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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.6% during week 16, 2020.
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](https://www.cdc.gov).

Table 1 shows the tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 0.1% of specimens tested at Oregon labs were positive for influenza during week 16, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive</th>
<th>Flu A</th>
<th>Flu B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>323</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>328</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>131</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>807</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance

Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties no influenza-associated hospitalizations were reported during week 16 of 2020. In total, there have been 669 hospitalizations; 375 (56.1%) were positive for flu A and 294 (44.0%) were positive for flu B. Of the 60 flu A specimens that have been subtyped, 54 (90.0%) were 2009 H1N1 and 6 (10.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

![Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season](image)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 years</td>
<td>50</td>
<td>7.5</td>
</tr>
<tr>
<td>5-17 years</td>
<td>40</td>
<td>6.0</td>
</tr>
<tr>
<td>18-49 years</td>
<td>159</td>
<td>23.8</td>
</tr>
<tr>
<td>50-64 years</td>
<td>163</td>
<td>24.4</td>
</tr>
<tr>
<td>≥ 65 years</td>
<td>257</td>
<td>38.4</td>
</tr>
</tbody>
</table>

Influenza Outbreaks: There were no influenza outbreaks reported during week 16, 2020. There have been a total of 92 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 56 (60.9%) occurred in a long-term care facility, 27 (29.3%) occurred in a school, and 9 (9.8%) occurred in another setting.

![Figure 4. Number of Influenza Outbreaks in Oregon by Setting, 2019-2020 Season](image)
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 16 of 2020 was 2.5%. Regionally, the percentage was highest in the Central and Gorge region (4.7%) and lowest in the Willamette Valley (0.9%).

Influenza-Associated Pediatric Mortality Surveillance: Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There were no pediatric flu deaths in Oregon reported during week 15, 2020. There have been a total of 3 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.
US Data (from CDC FluView): Laboratory confirmed flu activity as reported by clinical laboratories is now low. Influenza-like illness activity continues to decrease and is below the national baseline. The percent of deaths due to pneumonia or influenza (P&I) is high but the increase is due primarily to COVID-19, not influenza. Reported pediatric flu deaths for the season are high at 169.

**Viruses**
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories is 0.4%. This is approximately the same as the previous week.
- **Public Health Labs:** Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

**Illness**
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 2.8% last week to 2.9% this week. All regions are above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high or very high ILI activity decreased from 12 last week to 8 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity decreased from 17 last week to 10 this week.

**Severe Disease**
- **Hospitalizations:** The overall cumulative hospitalization rate for the season increased to 68.6 per 100,000.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 11.4%, down from 14.5% last week, but above the epidemic threshold of 6.9%.
- **Pediatric Deaths:** One influenza-associated pediatric death occurring during the 2019-2020 season were reported this week. The total for the season is 169.

---

Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2019-20 Influenza Season Week 16—ending April 18, 2020

**Map above:** 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 and Territorial Epidemiologists
2019-20 Influenza Season Week 16—ending April 18, 2020

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.4% during week 15, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 0.2% of specimens tested at Oregon labs were positive for influenza during week 15, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No. (%)</th>
<th>Flu A No. (%)</th>
<th>Flu B No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>719</td>
<td>1 (0.1%)</td>
<td>1 (100.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>198</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>18</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>155</td>
<td>1 (0.6%)</td>
<td>1 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>141</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1231</strong></td>
<td><strong>2 (0.2%)</strong></td>
<td><strong>2 (100.0%)</strong></td>
<td><strong>0 (0.0%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties no influenza-associated hospitalizations were reported during week 15 of 2020. In total, there have been 669 hospitalizations; 375 (56.1%) were positive for flu A and 294 (44.0%) were positive for flu B. Of the 60 flu A specimens that have been subtyped, 54 (90.0%) were 2009 H1N1 and 6 (10.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks:** There were no influenza outbreaks reported during week 15, 2020. There have been a total of 92 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 56 (60.9%) occurred in a long-term care facility, 27 (29.3%) occurred in a school, and 9 (9.8%) occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 15 of 2020 was 3.1%. Regionally, the percentage was highest in the Central and Gorge region (5.9%) and lowest in the Willamette Valley (1.5%).

Influenza-Associated Pediatric Mortality Surveillance: Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There were no pediatric flu deaths in Oregon reported during week 15, 2020. There have been a total of 3 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.
US Data (from CDC FluView): Laboratory confirmed flu activity as reported by clinical laboratories is now low. Influenza-like illness activity, while lower than last week, is still elevated. Influenza severity indicators remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

Viruses
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 0.9% last week to 0.4% this week.
- **Public Health Labs:** Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

Illness
- **ILI (Influenza-like Illness) Activity Map:** The number of jurisdictions experiencing high or very high ILI activity decreased from 21 last week to 12 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity decreased from 31 last week to 17 this week.

Severe Disease
- **Hospitalizations:** The overall cumulative hospitalization rate for the season increased to 68.3 per 100,000.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 11.9%, above the epidemic threshold of 7.1%.
- **Pediatric Deaths:** 2 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 168.

Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2019-20 Influenza Season Week 15—ending April 11, 2020

Map above: 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 and Territorial Epidemiologists
2019-20 Influenza Season Week 15—ending

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveill.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveill.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.5% during week 14, 2020.
**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](https://www.cdc.gov).

Table 1 shows the tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 0.5% of specimens tested at Oregon labs were positive for influenza during week 14, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

### Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1332</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>1041</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>38</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>237</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>208</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>2856</strong></td>
<td><strong>13</strong></td>
<td><strong>7</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**Figure 2. Oregon Influenza Laboratory Surveillance**

Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties no influenza-associated hospitalizations were reported during week 14 of 2020. In total, there have been 669 hospitalizations; 375 (56.1%) were positive for flu A and 294 (44.0%) were positive for flu B. Of the 60 flu A specimens that have been subtyped, 54 (90.0%) were 2009 H1N1 and 6 (10.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There were no influenza outbreaks reported during week 14, 2020. There have been a total of 92 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 56 (60.9%) occurred in a long-term care facility, 27 (29.3%) occurred in a school, and 9 (9.8%) occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 14 of 2020 was 3.7%. Regionally, the percentage was highest in the Central and Gorge region (7.8%) and lowest in the Willamette Valley (2.2%).

![Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020](image)

Influenza-Associated Pediatric Mortality Surveillance: Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There were no pediatric flu deaths in Oregon reported during week 14, 2020. There have been a total of 3 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.

RSV Hospitalizations: OHA conducts surveillance for lab confirmed RSV-associated hospitalizations in Clackamas, Multnomah, and Washington counties. Three RSV-associated hospitalizations were reported during week 14 of 2020. Since October 1, 2019, there have been a total of 611 hospitalizations; 301 hospitalizations (49.3%) were in children under the age of 5.

![Figure 6: Portland Metro Area RSV-Associated Hospitalizations by Week and Age Group, 2019-2020 Season](image)

<table>
<thead>
<tr>
<th>Case Age Group</th>
<th>&lt;5 yrs</th>
<th>5 - 17 yrs</th>
<th>18 - 49 yrs</th>
<th>50 - 64 yrs</th>
<th>≥65 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 years</td>
<td>301</td>
<td>49.3</td>
<td>15</td>
<td>2.5</td>
<td>29</td>
</tr>
<tr>
<td>5-17 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-49 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-64 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥65 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
US Data (from CDC FluView): Laboratory confirmed flu activity as reported by clinical laboratories continues to decrease sharply and is now low. Influenza-like illness activity, while lower than last week, is still elevated. Influenza severity indicators remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

**Viruses**
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 2.1% last week to 0.8% this week.
- **Public Health Labs:** Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

**Illness**
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 5.2% last week to 3.9% this week. All regions are above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity decreased from 31 last week to 21 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity decreased from 41 last week to 31 this week.

**Severe Disease**
- **Hospitalizations:** The overall cumulative hospitalization rate for the season increased to 68.2 per 100,000.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 10.0%, above the epidemic threshold of 7.1%.
- **Pediatric Deaths:** 4 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 166.

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 5.4% during week 13, 2020.
**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](https://www.cdc.gov).

