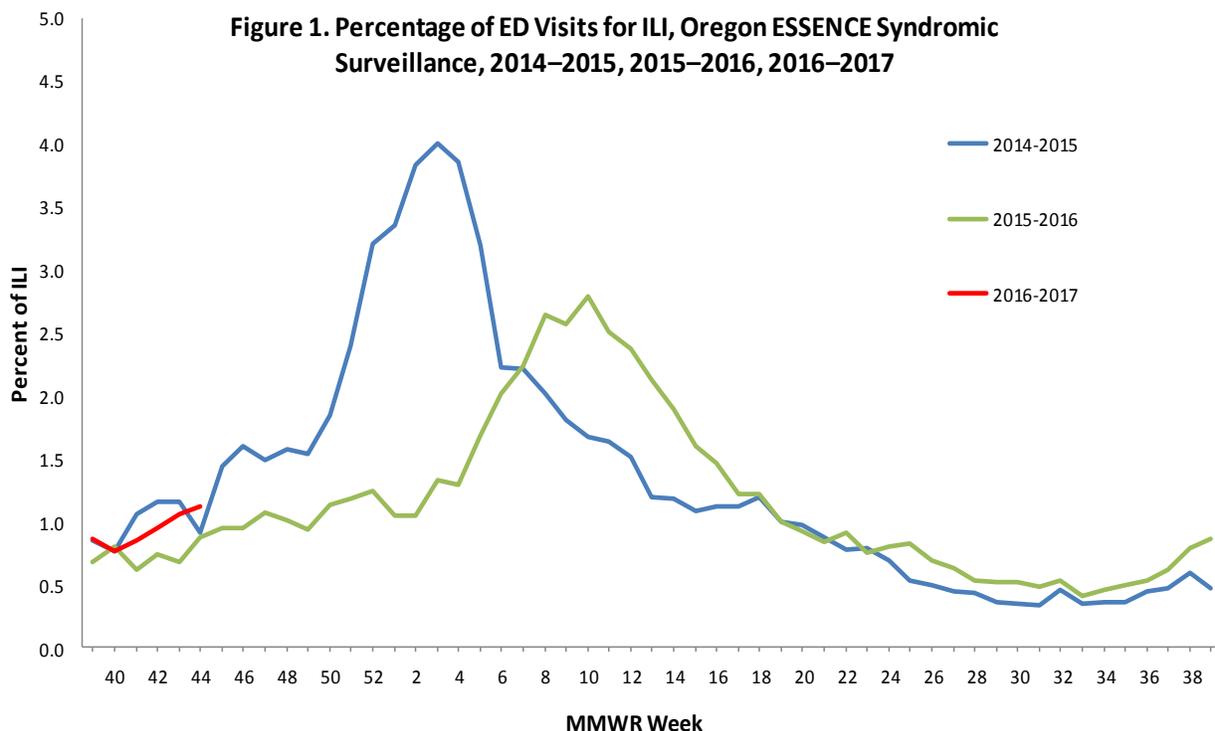
	Current Week (44)	Previous Week (43)
Percentage of emergency department visits for ILI ¹	1.1%	1.1%
Percentage positive influenza tests ²	4.6%	4.6%
Influenza-associated hospitalizations ³	1	2
Reported ILI/influenza outbreaks	1	0
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	1.0%	0.6%
Respiratory Syncytial Virus (RSV) activity ⁴	1%	1%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 1.1% during week 44, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 4.6% of specimens tested at Oregon labs were positive for influenza during week 44, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

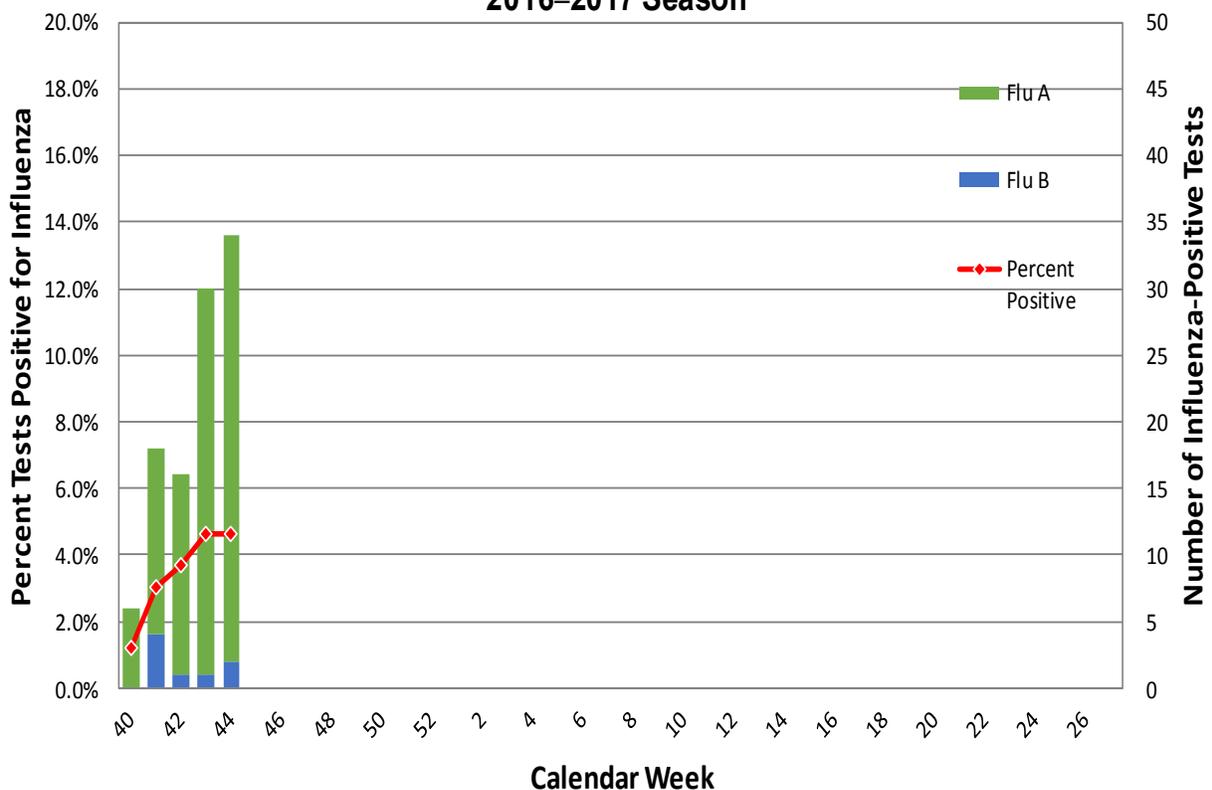
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	738	3,115
No. of positive specimens (%)	34 (4.6%)	111 (3.6%)
<i>Positive specimens by type</i>		
Influenza A	32 (94%)	100 (90%)
Influenza B	2 (6%)	8 (7%)
Not typed	0 (0%)	3 (3%)

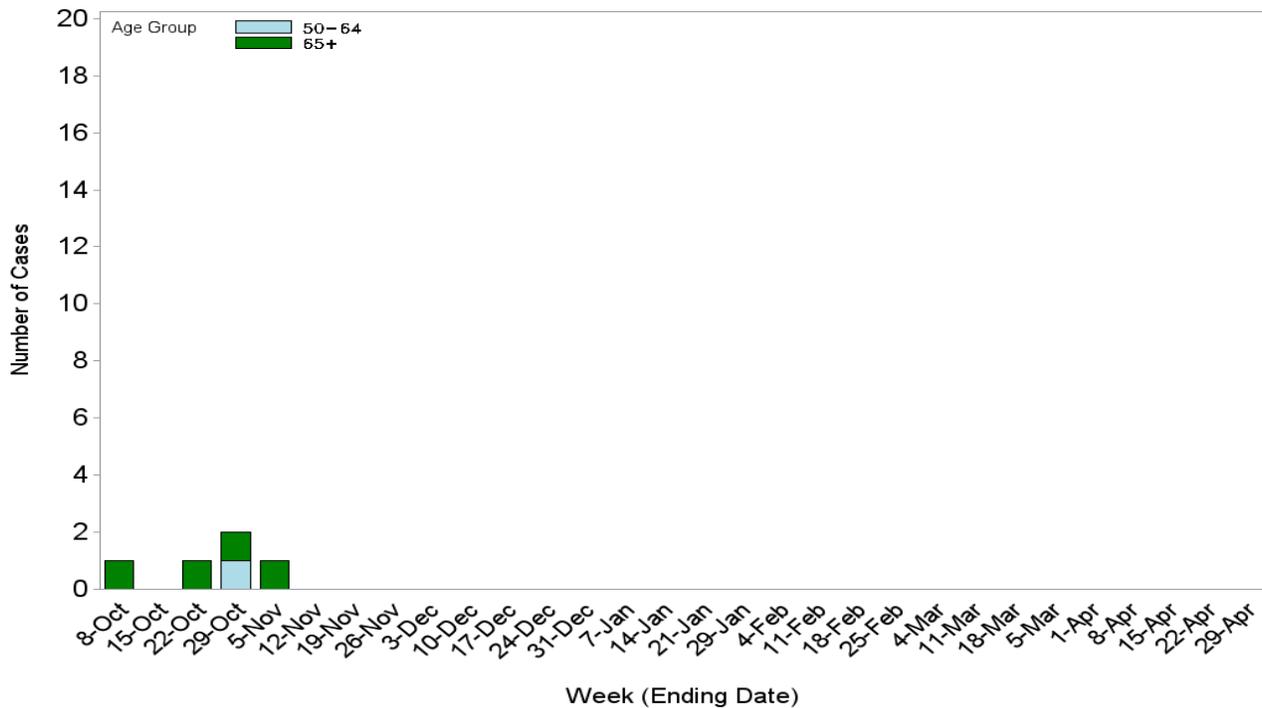
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

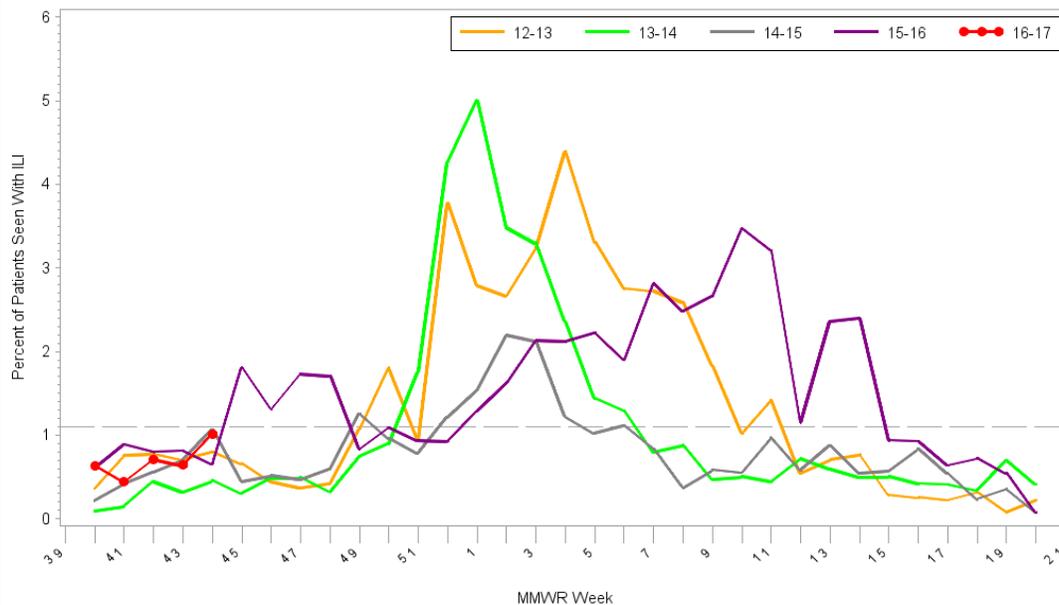
In Clackamas, Multnomah, and Washington counties 5 total reported influenza-associated hospitalizations occurred up through MMWR week 44, with 1 case reported during week 44. One person has been infected with influenza B and the other four with influenza A/H3.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 25 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 44 of 2016 was 1.0% which is below Oregon's seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 11NOV16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

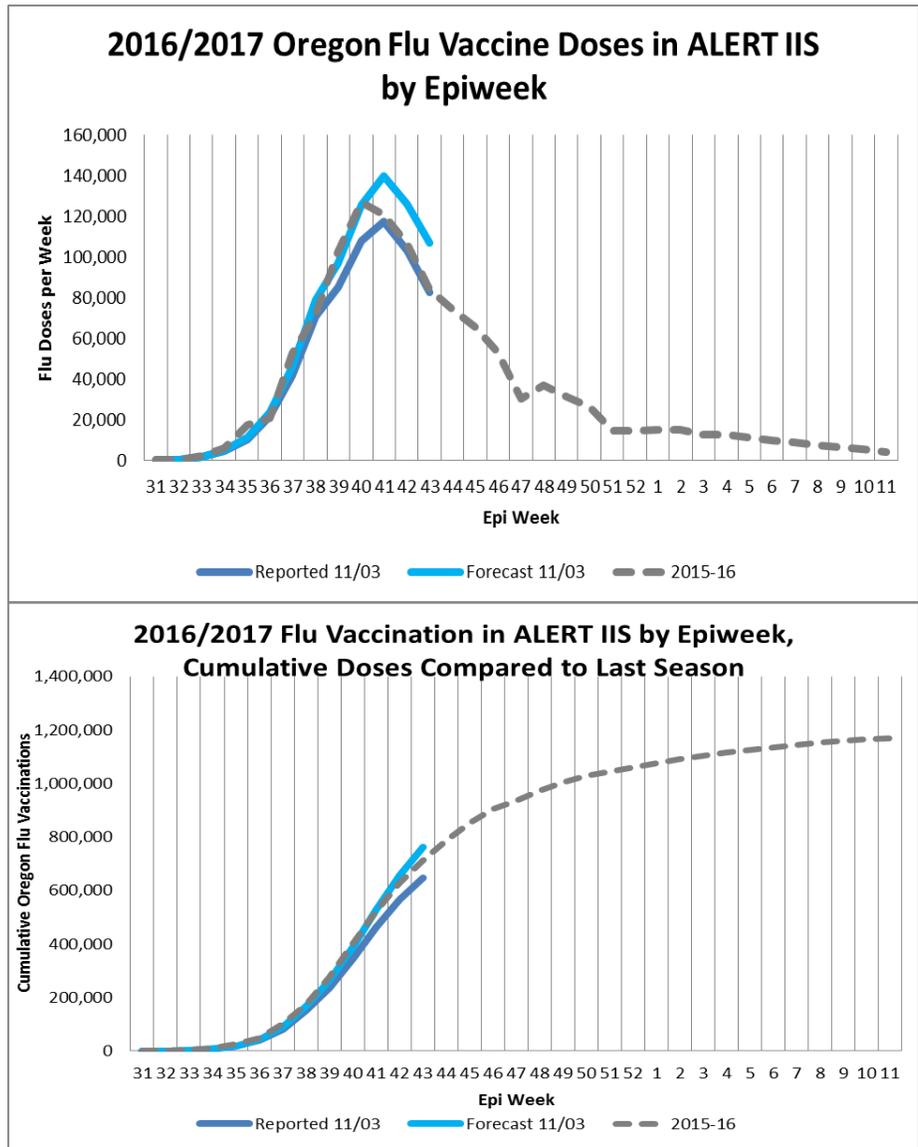
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

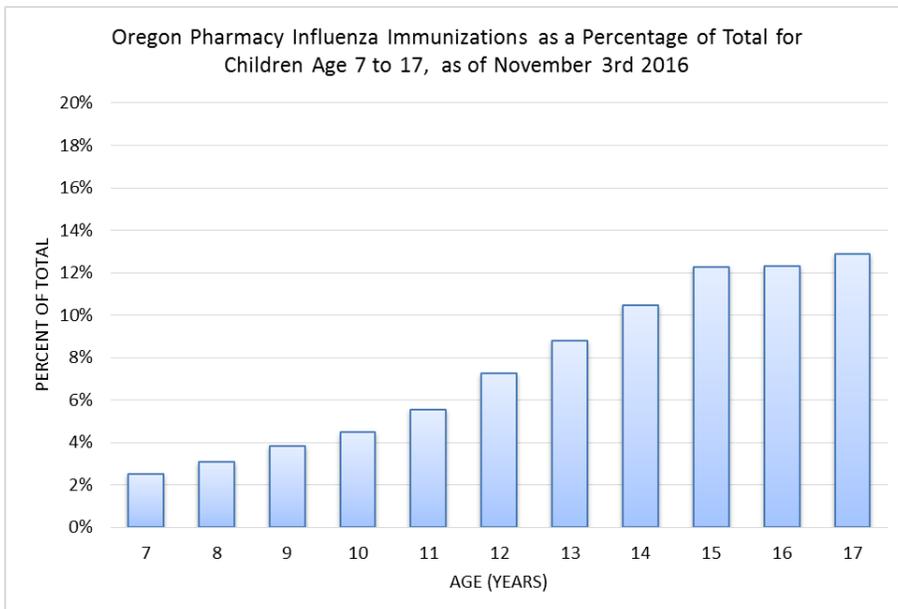
Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations:

This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 43 (October 23rd to October 29th). To date the ALERT IIS has received over 680,000 reports of seasonal influenza immunizations for Oregon residents. Influenza immunization seeking through the end of October remained high, but has started to decline since the season peak in week 41.



Below is a chart of influenza immunizations given in pharmacies, among eligible children age 7 to 17. In Oregon, pharmacists are allowed to immunize children in this age range under a broad authority, without having a prescription or physician involvement. To date only a smaller percentage (3%) of children under age 11 receiving an influenza immunization are using a pharmacy.

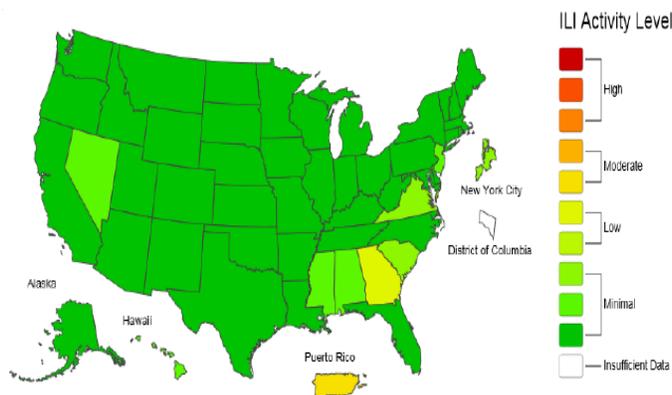


US Data (from CDC FluView):

During week 44 (October 30-November 5, 2016), influenza activity was low in the United States.

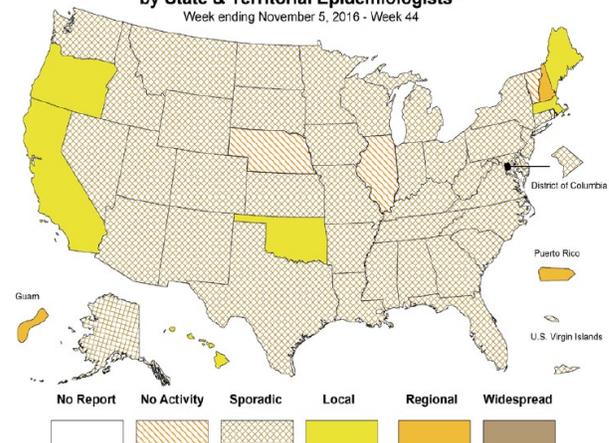
- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 44 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased slightly but remained low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.4%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. Puerto Rico experienced moderate ILI activity, one state experienced low ILI activity, New York City and 49 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam, Puerto Rico, and one state was reported as regional; six states reported local activity; the District of Columbia, the U.S. Virgin Islands and 39 states reported sporadic activity; and four states reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 44 ending Nov 5, 2016



Map above left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending November 5, 2016 - Week 44



Map above right: This map measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Additional resources:

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

Data at a Glance November 6–November 12, 2016 (Week 45)

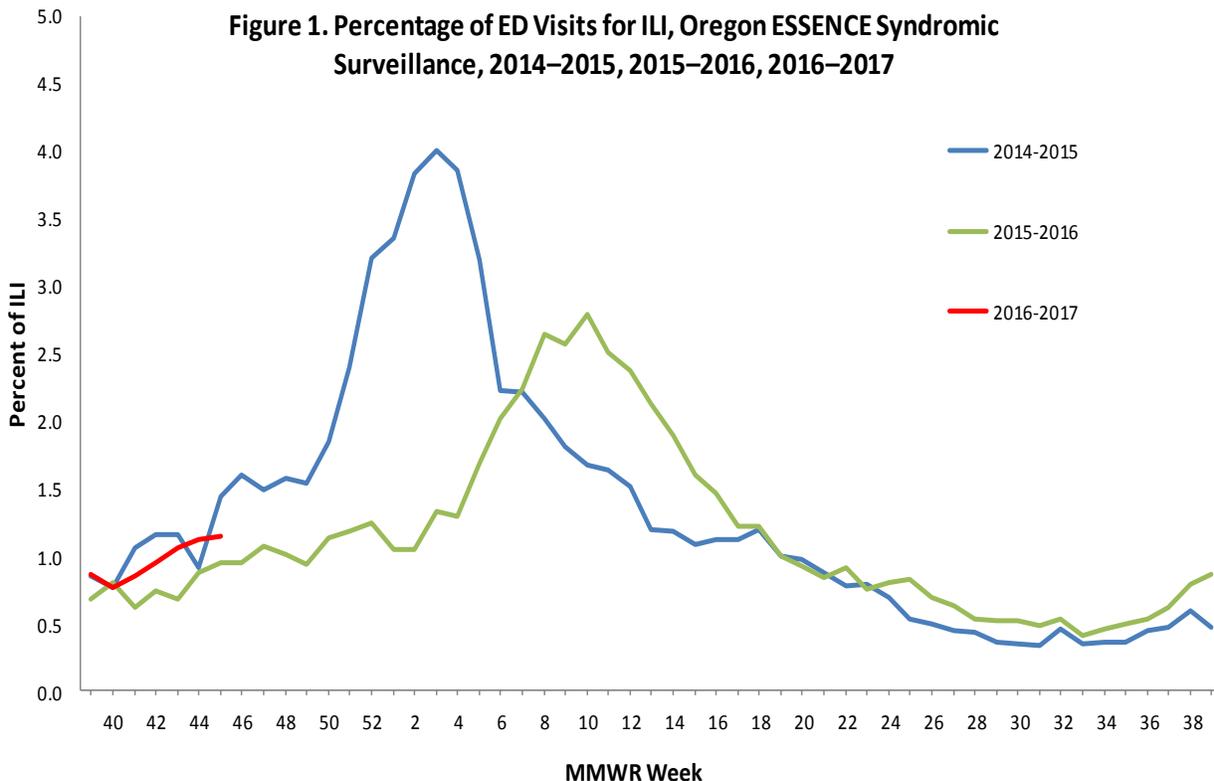
	Current Week (45)	Previous Week (44)
Percentage of emergency department visits for ILI ¹	1.1%	1.1%
Percentage positive influenza tests ²	9.0%	4.6%
Influenza-associated hospitalizations ³	3	1
Reported ILI/influenza outbreaks	1	1
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	1.3%	1.0%
Respiratory Syncytial Virus (RSV) activity ⁴	2%	1%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 1.1% during week 45, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 9.0% of specimens tested at Oregon labs were positive for influenza during week 45, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

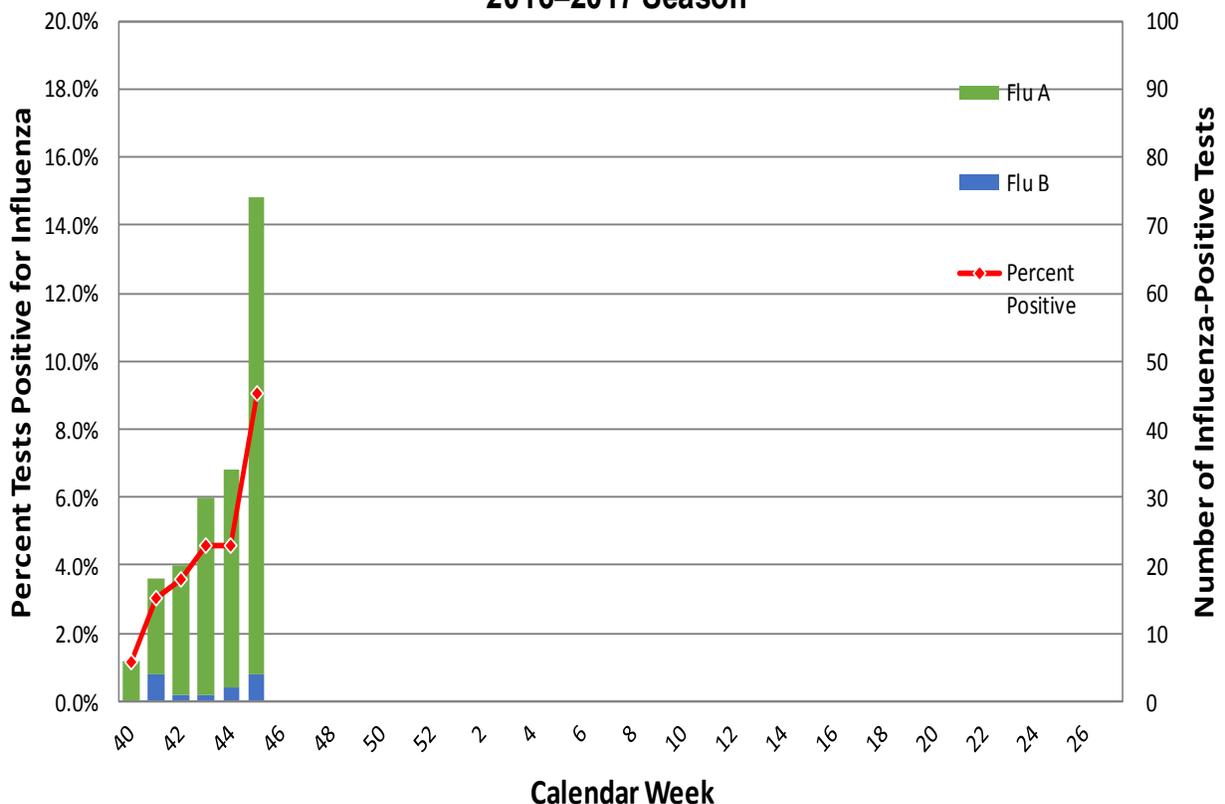
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	818	3,991
No. of positive specimens (%)	74 (9.0%)	185 (4.6%)
<i>Positive specimens by type</i>		
Influenza A	70 (94%)	170 (92%)
Influenza B	4 (6%)	12 (6%)
Not typed	0 (0%)	3 (2%)

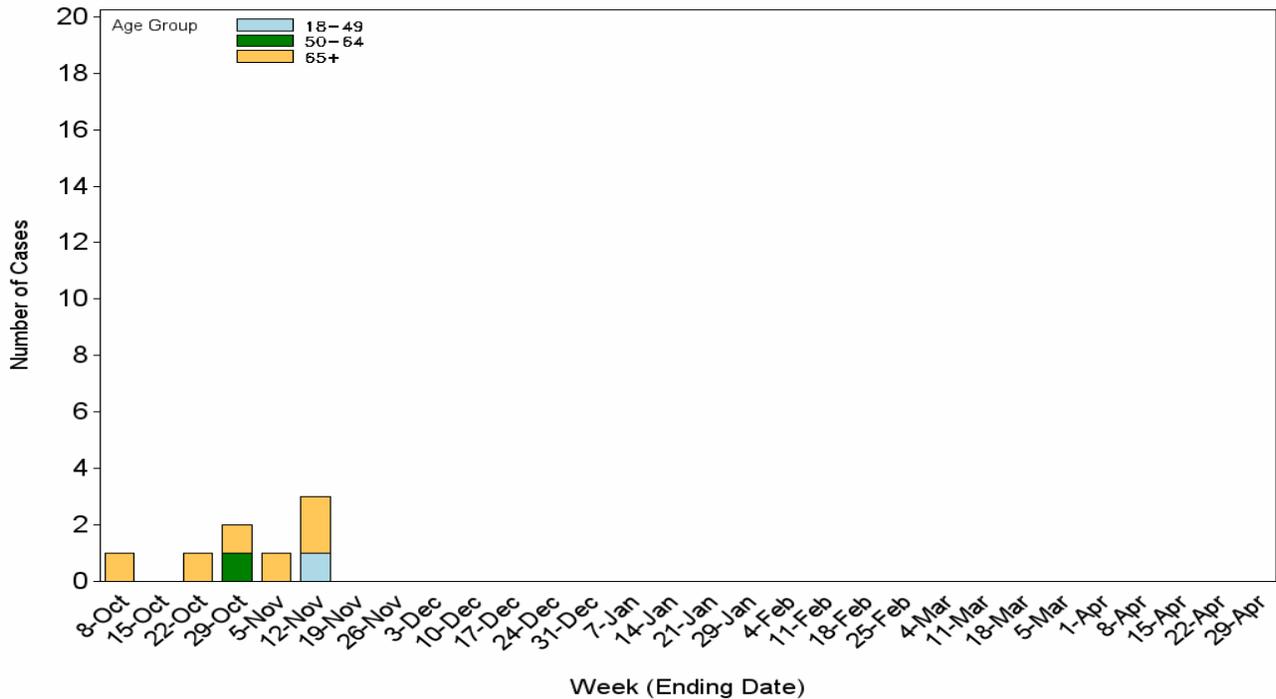
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

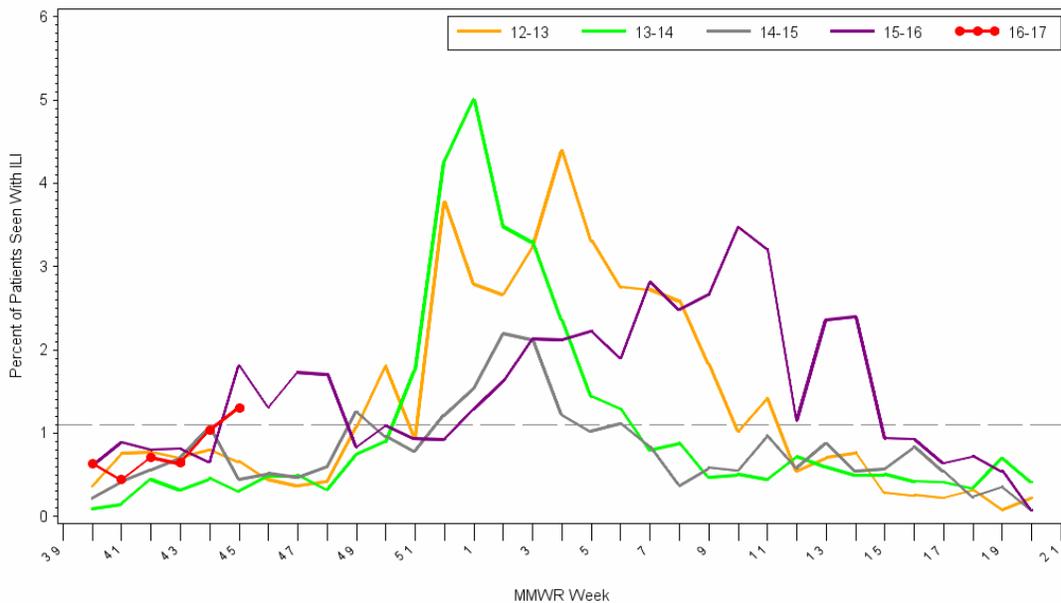
In Clackamas, Multnomah, and Washington counties 8 total reported influenza-associated hospitalizations occurred up through MMWR week 45, with 3 cases reported during week 45. One person has been infected with influenza B and the other 7 with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 45 of 2016 was 1.3% which is above Oregon's seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 17NOV16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

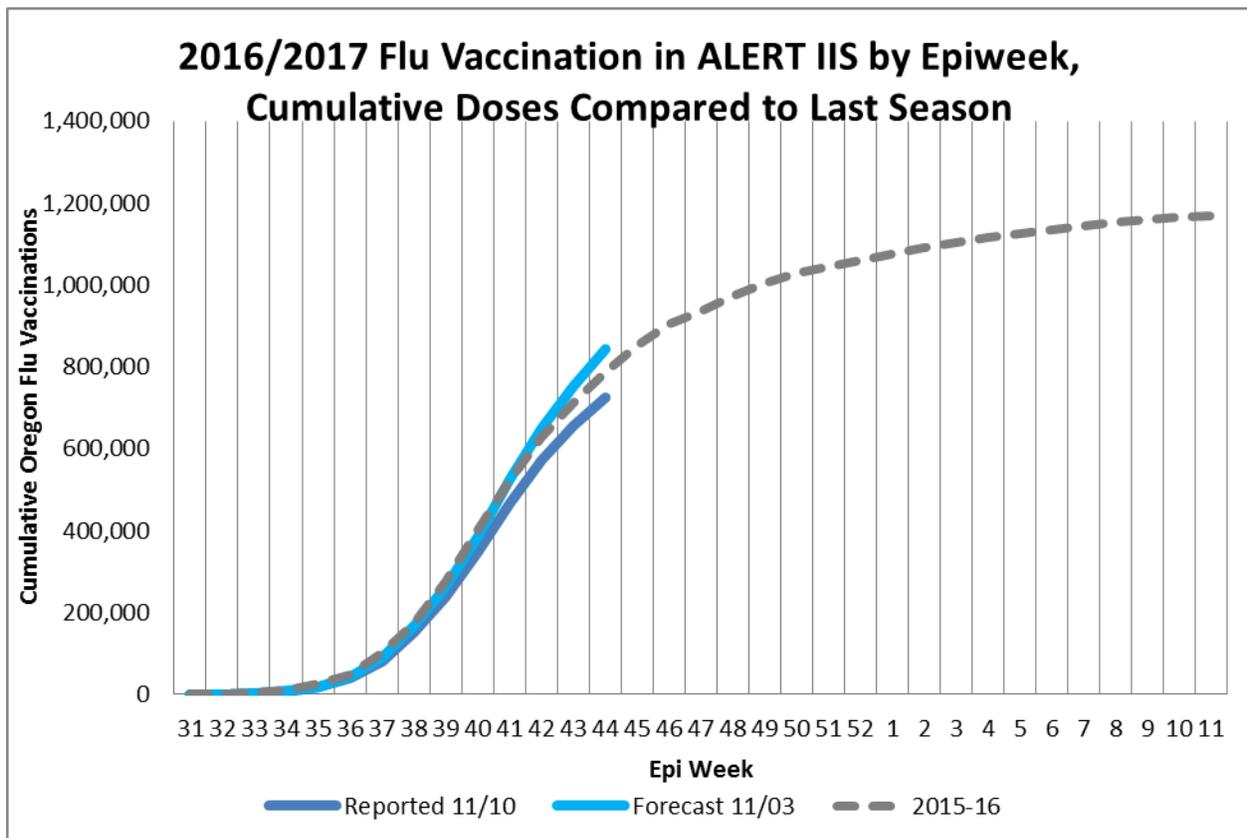
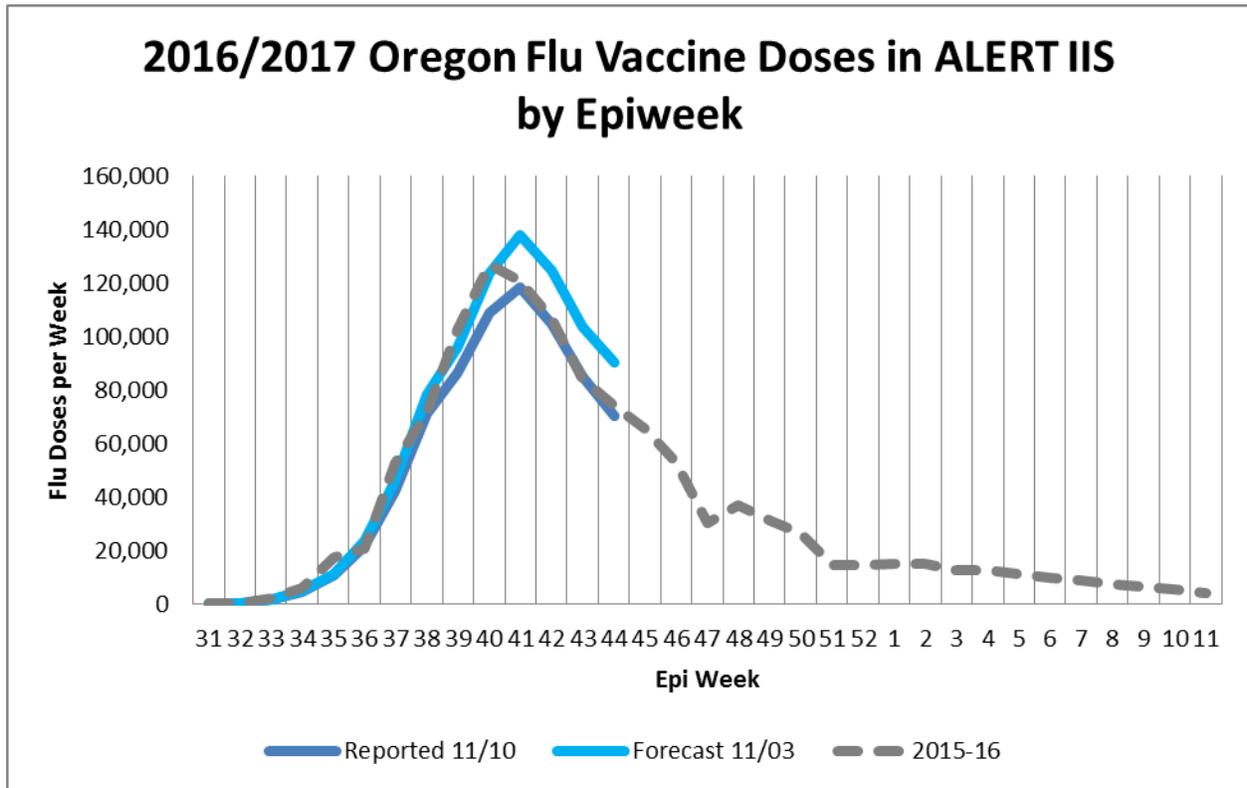
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations:

This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 44 (October 30th to November 5th). To date the ALERT IIS has received over 750,000 reports of seasonal influenza immunizations for Oregon residents. Influenza immunization seeking per week continues to decline as we approach the holiday season.



US Data (from CDC FluView):

During week 45 (November 6-12, 2016), influenza activity remained low in the United States.

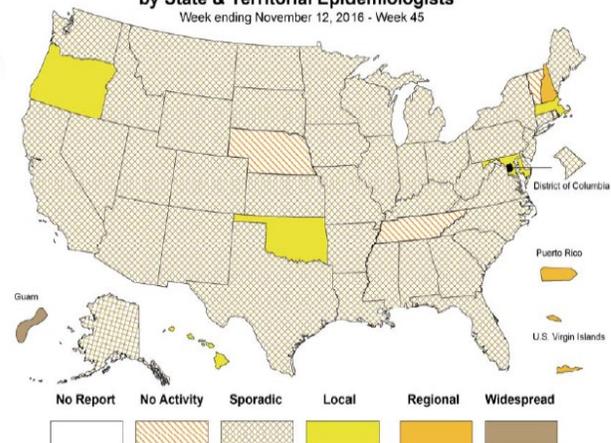
- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 45 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.6%, which is below the national baseline of 2.2%. One region reported ILI at their region-specific baseline level. Puerto Rico experienced high ILI activity, two states experienced low ILI activity, New York City and 48 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam was reported as widespread; Puerto Rico, the U.S. Virgin Islands and one state reported regional activity; five states reported local activity; the District of Columbia and 40 states reported sporadic activity; and four states reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 45 ending Nov 12, 2016



Map above left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

Weekly Influenza Activity Estimates Reported
by State & Territorial Epidemiologists*
Week ending November 12, 2016 - Week 45



Map above right: This map measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Additional resources:

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

Data at a Glance November 13–November 19, 2016 (Week 46)

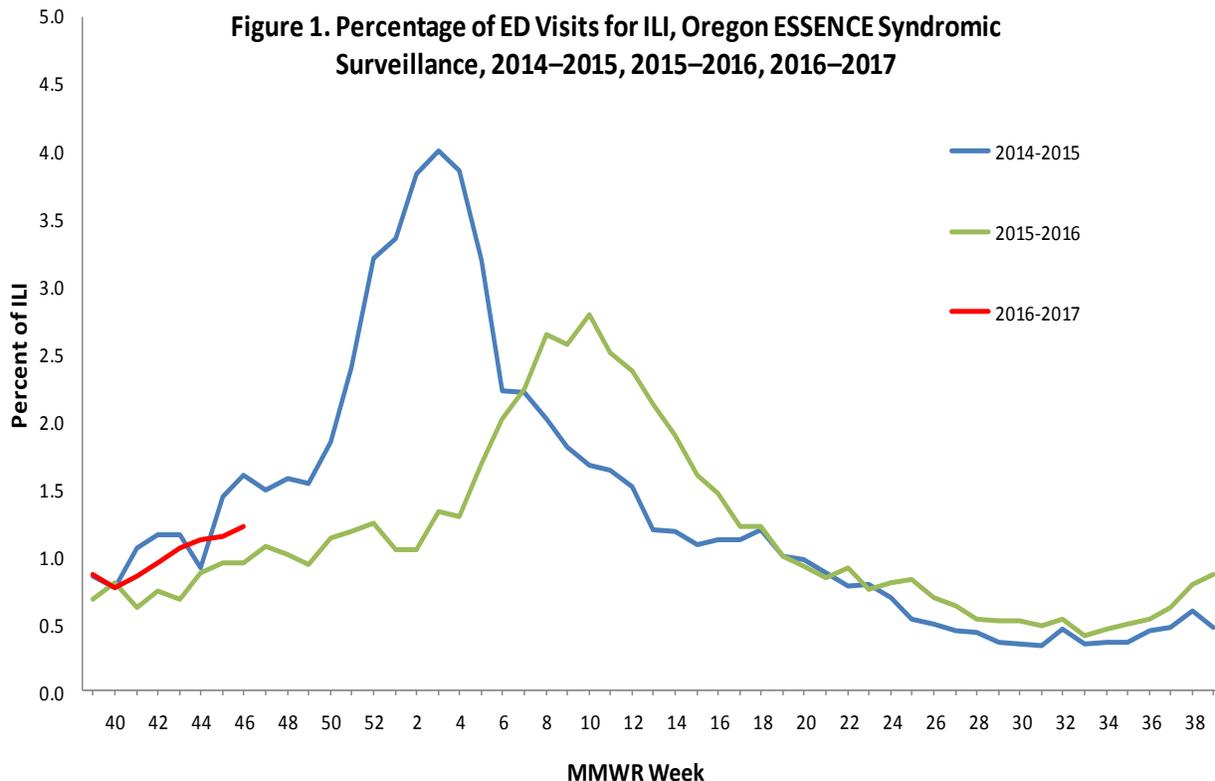
	Current Week (46)	Previous Week (45)
Percentage of emergency department visits for ILI ¹	1.2%	1.1%
Percentage positive influenza tests ²	8.1%	9.0%
Influenza-associated hospitalizations ³	4	3
Reported ILI/influenza outbreaks	1	1
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	0.8%	1.3%
Respiratory Syncytial Virus (RSV) activity ⁴	2%	2%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 1.2% during week 46, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 8.1% of specimens tested at Oregon labs were positive for influenza during week 46, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

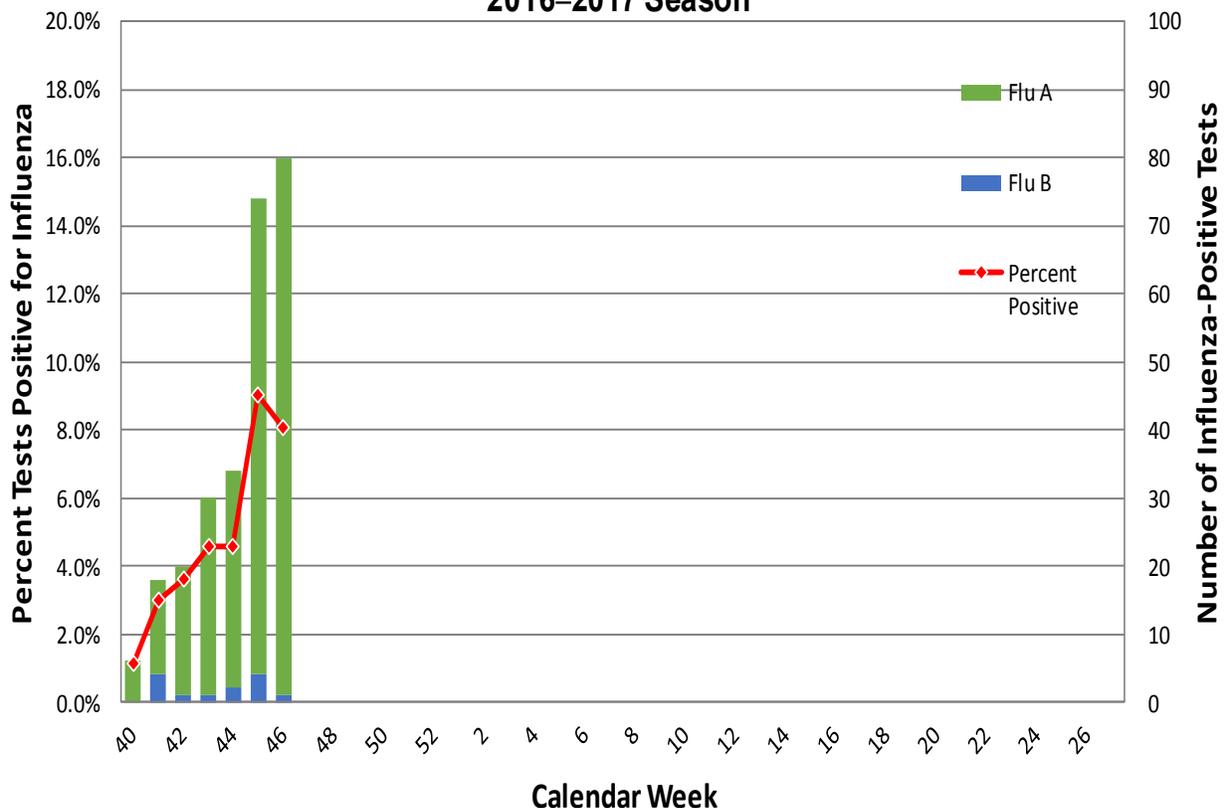
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	991	4,982
No. of positive specimens (%)	80 (8.1%)	265 (5.3%)
<i>Positive specimens by type</i>		
Influenza A	79 (99%)	249 (94%)
Influenza B	1 (1%)	13 (5%)
Not typed	0 (0%)	3 (1%)

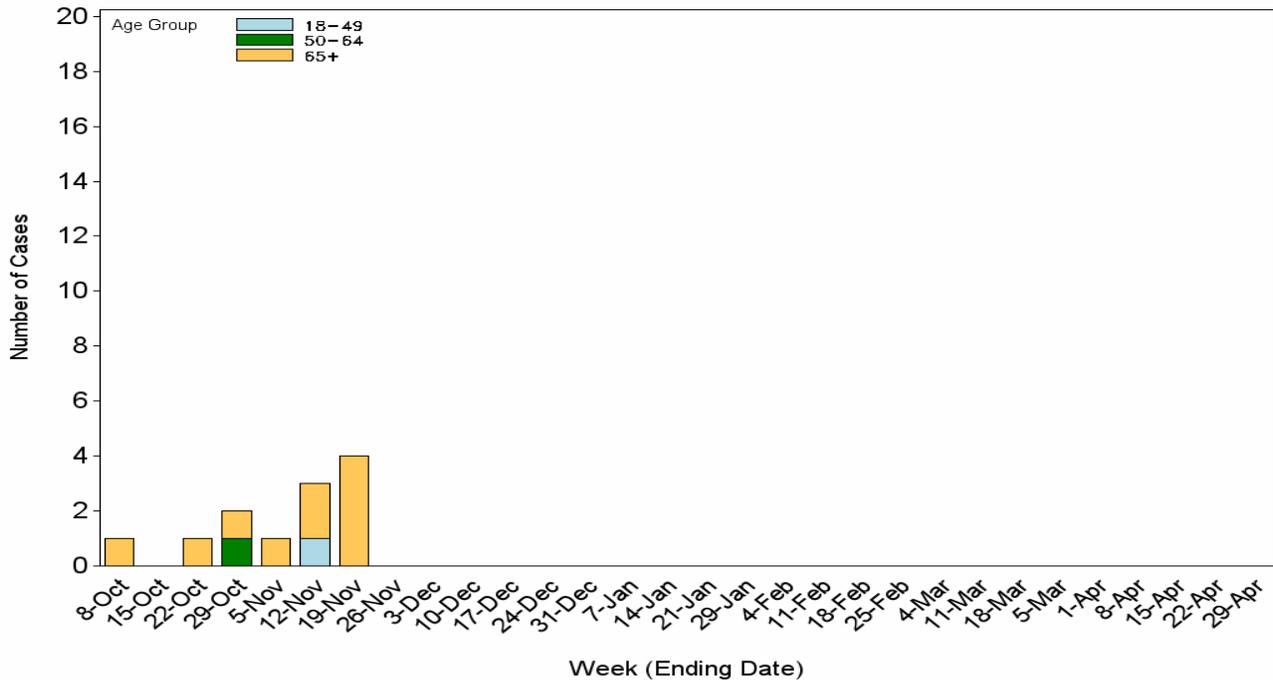
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

In Clackamas, Multnomah, and Washington counties 12 total reported influenza-associated hospitalizations occurred up through MMWR week 46, with 4 cases reported during week 46. One person has been infected with influenza B and the other 11 with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017

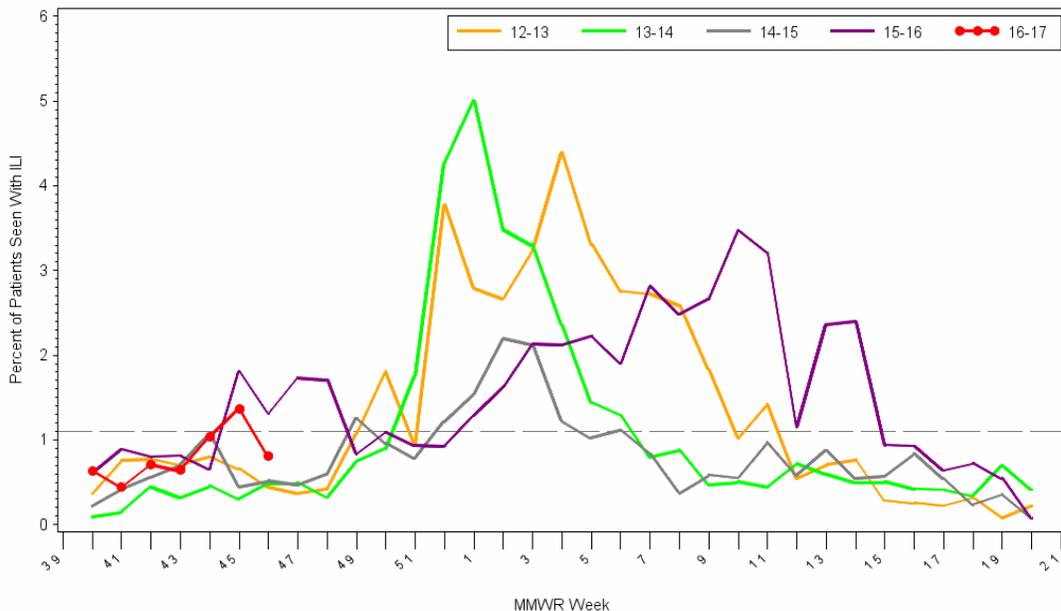


ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 46 of 2016 was 0.8% which is below Oregon's seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 28NOV16

Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)

Percent of Outpatients with Influenza-like Illness (ILI)
2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

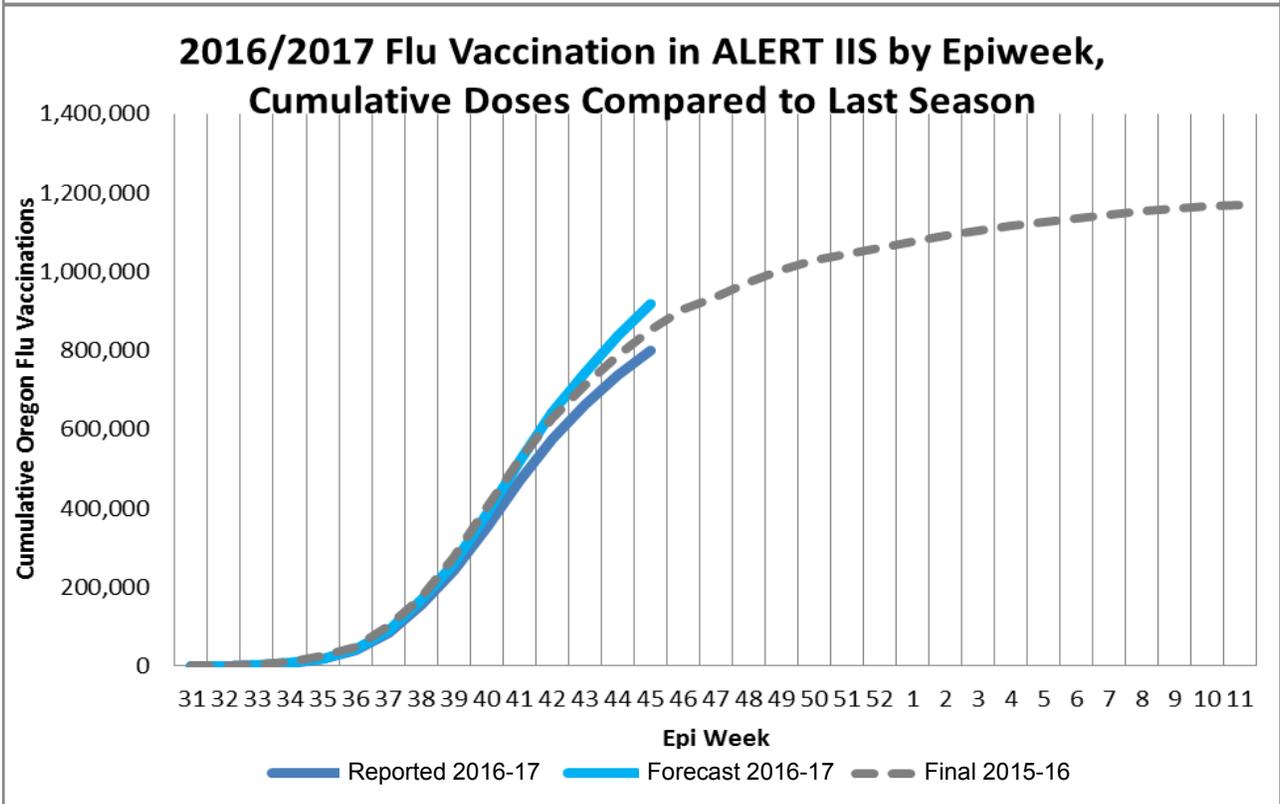
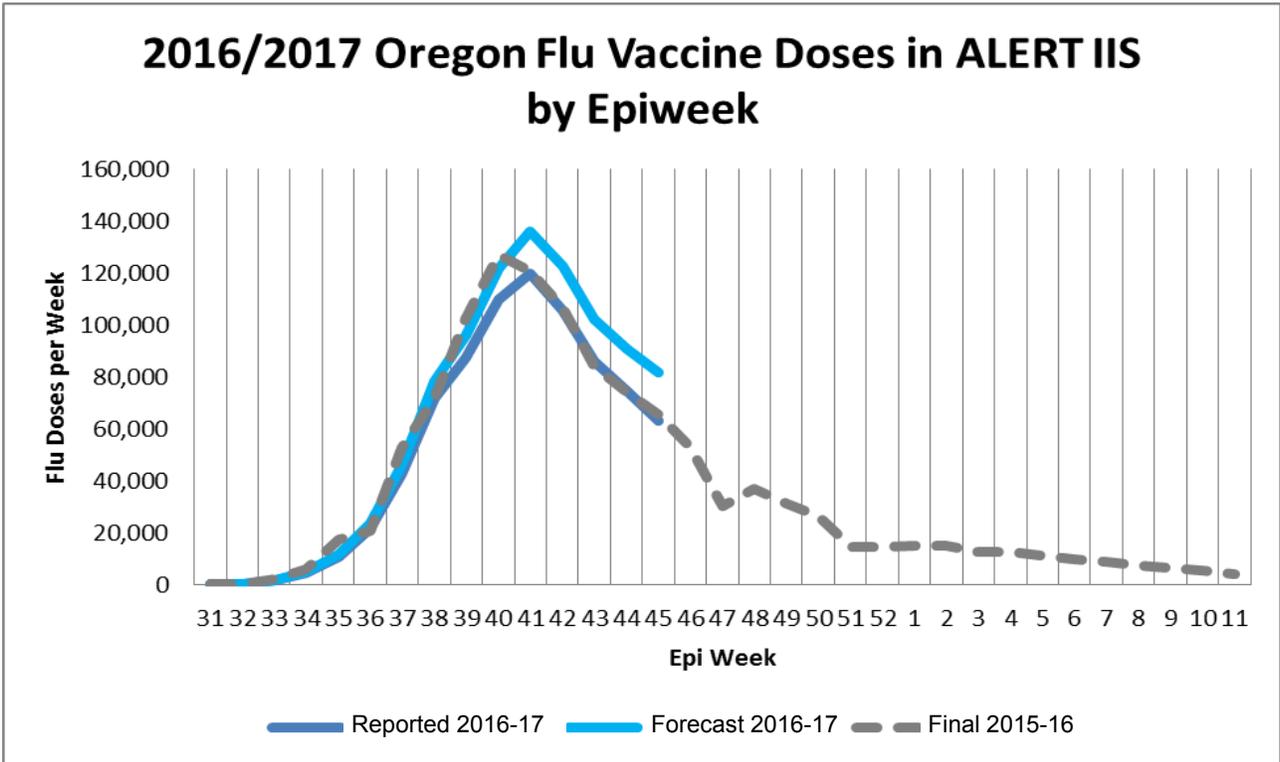
All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday

Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

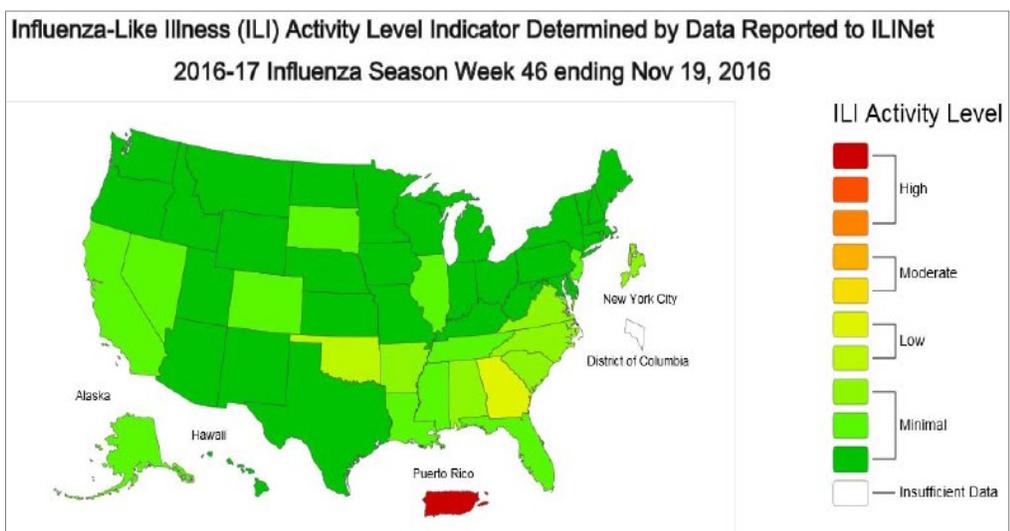
Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 45 (November 6-12). To date the ALERT IIS has received roughly 800,000 reports of seasonal influenza immunizations for Oregon residents, which is forecast to increase slightly as data continue to be reported. The current reported total is slightly above the 2015-2016 reported total last year at this time, which was 780,000 influenza immunizations (the final 2015-16 immunization total is larger after all facilities finish reporting).

At the start of this season there were initially concerns that the general recommendation against FluMist for children this season might reduce childhood immunizations. However in comparison to where we were last year at this time, reported children's influenza immunizations in the current season are 5% higher than reported children's immunizations last season.

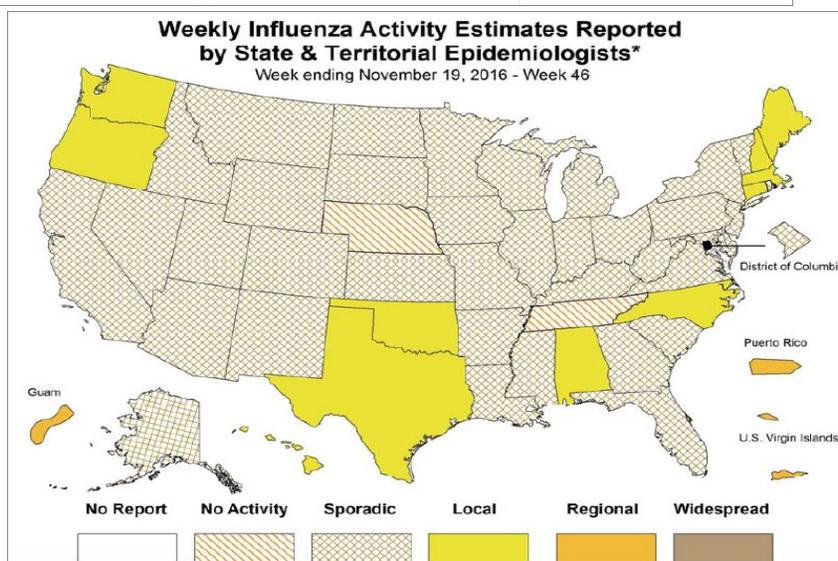


US Data (from CDC FluView): During week 46 (November 13-19, 2016), influenza activity increased slightly, but remained low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 46 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased slightly, but remained low.
- **Novel Influenza A Virus:** One human infection with a novel influenza A virus was reported.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.6%, which is below the national baseline of 2.2%. Two regions reported ILI at or above their region-specific baseline levels. Puerto Rico experienced high ILI activity, two states experienced low ILI activity, New York City and 48 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam, Puerto Rico, and the U.S. Virgin Islands was reported as regional; 11 states reported local activity; the District of Columbia and 36 states reported sporadic activity; and three states reported no activity.



Map left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.