Table 1 shows the tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 2.1% of specimens tested at Oregon labs were positive for influenza during week 13, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive (%)</th>
<th>Flu A (%)</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1374</td>
<td>34  2.5%</td>
<td>30 88.2%</td>
<td>4  11.8%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>912</td>
<td>13  1.4%</td>
<td>7  53.8%</td>
<td>6  46.2%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>85</td>
<td>1  0.0%</td>
<td>1  0.0%</td>
<td>0  0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>317</td>
<td>9  2.8%</td>
<td>6  66.7%</td>
<td>3  33.3%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>48</td>
<td>0  0.0%</td>
<td>0  0.0%</td>
<td>0  0.0%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>2736</strong></td>
<td><strong>57 2.1%</strong></td>
<td><strong>44 77.2%</strong></td>
<td><strong>13 22.8%</strong></td>
</tr>
</tbody>
</table>

![Figure 2. Oregon Influenza Laboratory Surveillance](image-url)
Hospitalizations: In Clackamas, Multnomah, and Washington counties, 3 influenza-associated hospitalizations were reported during week 13 of 2020. In total, there have been 669 hospitalizations: 375 (56.1%) were positive for flu A and 294 (44.0%) were positive for flu B. Of the 60 flu A specimens that have been subtyped, 54 (90.0%) were 2009 H1N1 and 6 (10.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There was 1 influenza outbreak reported during week 13, 2020. There have been a total of 92 influenza outbreaks reported to the Oregon Health Authority in the 2019–2020 flu season; 56 (60.9%) occurred in a long-term care facility, 27 (29.3%) occurred in a school, and 9 (9.8%) occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 13 of 2020 was 4.9%. Regionally, the percentage was

![Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020](image)

- **Central and Gorge**: 12.0%
- **Eastern**: 10.0%
- **Southern**: 8.0%
- **North Coast**: 6.0%
- **Portland Metro**: 4.0%
- **Willamette Valley**: 2.0%

Week Ending Date

Influenza-Associated Pediatric Mortality Surveillance: Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There were no pediatric flu deaths in Oregon reported during week 13, 2020. There have been a total of 3 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.

RSV Hospitalizations: OHA conducts surveillance for lab confirmed RSV-associated hospitalizations in Clackamas, Multnomah, and Washington counties. 6 RSV-associated hospitalizations were reported during week 13 of 2020. Since October 1, 2019, there have been a total of 604 hospitalizations; 298 hospitalizations (49.3%) were in children under the age of 5.

![Figure 6: Portland Metro Area RSV-Associated Hospitalizations by Week and Age Group, 2019-2020 Season](image)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 years</td>
<td>298</td>
<td>49.3</td>
</tr>
<tr>
<td>5-17 years</td>
<td>15</td>
<td>2.5</td>
</tr>
<tr>
<td>18-49 years</td>
<td>28</td>
<td>4.6</td>
</tr>
<tr>
<td>50-64 years</td>
<td>66</td>
<td>10.9</td>
</tr>
<tr>
<td>≥65 years</td>
<td>197</td>
<td>32.6</td>
</tr>
</tbody>
</table>

Week Ending Date
**US Data (from CDC FluView):** Laboratory confirmed flu activity as reported by clinical laboratories continues to decrease; however, influenza-like illness activity is increasing. Influenza severity indicators remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

**Viruses**
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 7.3% last week to 2.1% this week.
- **Public Health Labs:** Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

**Illness**
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 6.3% last week to 5.4% this week. All regions are above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity decreased from 37 last week to 31 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity decreased from 49 last week to 41 this week.

**Severe Disease**
- **Hospitalizations:** The overall cumulative hospitalization rate for the season increased to 67.9 per 100,000.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 8.2%, above the epidemic threshold of 7.2%.
- **Pediatric Deaths:** 7 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 162

### Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
**2019-20 Influenza Season Week 13—ending March 28, 2020**

**Map above:** 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 and Territorial Epidemiologists
**2019-20 Influenza Season Week 13—ending March 28, 2020**

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 7.0% during week 12, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 5.7% of specimens tested at Oregon labs were positive for influenza during week 12, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A (%)</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1476</td>
<td>93</td>
<td>6.3%</td>
<td>85</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>2014</td>
<td>101</td>
<td>5.0%</td>
<td>63</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>158</td>
<td>20</td>
<td>0.0%</td>
<td>19</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>444</td>
<td>27</td>
<td>6.1%</td>
<td>25</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>627</td>
<td>29</td>
<td>4.6%</td>
<td>26</td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations**: In Clackamas, Multnomah, and Washington counties, 19 influenza-associated hospitalizations were reported during week 12 of 2020. In total, there have been 664 hospitalizations; 370 (55.7%) were positive for flu A and 294 (44.3%) were positive for flu B. Of the 60 flu A specimens that have been subtyped, 54 (90.0%) were 2009 H1N1 and 6 (10.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks**: There were 19 influenza outbreaks reported during week 12, 2020. There have been a total of 161 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 77 (47.8%) occurred in a long-term care facility, 52 (32.3%) occurred in a school, and 32 (19.9%) occurred in another setting.

**Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs</td>
<td>39</td>
<td>5.9</td>
</tr>
<tr>
<td>5-17 yrs</td>
<td>159</td>
<td>23.9</td>
</tr>
<tr>
<td>18-49 yrs</td>
<td>163</td>
<td>24.5</td>
</tr>
<tr>
<td>50-64 yrs</td>
<td>252</td>
<td>38.0</td>
</tr>
<tr>
<td>≥ 65 yrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4. Number of Influenza Outbreaks in Oregon by Setting, 2019-2020 Season**
**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 12 of 2020 was 6.4%. Regionally, the percentage was highest in the Central and Gorge region (10.0%) and lowest in the North Coast (3.5%).

![Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020](image)

**Influenza-Associated Pediatric Mortality Surveillance:** Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There were no pediatric flu deaths in Oregon reported during week 12, 2020. There have been a total of 3 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.
**Immunizations data:** Influenza-Associated Pediatric Mortality Surveillance: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epi Week 12 of 2020 (March 21st). Rates of new influenza immunization per week, while declining, continue to run above what is normally observed at this time of year. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.

**Figure 6.** 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week

**Figure 7.** 2019-2020 Flu Vaccination in ALERT IIS by Epi Week, Cumulative Doses Compared to Last Season
US Data (from CDC FluView): Laboratory confirmed flu activity as reported by clinical laboratories continues to decrease; however, influenza-like illness activity is increasing. Influenza severity indicators remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

Viruses
• Clinical Labs: The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 14.9% last week to 6.9% this week.
• Public Health Labs: Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

Illness
• ILINet Outpatient Illness: Visits to health care providers for influenza-like illness (ILI) increased from 5.6% last week to 6.4% this week. All regions are above their baselines.
• ILINet Activity Map: The number of jurisdictions experiencing high ILI activity decreased from 40 last week to 37 this week.
• Geographic Spread: The number of jurisdictions reporting regional or widespread influenza activity decreased from 50 last week to 49 this week.

Severe Disease
• Hospitalizations: The overall cumulative hospitalization rate for the season increased to 67.3 per 100,000.
• P&I Mortality: The percentage of deaths attributed to pneumonia and influenza is 7.4%, above the epidemic threshold of 7.3%.
• Pediatric Deaths: 6 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 155.

Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2019-20 Influenza Season Week 12—ending March 21, 2020

Map above: 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 and Territorial Epidemiologists 2019-20 Influenza Season Week 12—ending March 21, 2020

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:
Oregon Public Health Division

Data at a Glance
March 8—March 14, 2020 (Week 11)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (11)</th>
<th>Previous Week (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI¹</td>
<td>6.1%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Percentage positive influenza tests²</td>
<td>12.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations³</td>
<td>33</td>
<td>60</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity⁴</td>
<td>8.3%</td>
<td>12.6%</td>
</tr>
</tbody>
</table>

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 6.1% during week 11, 2020.
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](https://www.cdc.gov).