* The map above measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance November 20–November 26, 2016 (Week 47)

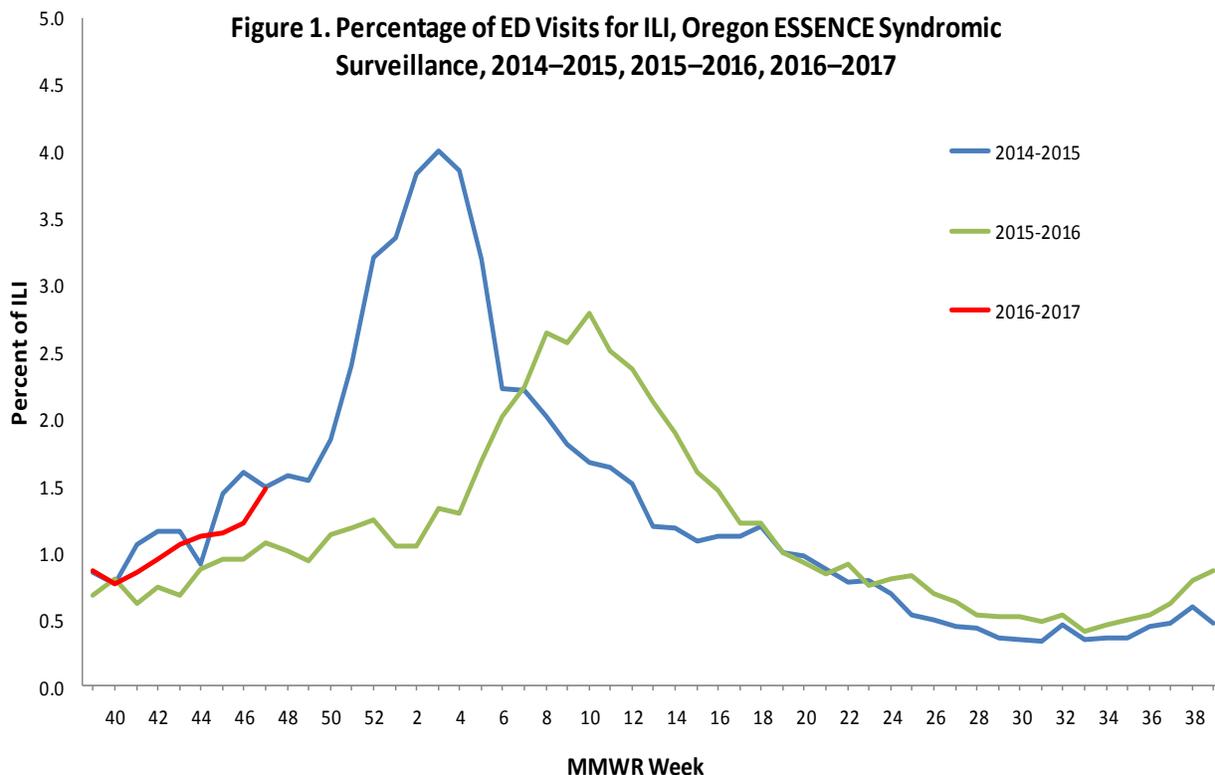
	Current Week (47)	Previous Week (46)
Percentage of emergency department visits for ILI ¹	1.5%	1.2%
Percentage positive influenza tests ²	10.8%	8.1%
Influenza-associated hospitalizations ³	13	4
Reported ILI/influenza outbreaks	0	1
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	1.0%	0.8%
Respiratory Syncytial Virus (RSV) activity ⁴	3%	2%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. **The percent of ED visits for ILI in all of Oregon was 1.5% during week 47, 2016.**

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 10.8% of specimens tested at Oregon labs were positive for influenza during week 47, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

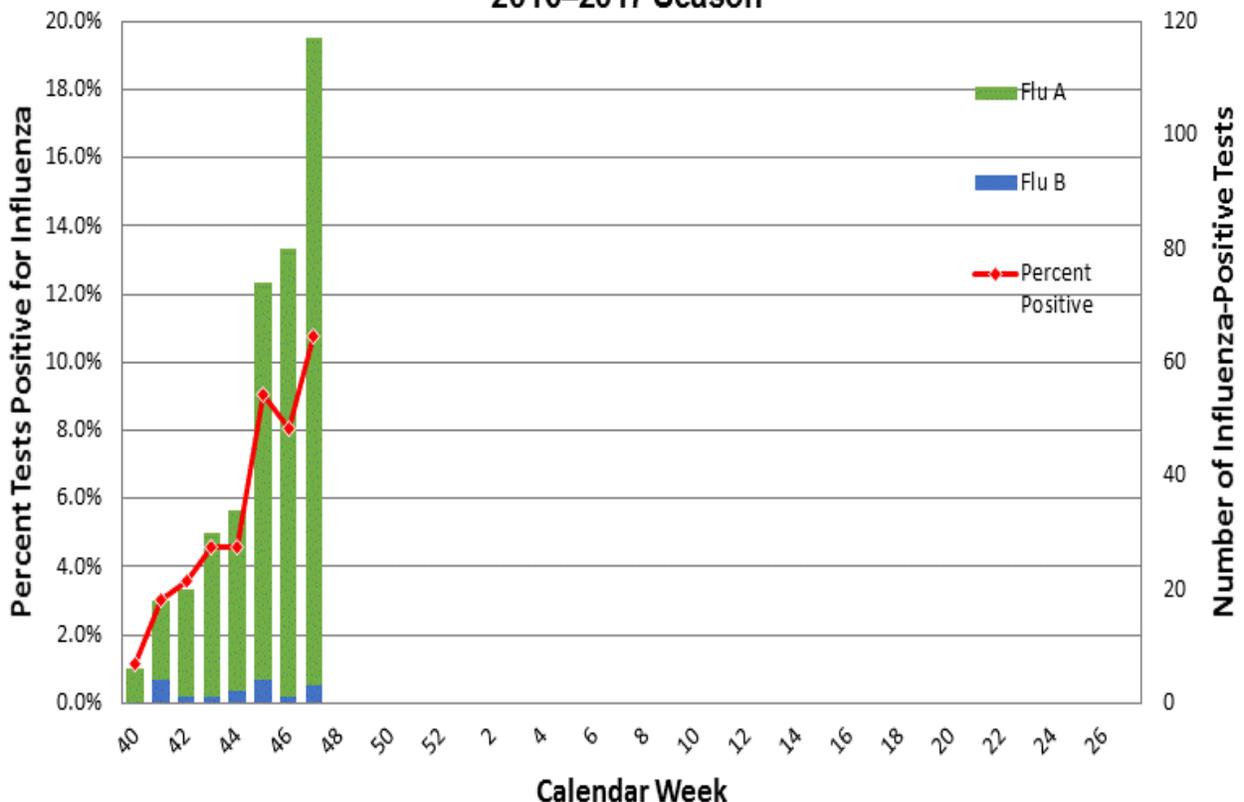
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	1,088	6,070
No. of positive specimens (%)	117 (10.8%)	382 (6.3%)
<i>Positive specimens by type</i>		
Influenza A	114 (99%)	363 (95%)
Influenza B	3 (1%)	16 (4%)
Not typed	0 (0%)	3 (1%)

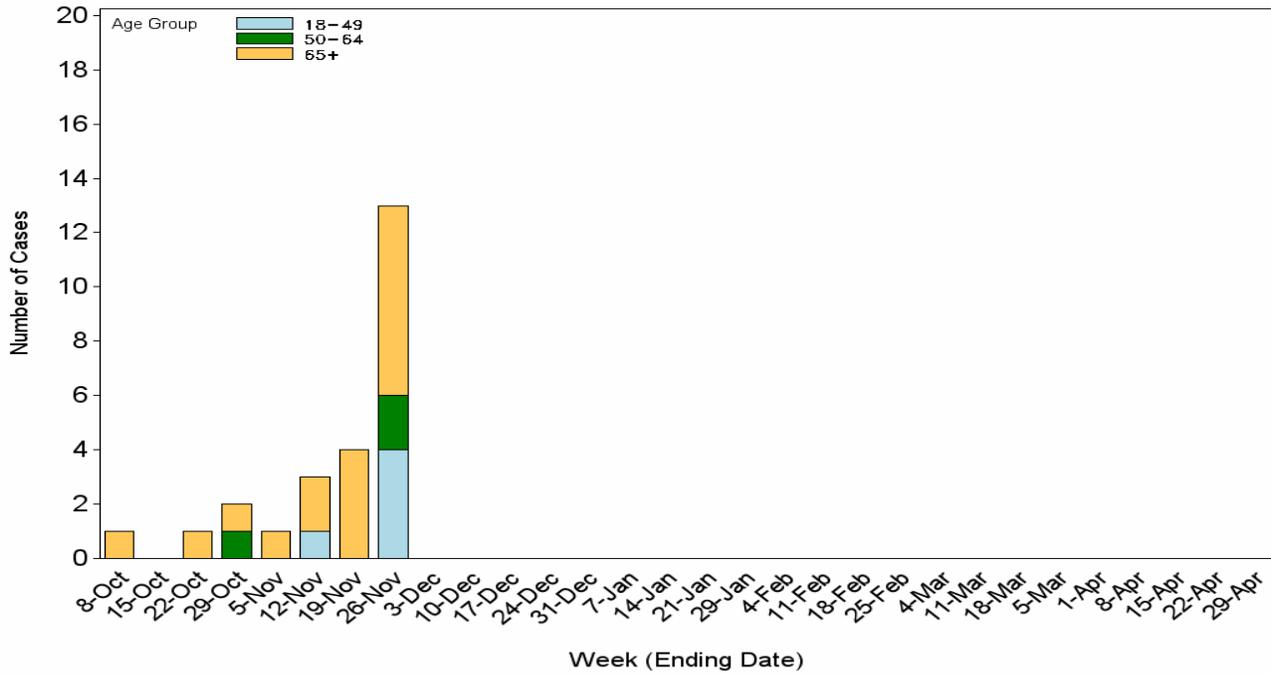
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

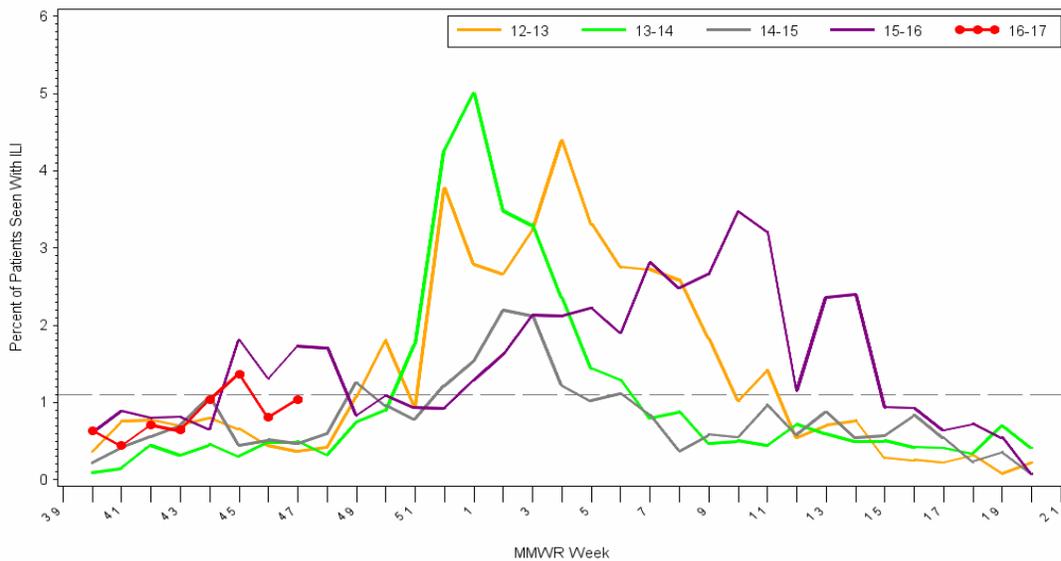
In Clackamas, Multnomah, and Washington counties 25 total reported influenza-associated hospitalizations occurred up through MMWR week 47, with 13 cases reported during week 47. One person has been infected with influenza B and the rest with influenza A.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. **The percent of outpatients seen with ILI for week 47 of 2016 was 1.0% which is below Oregon's seasonal threshold of 1.1%.***

Oregon Health Authority, Acute and Communicable Disease Prevention 01DEC16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

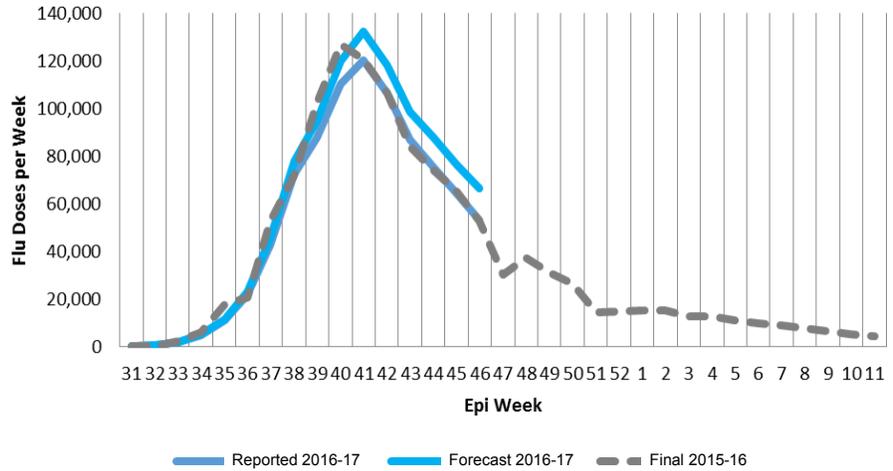
Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations:

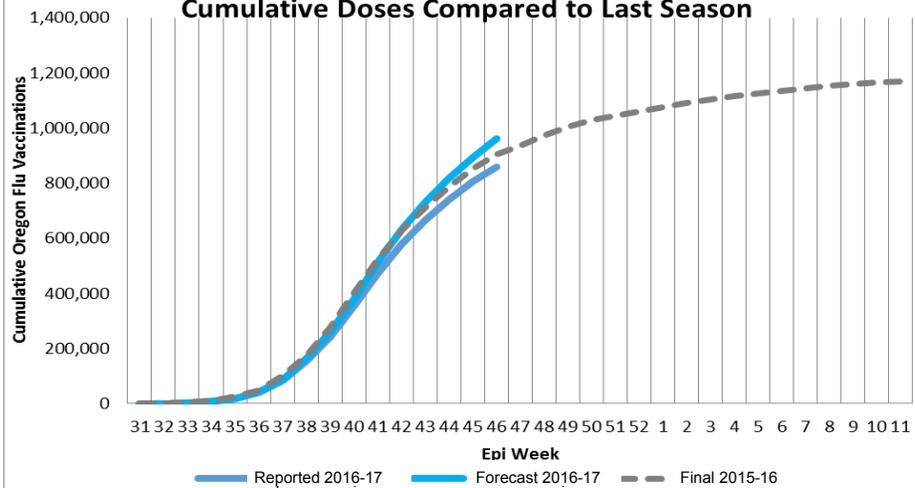
This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 46 (November 13th to November 19th). To date the ALERT IIS has received roughly 880,000 reports of seasonal influenza immunizations for Oregon residents. By this time in the influenza season, typically 2/3 of all influenza immunizations have been given.

For this week we are including a map of mid-season estimated county influenza immunization rates. As in past seasons, the southern band of the state has low influenza immunization rates (except for Coos County). Low rates in Umatilla and Union Counties are also of concern.

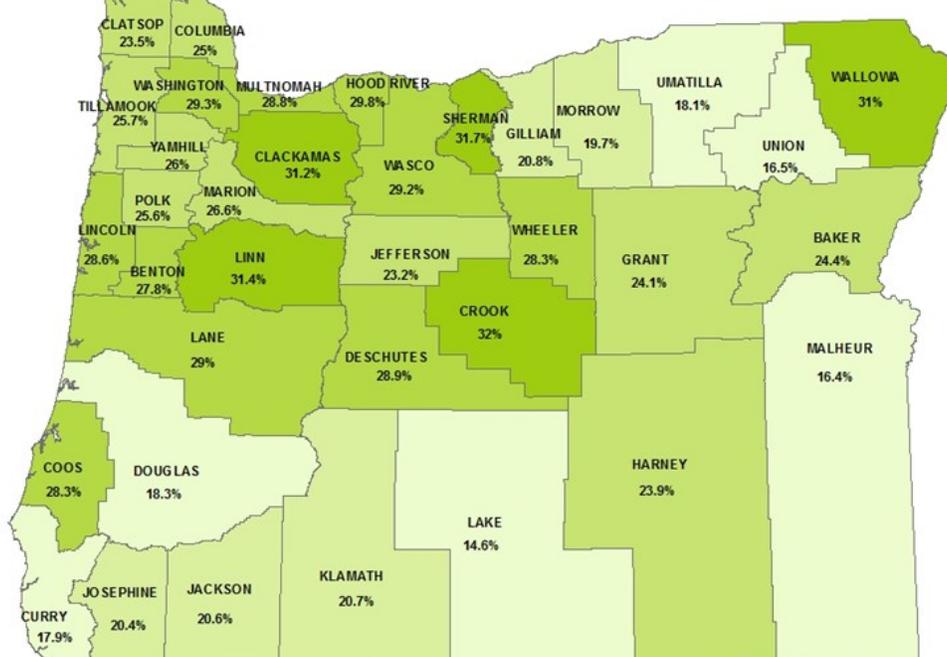
2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



2016/2017 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season



OREGON INFLUENZA IMMUNIZATION RATES AS OF NOV 24TH, 2016

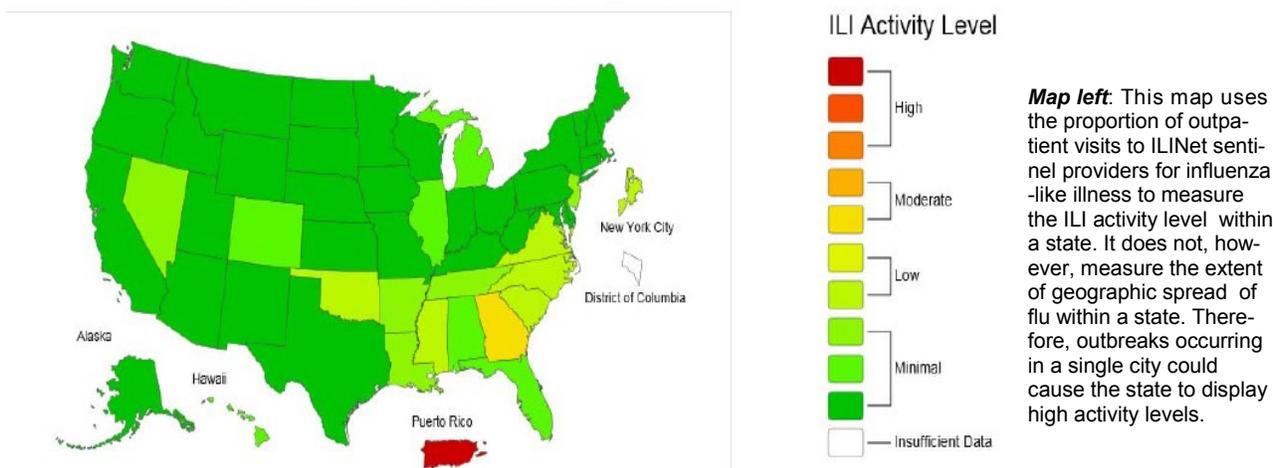


US Data (from [CDC FluView](#)): During week 47 (November 20-26, 2016), influenza activity increased slightly, but remained low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 47 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased slightly, but remained low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.8%, which is below the national baseline of 2.2%. Three regions reported ILI at or above their region-specific baseline levels. Puerto Rico experienced high ILI activity, one state experienced moderate ILI activity, New York City and five states experienced low ILI activity, 44 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam, Puerto Rico, the U.S. Virgin Islands, and one state was reported as regional; 12 states reported local activity; the District of Columbia and 36 states reported sporadic activity; and one state reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet

2016-17 Influenza Season Week 47 ending Nov 26, 2016



Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending November 26, 2016 - Week 47



* The map above measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance November 27–December 3, 2016 (Week 48)

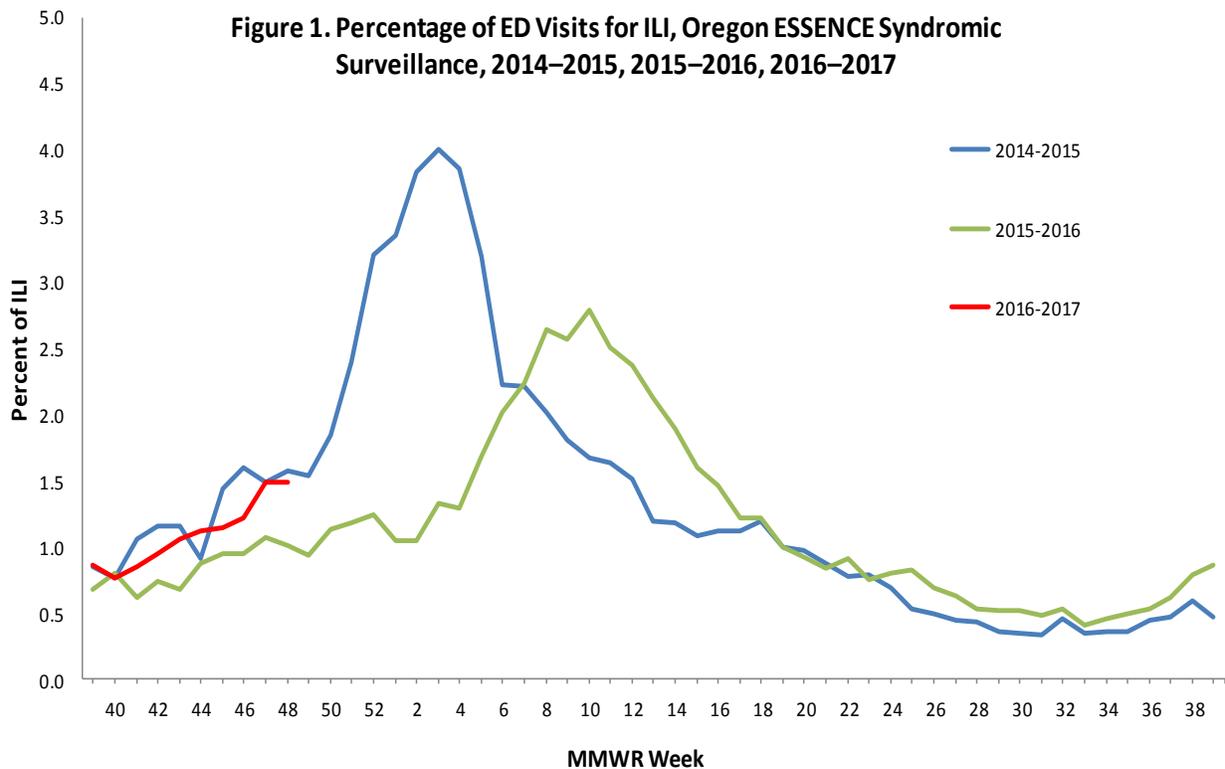
	Current Week (48)	Previous Week (47)
Percentage of emergency department visits for ILI ¹	1.5%	1.5%
Percentage positive influenza tests ²	10.8%	12.0%
Influenza-associated hospitalizations ³	17	14
Reported ILI/influenza outbreaks	0	0
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	1.1%	1.0%
Respiratory Syncytial Virus (RSV) activity ⁴	5%	3%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. **The percent of ED visits for ILI in all of Oregon was 1.5% during week 48, 2016.**

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

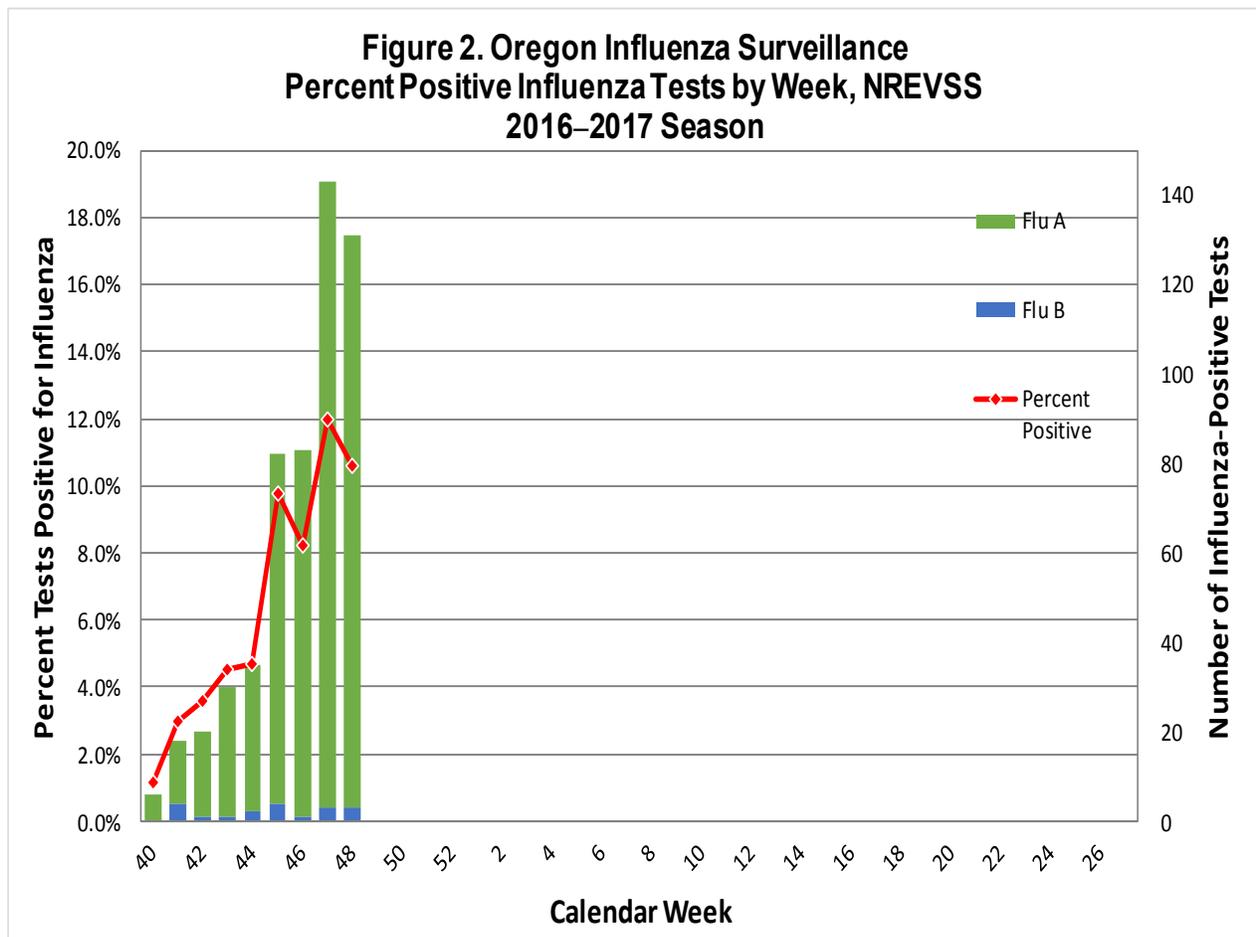
Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 10.8% of specimens tested at Oregon labs were positive for influenza during week 48, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

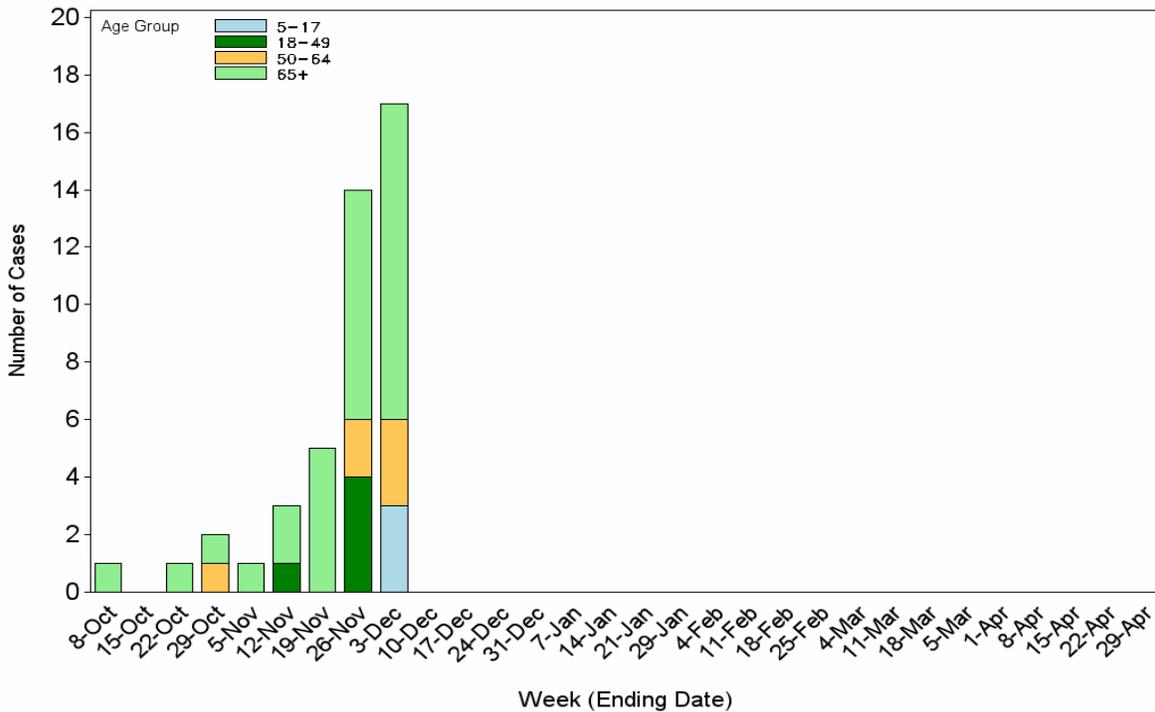
	Current Week	Cumulative
No. of specimens tested	1,245	7,474
No. of positive specimens (%)	134 (10.8%)	554 (7.4%)
<i>Positive specimens by type</i>		
Influenza A	128 (96%)	529 (95%)
Influenza B	3 (2%)	19 (3%)
Not typed	3 (2%)	6 (1%)



Hospitalizations:

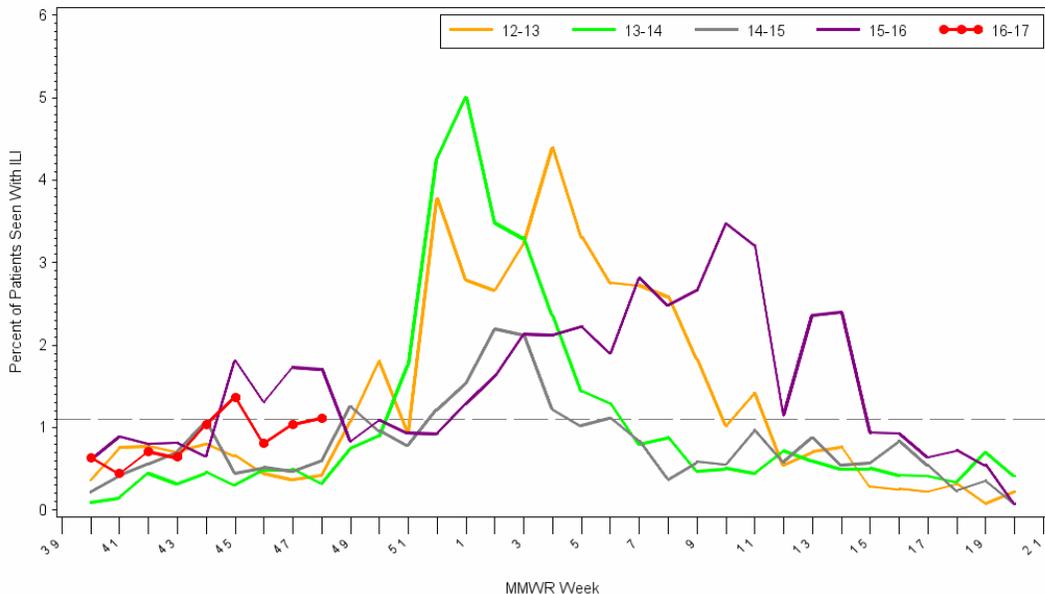
In Clackamas, Multnomah, and Washington counties 44 total reported influenza-associated hospitalizations occurred up through MMWR week 48, with 17 cases reported during week 48. One person was infected with influenza B, and the rest influenza A. All influenza A isolates that have been subtyped (30%) are A/H3.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. **The percent of outpatients seen with ILI for week 48 of 2016 was 1.12% which is above Oregon’s seasonal threshold of 1.1%.***

Oregon Health Authority, Acute and Communicable Disease Prevention 09DEC16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever (≥100°F) and cough or sore throat.

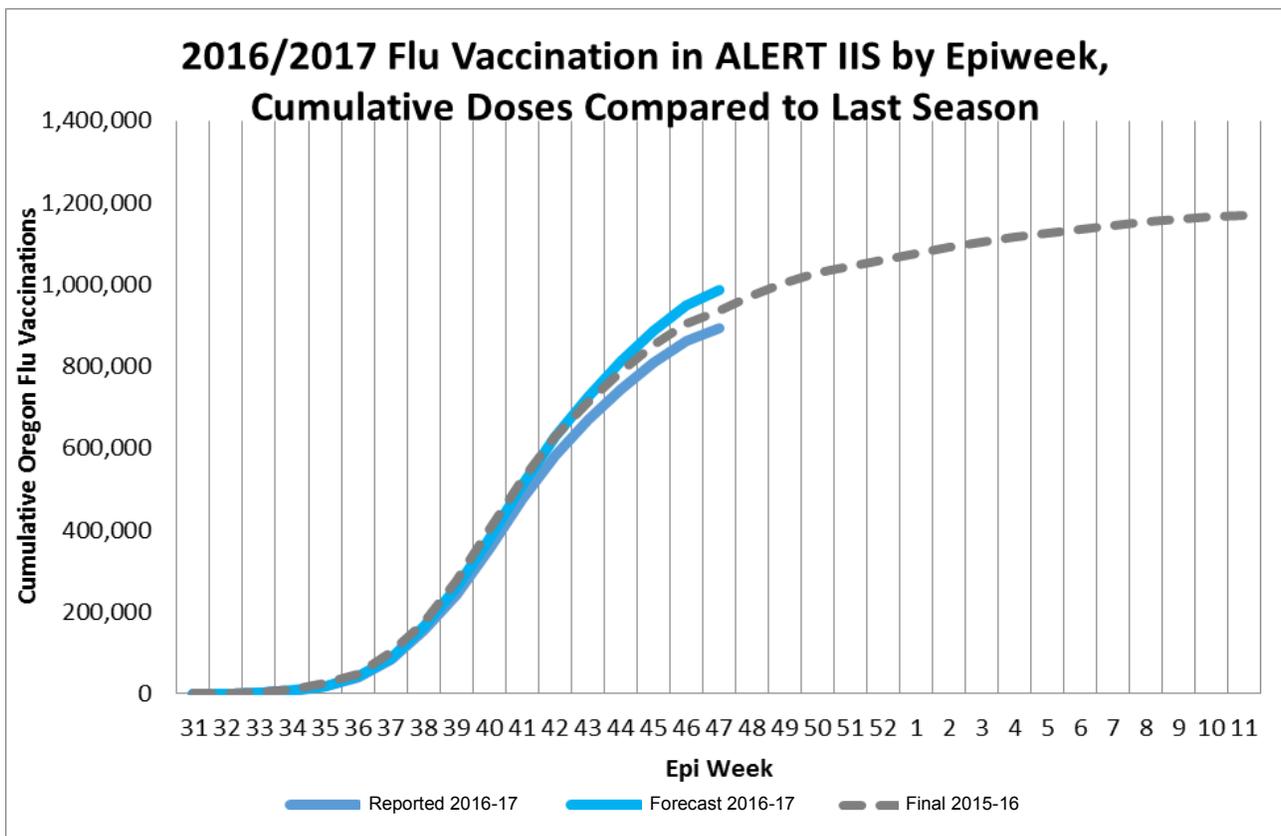
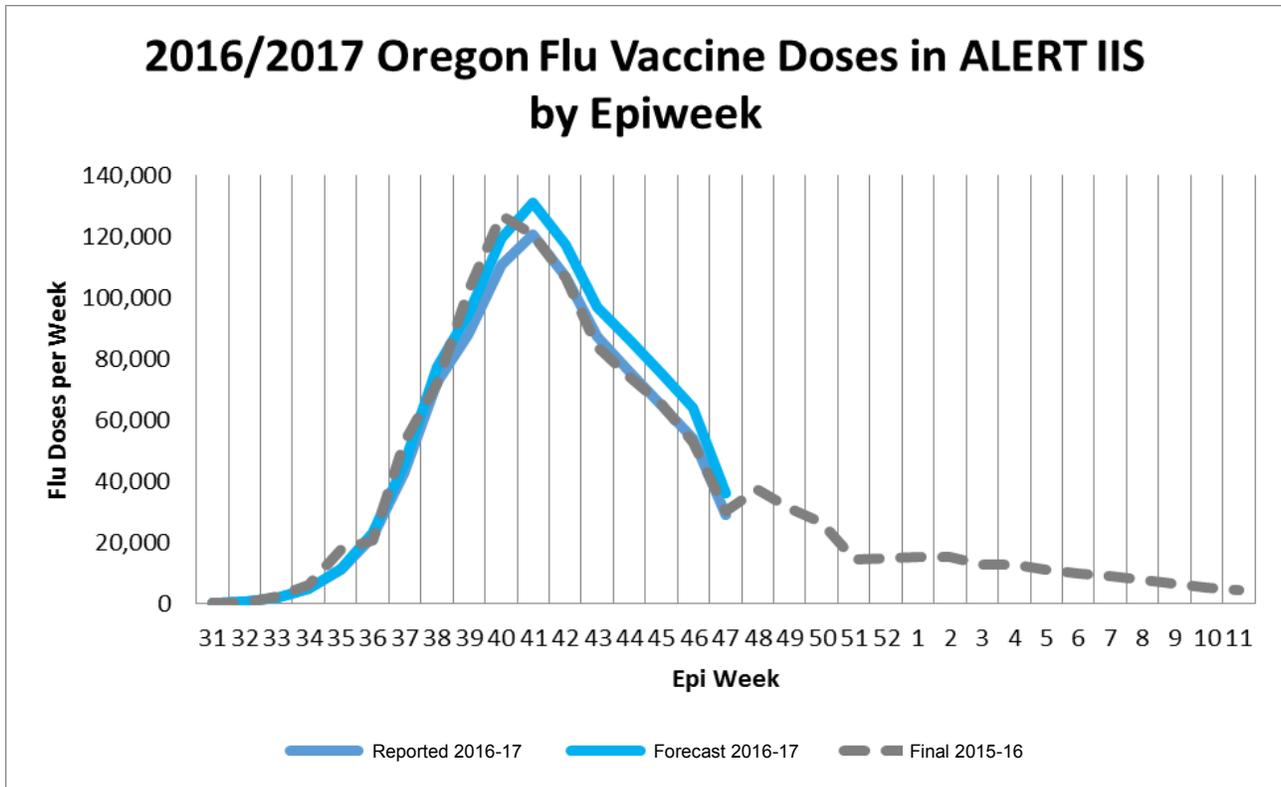
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations:

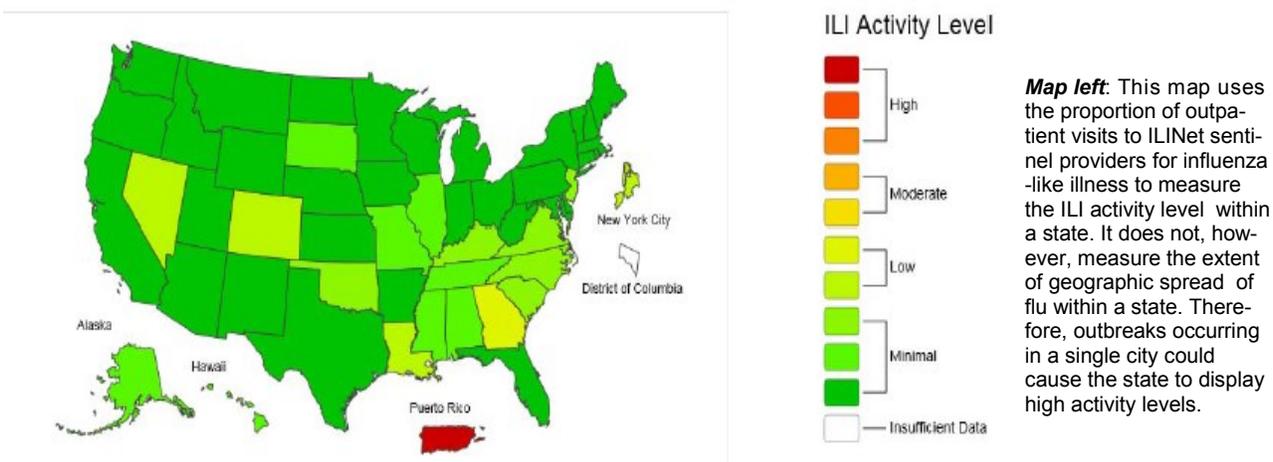
This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epi-week 47 (November 20th to November 26th). To date the ALERT IIS has received roughly 911,000 reports of seasonal influenza immunizations for Oregon residents. The weekly chart shows the typical drop in immunization that happens at Thanksgiving; immunization seeking is expected to rebound slightly in early December.



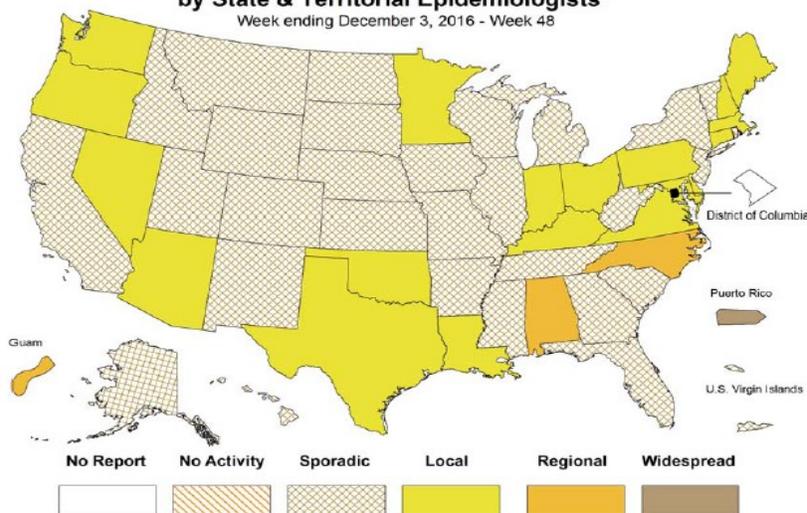
US Data (from [CDC FluView](#)): During week 48 (November 27-December 3, 2016), influenza activity increased slightly, but remained low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 48 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories remained low.
- **Pneumonia and Influenza Mortality:** Due to data processing problems, the National Center for Health Statistics (NCHS) mortality surveillance data for the week ending November 19, 2016 (week 46) will not be published this week.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.8%, which is below the national baseline of 2.2%. Two regions reported ILI at or above their region-specific baseline levels. Puerto Rico experienced high ILI activity, New York City and four states experienced low ILI activity, 46 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico was reported as widespread; Guam and two states were reported as regional; 19 states reported local activity; the U.S. Virgin Islands and 28 states reported sporadic activity; one state reported no activity; and the District of Columbia did not report.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 48 ending Dec 03, 2016



Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
 Week ending December 3, 2016 - Week 48



* The map above measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance December 4–December 10, 2016 (Week 49)

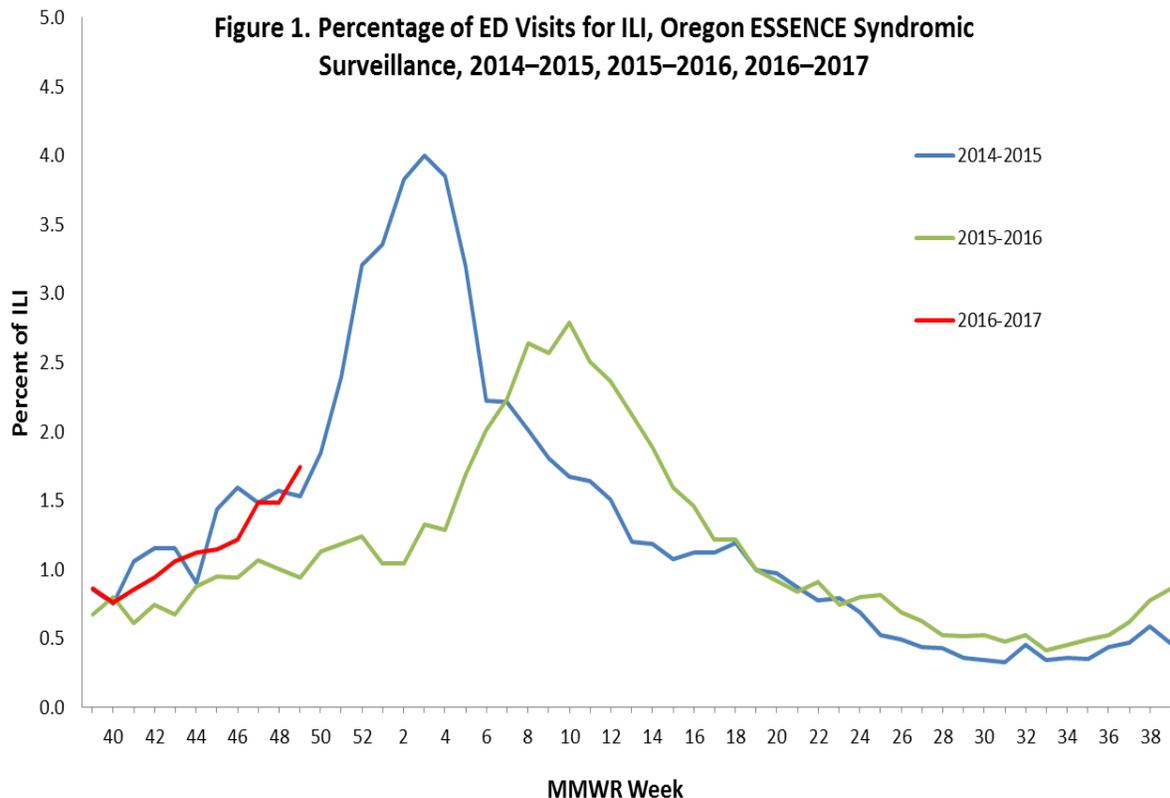
	Current Week (49)	Previous Week (48)
Percentage of emergency department visits for ILI¹	1.7%	1.5%
Percentage positive influenza tests²	15.1%	10.8%
Influenza-associated hospitalizations³	23	17
Reported ILI/influenza outbreaks	2	0
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	1.1%	1.1%
Respiratory Syncytial Virus (RSV) activity⁴	5%	5%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 1.7% during week 49, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 15.1% of specimens tested at Oregon labs were positive for influenza during week 49, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

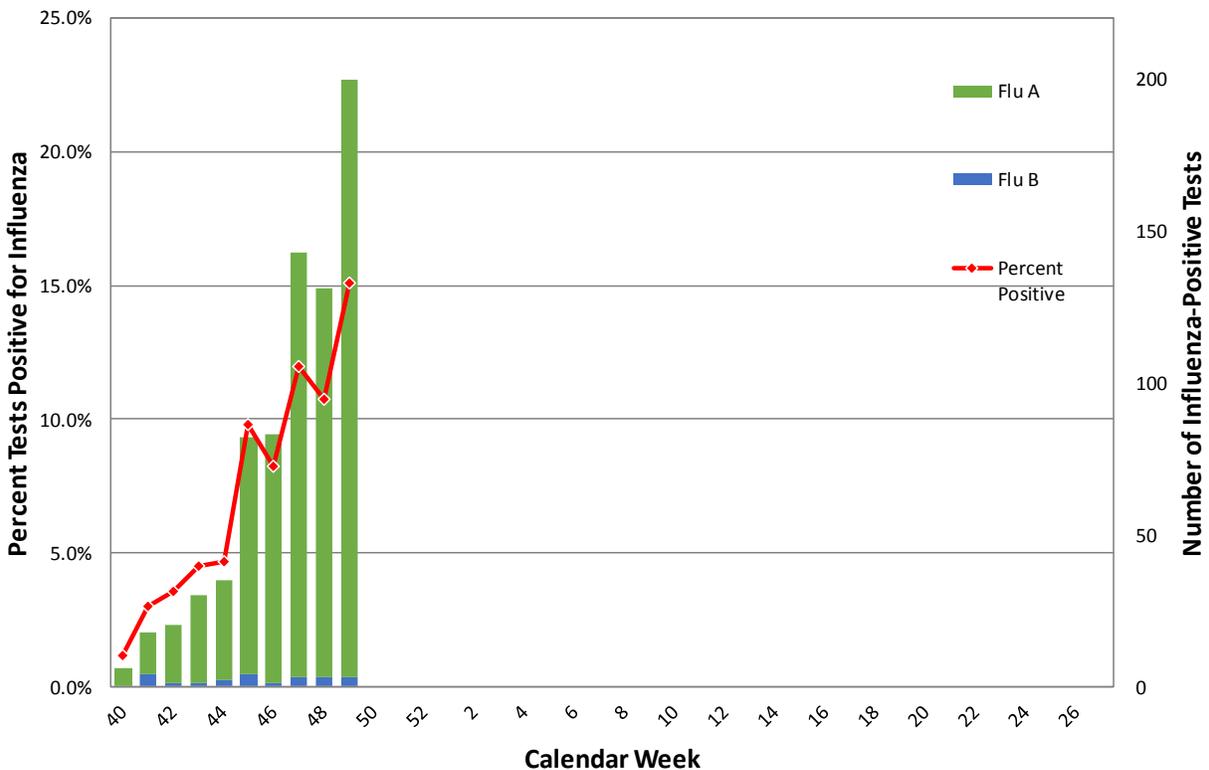
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	1,373	8,850
No. of positive specimens (%)	207 (15.1%)	761 (8.6%)
<i>Positive specimens by type</i>		
Influenza A	197 (95%)	726 (95%)
Influenza B	3 (2%)	22 (3%)
Not typed	7 (3%)	13 (2%)

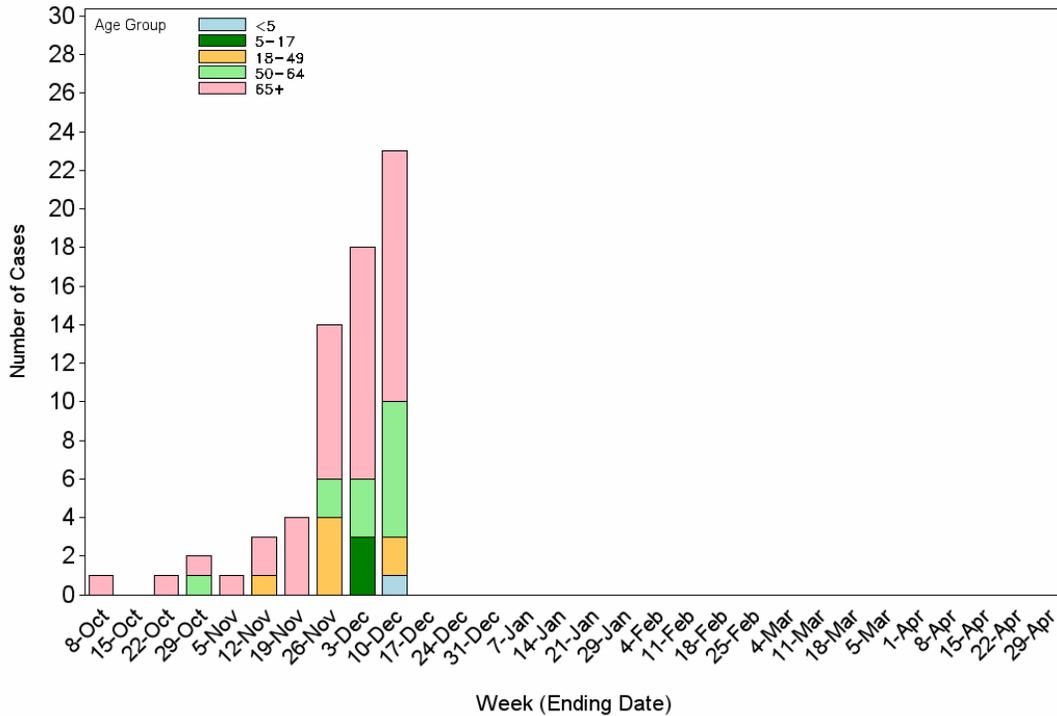
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

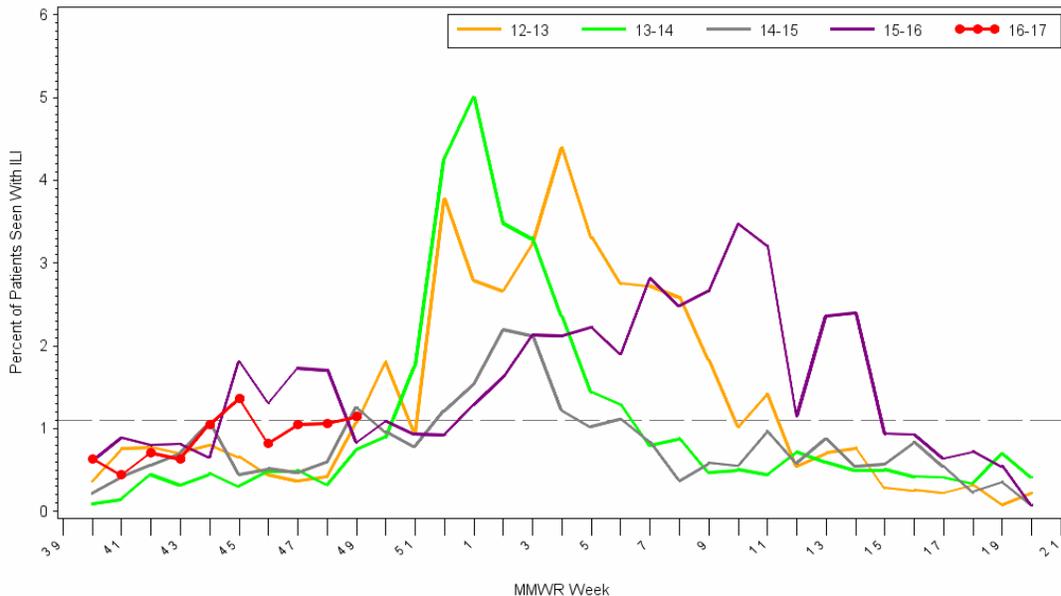
In Clackamas, Multnomah, and Washington counties 66 total reported influenza-associated hospitalizations occurred up through MMWR week 49, with 23 cases reported during week 49. Two people were infected with influenza B and the rest influenza A. All influenza A isolates that have been subtyped (28%) are A/H3.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 49 of 2016 was 1.14% which is above Oregon’s seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 16DEC16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever (≥100°F) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

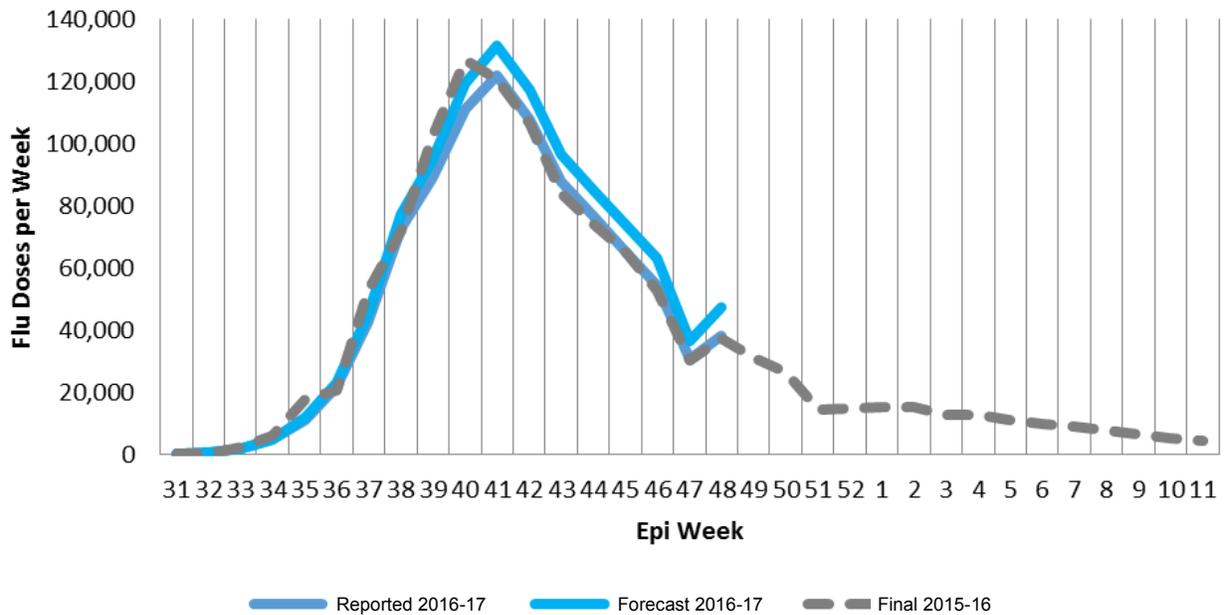
All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

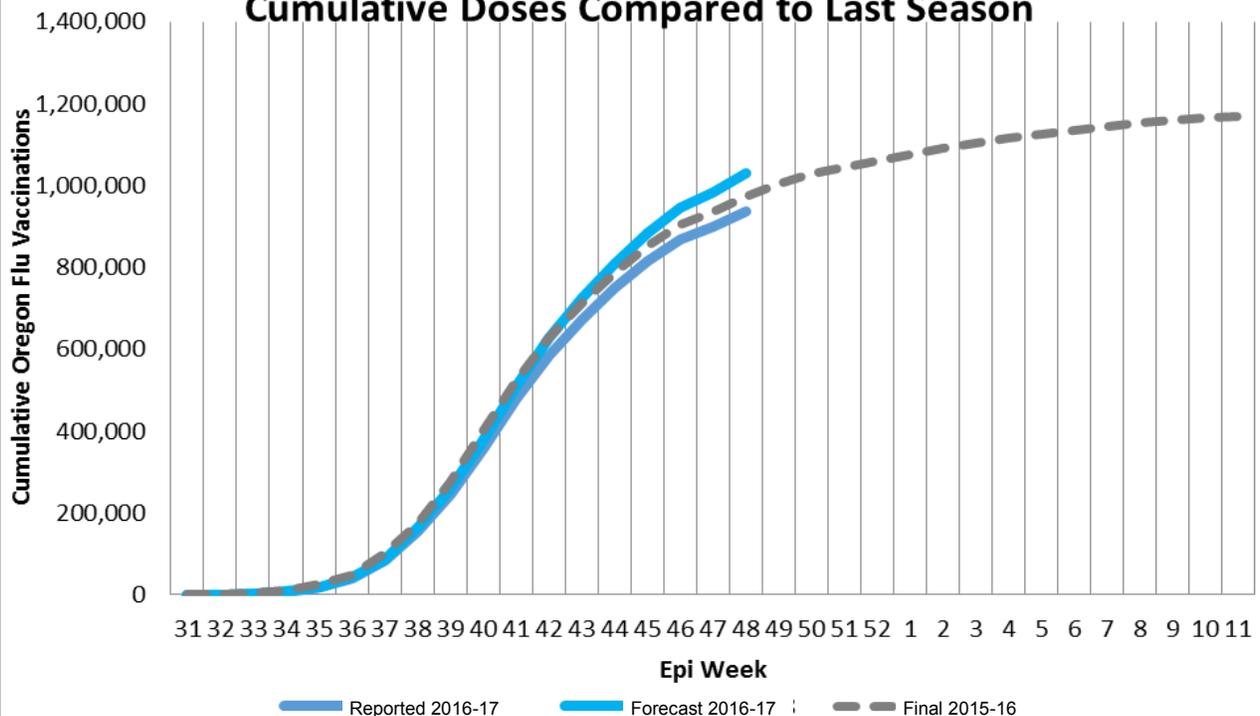
Immunizations:

This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epi-week 48 (November 27th to December 3rd). To date the ALERT IIS has received over 980,000 reports of seasonal influenza immunizations for Oregon residents. After the expected lull in immunizations during Thanksgiving, weekly immunizations rebounded at the start of December.

2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



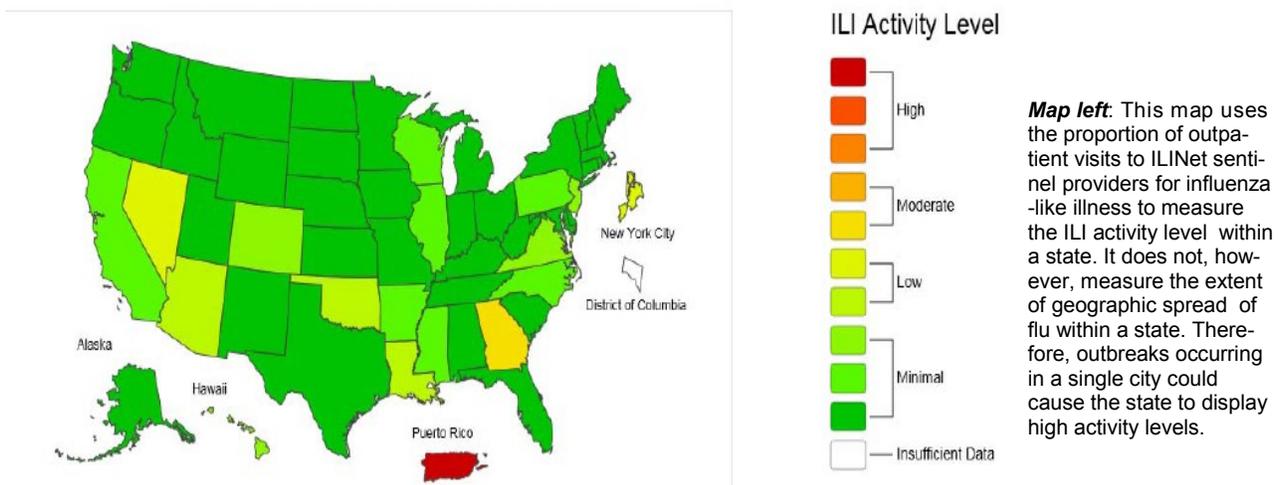
2016/2017 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season



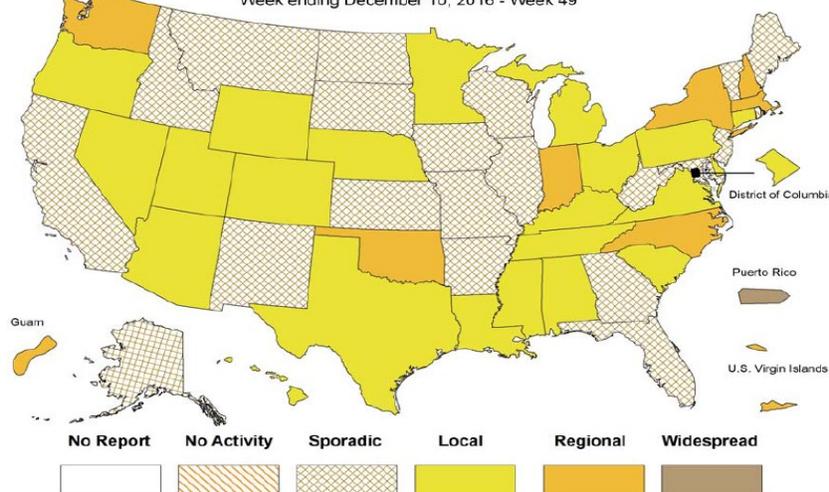
US Data (from CDC FluView): During week 49 (December 4-10, 2016), influenza activity increased slightly in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 49 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased slightly.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 1.7 laboratory confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.9%, which is below the national baseline of 2.2%. Two regions reported ILI at or above their region-specific baseline levels. Puerto Rico experienced high ILI activity, one state experienced moderate ILI activity, New York City and four states experienced low ILI activity, 45 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico was reported as widespread; Guam, the U.S. Virgin Islands, and seven states were reported as regional; the District of Columbia and 22 states reported local activity; 20 states reported sporadic activity; and one state reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 49 ending Dec 10, 2016



Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
 Week ending December 10, 2016 - Week 49



* The map above measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance December 11–December 17, 2016 (Week 50)

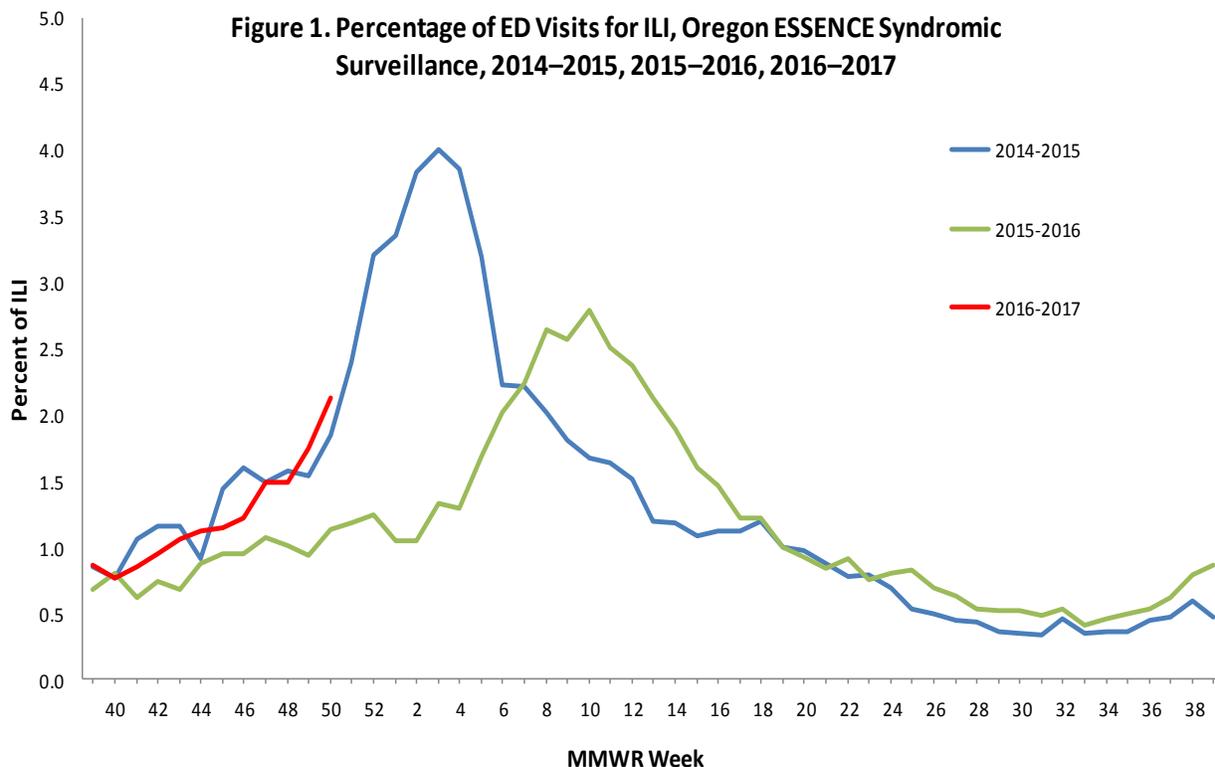
	Current Week (50)	Previous Week (49)
Percentage of emergency department visits for ILI ¹	2.1%	1.7%
Percentage positive influenza tests ²	25.7%	15.1%
Influenza-associated hospitalizations ³	31	23
Reported ILI/influenza outbreaks	4	2
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	2.4%	1.1%
Respiratory Syncytial Virus (RSV) activity ⁴	6%	5%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. **The percent of ED visits for ILI in all of Oregon was 2.1% during week 50, 2016.**

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 25.7% of specimens tested at Oregon labs were positive for influenza during week 50, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

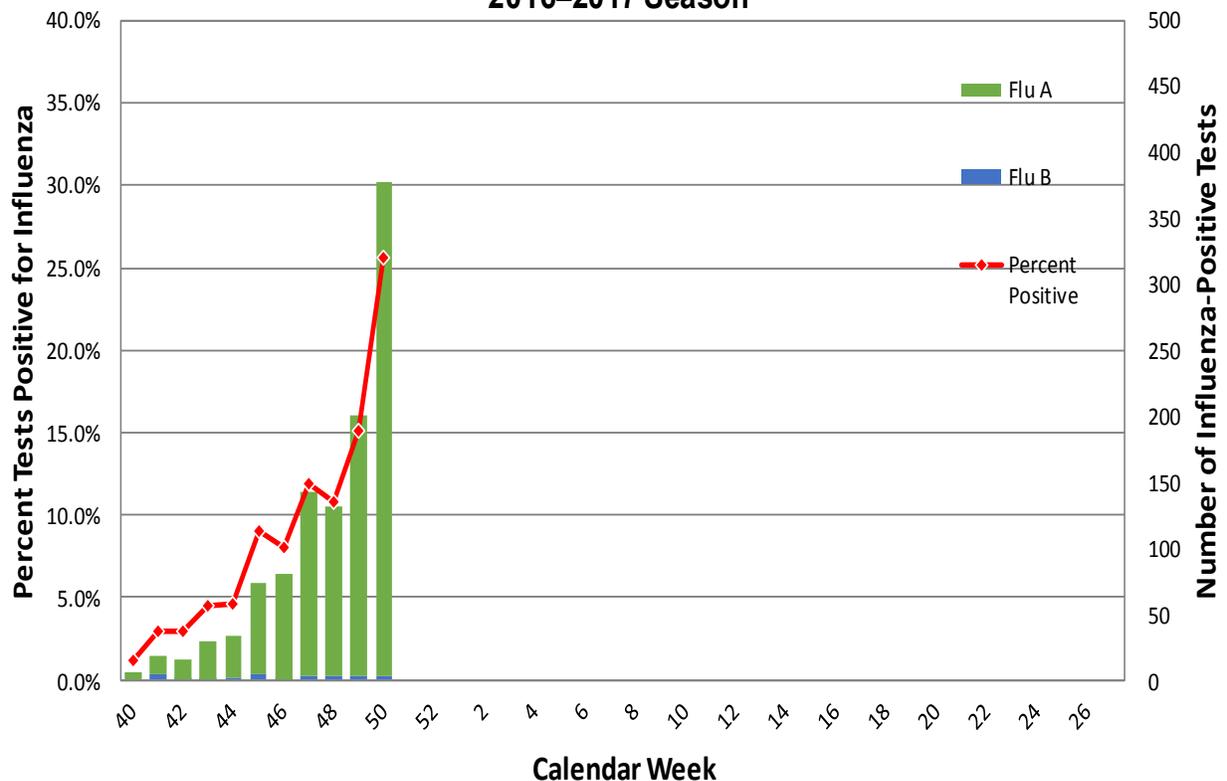
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	1,497	10,305
No. of positive specimens (%)	384 (25.7%)	1,128 (10.9%)
<i>Positive specimens by type</i>		
Influenza A	375 (98%)	1,084 (96%)
Influenza B	3 (1%)	25 (2%)
Not typed	6 (1%)	19 (2%)