Table 1 shows the tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 12.5% of specimens tested at Oregon labs were positive for influenza during week 11, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A (%)</th>
<th>Flu B No.</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>3363</td>
<td>406</td>
<td>12.1%</td>
<td>360</td>
<td>88.7%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>1475</td>
<td>215</td>
<td>14.6%</td>
<td>140</td>
<td>65.1%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>147</td>
<td>32</td>
<td>0.0%</td>
<td>32</td>
<td>0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>708</td>
<td>64</td>
<td>9.0%</td>
<td>50</td>
<td>78.1%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>659</td>
<td>74</td>
<td>11.2%</td>
<td>66</td>
<td>89.2%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>6352</strong></td>
<td><strong>791</strong></td>
<td><strong>12.5%</strong></td>
<td><strong>648</strong></td>
<td><strong>81.9%</strong></td>
</tr>
</tbody>
</table>

**Figure 2. Oregon Influenza Laboratory Surveillance**

Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 33 influenza-associated hospitalizations were reported during week 11 of 2020. In total, there have been 636 hospitalizations; 344 (54.1%) were positive for flu A and 292 (45.9%) were positive for flu B. Of the 56 flu A specimens that have been subtyped, 50 (89.3%) were 2009 H1N1 and 6 (10.7%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks:** There were 2 influenza outbreaks reported during week 11, 2020. There have been a total of 67 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 46 (68.7%) occurred in a long-term care facility, 25 (22.4%) occurred in a school, and 6 (9.0%) occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 11 of 2020 was 5.7%. Regionally, the percentage was highest in the Central and Gorge region (8.7%) and lowest in the North Coast (3.3%).

Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020

Influenza-Associated Pediatric Mortality Surveillance: Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There was one pediatric flu death in Oregon reported during week 11, 2020. There have been a total of 3 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.
US Data (from CDC FluView): Laboratory confirmed flu activity as reported by clinical laboratories continued to decrease; however, influenza-like illness activity increased. Influenza severity indicators remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

Viruses
- **Clinical Labs**: The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 21.1% last week to 15.3% this week.
- **Public Health Labs**: Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

Illness
- **ILI Net Outpatient Illness**: Visits to health care providers for influenza-like illness (ILI) increased from 5.2% last week to 5.8% this week. All regions are above their baselines.
- **ILINet Activity Map**: The number of jurisdictions experiencing high ILI activity decreased from 43 last week to 40 this week.
- **Geographic Spread**: The number of jurisdictions reporting regional or widespread influenza activity remained at 50 this week.

Severe Disease
- **Hospitalizations**: The overall cumulative hospitalization rate for the season increased to 65.1 per 100,000.
- **P&I Mortality**: The percentage of deaths attributed to pneumonia and influenza is 7.1%, below the epidemic threshold of 7.3%.
- **Pediatric Deaths**: 5 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 149.

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/survell.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.6% during week 9, 2020.

### Data at a Glance
February 23—February 29, 2020 (Week 09)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (09)</th>
<th>Previous Week (08)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Percentage positive influenza tests&lt;sup&gt;2&lt;/sup&gt;</td>
<td>19.7%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations&lt;sup&gt;3&lt;/sup&gt;</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity&lt;sup&gt;4&lt;/sup&gt;</td>
<td>12.9%</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

<sup>1</sup> Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

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

<sup>3</sup> Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

<sup>4</sup> Percent positivity based on data from Oregon’s RSV Laboratory Surveillance System.

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[Graph showing percentage of ED visits for ILI from 10/1/2019 to 9/19/2020 with data points for each year.]
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 19.7% of specimens tested at Oregon labs were positive for influenza during week 9, 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)
- Oregon Health & Science University (Portland, OR)
- Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR)
- Adventist Health (Portland, OR)
- Bay Area Hospital (Coos Bay, OR)
- Curry Health Network (Brookings, OR)
- Mercy Medical Center (Roseburg, OR)
- Sky Lakes Medical Center (Klamath Falls, OR)
- Lake Health District, (Lakeview, OR)
- Rogue Valley Medical Center (SW Oregon)
- Good Shepherd Medical Center (Hermiston, OR)
- Grande Ronde Hospital (La Grande, OR)
- Mid-Columbia Medical Center (The Dalles, OR)
- Central Oregon Pediatric Associates (Central Oregon)
- Harney District Hospital (Burns, OR)
- St. Charles (Bend, OR)
- Samaritan Health Services (Lebanon, OR)
- Columbia Memorial Hospital (Astoria, OR)
- PeaceHealth Southwest Medical Center (Vancouver, WA)
- Salem Hospital (Salem, OR)
- Willamette Valley Medical Center (McMinnville, OR)

### Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A (%)</th>
<th>Flu B No.</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>2048</td>
<td>392</td>
<td>19.1%</td>
<td>326</td>
<td>83.2%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>1092</td>
<td>259</td>
<td>23.7%</td>
<td>152</td>
<td>58.7%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>60</td>
<td>18</td>
<td>26.7%</td>
<td>15</td>
<td>93.8%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>513</td>
<td>96</td>
<td>18.7%</td>
<td>76</td>
<td>79.2%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>337</td>
<td>33</td>
<td>9.8%</td>
<td>27</td>
<td>81.8%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>4050</strong></td>
<td><strong>796</strong></td>
<td><strong>19.7%</strong></td>
<td><strong>596</strong></td>
<td><strong>74.9%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2. Oregon Influenza Laboratory Surveillance**

**Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season**
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 28 influenza-associated hospitalizations were reported during week 9 of 2020. In total, there have been 523 hospitalizations; 240 (45.9%) were positive for flu A and 283 (54.1%) were positive for flu B. Of the 40 flu A specimens that have been subtyped, 34 (85.0%) were 2009 H1N1 and 6 (15.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks:** There were 8 influenza outbreaks reported during week 9, 2020. There have been a total of 65 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 38 (58.5%) occurred in a long-term care facility, 21 (32.3%) occurred in a school, and 6 (9.2%) occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percentage of outpatients seen with ILI across the state during week 9 of 2020 was 4.1%. Regionally, the percentage was highest in the Central Oregon and Columbia Gorge region (8.1%) and lowest in the North Coast (2.2%).

![Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020](image)

Influenza-Associated Pediatric Mortality Surveillance: Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There was 1 pediatric flu death in Oregon reported during week 9, 2020. There have been a total of 2 influenza-associated pediatric deaths reported to the Oregon Health Authority in the 2019—2020 flu season.

Immunizations data: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 9 of 2020 (February 29th). Rates of new influenza immunization per week are currently running slightly above what is typically seen at this time of the season. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed- current weekly totals will be adjusted upward later.

![Figure 6. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week](image)
Figure 7. 2019-2020 Flu Vaccination in ALERT IIS by Epi Week, Cumulative Doses Compared to Last Season

Figure 8. Weekly Influenza Immunization Rate Among Not-Yet Immunized Oregonians, 2019-20 Compared to 2018-19 by Epi Week
US Data (from CDC FluView): Key indicators that track flu activity remain high but decreased for the third week in a row. Severity indicators (hospitalizations and deaths) remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

**Viruses**
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 28.0% last week to 24.3% this week.
- **Public Health Labs:** Nationally, influenza A(H1N1)pdm09 viruses are now the most commonly reported influenza viruses this season.

**Illness**
- **ILI Net Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 5.5% last week to 5.3% this week. All regions remain above their baselines.
- **ILI Net Activity Map:** The number of jurisdictions experiencing high ILI activity decreased from 45 last week to 42 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity increased from 50 last week to 51 this week.

**Severe Disease**
- **Hospitalizations:** The overall cumulative hospitalization rate for the season increased to 57.9 per 100,000.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 6.9%, below the epidemic threshold of 7.3%.
- **Pediatric Deaths:** 11 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 136.

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

**2019-20 Influenza Season Week 9—ending February 29, 2020**

**Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists**

**2019-20 Influenza Season Week 9—ending February 29, 2020**

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.9% during week 8, 2020.