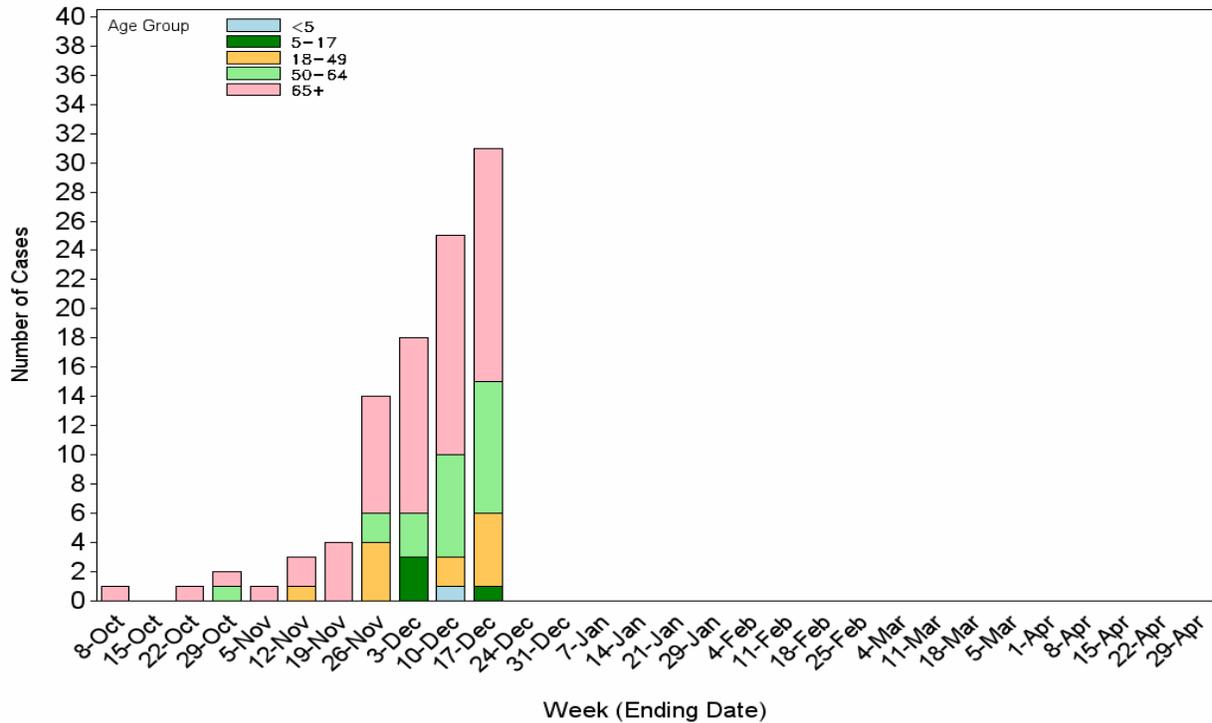
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

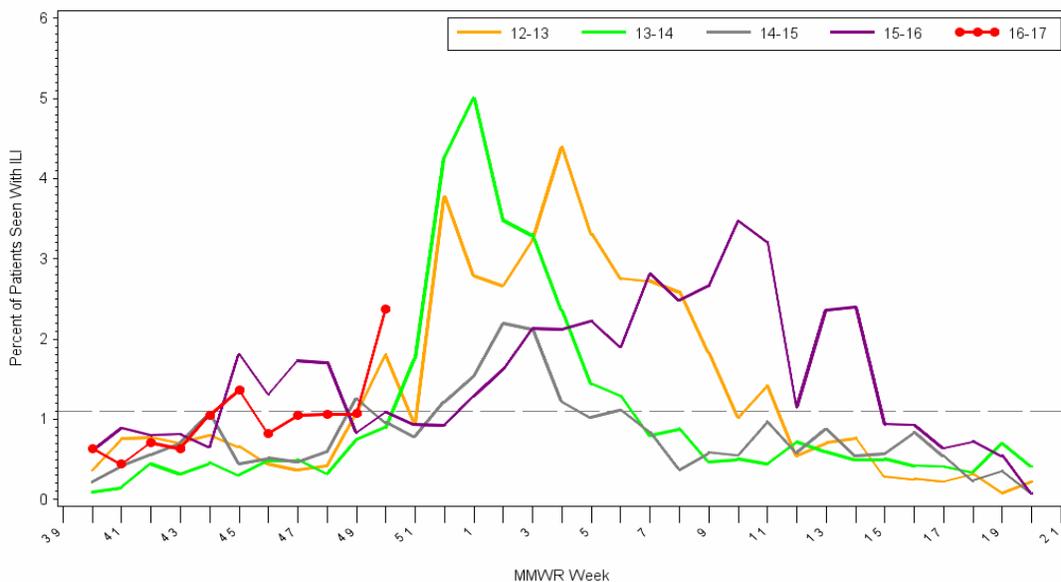
In Clackamas, Multnomah, and Washington counties 100 total reported influenza-associated hospitalizations occurred up through MMWR week 50, with 31 cases reported during week 50. Two people were infected with influenza B and the rest influenza A. All influenza A isolates that have been subtyped are A/H3.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. **The percent of outpatients seen with ILI for week 50 of 2016 was 2.4% which is above Oregon’s seasonal threshold of 1.1%.***

Oregon Health Authority, Acute and Communicable Disease Prevention 23DEC16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



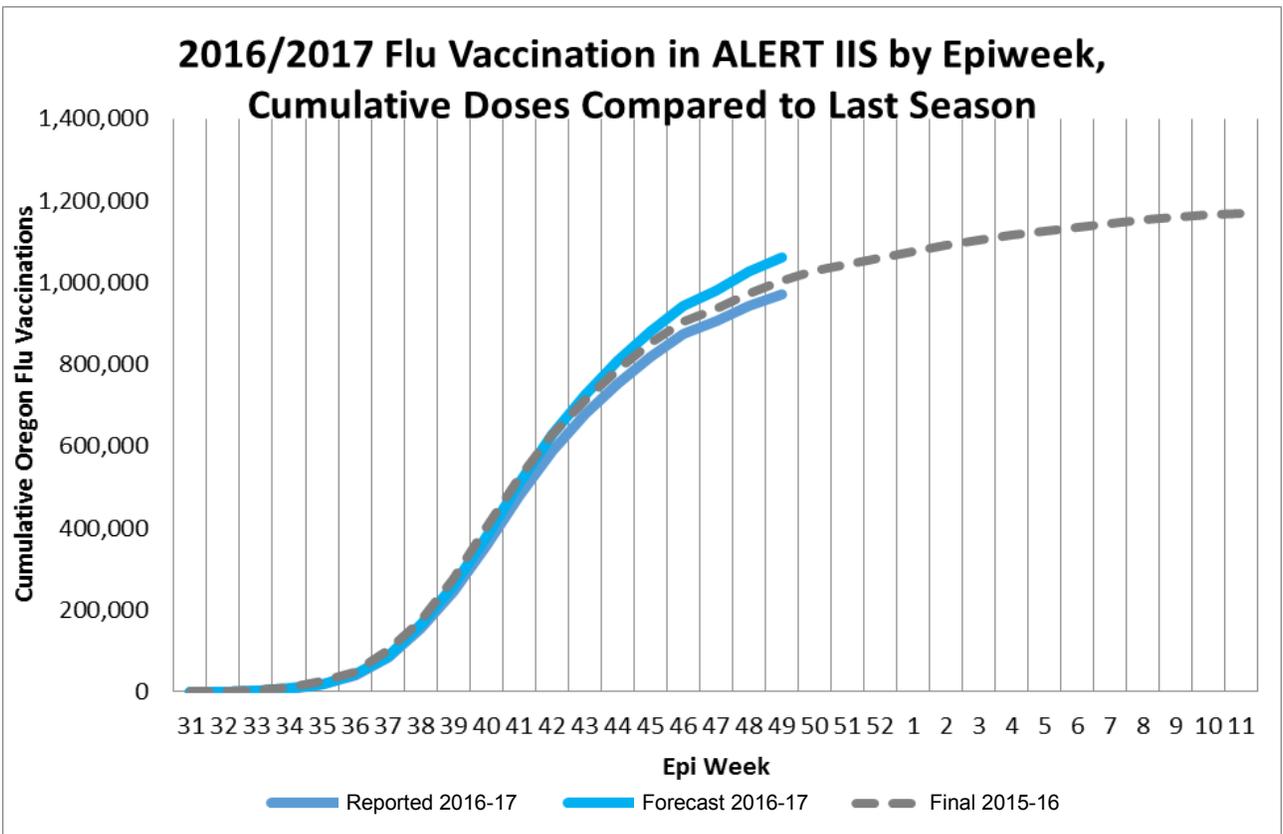
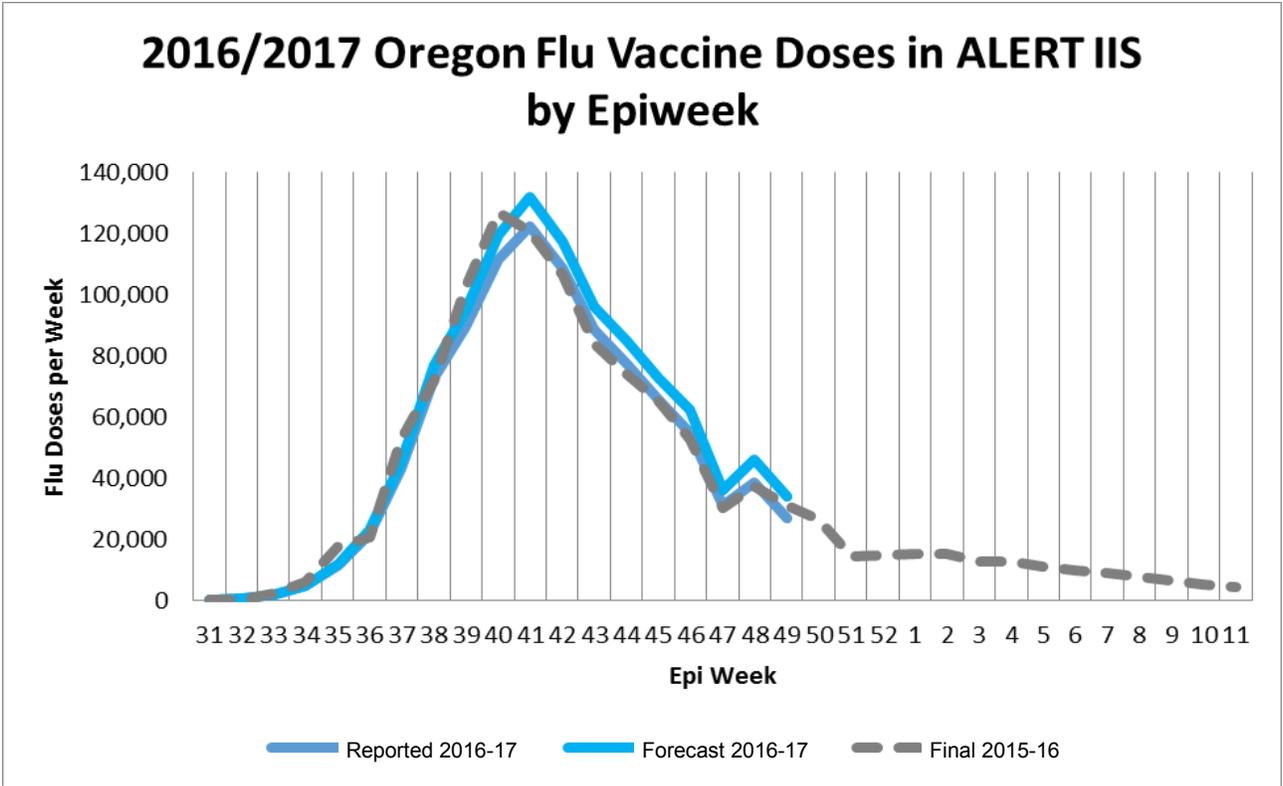
Note: ILI is defined as fever (≥100°F) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This week’s seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 49 (December 4–10). To date the ALERT IIS has received over a million reports of seasonal influenza immunizations for Oregon residents. The total amount of influenza immunization reported to ALERT IIS so far this season is 6% greater than the total at this time of last season. The volume of influenza immunizations at pharmacies is the leading factor behind an increase, with pharmacy influenza immunizations up by 11% over last season. The weekly chart shows a December rebound in immunization seeking, but this appears to be dropping off at a faster rate than is typical.

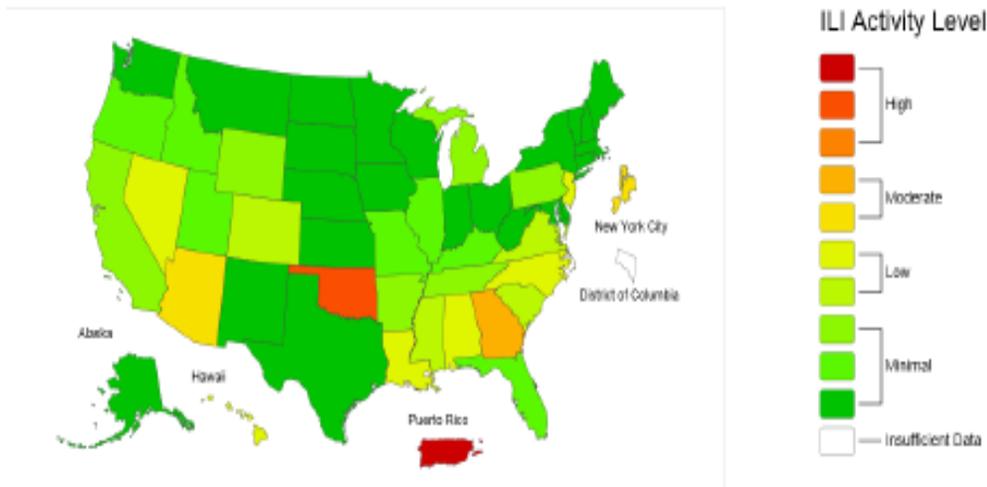


US Data (from [CDC FluView](#)):

During week 50 (December 11-17, 2016), influenza activity increased in the United States.

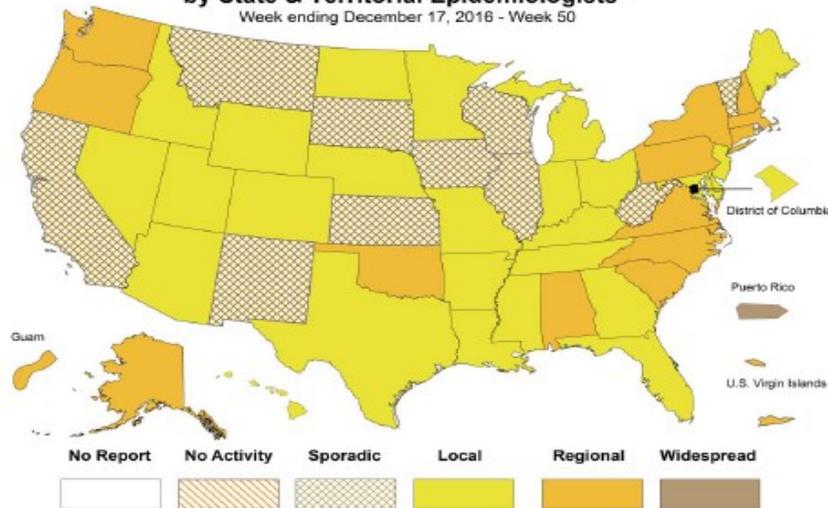
- o **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 50 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- o **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- o **Influenza-associated Pediatric Deaths:** Two influenza-associated pediatric deaths were reported that occurred during the 2015-2016 season.
- o **Influenza-associated Hospitalizations:** A cumulative rate for the season of 2.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- o **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 2.3%, which is above the national baseline of 2.2%. Five regions reported ILI at or above their region-specific baseline levels. One state and Puerto Rico experienced high ILI activity, two states and New York City experienced moderate ILI activity, ten states experienced low ILI activity, 37 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- o **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico was reported as widespread; Guam, the U.S. Virgin Islands and 13 states reported as regional; the District of Columbia and 26 states reported local activity; and 11 states reported sporadic activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 50 ending Dec 17, 2016



Map left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending December 17, 2016 - Week 50



* The map above measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance December 18–December 24, 2016 (Week 51)

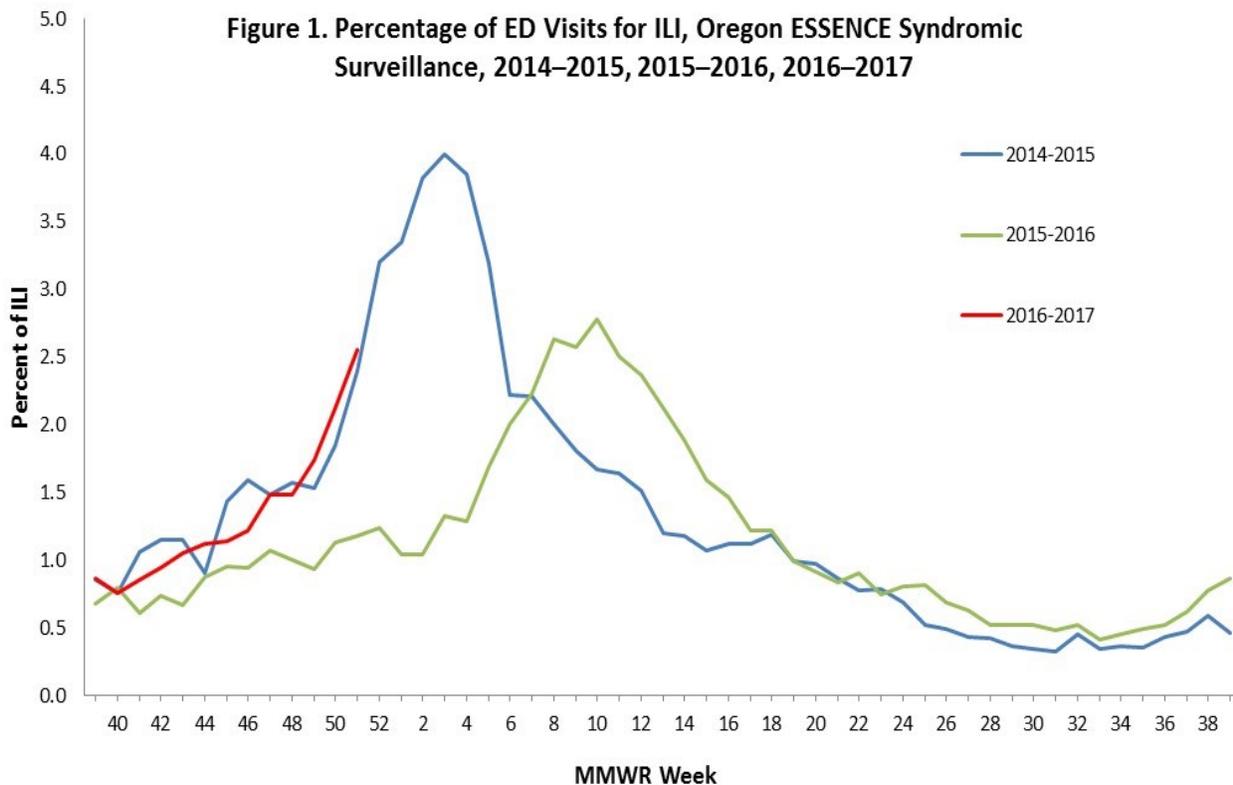
	Current Week (51)	Previous Week (50)
Percentage of emergency department visits for ILI ¹	2.6%	2.1%
Percentage positive influenza tests ²	32.7%	25.7%
Influenza-associated hospitalizations ³	62	33
Reported ILI/influenza outbreaks	13	4
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	2.5%	2.4%
Respiratory Syncytial Virus (RSV) activity ⁴	8%	6%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. **The percent of ED visits for ILI in all of Oregon was 2.6% during week 51, 2016.**

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 32.7% of specimens tested at Oregon labs were positive for influenza during week 51, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

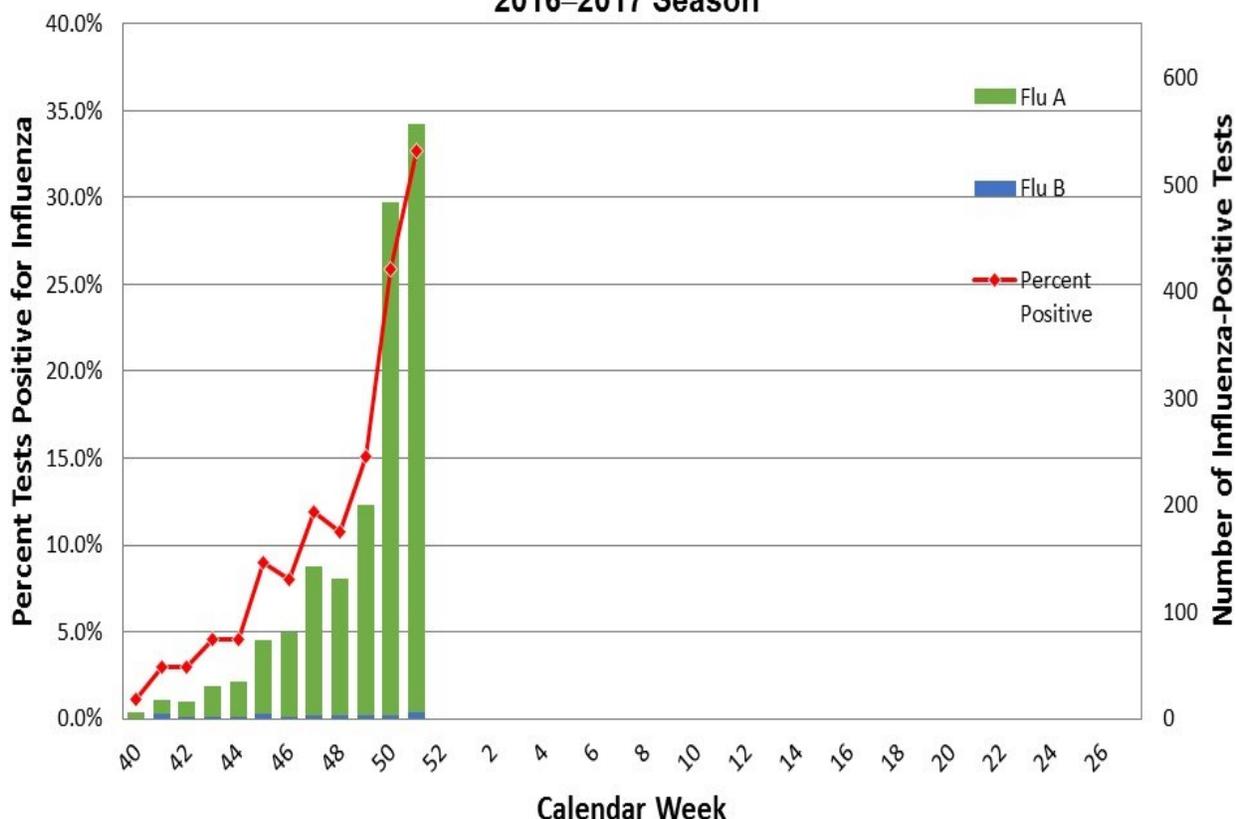
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	1,863	12,563
No. of positive specimens (%)	609 (32.7%)	1,842 (14.7%)
<i>Positive specimens by type</i>		
Influenza A	550 (90%)	1,739 (94%)
Influenza B	6 (1%)	31 (2%)
Not typed	53 (9%)	72 (4%)

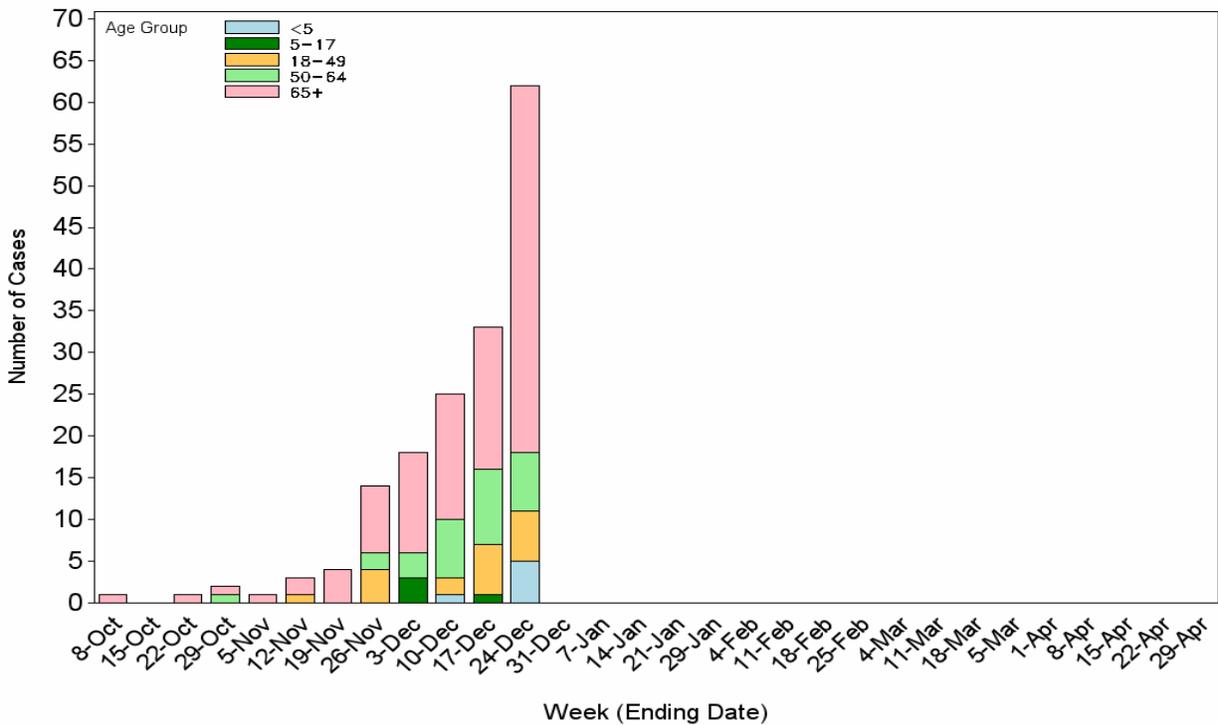
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

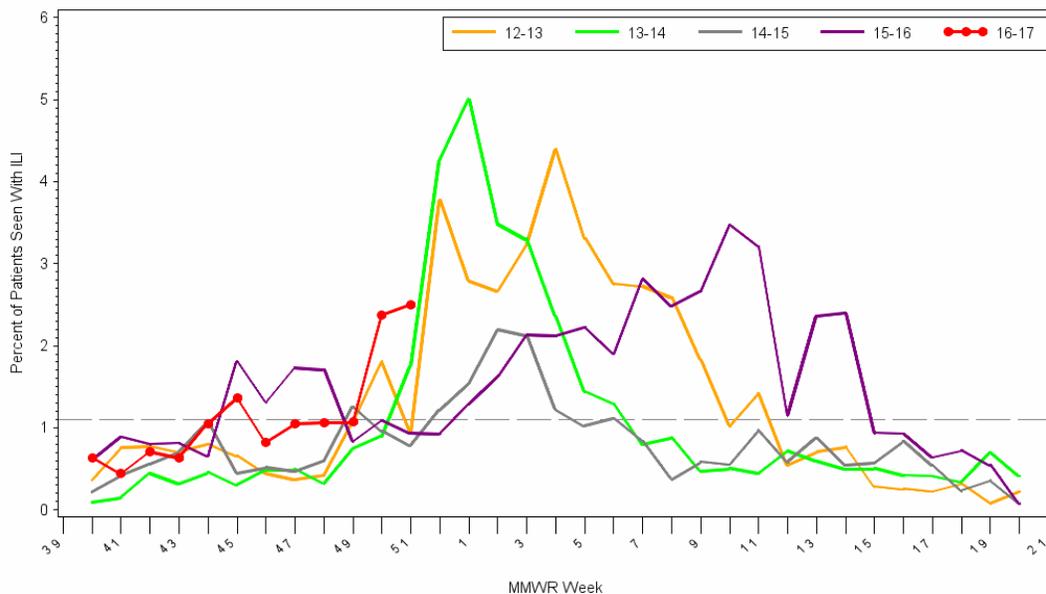
In Clackamas, Multnomah, and Washington counties 164 total reported influenza-associated hospitalizations occurred up through MMWR week 51, with 62 cases reported during week 51. Three people were infected with influenza B, the rest influenza A. All influenza A isolates that have been subtyped are A/H3.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. **The percent of outpatients seen with ILI for week 51 of 2016 was 2.5% which is above Oregon's seasonal threshold of 1.1%.***

Oregon Health Authority, Acute and Communicable Disease Prevention 30DEC16
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

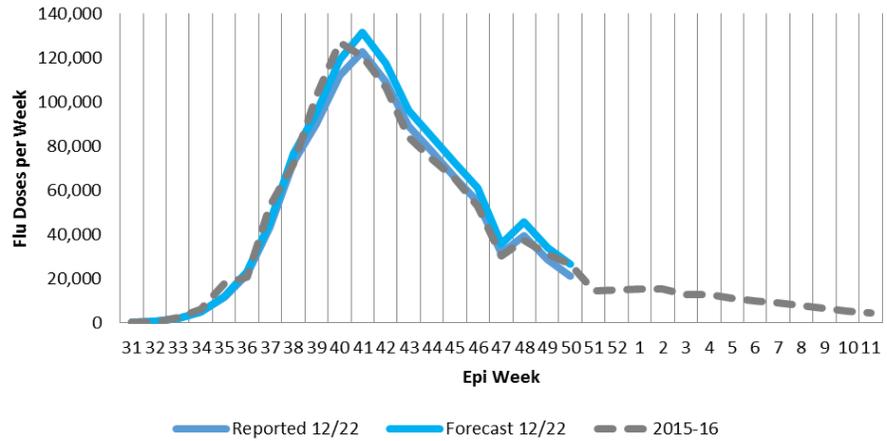
All Flu Bites data provided are preliminary and may change as additional reports are received.

Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

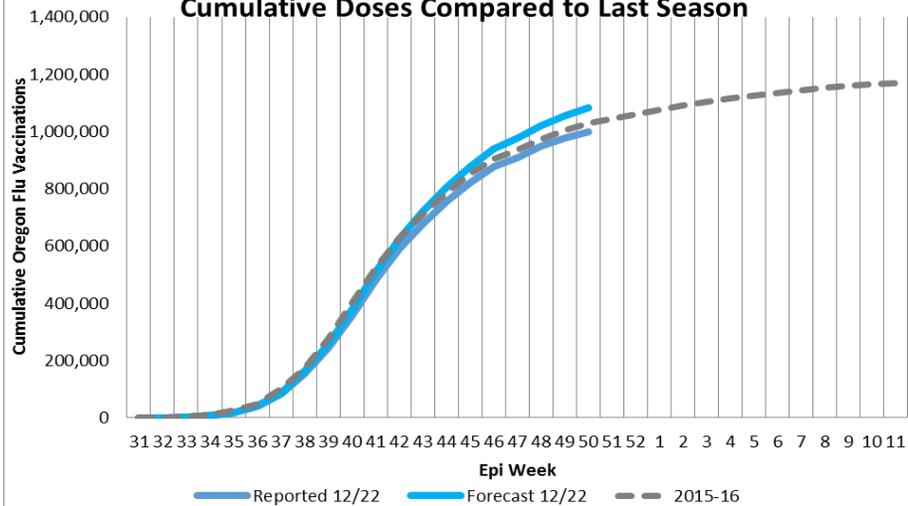
Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 50 (December 11-18). Weekly patterns of influenza immunizations continue to closely follow that of the previous season, with a continued decline in weekly totals heading into the end of the year. To date the ALERT IIS has received over a million reports of seasonal influenza immunizations for Oregon residents.

This week we are including a chart comparing the total volume of influenza immunization reported by this time of year to what was reported last year. Overall the volume by age across the two years is near-identical, with a slight increase for seniors that may in part be related to an increase in Oregon's senior population.

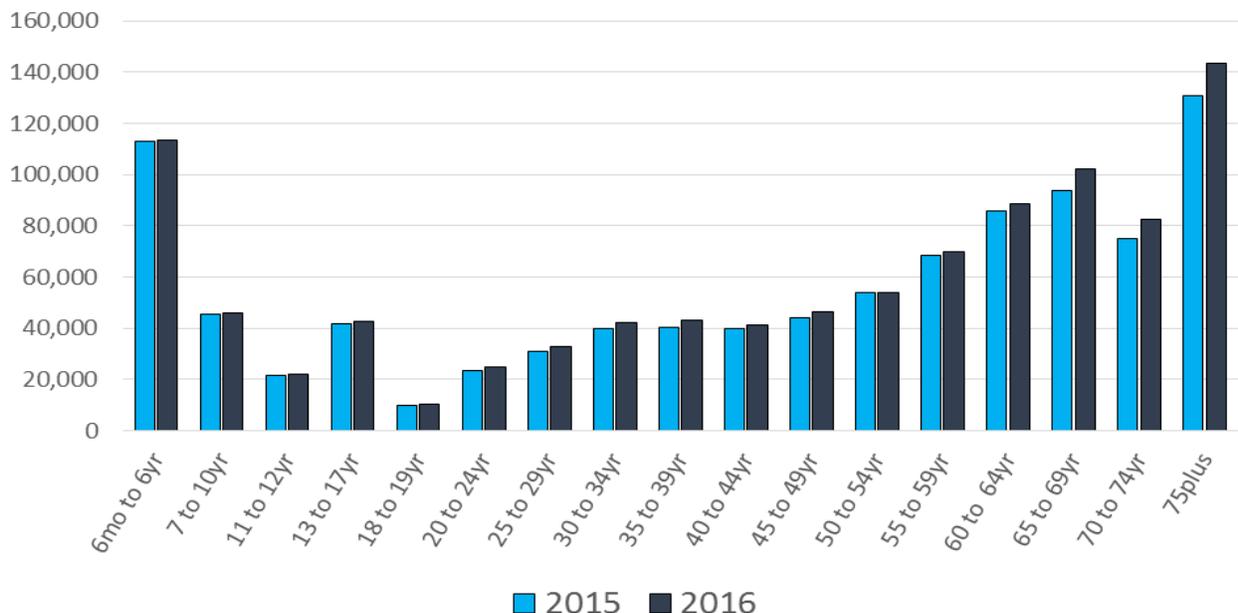
2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



2016/2017 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season



A Comparison of 2016 to 2015 Oregon Influenza Immunizations by Age (Reported to ALERT IIS as of Dec. 22nd of each year)

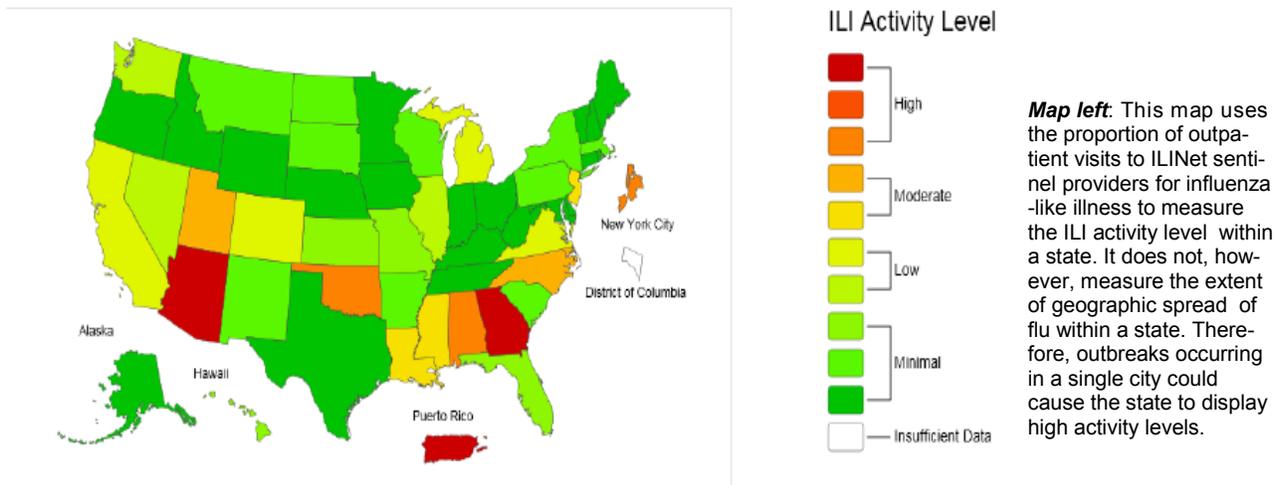


US Data (from [CDC FluView](#)):

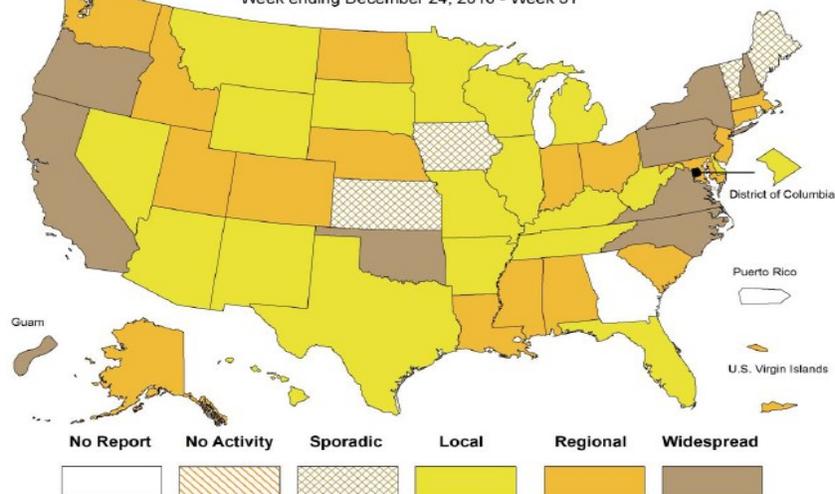
During week 51 (December 18-24, 2016), influenza activity increased in the United States.

- o **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 51 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- o **Novel Influenza A Virus:** One human infection with a novel influenza A virus was reported.
- o **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- o **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- o **Influenza-associated Hospitalizations:** A cumulative rate for the season of 3.1 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- o **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 2.9%, which is above the national baseline of 2.2%. Nine regions reported ILI at or above their region-specific baseline levels. Four states, New York City and Puerto Rico experienced high ILI activity; five states experienced moderate ILI activity; seven states experienced low ILI activity; 34 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- o **Geographic Spread of Influenza:** The geographic spread of influenza in Guam and eight states was reported as widespread, the U.S. Virgin Islands and 17 states reported regional activity, the District of Columbia and 19 states reported local activity, five states reported sporadic activity, and Puerto Rico and one state did not report.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 51 ending Dec 24, 2016



Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
 Week ending December 24, 2016 - Week 51



* The map above measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance December 25–December 31, 2016 (Week 52)

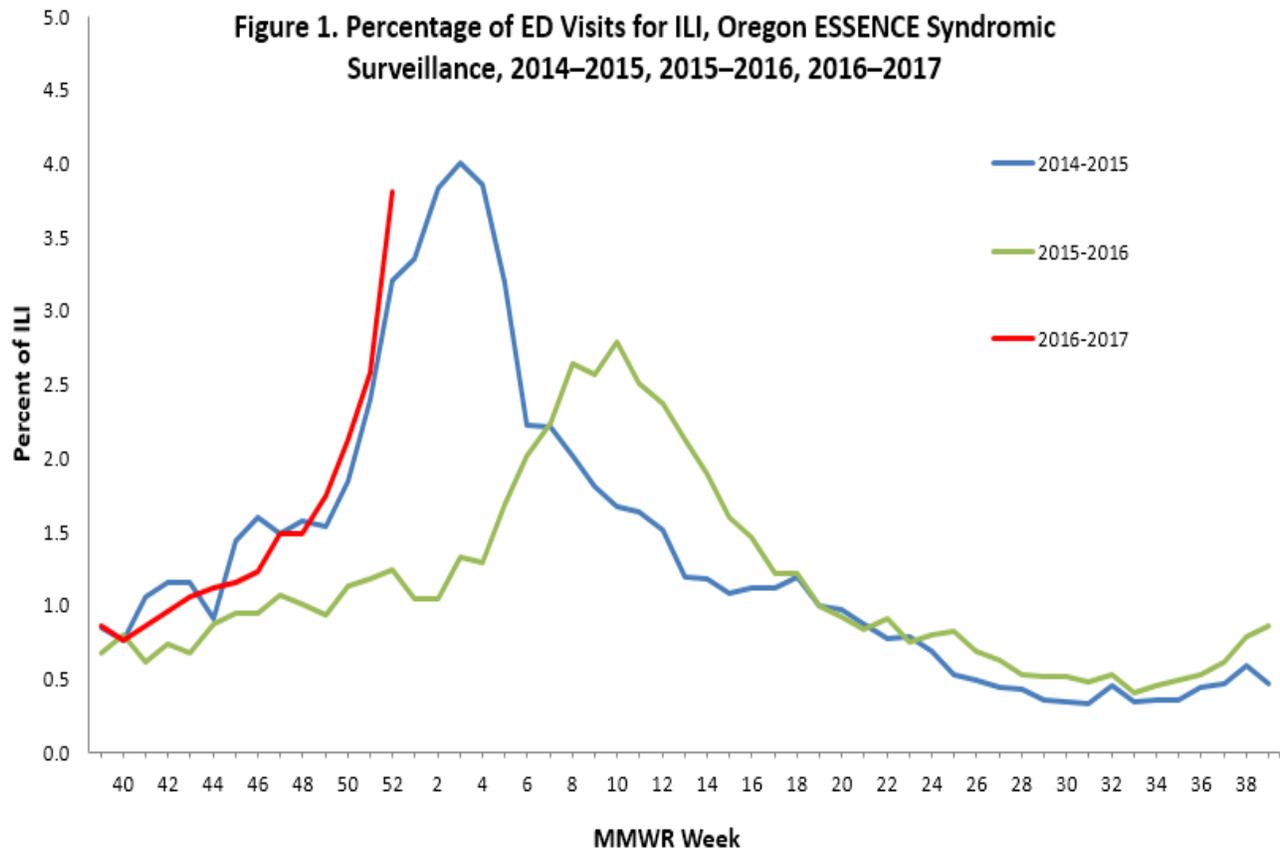
	Current Week (52)	Previous Week (51)
Percentage of emergency department visits for ILI ¹	3.8%	2.6%
Percentage positive influenza tests ²	40.6%	32.7%
Influenza-associated hospitalizations ³	143	79
Reported ILI/influenza outbreaks	16	13
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	7.4%	2.5%
Respiratory Syncytial Virus (RSV) activity ⁴	9%	8%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 3.8% during week 52, 2016.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 40.6% of specimens tested at Oregon labs were positive for influenza during week 52, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

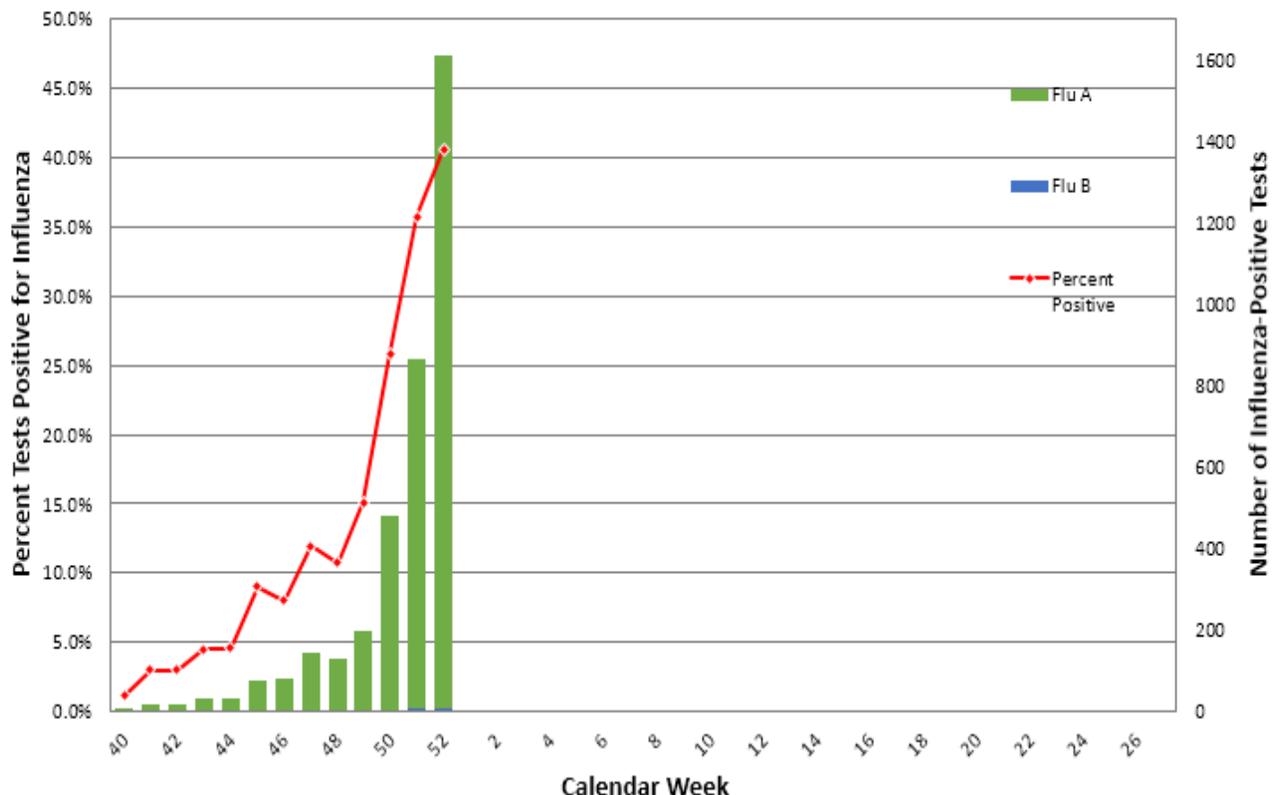
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	4,038	17,310
No. of positive specimens (%)	1,641 (40.6%)	3,793 (21.9%)
<i>Positive specimens by type</i>		
Influenza A	1,603 (97.7%)	3,643 (96%)
Influenza B	8 (0.5%)	42 (1%)
Not typed	30 (1.8%)	102 (3%)

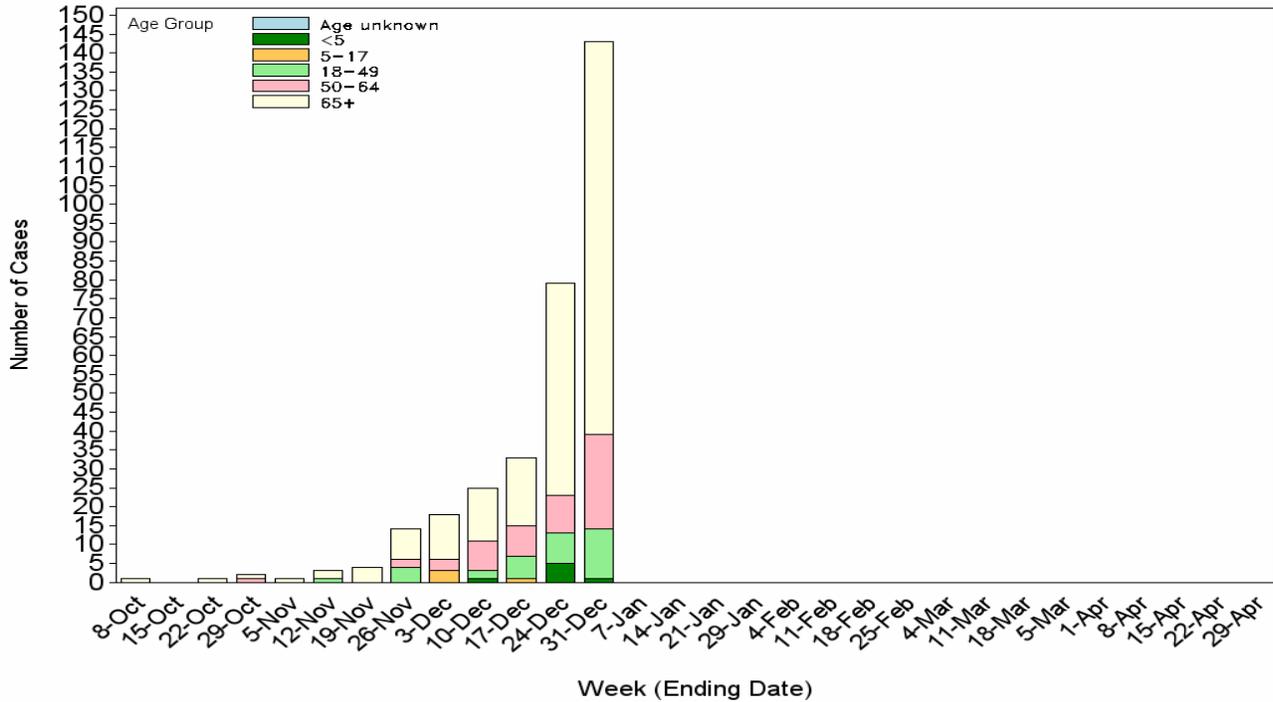
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

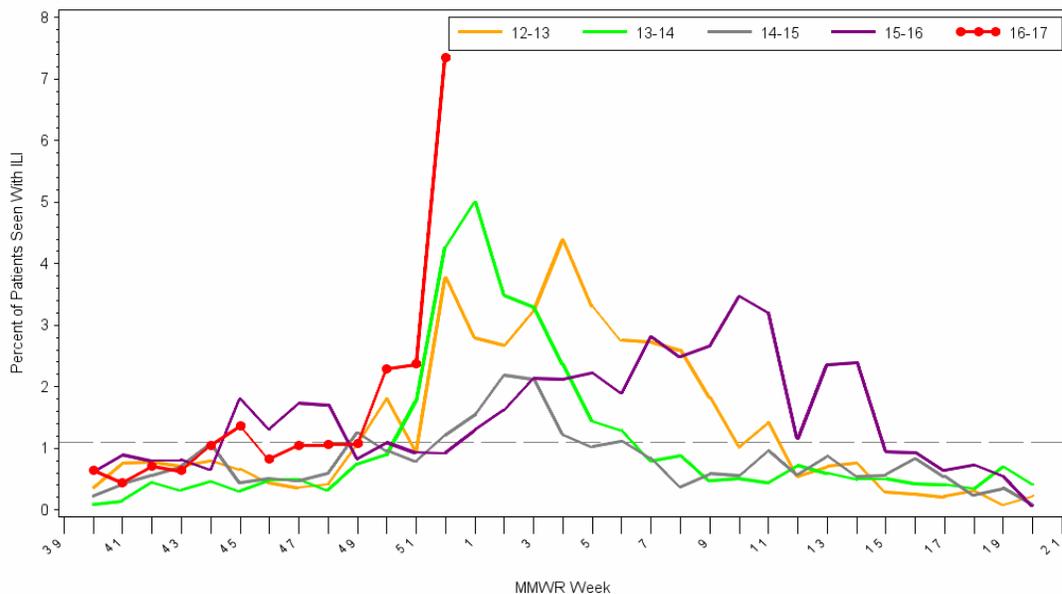
In Clackamas, Multnomah, and Washington counties 324 total reported influenza-associated hospitalizations occurred up through MMWR week 52, with 143 cases reported during week 52. Five people were infected with influenza B, the rest influenza A. One influenza A isolate that was subtype was 2009 H1N1, all others were A/H3.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 52 of 2016 was 7.4% which is above Oregon’s seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 06JAN17
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

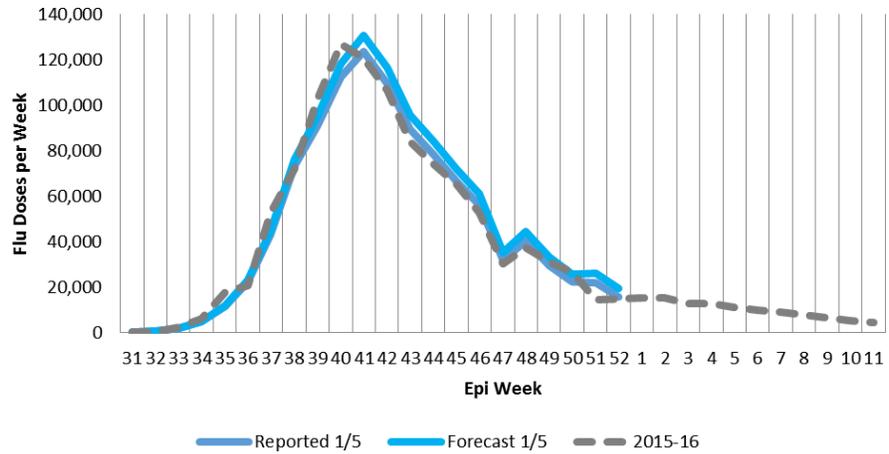
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

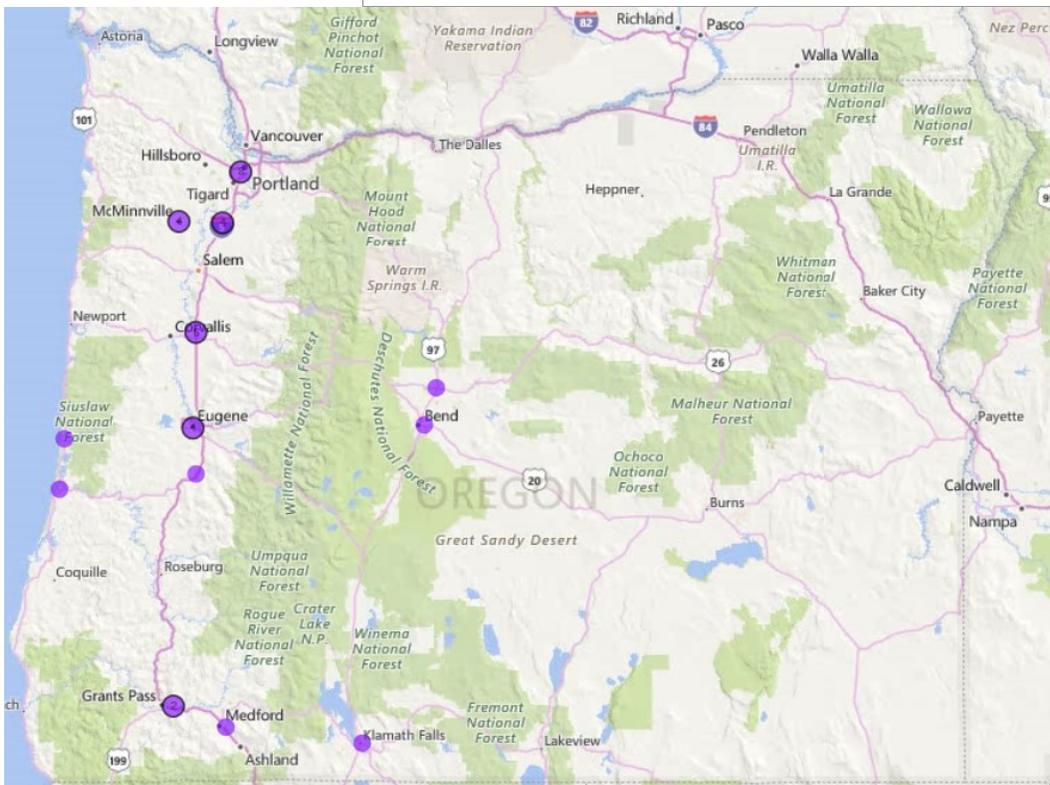
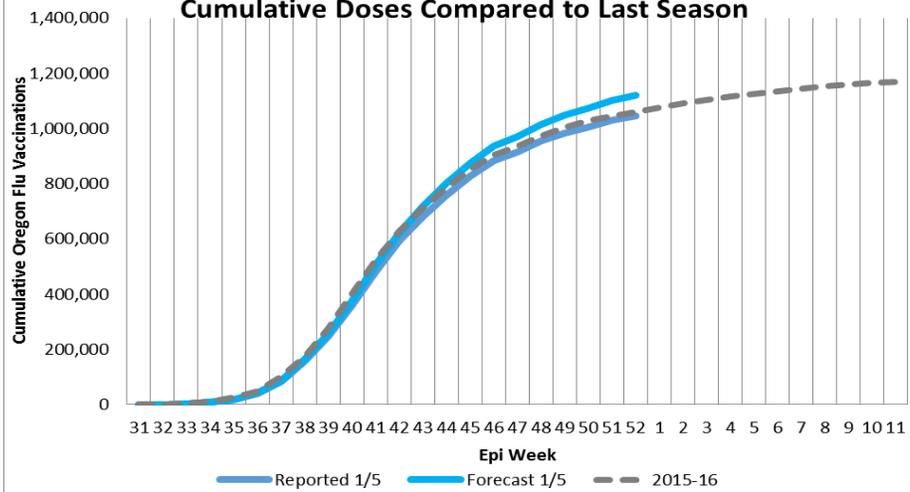
Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 52 (December 25th to December 31st). From now until the end of the current season we are decreasing the lag in ALERT IIS reporting from two weeks to one week. This will allow a quicker view of any immunization activity surges that may occur in January and February in response to colder weather and more disease. To date the ALERT IIS has received over a million reports of seasonal influenza immunizations for Oregon residents, with the age and geographic pattern of immunization closely matching to the prior 2015-16 season.

2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



2016/2017 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season



Outbreaks: The map at left shows the distribution of outbreaks in the state of Oregon.

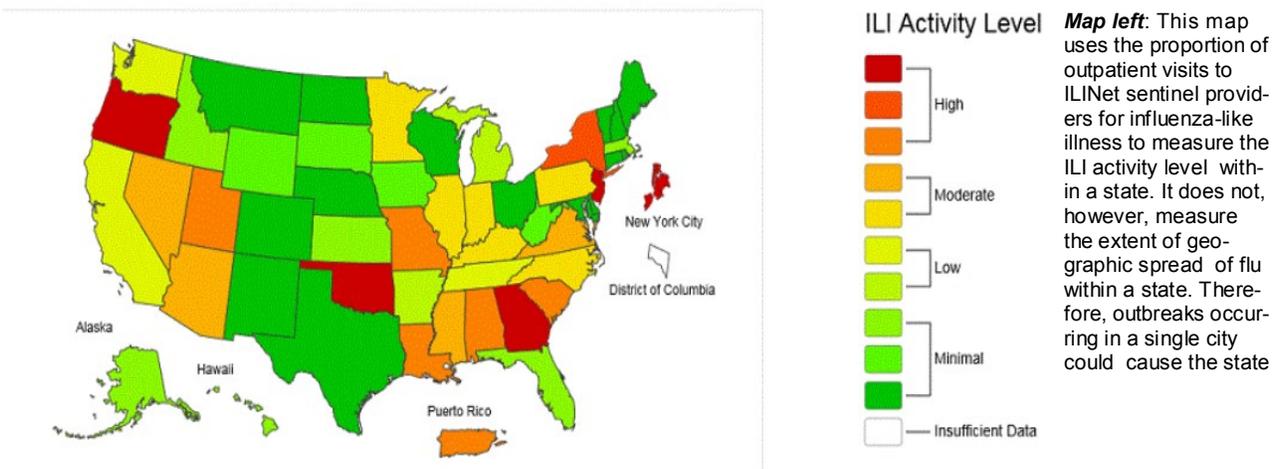
Since October 1, 2016, there have been 35 confirmed flu outbreaks.

16 new flu outbreaks were reported during week 52.

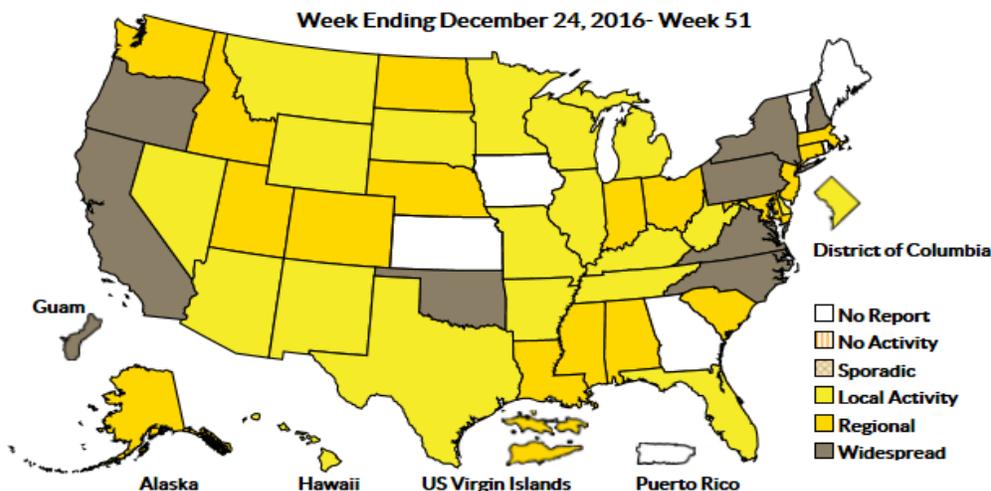
US Data (from CDC FluView): During week 52 (December 25-31, 2016), influenza activity increased in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 52 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** No influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 4.9 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 3.4%, which is above the national baseline of 2.2%. Nine regions reported ILI at or above their region-specific baseline levels. New York City, Puerto Rico, and 10 states experienced high ILI activity; 10 states experienced moderate ILI activity; five states experienced low ILI activity; 25 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in 12 states was reported as widespread; Guam and 28 states reported regional activity; the District of Columbia and 10 states reported local activity; the U.S. Virgin Islands reported sporadic activity; and Puerto Rico did not report.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 52 ending Dec 31, 2016



A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*



Data at a Glance January 1–January 7, 2017 (Week 1)

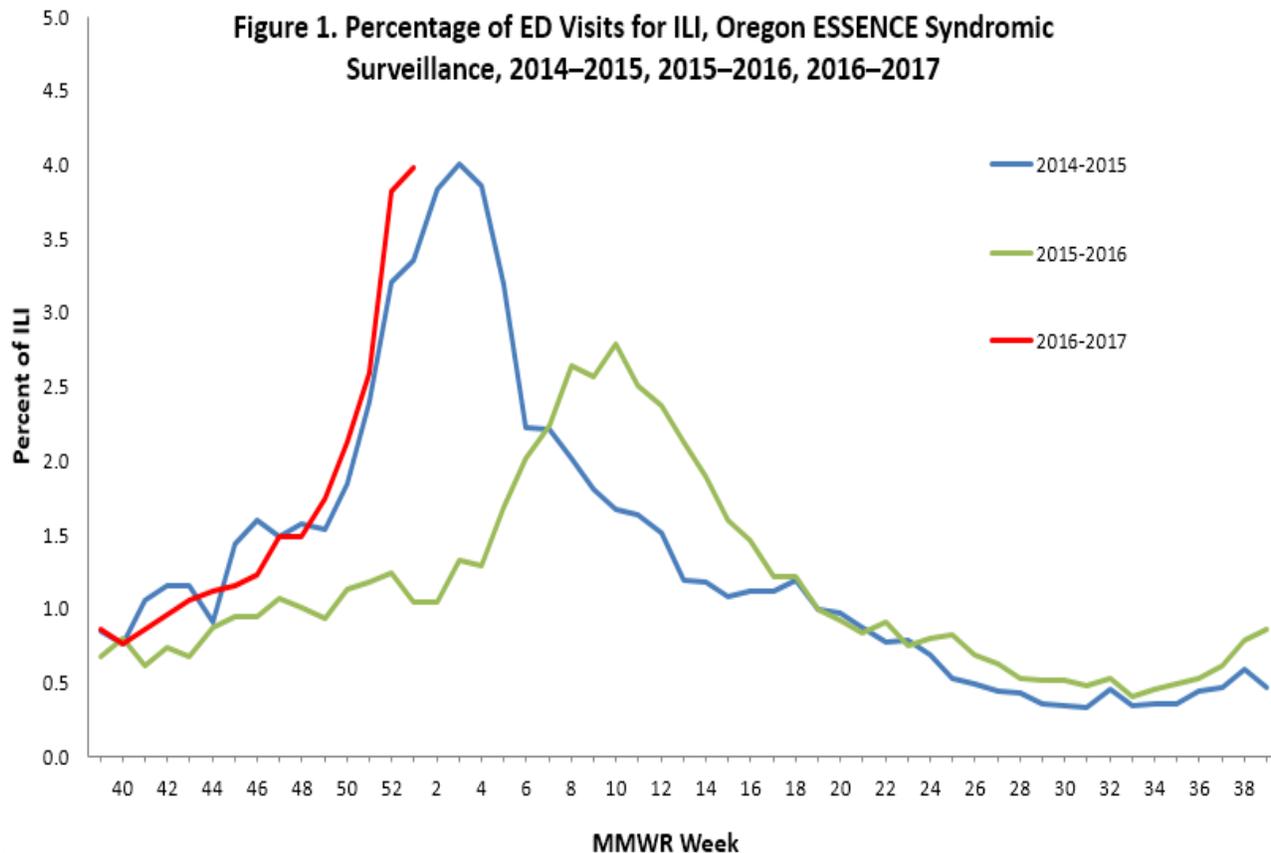
	Current Week (1)	Previous Week (52)
Percentage of emergency department visits for ILI ¹	4.0%	3.8%
Percentage positive influenza tests ²	35.6%	40.6%
Influenza-associated hospitalizations ³	172	175
Reported ILI/influenza outbreaks	21	16
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	5.7%	6.6%
Respiratory Syncytial Virus (RSV) activity ⁴	8%	9%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. **The percent of ED visits for ILI in all of Oregon was 4.0% during week 1, 2017.**