### Data at a Glance
February 16—February 22, 2020 (Week 08)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (08)</th>
<th>Previous Week (07)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI</td>
<td>2.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Percentage positive influenza tests</td>
<td>19.0%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity</td>
<td>13.4%</td>
<td>13.6%</td>
</tr>
</tbody>
</table>

1 Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.
2 Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)
3 Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.
4 Percent 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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.9% during week 8, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 19.0% of specimens tested at Oregon labs were positive for influenza during week 8, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive</th>
<th>Flu A</th>
<th>Flu B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>(%)</td>
<td>No.</td>
<td>(%)</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>1782</td>
<td>292</td>
<td>226</td>
<td>66</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>1055</td>
<td>244</td>
<td>128</td>
<td>116</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>104</td>
<td>13</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>489</td>
<td>119</td>
<td>75</td>
<td>44</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>394</td>
<td>57</td>
<td>44</td>
<td>13</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>3824</strong></td>
<td><strong>725</strong></td>
<td><strong>484</strong></td>
<td><strong>241</strong></td>
</tr>
</tbody>
</table>

![Figure 2. Oregon Influenza Laboratory Surveillance](image)
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 30 influenza-associated hospitalizations were reported during week 8 of 2020. In total, there have been 494 hospitalizations; 213 (43.1%) were positive for flu A and 278 (56.9.7%) were positive for flu B. Of the 40 flu A specimens that have been subtyped, 34 (85.0%) were 2009 H1N1 and 5 (15.0%) were H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs</td>
<td>40</td>
<td>8.1</td>
</tr>
<tr>
<td>5-17 yrs</td>
<td>29</td>
<td>5.9</td>
</tr>
<tr>
<td>18-49 yrs</td>
<td>123</td>
<td>24.9</td>
</tr>
<tr>
<td>50-64 yrs</td>
<td>118</td>
<td>23.9</td>
</tr>
<tr>
<td>≥ 65 yrs</td>
<td>184</td>
<td>37.2</td>
</tr>
</tbody>
</table>

**Influenza Outbreaks:** There were 2 influenza outbreaks reported during week 8, 2020. There has been a total of 57 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 34 (59.6%) occurred in a long-term care facility, 18 (31.6%) occurred in a school, and 5 (8.8%) occurred in another setting.

**Figure 4. Number of Influenza Outbreaks in Oregon by Setting, 2019-2020 Season**
**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 7 of 2020 was 3.4%. Regionally, the percent was highest in the Central Oregon and Columbia Gorge region (6.8%) and lowest in the Willamette Valley (2.0%).

**Influenza-Associated Pediatric Mortality Surveillance:** Influenza-associated deaths in children 17 years of age and younger are nationally notifiable. There were no pediatric flu deaths in Oregon reported during week 8, 2020. There has been a total of 1 influenza-associated pediatric death reported to the Oregon Health Authority in the 2019—2020 flu season.
**Immunizations data:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 8 of 2020 (February 22\textsuperscript{nd}). The ALERT IIS to date has received reports of 1.7 million influenza immunizations for this season. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed—current weekly totals will be adjusted upward later.

**Figure 6. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week**

**Figure 7. 2019-2020 Flu Vaccination in ALERT IIS by Epi Week, Cumulative Doses Compared to Last Season**
US Data (from CDC FluView): Key indicators that track flu activity remain high but decreased for the second week in a row. Severity indicators (hospitalizations and deaths) remain moderate to low overall, but hospitalization rates differ by age group, with high rates among children and young adults.

Viruses
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 29.7% last week to 26.4% this week.
- **Public Health Labs:** Numbers of influenza B/Victoria and A(H1N1)pdm09 viruses are approximately equal for the season overall, with continued increases in influenza A(H1N1)pdm09 viruses in recent weeks.

Illness
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 6.1% last week to 5.5% this week. All regions remain above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity decreased slightly from 46 last week to 45 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity decreased from 51 last week to 50 this week.

Severe Disease
- **Hospitalizations:** The overall cumulative hospitalization rate for the season increased to 52.7 per 100,000.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 6.9%, below the epidemic threshold of 7.3%.
- **Pediatric Deaths:** 20 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 125.

Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2019-20 Influenza Season Week 8—ending February 22, 2020

Map above: This map uses the proportion of outpatient visits to ILINet sentinel providers for influenza-like illness (ILI) 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 and Territorial Epidemiologists
2019-20 Influenza Season Week 8—ending February 22, 2020

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx
Oregon Public Health Division

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.1% during week 7, 2020.

Data at a Glance
February 9—February 15, 2020 (Week 07)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (07)</th>
<th>Previous Week (06)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Percentage positive influenza tests&lt;sup&gt;2&lt;/sup&gt;</td>
<td>17.1%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations&lt;sup&gt;3&lt;/sup&gt;</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity&lt;sup&gt;4&lt;/sup&gt;</td>
<td>13.6%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

<sup>1</sup>Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

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

<sup>3</sup>Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

<sup>4</sup>Percent positivity based on data from Oregon’s RSV Laboratory Surveillance System.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 17.1% of specimens tested at Oregon labs were positive for influenza during week 7, 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)
- Oregon Health & Science University (Portland, OR)
- Providence Health (Oregon)
- Kaiser Permanente (Oregon)
- Veteran’s Administration Hospital (Portland, OR)
- Adventist Health (Portland, OR)
- Bay Area Hospital (Coo Bay, OR)
- Curry Health Network (Brookings, OR)
- Mercy Medical Center (Roseburg, OR)
- Sky Lakes Medical Center (Klamath Falls, OR)
- Lake Health District (Lakeview, OR)
- Rogue Valley Medical Center (SW Oregon)
- Good Shepherd Medical Center (Hermiston, OR)
- Grande Ronde Hospital (La Grande, OR)
- Mid-Columbia Medical Center (The Dalles, OR)
- Central Oregon Pediatric Associates (Central Oregon)
- Harney District Hospital (Burns, OR)
- St. Charles (Bend, OR)
- Samaritan Health Services (Lebanon, OR)
- Columbia Memorial Hospital (Astoria, OR)
- PeaceHealth Southwest Medical Center (Vancouver, WA)
- Salem Hospital (Salem, OR)
- Willamette Valley Medical Center (McMinnville, OR)

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1711</td>
<td>224</td>
<td>158</td>
<td>66</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>913</td>
<td>221</td>
<td>101</td>
<td>120</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>94</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>505</td>
<td>105</td>
<td>62</td>
<td>43</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>393</td>
<td>53</td>
<td>38</td>
<td>15</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>3616</strong></td>
<td><strong>618</strong></td>
<td><strong>371</strong></td>
<td><strong>247</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 12 influenza-associated hospitalizations were reported during week 7 of 2020. Of note, 11 of those week 7 hospitalizations were for flu A. In total, there have been 462 hospitalizations; 191 (41.3%) were positive for flu A and 271 (58.7%) were positive for flu B. Of the 32 flu A specimens that have been subtyped, 27 (84.4%) were 2009 H1N1 and 5 (15.6%) were flu A H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season**

<table>
<thead>
<tr>
<th>Case Age Group</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs</td>
<td>40</td>
</tr>
<tr>
<td>5 - 17 yrs</td>
<td>29</td>
</tr>
<tr>
<td>18 - 49 yrs</td>
<td>114</td>
</tr>
<tr>
<td>50 - 64 yrs</td>
<td>108</td>
</tr>
<tr>
<td>65 yrs and over</td>
<td>171</td>
</tr>
<tr>
<td>Total</td>
<td>462</td>
</tr>
</tbody>
</table>

**Table 2. Portland Metro Area Influenza-Associated Hospitalizations by Age, 2019–2020 Season**
Influenza Outbreaks: There were 5 influenza outbreaks reported during week 7, 2020. There have been a total of 55 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 33 (60.0%) occurred in a long-term care facility, 17 (30.9%) occurred in a school, and 5 (9.1%) occurred in another setting.

Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 310 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 7 of 2020 was 3.9%. Regionally, the percent was highest in the Eastern region (7.5%) and lowest in the Willamette Valley (2.1%).
**Immunizations data:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 7 of 2020 (February 15th). The ALERT IIS to date has received reports of 1.65 million influenza immunizations for this season. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.

**Figure 6. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week**

**Figure 7. 2019-2020 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season**
**US Data (from CDC FluView):** Key indicators that track flu activity remain high but decreased slightly this week. Indicators that track overall severity (hospitalizations and deaths) are not high at this point in the season.

**Viruses**
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased from 30.3% last week to 29.6% this week.
- **Public Health Labs:** Numbers of influenza B/Victoria and A(H1N1)pdm09 viruses are approximately equal for the season overall, with continued increases in influenza A(H1N1)pdm09 viruses in recent weeks.

**Illness**
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 6.7% last week to 6.1% this week. All regions remain above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity remained at 46 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity remained at 51 this week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season increased to 47.4 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 6.8%, below the epidemic threshold of 7.3%.
- **Pediatric Deaths:** Thirteen influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 105.