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 35.6% of specimens tested at Oregon labs were positive for influenza during week 1, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

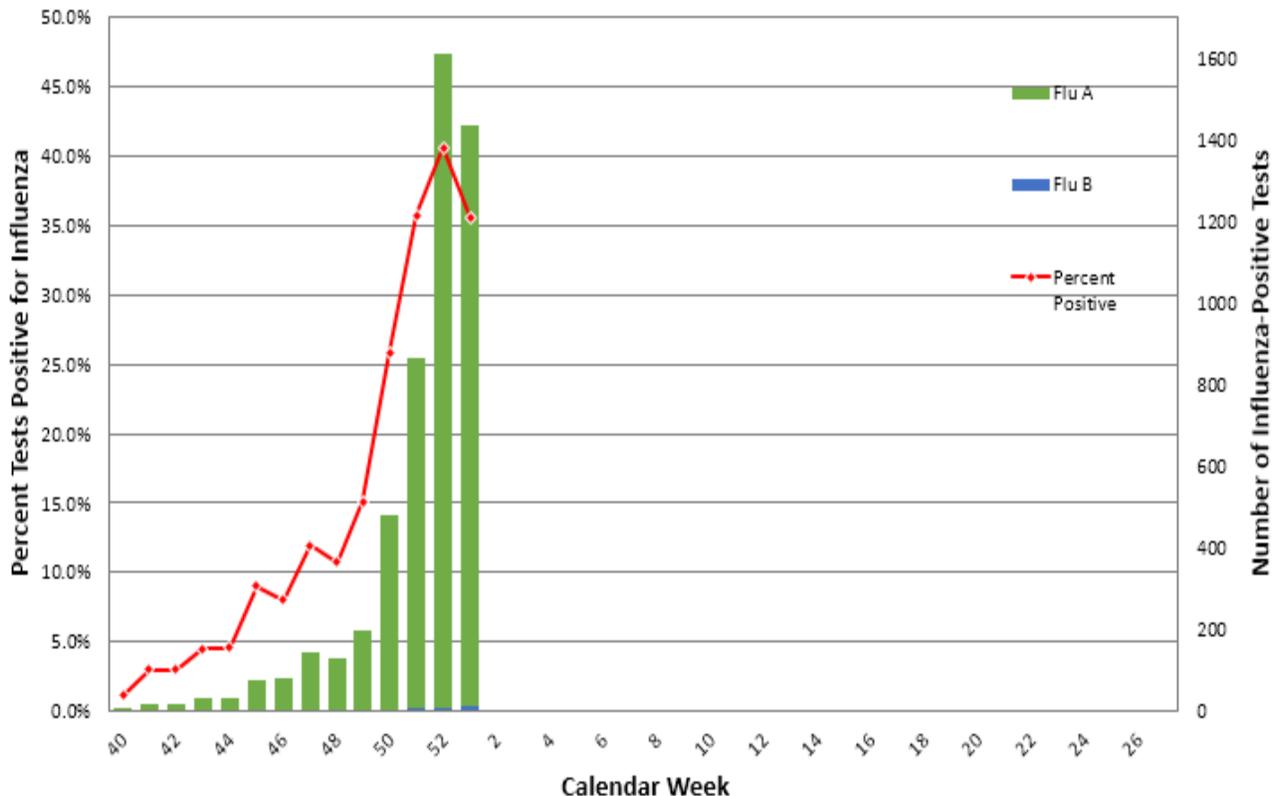
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	4,075	21,385
No. of positive specimens (%)	1,452 (35.6%)	5,245 (24.5%)
<i>Positive specimens by type</i>		
Influenza A	1,426 (98.2%)	5,075 (97%)
Influenza B	11 (0.8%)	53 (1%)
Not typed	15 (1%)	117 (2%)

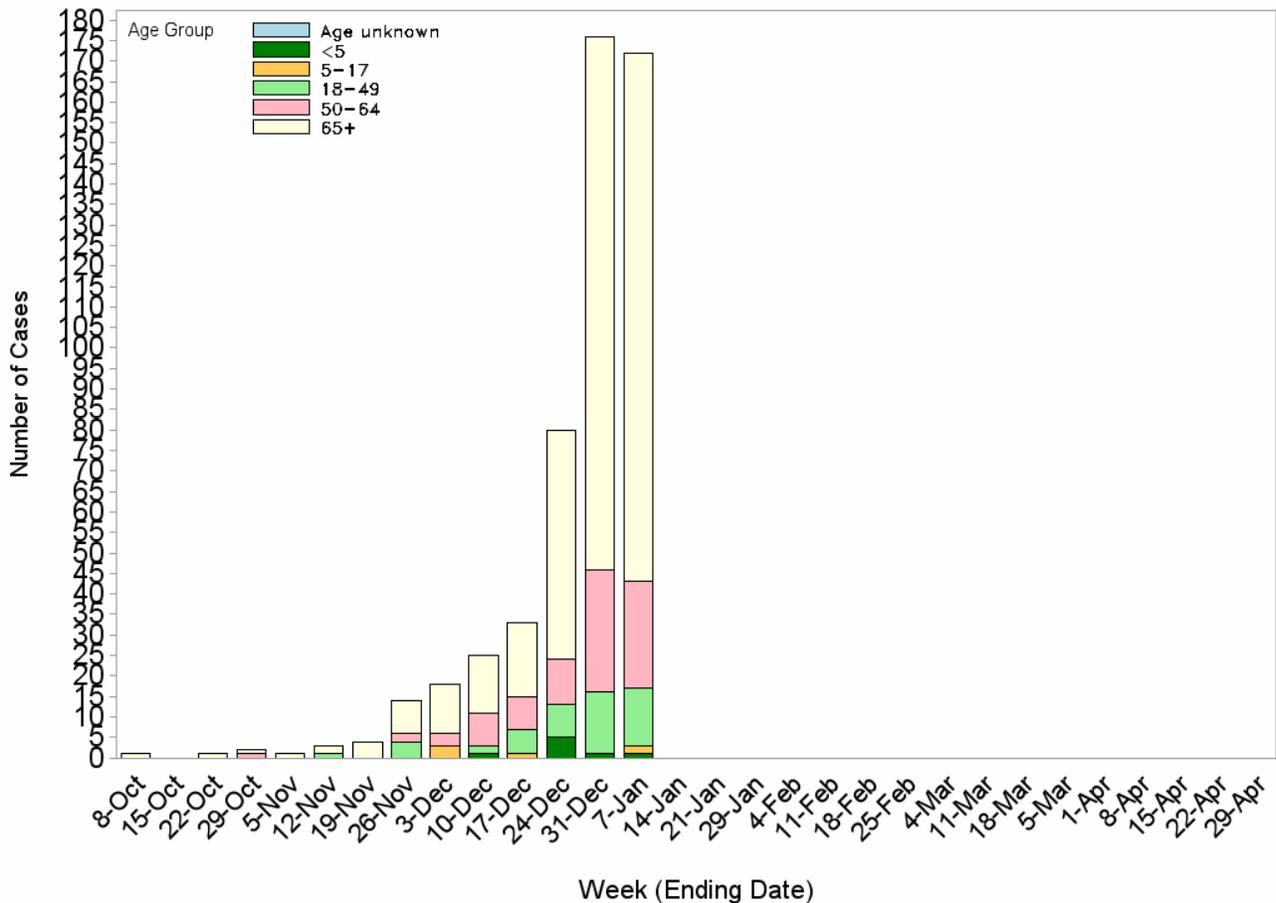
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



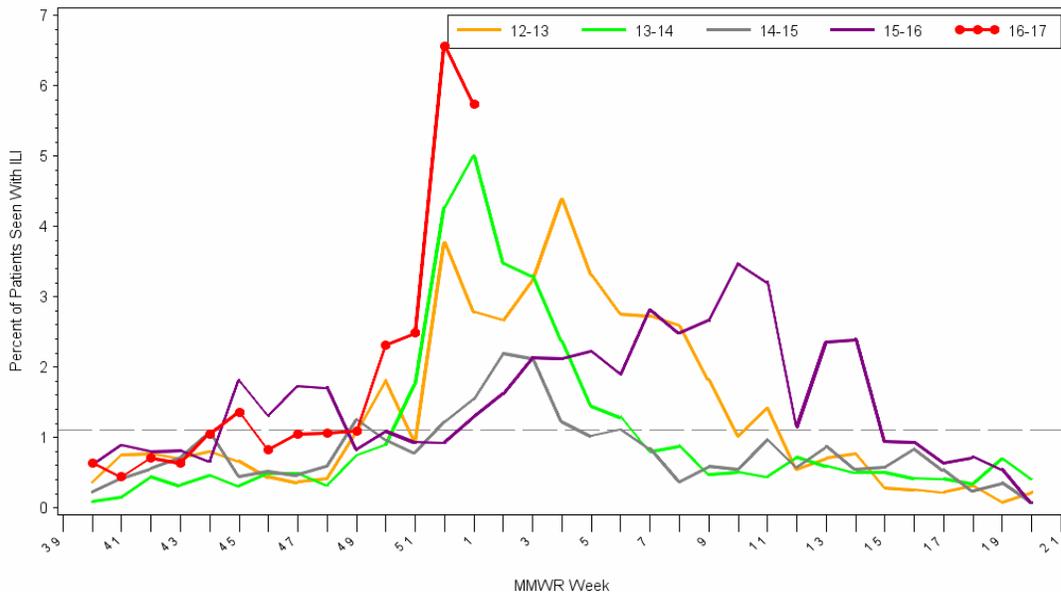
Hospitalizations:

In Clackamas, Multnomah, and Washington counties 530 total reported influenza-associated hospitalizations occurred up through MMWR week 1, with 172 cases reported during week 1. All 172 new cases were type A, and all subtyped cases were H3.

Hospitalized cases reported by age group and MMWR week, Portland



Oregon Health Authority, Acute and Communicable Disease Prevention 13JAN17
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

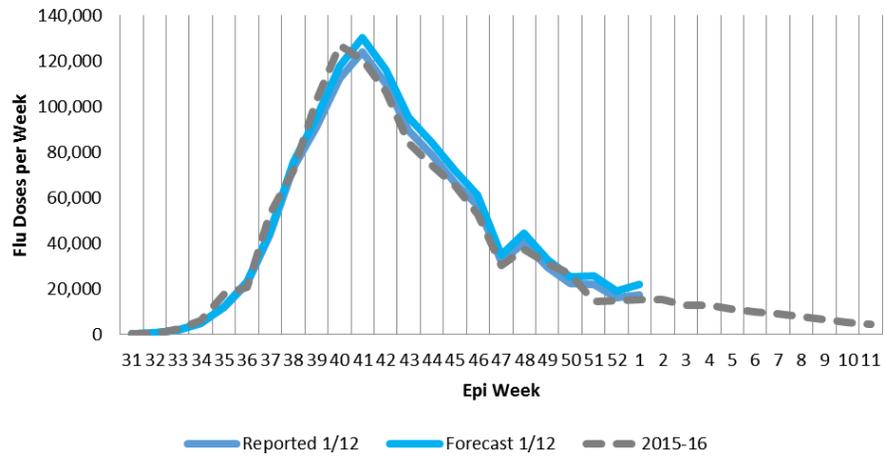
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

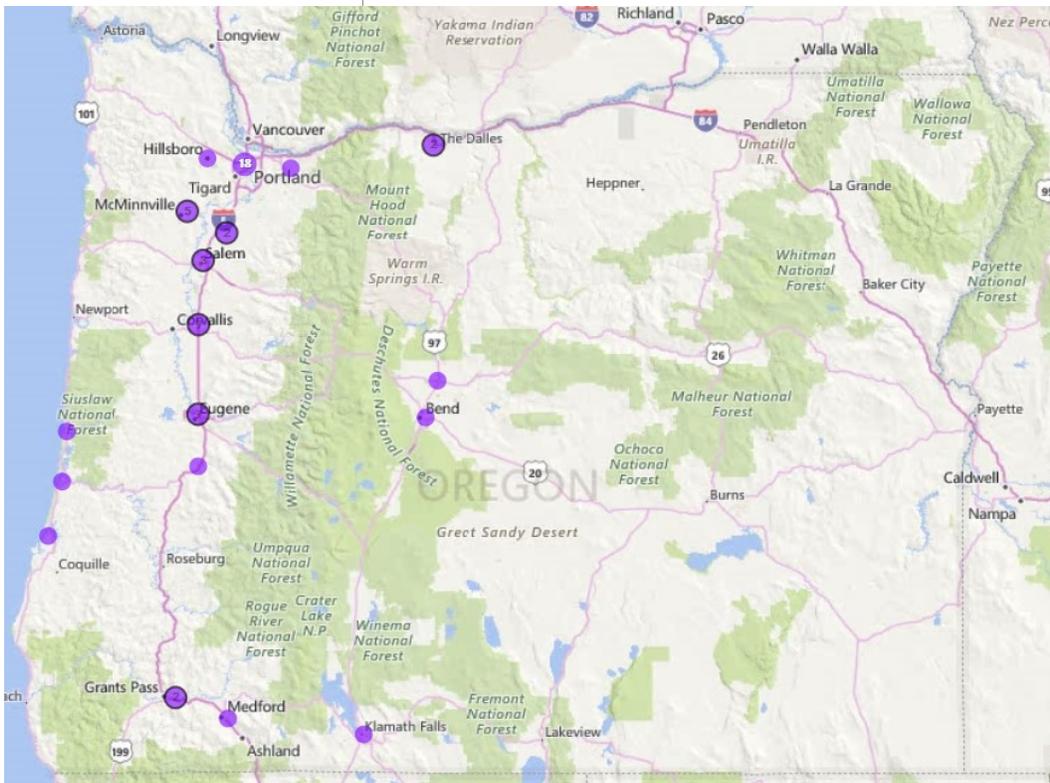
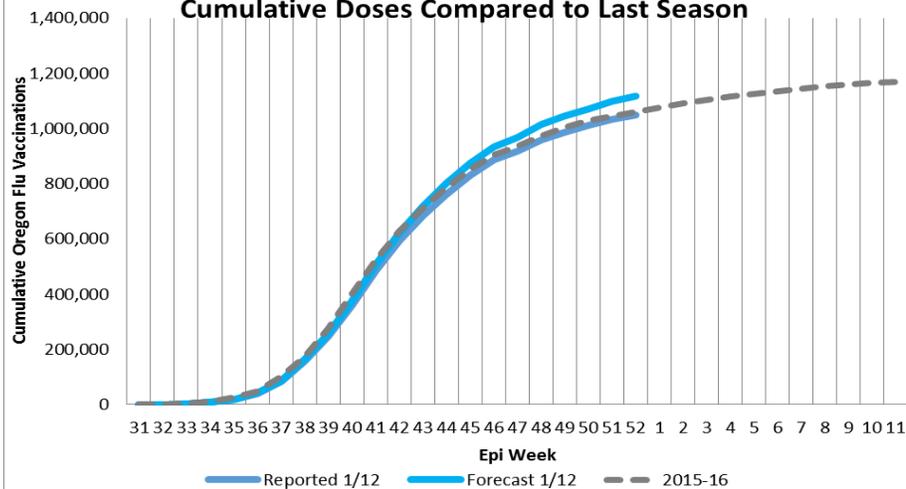
Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 1 of 2017 (Jan 1st to Jan 7th). To date the ALERT IIS has received 1.1 million reports of seasonal influenza immunizations for Oregon residents. Despite the presence of influenza disease for the last several weeks in Oregon, only a slight up-tick in immunizations is visible for the first week of January. For over 73% of this season's influenza immunizations reported to ALERT IIS, race and ethnicity status were also included. While Hispanic and Latino populations comprise 12% of Oregon's total population, they only account for 8% of influenza immunizations.

2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



2016/2017 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season



Outbreaks: The map at left shows the distribution of outbreaks in the state of Oregon.

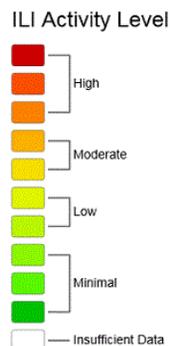
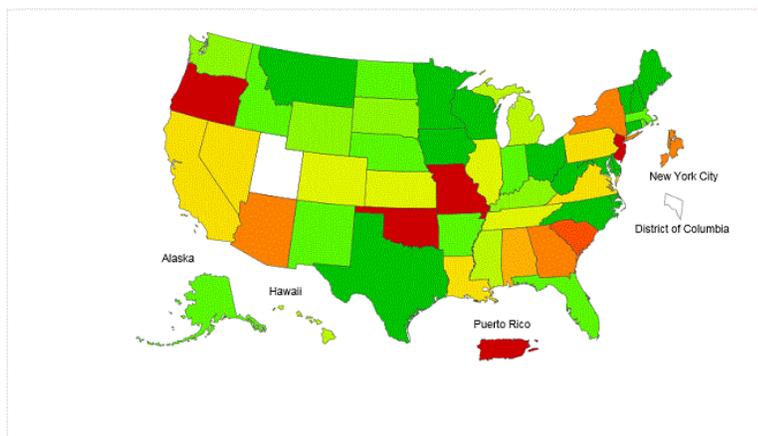
Since October 1, 2016, there have been 57 confirmed flu outbreaks.

21 new flu outbreaks were reported during week 1.

US Data (from [CDC FluView](#)): During week 1 (January 1-7, 2017), influenza activity increased in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 1 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Three influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 7.1 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 3.2%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline levels. New York City, Puerto Rico, and eight states experienced high ILI activity; six states experienced moderate ILI activity; seven states experienced low ILI activity; 28 states experienced minimal ILI activity, and the District of Columbia and one state had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 21 states was reported as widespread; Guam and 21 states reported regional activity; the District of Columbia and eight states reported local activity; and the U.S. Virgin Islands reported no activity.

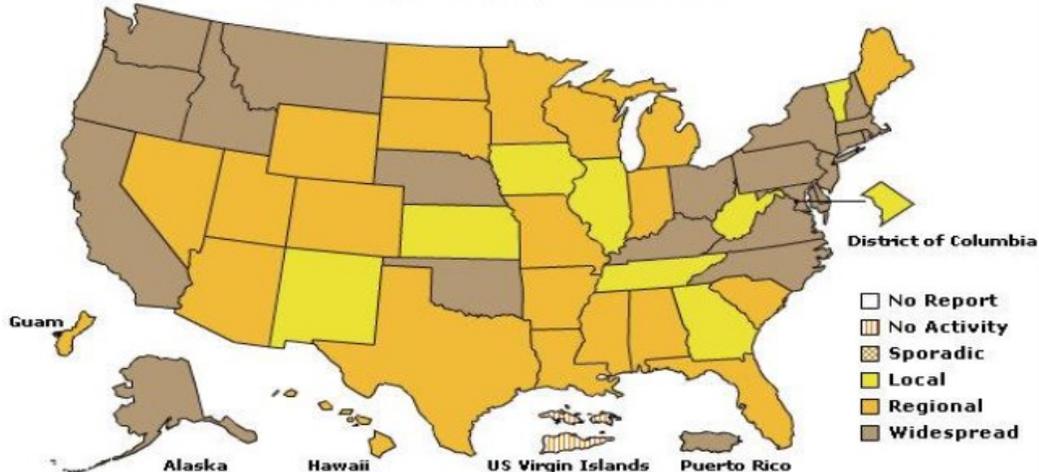
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 1 ending Jan 07, 2017



Map left. This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending January 07, 2017- Week 1



* The map left measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance January 8–January 14, 2017 (Week 2)

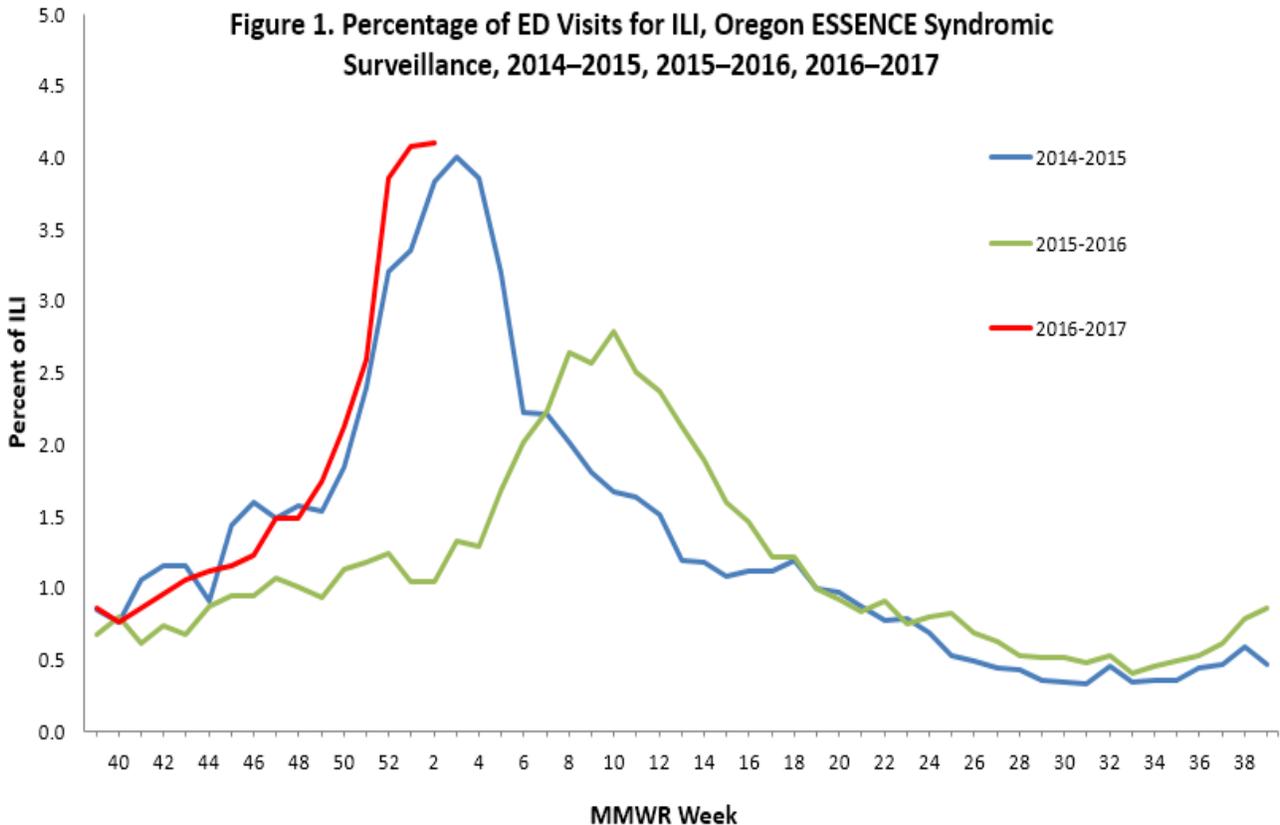
	Current Week (2)	Previous Week (1)
Percentage of emergency department visits for ILI ¹	4.1%	4.1%
Percentage positive influenza tests ²	31.4%	35.9%
Influenza-associated hospitalizations ³	173	204
Reported ILI/influenza outbreaks	19	29
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	2.3%	5.7%
Respiratory Syncytial Virus (RSV) activity ⁴	10%	8%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 4.1% during week 2, 2017.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 31.4% of specimens tested at Oregon labs were positive for influenza during week 2, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

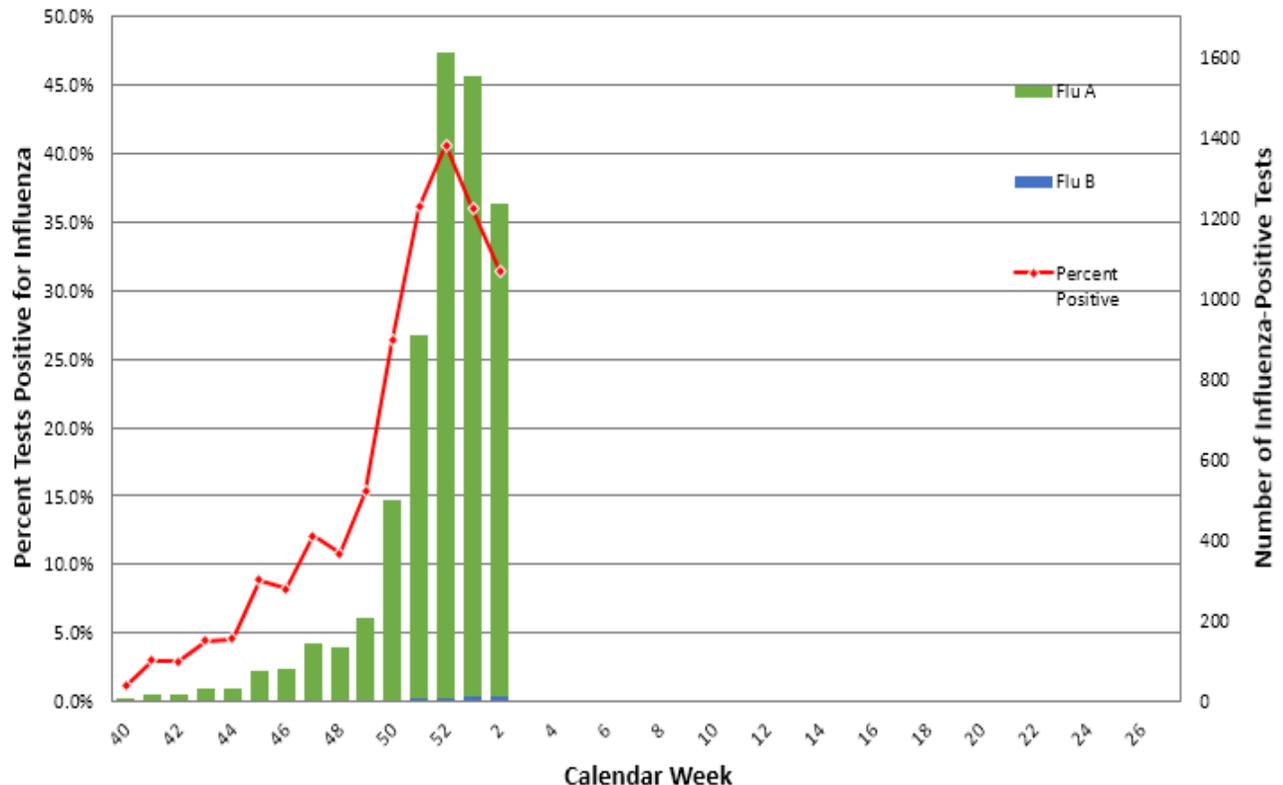
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	4,051	25,968
No. of positive specimens (%)	1,274 (31.4%)	6,714 (25.9%)
<i>Positive specimens by type</i>		
Influenza A	1,220 (95.8%)	6,490 (97%)
Influenza B	14 (1.1%)	67 (1%)
Not typed	40 (3.1%)	157 (2%)

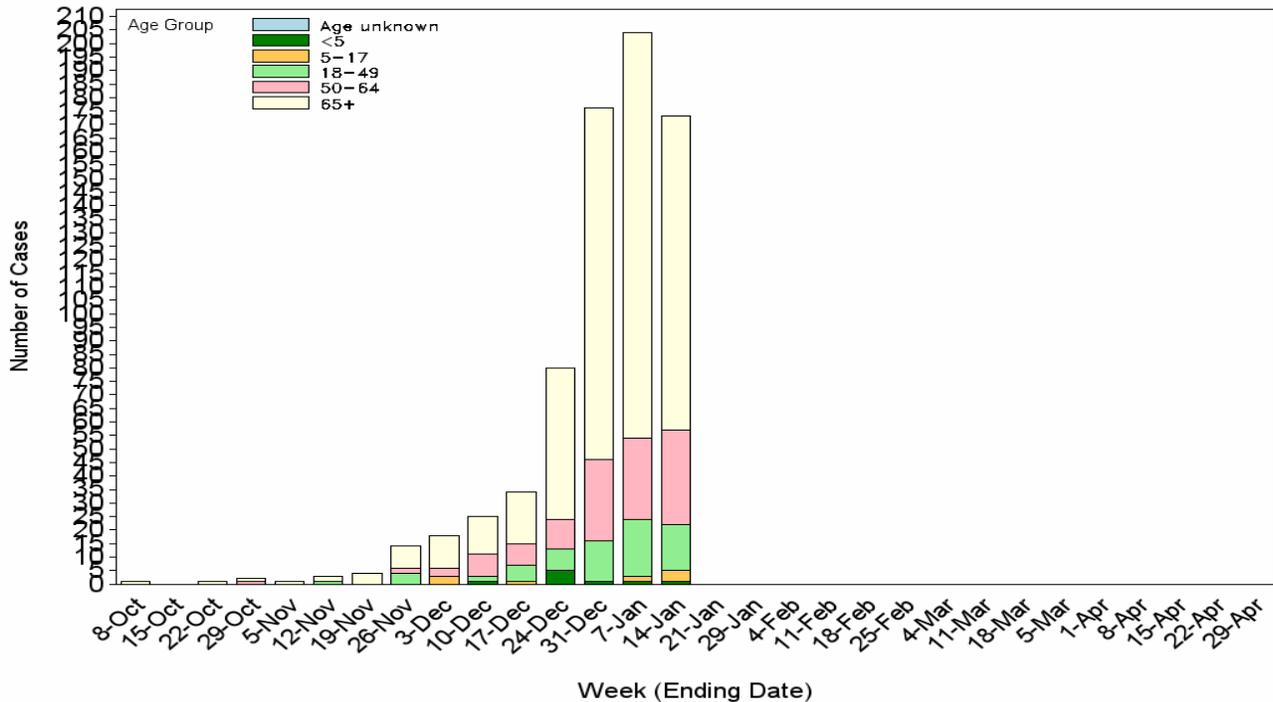
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

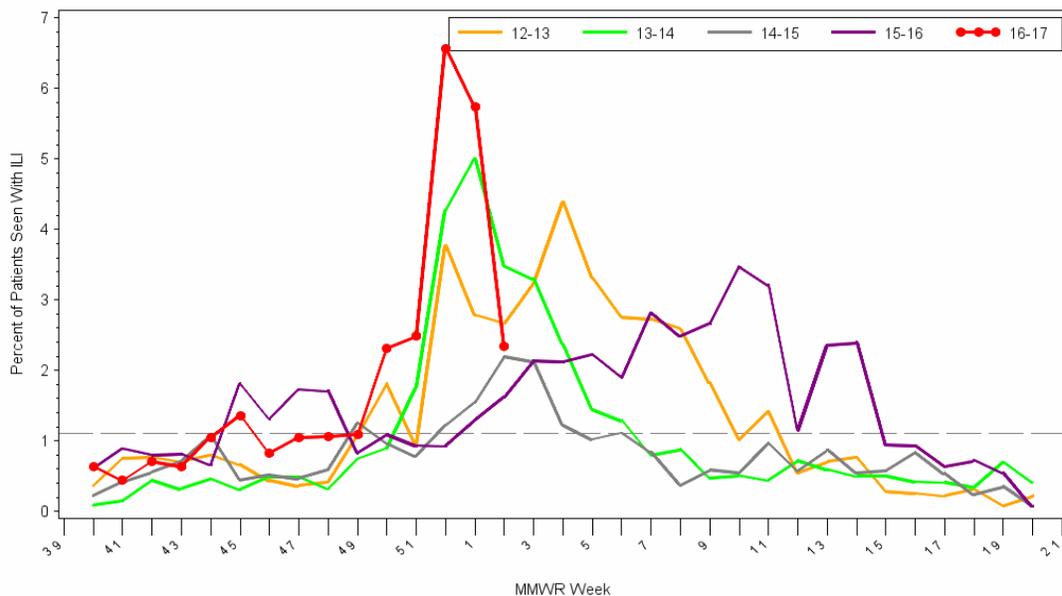
In Clackamas, Multnomah, and Washington counties 736 total reported influenza-associated hospitalizations occurred up through MMWR week 2, with 173 cases reported during week 2. Of cases with type information, 727 (98.9%) were Influenza A, and 8 (1.1%) were Flu B. 218 Influenza A specimens were sub-typed, with 215 (98.6) being H3, and 3 (1.4%) being 2009 H1N1.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon’s Outpatient Influenza-like Illness Surveillance Network: Oregon’s outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 2 of 2017 was 2.3% which is above Oregon’s seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 20JAN17
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever (≥100°F) and cough or sore throat.