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**Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILI Net**

**2019-20 Influenza Season Week 6 ending February 08, 2020**

**Map above:** This map uses the proportion of outpatient visits to ILI Net 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 and Territorial Epidemiologists**

**Week ending February 08, 2020—Week 6**

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.9% during week 6, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 17.4% of specimens tested at Oregon labs were positive for influenza during week 6, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

**Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season**

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive</th>
<th>Flu A</th>
<th>Flu B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. (%)</td>
<td>No. (%)</td>
<td>No. (%)</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>1123</td>
<td>141 12.6%</td>
<td>98 69.5%</td>
<td>43 30.5%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>624</td>
<td>135 21.6%</td>
<td>61 45.2%</td>
<td>74 54.8%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>115</td>
<td>21 18.3%</td>
<td>11 52.4%</td>
<td>10 47.6%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>490</td>
<td>107 21.8%</td>
<td>54 50.5%</td>
<td>53 49.5%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>53</td>
<td>14 26.4%</td>
<td>2 14.3%</td>
<td>12 85.7%</td>
</tr>
<tr>
<td>State Total</td>
<td>2405</td>
<td>418 17.4%</td>
<td>226 54.1%</td>
<td>192 45.9%</td>
</tr>
</tbody>
</table>

**Figure 2. Oregon Influenza Laboratory Surveillance**

Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 19 influenza-associated hospitalizations were reported during week 6 of 2020. In total, there have been 444 hospitalizations; 175 (39.4%) were positive for flu A and 269 (60.6%) were positive for flu B. Of the 32 flu A specimens that have been subtyped, 27 (84.4%) were 2009 H1N1 and 5 (15.6%) were flu A H3. All 22 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There were 3 influenza outbreaks reported during Week 6, 2020. There have been a total of 50 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 27 occurred in a long-term care facility, 17 occurred in a school, and 6 occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 309 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 6 of 2020 was 3.5%. Regionally, the percent was highest in the Central and Gorge region (6.5%) and lowest in the Willamette Valley (1.9%).

Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020
Immunizations data: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 6 of 2020 (February 8th). To date, 1.5 million influenza immunizations given to Oregonians have been reported to ALERT IIS this season. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.
**US Data (from CDC FluView):** Key indicators that track flu activity remain high and, after falling during the first two weeks of the year, increased over the last four weeks. Indicators that track overall severity (hospitalizations and deaths) are not high at this point in the season.

**Viruses**
- **Clinical Labs:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased from 30.1% last week to 30.8% this week.
- **Public Health Labs:** Numbers of influenza B/Victoria and A(H1N1)pdm09 viruses are approximately equal for the season overall, with continued increases in influenza A(H1N1)pdm09 viruses in recent weeks.

**Illness**
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) increased from 6.6% last week to 6.8% this week. All regions remain above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity decreased slightly from 47 last week to 46 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity remained at 51 this week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season increased to 41.9 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 6.8%, below the epidemic threshold of 7.2%.
- **Pediatric Deaths:** Fourteen new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 92.

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

**2019-20 Influenza Season Week 6 ending February 08, 2020**

*Map above:* 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 and Territorial Epidemiologists*

**Week ending February 08, 2020— Week 6**

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.2% during week 5, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 19.9% of specimens tested at Oregon labs were positive for influenza during week 5, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive</th>
<th>Flu A</th>
<th>Flu B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. (%</td>
<td>No. (%)</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>2053</td>
<td>364 (17.7%)</td>
<td>227 (62.4%)</td>
<td>137 (37.6%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>1032</td>
<td>222 (21.5%)</td>
<td>82 (36.9%)</td>
<td>140 (63.1%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>117</td>
<td>23 (19.7%)</td>
<td>7 (30.4%)</td>
<td>16 (69.6%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>501</td>
<td>146 (29.1%)</td>
<td>68 (46.6%)</td>
<td>78 (53.4%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>527</td>
<td>87 (16.5%)</td>
<td>42 (48.3%)</td>
<td>45 (51.7%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>4230</strong></td>
<td><strong>842 (19.9%)</strong></td>
<td><strong>426 (50.6%)</strong></td>
<td><strong>416 (49.4%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 33 influenza-associated hospitalizations were reported during week 5 of 2020. In total, there have been 418 hospitalizations: 160 (38.3%) were positive for flu A and 258 (61.72%) were positive for flu B. Of the 32 flu A specimens that have been subtyped, 27 (84.4%) were 2009 H1N1 and 5 (15.6%) were flu A H3. All 22 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There were 4 influenza outbreaks reported during Week 5, 2020. There have been a total of 45 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 23 occurred in a long-term care facility, 17 occurred in a school, and 5 occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 309 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 5 of 2020 was 3.9%. Regionally, the percent was highest in the Central and Gorge region (5.3%) and lowest in the Willamette Valley (2.5%).

Immunizations data: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 5 of 2020 (February 1st). As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed—current weekly totals will be adjusted upward later.
Immunizations data (continued): Oregon Immunizations Program is currently projecting a 2019-20 influenza immunization rate of 45.5% among Oregonians of all ages. This is slightly above last season’s rate of 45.2%. For this week, a table is included for projected all-age influenza immunization rates by race (single categories) and ethnicity. Consistent with prior seasons, Hispanic Oregonians have lower influenza immunization rates than other groups, but all groups remain substantially below target immunization rates.

Table 2. Projected Oregon 2019-20 All-Age Influenza Immunization Rates

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>46.6%</td>
</tr>
<tr>
<td>Black</td>
<td>45.5%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>46.2%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>45.5%</td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>40.4%</td>
</tr>
<tr>
<td>All</td>
<td>45.5%</td>
</tr>
</tbody>
</table>
US Data (from CDC FluView): Key indicators that track flu activity remain high and, after falling during the first two weeks of the year, increased over the last three weeks. Indicators that track overall severity (hospitalizations and deaths) are not high at this point in the season.

**Viruses**
- **Clinical Labs**: The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased from 28.4% last week to 29.8% this week.
- **Public Health Labs**: Numbers of influenza B/Victoria and A(H1N1)pdm09 viruses are approximately equal for the season overall, with continued increases in influenza A(H1N1)pdm09 viruses in recent weeks.

**Illness**
- **ILI Net Outpatient Illness**: Visits to health care providers for influenza-like illness (ILI) increased from 6.0% last week to 6.7% this week. All regions remain above their baselines.
- **ILI Net Activity Map**: The number of jurisdictions experiencing high ILI activity increased from 44 last week to 47 this week.
- **Geographic Spread**: The number of jurisdictions reporting regional or widespread influenza activity remained at 51 this week.

**Severe Disease**
- **Hospitalizations**: The overall hospitalization rate for the season increased to 35.5 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality**: The percentage of deaths attributed to pneumonia and influenza is 7.1%, below the epidemic threshold of 7.2%.
- **Pediatric Deaths**: Ten new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 78.

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

2019-20 Influenza Season Week 5 ending February 01, 2020

*Map above*: 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 and Territorial Epidemiologists**

Week ending February 01, 2020— Week 5

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.3% during week 4, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 24.7% of specimens tested at Oregon labs were positive for influenza during week 4, 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>2108</td>
<td>441 20.9%</td>
<td>238 54.0%</td>
<td>203 46.0%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>914</td>
<td>270 29.5%</td>
<td>86 31.9%</td>
<td>184 68.1%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>113</td>
<td>16 14.2%</td>
<td>3 18.8%</td>
<td>13 81.3%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>471</td>
<td>141 29.9%</td>
<td>71 50.4%</td>
<td>70 49.6%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>482</td>
<td>140 29.0%</td>
<td>43 30.7%</td>
<td>97 69.3%</td>
</tr>
<tr>
<td>State Total</td>
<td>4088</td>
<td>1008 24.7%</td>
<td>441 43.8%</td>
<td>567 56.3%</td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations**: In Clackamas, Multnomah, and Washington counties 22 influenza-associated hospitalizations were reported during week 4 of 2020. In total, there have been 382 hospitalizations; 134 (35.1%) were positive for flu A and 248 (64.9%) were positive for flu B. Of the 15 flu A specimens that have been subtyped, 11 (73.3%) were 2009 H1N1 and 4 (26.7%) were flu A H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks**: There were 4 influenza outbreaks reported during Week 4, 2020. There have been a total of 41 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season; 22 occurred in a long-term care facility, 13 occurred in a school, and 3 occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 309 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 4 of 2020 was 3.6%. Regionally, the percent was highest in the Central and Gorge region (5.8%) and lowest in the North Coast (2.3%).

**Immunizations data:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 4 of 2020 (January 25th). At this time, new influenza immunization seeking appears to be dropping. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed- current weekly totals will be adjusted upward later.
Immunizations data (continued): For this week, we’ve added preliminary estimates of influenza immunization rates by age.

Figure 7. 2019-2020 Flu Vaccination in ALERT IIS by Epi Week, Cumulative Doses Compared to Last Season

Figure 8. Oregon 2019-20 Influenza Immunization Rates by Age
US Data (from CDC FluView): Key indicators that track flu activity remain high and, after falling during the first two weeks of the year, increased over the last two weeks. Indicators that track severity (hospitalizations and deaths) are not high at this point in the season.

Viruses
- **Clinical Labs**: The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased from 25.7% last week to 27.7% this week.
- **Public Health Labs**: Nationally, B/Victoria viruses are the predominant virus this season; however, during recent weeks, slightly more A(H1N1)pdm09 than B/Victoria viruses have been reported.

Illness
- **ILI Net Outpatient Illness**: Visits to health care providers for influenza-like illness (ILI) increased from 5.1% last week to 5.7% this week. All regions remain above their baselines.
- **ILI Net Activity Map**: The number of jurisdictions experiencing high ILI activity increased from 37 last week to 44 this week.
- **Geographic Spread**: The number of jurisdictions reporting regional or widespread influenza activity increased to 51 this week.

Severe Disease
- **Hospitalizations**: The overall hospitalization rate for the season increased to 29.7 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality**: The percentage of deaths attributed to pneumonia and influenza is 6.7%, below the epidemic threshold of 7.2%.
- **Pediatric Deaths**: Fourteen new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 68.

Influenza-like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2019-20 Influenza Season Week 4 ending January 25, 2020

Map above: 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 and Territorial Epidemiologists
Week ending January 25, 2020—Week 4

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveill.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.1% during week 3, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 19.8% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive (%)</th>
<th>Flu A (%)</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>2173</td>
<td>407 (18.7%)</td>
<td>158 (38.8%)</td>
<td>249 (61.2%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>1032</td>
<td>211 (20.4%)</td>
<td>41 (19.4%)</td>
<td>170 (80.6%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>191</td>
<td>38 (19.9%)</td>
<td>14 (36.8%)</td>
<td>24 (63.2%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>405</td>
<td>96 (23.7%)</td>
<td>47 (49.0%)</td>
<td>49 (51.0%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>444</td>
<td>88 (19.8%)</td>
<td>22 (25.0%)</td>
<td>66 (75.0%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>4245</strong></td>
<td><strong>840 (19.8%)</strong></td>
<td><strong>282 (33.6%)</strong></td>
<td><strong>558 (66.4%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 36 influenza-associated hospitalizations were reported during week 3 of 2020. In total, there have been 357 hospitalizations; 115 (32.2%) were positive for flu A and 242 (67.8%) were positive for flu B. Of the 15 flu A specimens that have been subtyped, 11 (73.3%) were 2009 H1N1 and 4 (26.7%) were flu A H3. All 22 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There were 3 influenza outbreaks reported during Week 3, 2020. There have been a total of 35 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 21 occurred in a long-term care facility, 13 occurred in a school, and 1 occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 186 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 3 of 2020 was 4.2%. Regionally, the percent was highest in the Central and Gorge region (6.9%) and lowest in the North coast and Willamette Valley (2.4%).

Immunizations data: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 3 of 2020 (January 18th). Immunization patterns continue to closely match to last season’s patterns at this time of year. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.

Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020

Figure 6. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week
Immunizations data (continued): This week, we are also including a classic epidemiological graph of rates of influenza immunizations per week compared to last season.

Figure 7. 2019-2020 Flu Vaccination in ALERT IIS by Epi Week, Cumulative Doses Compared to Last Season

Figure 8. Weekly Influenza Immunization Rate Among Not Yet Immunized Oregonians, 2019-20 Compared to 2018-19 by Epi Week
US Data (from CDC FluView): Key indicators that track flu activity remain high and, after falling during the first two weeks of the year, increased slightly this week. Indicators that track severity (hospitalizations and deaths) are not high at this point in the season.

VIRUSES
- **Clinical Lab**: The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased from 23.4% last week to 25.6% this week.
- **Public Health Lab**: Nationally, B/Victoria viruses are the predominant viruses this season; however, during recent weeks, approximately equal numbers of B/Victoria and A(H1N1)pdm09 viruses have been reported.
- **Virus Characterization**: Genetic and antigenic characterization and antiviral susceptibility of influenza viruses collected in the U.S. are summarized in this report.

ILLNESS
- **ILI*Net Outpatient Illness**: Visits to health care providers for influenza-like illness (ILI) increased from 4.7% last week to 5.0% this week. All regions remain above their baselines.
- **ILI*Net Activity Map**: The number of jurisdictions experiencing high ILI activity increased from 34 last week to 37 this week.
- **Geographic Spread**: The number of jurisdictions reporting regional or widespread influenza activity remained at 50 this week.

SEVERE DISEASE
- **Hospitalizations**: The overall hospitalization rate for the season increased to 24.1 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality**: The percentage of deaths attributed to pneumonia and influenza decreased from 7.1% to 6.7% and is below the epidemic threshold.
- **Pediatric Deaths**: Fifteen new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 54.

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*ILI*Net Outpatient Illness Indicator Determined by Data Reported to ILI*Net
2019-20 Influenza Season Week 3 ending Jan 18, 2020

**Map above**: This map uses the proportion of outpatient visits to ILI*Net 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 and Territorial Epidemiologists**
Week Ending Jan 18, 2020 - Week 3

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx
Data at a Glance
January 5—January 11, 2020 (Week 02)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (02)</th>
<th>Previous Week (01)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI1</td>
<td>3.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Percentage positive influenza tests2</td>
<td>23.1%</td>
<td>26.6%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations3</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity4</td>
<td>11.5%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

1 Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.
2 Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS)
3 Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.
4 Percent 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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.8% during week 2, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 23.1% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No. (%</th>
<th>Flu A No. (%)</th>
<th>Flu B No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>2608</td>
<td>560 (21.5%)</td>
<td>136 (24.3%)</td>
<td>424 (75.7%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>839</td>
<td>158 (18.8%)</td>
<td>30 (19.0%)</td>
<td>128 (81.0%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>304</td>
<td>75 (24.7%)</td>
<td>9 (12.0%)</td>
<td>66 (88.0%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>495</td>
<td>135 (27.3%)</td>
<td>40 (29.6%)</td>
<td>95 (70.4%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>567</td>
<td>184 (32.5%)</td>
<td>25 (13.6%)</td>
<td>159 (86.4%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>4813</strong></td>
<td><strong>1112 (23.1%)</strong></td>
<td><strong>240 (21.6%)</strong></td>
<td><strong>872 (78.4%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 30 influenza-associated hospitalizations were reported during week 2 of 2020. In total, there have been 315 hospitalizations; 93 (30.5%) were positive for flu A and 212 (69.5%) were positive for flu B. Of the 12 flu A specimens that have been subtyped, 8 (66.7%) were 2009 H1N1 and 4 (33.3%) were flu A H3. All 22 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks:** There were 6 influenza outbreaks reported during Week 2, 2020. There have been a total of 32 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 19 occurred in a long-term care facility, 12 occurred in a school, and 1 occurred in another setting.
**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 186 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 2 of 2020 was 4.2%. Regionally, the percent was highest in the Central and Gorge region (6.9%) and lowest in the North coast (2.6%).

**Vaccination Information:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 2 of 2020 (January 11th). Currently we are seeing a January uptick in immunizations, in line with prior seasons. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed- current weekly totals will be adjusted upward later.
**US Data (from CDC FluView):** Key indicators that track flu activity declined slightly but remain high. Indicators that track severity (hospitalizations and deaths) are not high at this point in the season.