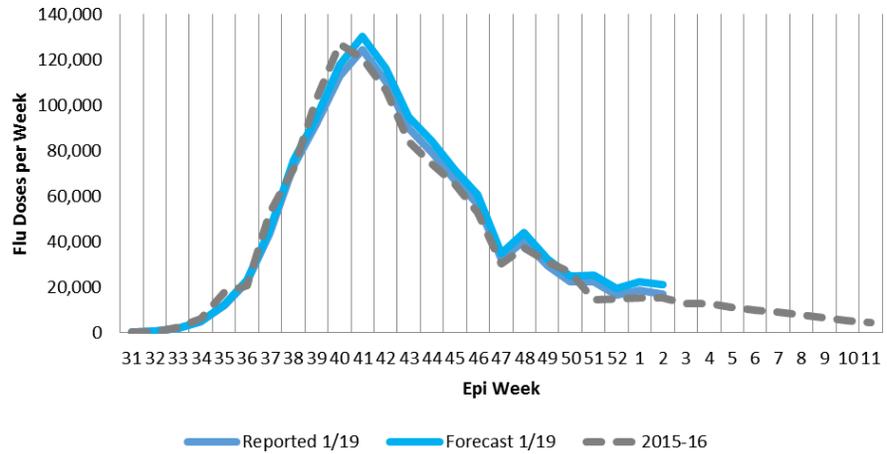
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

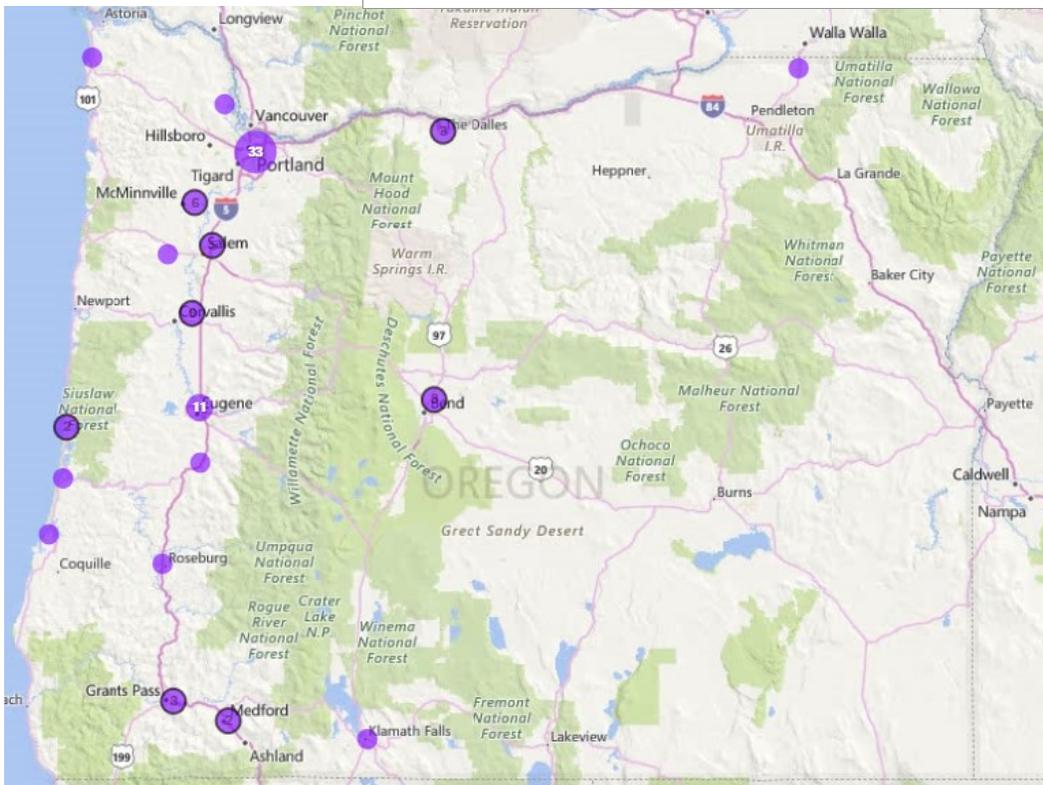
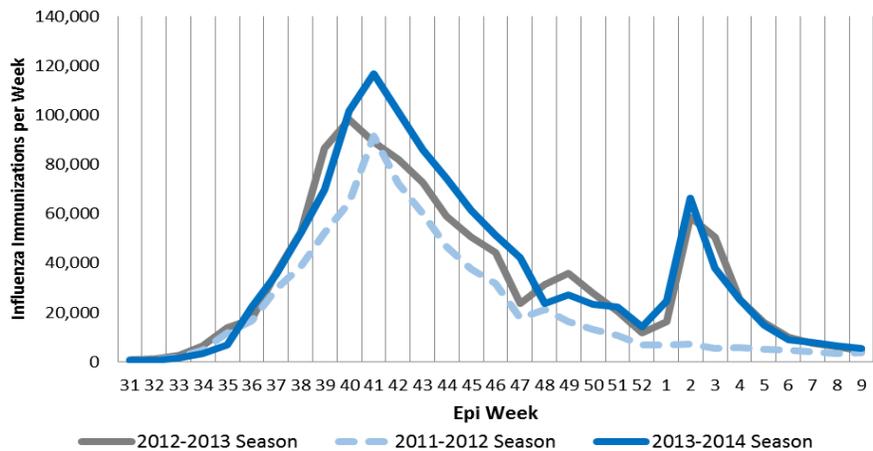
Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 2 of 2017 (Jan 8th to Jan 14th). Currently immunization rates remain on track to match last year's totals. Through the second week of January, influenza immunization seeking remained low despite the increasing presence of influenza disease. An immunization mystery is why some seasons had strong January surges in influenza immunizations, while in the three most recent seasons there was none. For comparison a chart of prior seasons (2011-12 through 2013-14) is included this week, showing the effect of prior January surges on weekly influenza immunizations.

2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



Prior Seasons (2011/12 to 2013/14) for Influenza Immunizations in ALERT IIS by Week



Outbreaks:

The map at left shows the distribution of outbreaks in the state of Oregon.

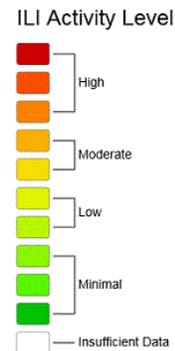
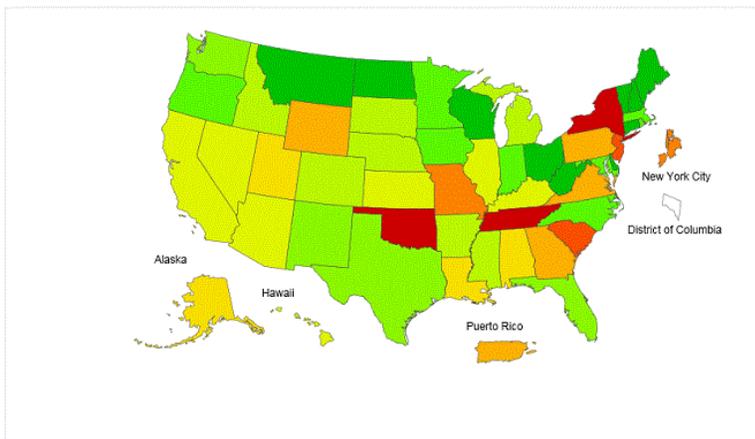
Since October 1, 2016, there have been 86 confirmed flu outbreaks.

19 new flu outbreaks were reported during week 2.

US Data (from CDC FluView): During week 2 (January 8-14, 2017), influenza activity increased in the United States.

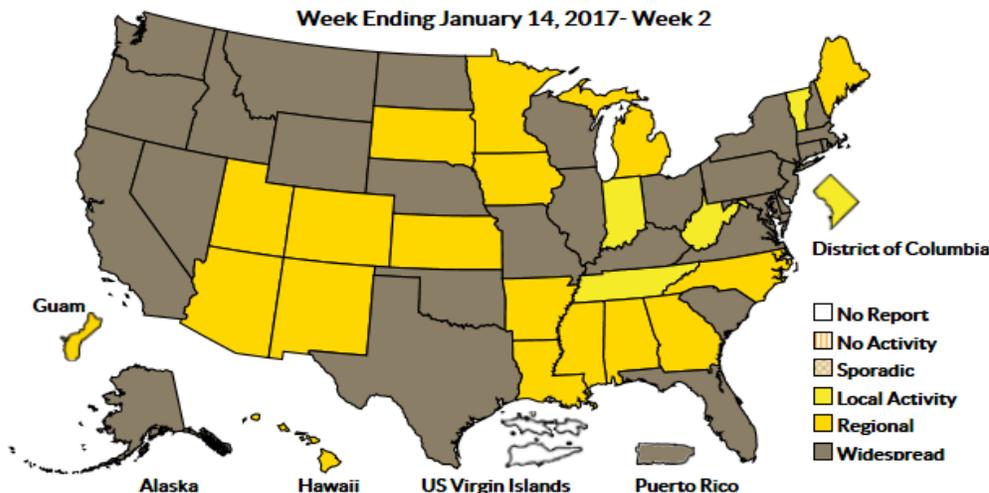
- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 2 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Two influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 10.2 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 3.3%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline levels. New York City and six states experienced high ILI activity; Puerto Rico and eight states experienced moderate ILI activity; 14 states experienced low ILI activity; 22 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 29 states was reported as widespread; Guam and 17 states reported regional activity; the District of Columbia and four states reported local activity; and the U.S. Virgin Islands reported sporadic activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 2 ending Jan 14, 2017



Map left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*



* The map left measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

Data at a Glance January 15–January 21, 2017 (Week 3)

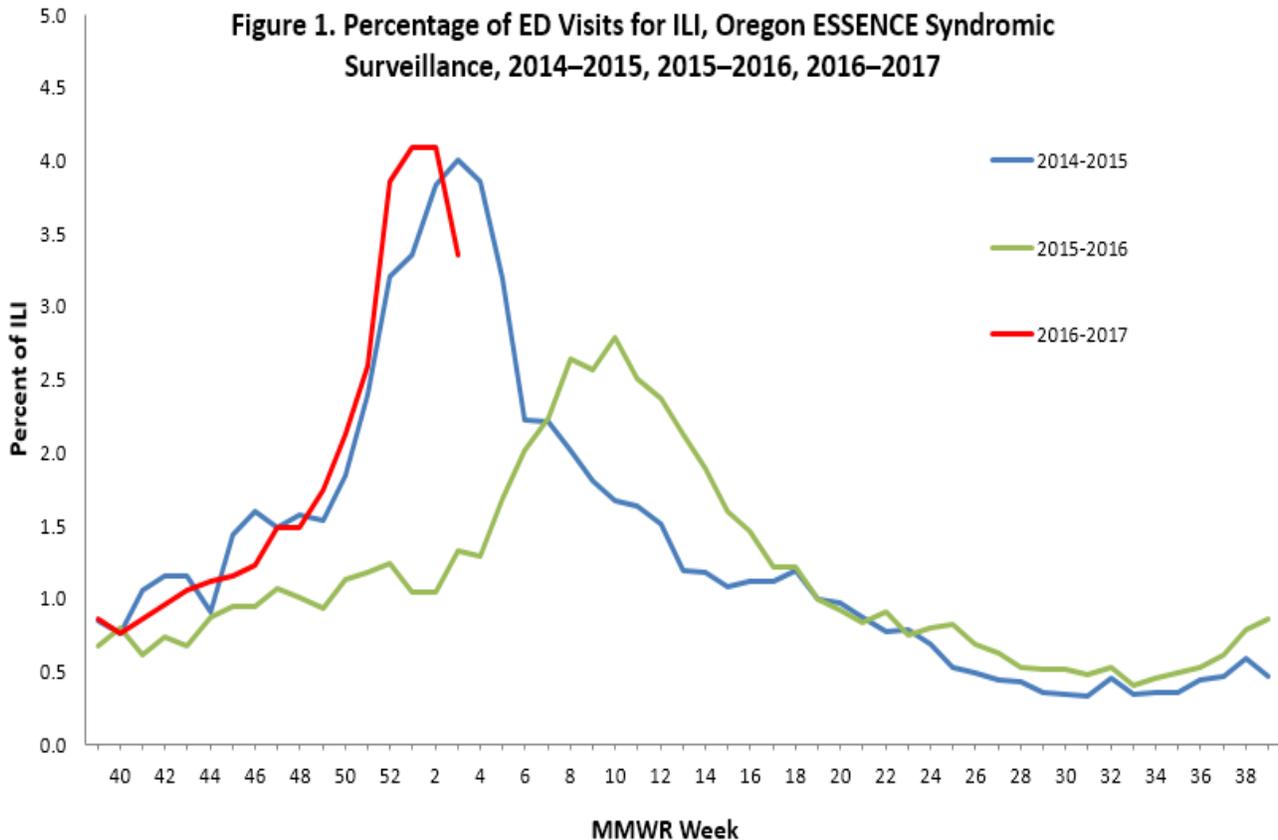
	Current Week (3)	Previous Week (2)
Percentage of emergency department visits for ILI ¹	3.4%	4.1%
Percentage positive influenza tests ²	25.2%	31.5%
Influenza-associated hospitalizations ³	129	236
Reported ILI/influenza outbreaks	13	24
Influenza-associated pediatric mortality	0	0
Percentage of outpatient visits for ILI	2.7%	2.1%
Respiratory Syncytial Virus (RSV) activity ⁴	12%	10%

¹Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

²Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)

³Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

⁴Percent positivity based on data from Oregon's RSV Laboratory Surveillance System.



Oregon ESSENCE Syndromic Surveillance: Oregon Public Health tracks hospital emergency department (ED) visits throughout the state using the Oregon ESSENCE syndromic surveillance system. ESSENCE categorizes chief complaints into syndrome categories, which include ILI. Figure 1, above, displays percentages for all of Oregon during this flu season compared with the previous two flu seasons. The percent of ED visits for ILI in all of Oregon was 3.4% during week 3, 2017.

Laboratory Surveillance:

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors influenza and other respiratory viruses circulating the United States. More information is at CDC's [website](#).

Table 1 shows the current week and cumulative totals (since October 2, 2016) for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 25.2% of specimens tested at Oregon labs were positive for influenza during week 3, and the bar chart displays the number of influenza-positive tests by flu type and percent positivity.

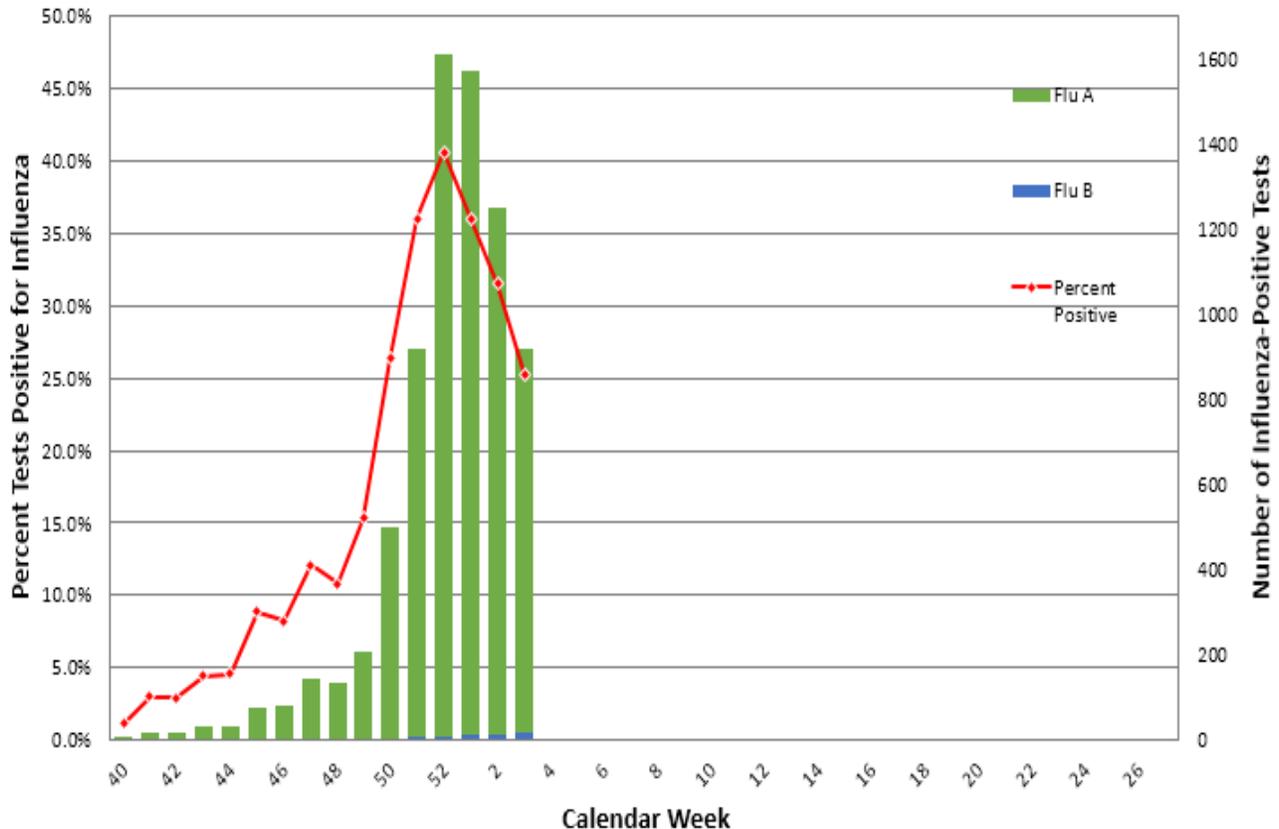
Participation by laboratories is voluntary. Current labs participating in NREVSS in Oregon include:

- Legacy Emanuel Hospital and Health Center, Portland, OR
- Mercy Medical Center, Roseburg, OR
- Oregon Medical Laboratories, Eugene, OR
- Oregon State Public Health Laboratories, Portland, OR
- Salem Hospital, Salem, OR
- Santiam Memorial Hospital, Stayton, OR

Table 1. Influenza Test Results in Oregon, NREVSS, 2016–2017.

	Current Week	Cumulative
No. of specimens tested	3,759	29,845
No. of positive specimens (%)	949 (25.2%)	7,707 (25.8%)
<i>Positive specimens by type</i>		
Influenza A	899 (94.7%)	7,431 (96%)
Influenza B	20 (2.1%)	89 (1%)
Not typed	30 (3.2%)	187 (2%)

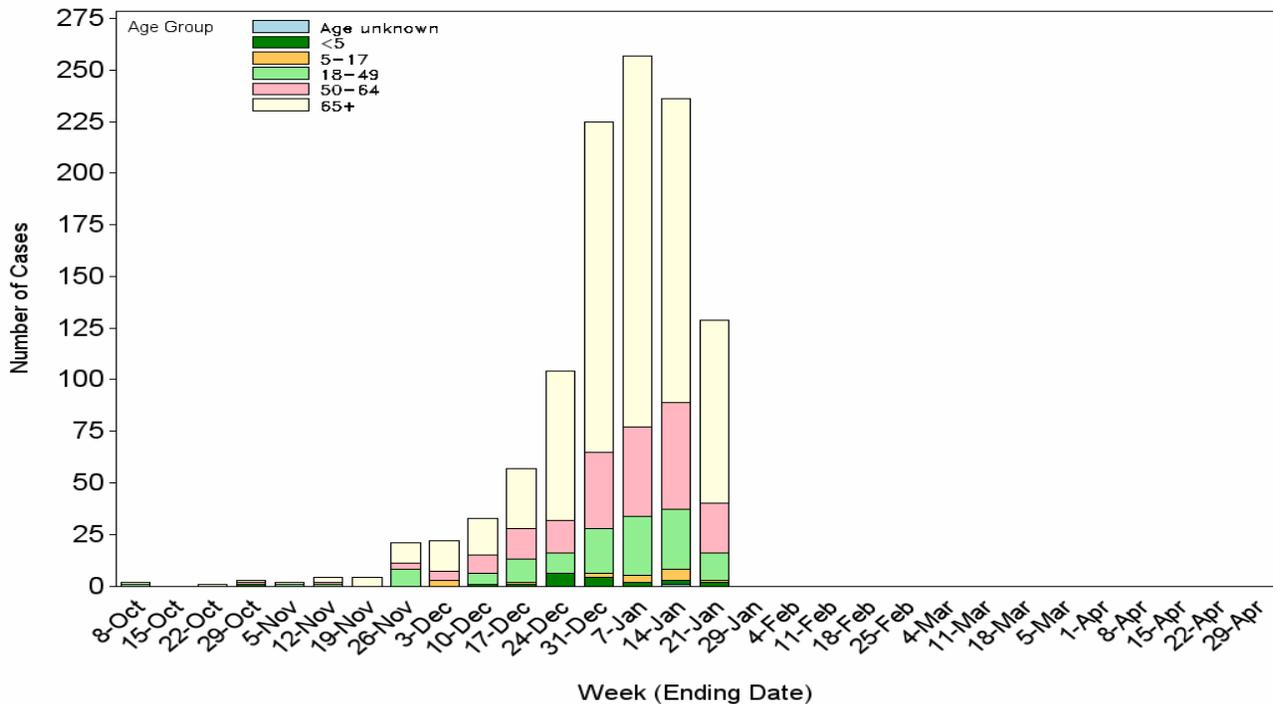
**Figure 2. Oregon Influenza Surveillance
Percent Positive Influenza Tests by Week, NREVSS
2016–2017 Season**



Hospitalizations:

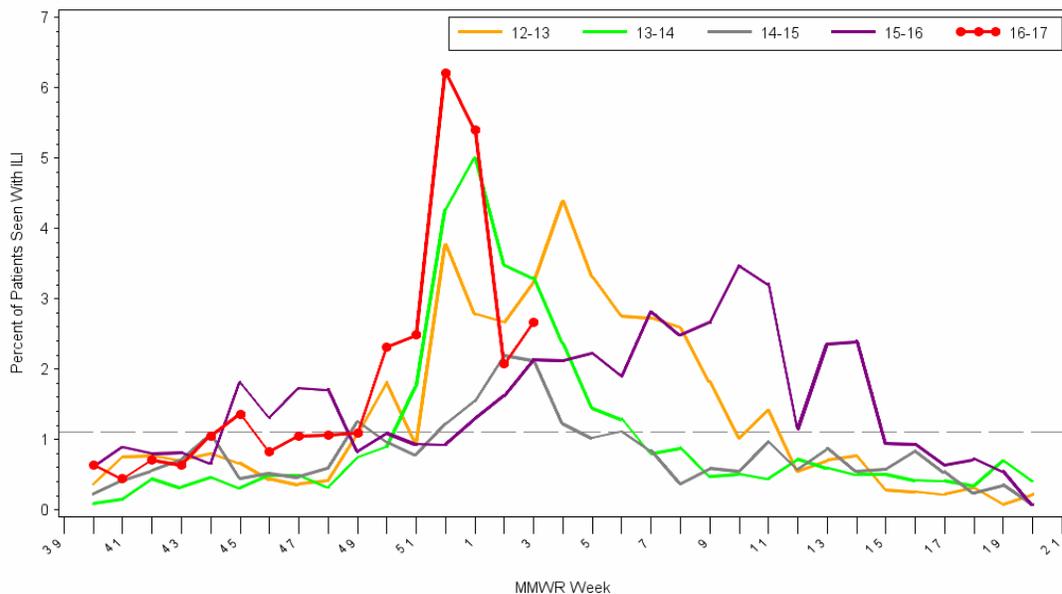
In Clackamas, Multnomah, and Washington counties 1,100 total reported influenza-associated hospitalizations occurred up through MMWR week 3, with 129 cases reported during week 3. Of cases with type information, 1091 (99.2%) were Influenza A, and 8 (0.8%) were Flu B. 444 Influenza A specimens were subtyped, with 440 (99.1%) being H3, and 4 (0.9%) being 2009 H1N1.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2016-2017



ILINet: Oregon's Outpatient Influenza-like Illness Surveillance Network: Oregon's outpatient influenza-like illness (ILI) network comprises 24 voluntary healthcare providers from across Oregon who report the number of patients with influenza-like illness as well as total number of patient visits for each week during the surveillance season. The percent of outpatients seen with ILI for week 2 of 2017 was 2.7% which is above Oregon's seasonal threshold of 1.1%.*

Oregon Health Authority, Acute and Communicable Disease Prevention 27 JAN 17
Oregon Outpatient Influenza-Like Illness Surveillance Network (ILINet)
 Percent of Outpatients with Influenza-like Illness (ILI)
 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017



Note: ILI is defined as fever ($\geq 100^{\circ}\text{F}$) and cough or sore throat.

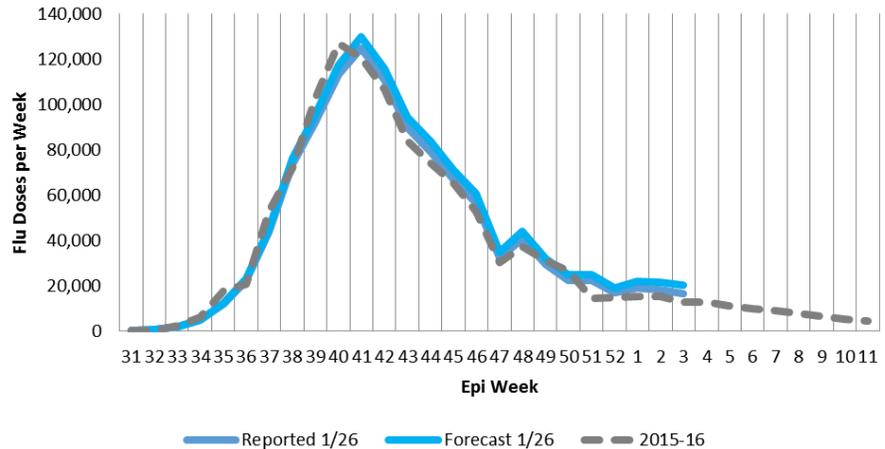
*The seasonal ILI baseline (threshold) is calculated by CDC and averages the ILI seen during non-influenza weeks in the northwestern region of the US, including AK, WA, OR, and ID.

All Flu Bites data provided are preliminary and may change as additional reports are received.

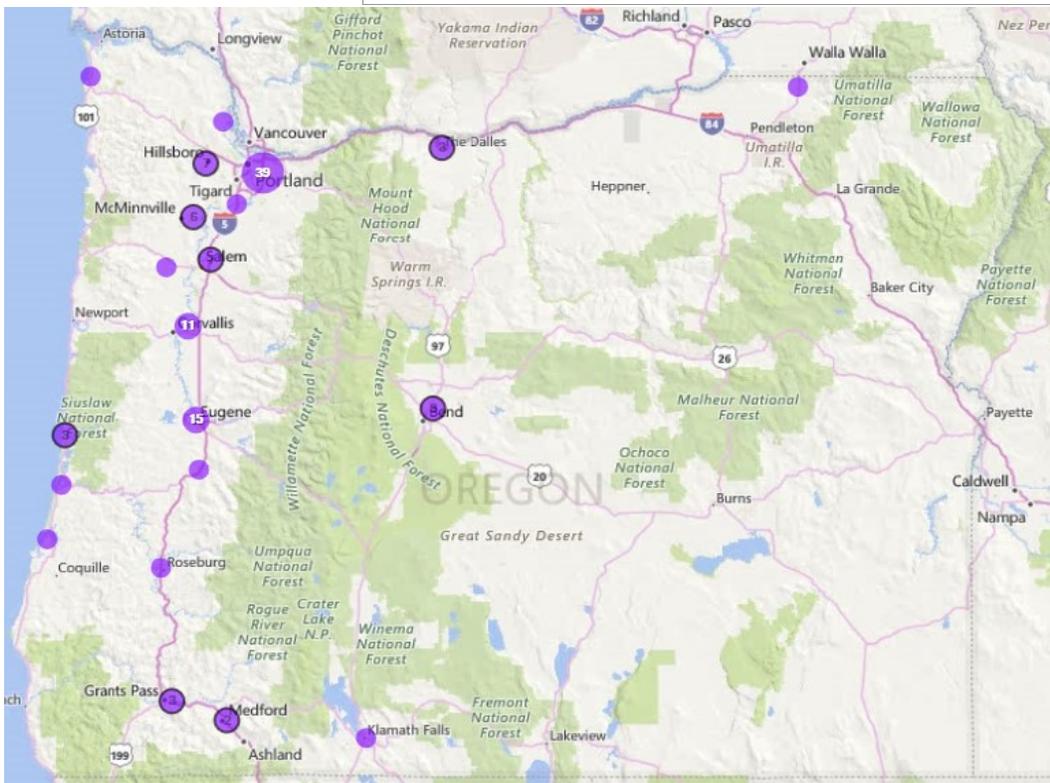
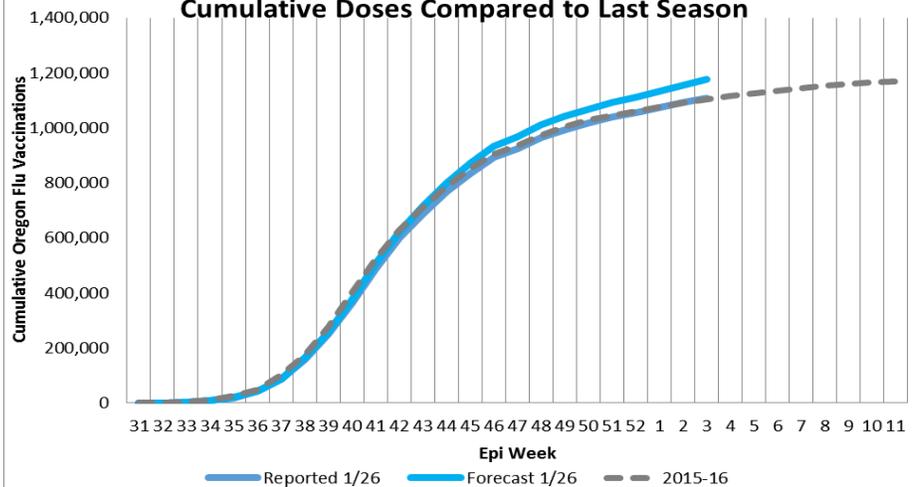
Surveillance weeks run from Sunday through Saturday
 Sentinel providers report the number of patients seen with influenza-like illness as well as total patients seen each week.

Immunizations: This week's seasonal influenza immunization reporting is based on ALERT IIS data through Epiweek 3 of 2017 (Jan 15th to Jan 21st). Overall immunization levels continue to match well to prior season totals. Despite the widespread presence of influenza disease in Oregon, immunization rates have not spiked upwards in January.

2016/2017 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek



2016/2017 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season



Outbreaks: The map at left shows the distribution of outbreaks in the state of Oregon.

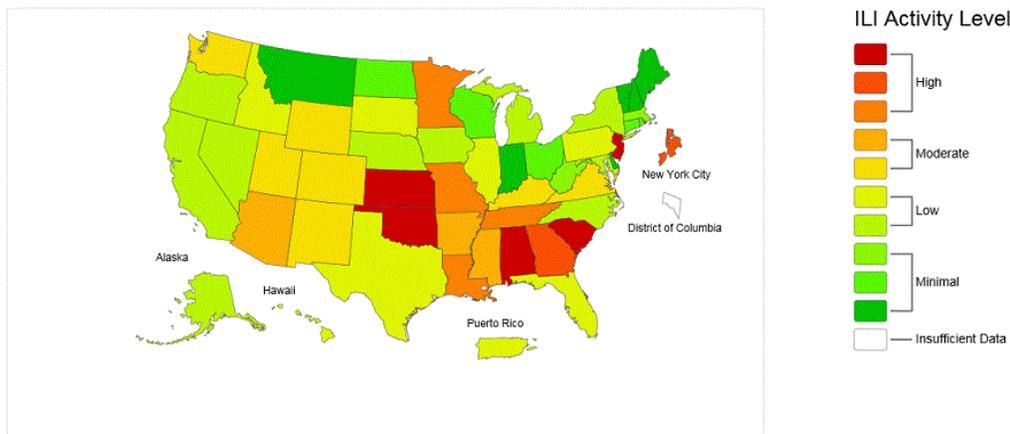
Since October 1, 2016, there have been 109 confirmed flu outbreaks.

13 new flu outbreaks were reported during week 3.

US Data (from CDC FluView): During week 3 (January 15-21, 2017), influenza activity increased in the United States.

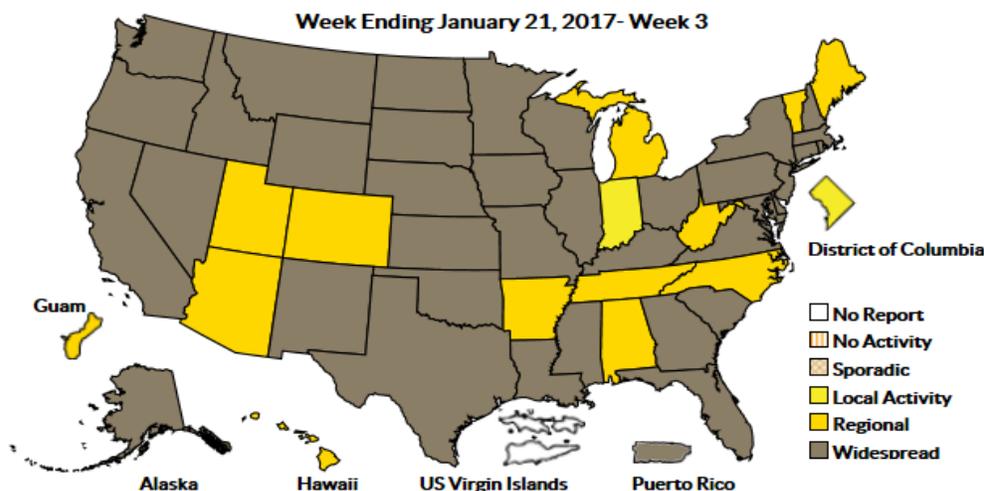
- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 3 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Three influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 15.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 3.4%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline levels. New York City and 10 states experienced high ILI activity; 10 states experienced moderate ILI activity; Puerto Rico and 17 states experienced low ILI activity; 13 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 37 states was reported as widespread; Guam and 12 states reported regional activity; the District of Columbia and one state reported local activity; and the U.S. Virgin Islands reported no activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 3 ending Jan 21, 2017



Map left: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*



* The map left measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.