**Viruses**
- **Clinical Lab:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 23.6% last week to 22.9% this week.
- **Public Health Lab:** Nationally, B/Victoria viruses are the predominant viruses this season; however, during recent weeks, approximately equal numbers of B/Victoria and A(H1N1)pdm09 viruses have been reported.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of influenza viruses collected in the U.S. are summarized in this report.

**Illness**
- **ILI Net Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 5.7% last week to 4.7% this week. All regions remain above their baselines.
- **ILI Net Activity Map:** The number of jurisdictions experiencing high ILI activity decreased from 36 last week to 34 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity remained at 50 this week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season increased to 19.9 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza increased from 6.0% to 6.9% but remains below the epidemic threshold.
- **Pediatric Deaths:** Seven new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 39.

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

*2019-20 Influenza Season Week 2 ending Jan 11, 2020*

**Map above:** 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 and Territorial Epidemiologists**

*Week Ending Jan 11, 2020 - Week 2*

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 5.0% during week 1, 2020.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 26.6% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coe Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No. (%)</th>
<th>Flu A No. (%)</th>
<th>Flu B No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>3121</td>
<td>832 26.7%</td>
<td>146 17.5%</td>
<td>686 82.5%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>862</td>
<td>220 24.9%</td>
<td>36 17.3%</td>
<td>162 82.7%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>171</td>
<td>63 36.8%</td>
<td>14 22.2%</td>
<td>49 77.8%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>567</td>
<td>138 24.3%</td>
<td>35 25.4%</td>
<td>103 74.6%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>754</td>
<td>208 27.6%</td>
<td>20 9.6%</td>
<td>188 90.4%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>5495</strong></td>
<td><strong>1461 26.6%</strong></td>
<td><strong>253 17.3%</strong></td>
<td><strong>1208 82.7%</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 84 influenza-associated hospitalizations were reported during week 1 of 2020. In total, there have been 274 hospitalizations; 84 (30.7%) were positive for flu A and 190 (69.3%) were positive for flu B. Of the 7 flu A specimens that have been subtyped, 4 (57.1%) were 2009 H1N1 and 3 (42.9%) were flu A H3. All 21 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks:** There was 1 influenza outbreak reported during Week 1, 2020. There have been a total of 26 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 13 occurred in a long-term care facility, 12 occurred in a school, and 1 occurred in another setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 186 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 1 of 2020 was 4.9%. Regionally, the percent was highest in the Central and Gorge region (7.9%) and lowest in the North Coast region (2.2%).

Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020

Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 1 of 2020 (January 4th). As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed; current weekly totals will be adjusted upward later.

Figure 6. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week
Vaccination Information (continued): For this week, we are including a comparison by age of influenza immunizations given this season compared to what was reported last season at this time (Figure 8). Overall, there is a slight drop in early childhood influenza immunizations, a moderate increase in older child and adolescent influenza immunizations, and an increase in non-senior adult influenza immunizations.
US Data (from CDC FluView): Key indicators that track flu activity remain high, but indicators that track severity (hospitalizations and deaths) are not high at this point in the season.

**Viruses**
- **Clinical Lab:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories decreased from 26.4% last week to 23.3% this week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 viruses. The predominant virus varies by region and age group. There is low circulation of A(H3N2) and B/Yamagata viruses.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of influenza viruses collected in the U.S. this season is summarized in this report.

**Illness**
- **ILI NET Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) decreased from 7.0% last week to 5.8% this week. All regions remain above their baselines.
- **ILI NET Activity Map:** The number of jurisdictions experiencing high ILI activity decreased from 37 last week to 36 this week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity increased to 50 this week compared to 48 last week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season increased to 14.6 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 5.8% which is below the epidemic threshold.
- **Pediatric Deaths:** Five new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 32.

Map above: 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 and Territorial Epidemiologists
Week Ending Jan 04, 2020 - Week 1

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 5.7% during week 52, 2019.

### Data at a Glance
December 22—December 28, 2019 (Week 52)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (52)</th>
<th>Previous Week (51)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5.7%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Percentage positive influenza tests&lt;sup&gt;2&lt;/sup&gt;</td>
<td>31.2%</td>
<td>30.8%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations&lt;sup&gt;3&lt;/sup&gt;</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity&lt;sup&gt;4&lt;/sup&gt;</td>
<td>11.1%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

<sup>1</sup> Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

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

<sup>3</sup> Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

<sup>4</sup> Percent positivity based on data from Oregon’s RSV Laboratory Surveillance System.

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![Figure 1. Percentage of ED Visits for ILI, Oregon ESSENCE Syndromic Surveillance, 2016–2017, 2017–2018, 2018-2019, 2019-2020](image-url)
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 31.2% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>2627</td>
<td>825</td>
<td>101</td>
<td>724</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>770</td>
<td>174</td>
<td>45</td>
<td>129</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>394</td>
<td>158</td>
<td>10</td>
<td>148</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>584</td>
<td>186</td>
<td>25</td>
<td>161</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>709</td>
<td>243</td>
<td>11</td>
<td>232</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>5084</strong></td>
<td><strong>1586</strong></td>
<td><strong>192</strong></td>
<td><strong>1394</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 44 influenza-associated hospitalizations were reported during week 52 of 2019. In total, there have been 187 hospitalizations; 63 (29.2%) were positive for flu A and 153 (70.8%) were positive for flu B. Of the 7 flu A specimens that have been subtyped, 4 (57.1%) were 2009 H1N1 and 3 (42.9%) were flu A H3. All 18 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There were 4 influenza outbreaks reported during Week 52, 2019. There have been a total of 26 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 13 occurred in a long-term care facility, 12 occurred in a school, and 1 occurred in another setting.
**Outpatient Influenza-like Illness Surveillance**: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 186 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 52 of 2019 was 6.4%. Regionally, the percent was highest in the Central and Gorge region (9.3%) and lowest in the Southern region (3.6%).

**Vaccination Information**: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 52 of 2019 (December 28th). To date, 1.5 million Oregonians have received an influenza immunization in this season. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.
US Data (from CDC FluView): Seasonal influenza activity in the United States is high and continues to increase. Activity has been elevated for eight weeks.

Viruses
- **Clinical Lab:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased from 23.0% last week to 26.3% this week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 viruses. The predominant virus varies by region and age group. There is low circulation of A(H3N2) and B/Yamagata viruses.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of influenza viruses collected in the U.S. this season is summarized in this report.

Illness
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) increased from 5.1% last week to 6.9% this week. All regions were above their baselines and continuing to increase.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity increased to 37 this week compared to 28 last week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread influenza activity increased to 50 this week compared to 48 last week.

Severe Disease
- **Hospitalizations:** The overall hospitalization rate for the season increased to 9.2 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza is 5.5% which is below the epidemic threshold.
- **Pediatric Deaths:** Five new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported this week. The total for the season is 27.

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

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists

Week Ending Dec 28, 2019 - Week 52

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 4.5% during week 51, 2019.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 30.8% 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)
- Oregon Health & Science University (Portland, OR)
- Providence Health (Oregon)
- Kaiser Permanente (Oregon)
- Veteran's Administration Hospital (Portland, OR)
- Adventist Health (Portland, OR)
- Bay Area Hospital (Coos Bay, OR)
- Curry Health Network (Brookings, OR)
- Mercy Medical Center (Roseburg, OR)
- Sky Lakes Medical Center (Klamath Falls, OR)
- Lake Health District (Lakeview, OR)
- Rogue Valley Medical Center (SW Oregon)
- Good Shepherd Medical Center (Hermiston, OR)
- Grande Ronde Hospital (La Grande, OR)
- Mid-Columbia Medical Center (The Dalles, OR)
- Central Oregon Pediatric Associates (Central Oregon)
- Harney District Hospital (Burns, OR)
- St. Charles (Bend, OR)
- Samaritan Health Services (Lebanon, OR)
- Columbia Memorial Hospital (Astoria, OR)
- PeaceHealth Southwest Medical Center (Vancouver, WA)
- Salem Hospital (Salem, OR)
- Willamette Valley Medical Center (McMinnville, OR)

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

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<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1954</td>
<td>628</td>
<td>47</td>
<td>581</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>674</td>
<td>135</td>
<td>24</td>
<td>111</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>314</td>
<td>134</td>
<td>18</td>
<td>116</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>595</td>
<td>208</td>
<td>27</td>
<td>181</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>606</td>
<td>172</td>
<td>10</td>
<td>162</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>4143</strong></td>
<td><strong>1277</strong></td>
<td><strong>126</strong></td>
<td><strong>1151</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 25 influenza-associated hospitalizations were reported during week 51 of 2019. In total, there have been 134 hospitalizations; 33 (24.6%) were positive for flu A and 101 (75.4%) were positive for flu B. Of the 4 flu A specimens that have been subtyped, 2 (50.0%) were 2009 H1N1 and 2 (50.0%) were flu A H3. All 16 flu B specimens that were differentiated were Victoria lineage.

Influenza Outbreaks: There were 11 influenza outbreaks reported during Week 51, 2019. There have been a total of 22 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 9 occurred in a long-term care facility, 12 occurred in a school, and 1 occurred in an other setting.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 186 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 51 of 2019 was 5.3%. Regionally, the percent was highest in the Central and Gorge region (7.6%) and lowest in the North Coast (1.8%).

Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epi week 51 of 2019 (December 21st). New influenza immunization seeking continued through Epiweek 51 at a level slightly above last season.
US Data (from CDC FluView): Seasonal influenza activity in the United States continues to increase and has been elevated for seven weeks.

**Viruses**
- **Clinical Lab:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased to 22.1% this week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 viruses. The predominant virus varies by region and age group.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of viruses collected in the U.S. this season are now being reported.

**Illness**
- **ILINet Outpatient Illness:** Visits to health care providers for influenza-like illness (ILI) increased to 5.1%. ILI has been at or above the national baseline of 2.4% for seven weeks. All regions were at or above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity increased to 28 this week compared to 21 last week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread activity stayed the same as last week at 48.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season increased to 6.6 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza increased to 5.7% but remains below the epidemic threshold.
- **Pediatric Deaths:** Three new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week. The total for the season is 22.

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

*2019-20 Influenza Season Week 51 ending Dec 21, 2019*

*Map above:* 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 and Territorial Epidemiologists**

*Week Ending Dec 21, 2019 - Week 51*

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx)
Oregon Public Health Division

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.6% during week 50, 2019.

### Data at a Glance
December 08—December 14, 2019 (Week 50)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (50)</th>
<th>Previous Week (49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Percentage positive influenza tests&lt;sup&gt;2&lt;/sup&gt;</td>
<td>27.3%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations&lt;sup&gt;3&lt;/sup&gt;</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity&lt;sup&gt;4&lt;/sup&gt;</td>
<td>8.1%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

1 Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.
2 Percent positivity based on data from Oregon reporters to the National Respiratory and Enteric Virus Surveillance System (NREVSS).
3 Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.
4 Percent positivity based on data from Oregon’s RSV Laboratory Surveillance System.

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Week Ending Date of 2019-2020 Season

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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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 3.6% during week 50, 2019.
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](https://www.cdc.gov/).

Table 1 shows the tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 27.3% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Adventist Health (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Grande Ronde Hospital, (La Grande, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Samaritan Health Services (Lebanon, OR), Columbia Memorial Hospital (Astoria, OR), PeaceHealth Southwest Medical Center (Vancouver, WA), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No. (%)</th>
<th>Flu A No. (%)</th>
<th>Flu B No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>2257</td>
<td>664 (29.4%)</td>
<td>47 (7.1%)</td>
<td>617 (92.9%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>580</td>
<td>70 (12.1%)</td>
<td>25 (35.7%)</td>
<td>45 (64.3%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>156</td>
<td>66 (42.3%)</td>
<td>7 (0.0%)</td>
<td>59 (89.4%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>350</td>
<td>95 (27.1%)</td>
<td>19 (20.0%)</td>
<td>76 (80.0%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>466</td>
<td>145 (31.1%)</td>
<td>5 (3.4%)</td>
<td>140 (96.6%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>3809</strong></td>
<td><strong>1040 (27.3%)</strong></td>
<td><strong>103 (9.9%)</strong></td>
<td><strong>937 (90.1%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance

Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 31 influenza-associated hospitalizations were reported during week 50 of 2019. In total, there have been 103 hospitalizations; 27 (26.2%) were positive for flu A and 76 (73.8%) were positive for flu B. Of the 3 flu A specimens that have been subtyped, 2 (66.7%) were 2009 H1N1 and 1 (33.3%) was flu A H3. All 14 flu B specimens that were differentiated were Victoria lineage.

**Influenza Outbreaks:** There were 3 influenza outbreaks reported during Week 50, 2019. There have been a total of 9 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 4 occurred in a long-term care facility, and 5 occurred in a school.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 186 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 50 of 2019 was 4.3%. Regionally, the percent was highest in the Eastern region (6.3%) and lowest in the North Coast (2.3%).

Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 50 of 2019 (December 14th). At this time, new influenza immunization seeking remains at or above prior season levels (Figures 6-7).
US Data (from CDC FluView): Seasonal influenza activity in the United States continues to increase and has been elevated for six weeks now.

**Viruses**
- **Clinical Lab:** The percentage of respiratory specimens testing positive for influenza at clinical laboratories increased to 16.3% this week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 viruses. The predominant virus varies by region and age group.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of viruses collected in the U.S. this season are now being reported.

**Illness**
- **ILIOutpatient Illness:** Visits to health care providers for influenza-like illness (ILI) increased to 3.9%. ILI has been at or above the national baseline of 2.4% for six weeks. All regions were at or above their baselines.
- **ILIOut Activity Map:** The number of jurisdictions experiencing high ILI activity increased to 21 this week compared to 12 last week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread activity increased to 48 this week from 38 last week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season increased to 5.5 per 100,000. This is similar to what has been seen at this time during recent seasons.
- **P&I Mortality:** The percentage of deaths attributed to pneumonia and influenza increased to 5.5% but remains below the epidemic threshold.
- **Pediatric Deaths:** Nine new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week. The total for the season is 19.

*Map above:* 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 and Territorial Epidemiologists Week Ending Dec 14, 2019 - Week 50*

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx
Oregon Public Health Division

Published December 13, 2019

**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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.6% during week 49, 2019.

### Data at a Glance
**December 01—December 07, 2019 (Week 49)**

<table>
<thead>
<tr>
<th></th>
<th>Current Week (49)</th>
<th>Previous Week (48)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of emergency department visits for ILI</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Percentage positive influenza tests</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>19.4%</td>
<td>14.0%</td>
</tr>
<tr>
<td><strong>Influenza-associated hospitalizations</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td><strong>Reported influenza outbreaks</strong></td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Influenza-associated pediatric mortality</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Respiratory Syncytial Virus (RSV) activity</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
<td>6.1%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

<sup>1</sup>Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

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

<sup>3</sup>Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

<sup>4</sup>Percent positivity based on data from Oregon’s RSV Laboratory Surveillance System.

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![Figure 1. Percentage of ED Visits for ILI, Oregon ESSENCE Syndromic Surveillance, 2016–2017, 2017–2018, 2018-2019, 2019-2020](image-url)
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 19.4% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Positive (%)</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
<th>Flu A (%)</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1744</td>
<td>393</td>
<td>22.5%</td>
<td>33</td>
<td>360</td>
<td>8.4%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>509</td>
<td>51</td>
<td>10.0%</td>
<td>14</td>
<td>37</td>
<td>27.5%</td>
<td>72.5%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>90</td>
<td>25</td>
<td>27.8%</td>
<td>1</td>
<td>24</td>
<td>0.0%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>300</td>
<td>59</td>
<td>19.7%</td>
<td>13</td>
<td>46</td>
<td>22.0%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>295</td>
<td>41</td>
<td>13.9%</td>
<td>3</td>
<td>38</td>
<td>7.3%</td>
<td>92.7%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>2938</strong></td>
<td><strong>569</strong></td>
<td><strong>19.4%</strong></td>
<td><strong>64</strong></td>
<td><strong>505</strong></td>
<td><strong>11.2%</strong></td>
<td><strong>88.8%</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 14 influenza-associated hospitalizations were reported during week 49 of 2019. In total, there have been 60 hospitalizations; 15 (25.0%) were positive for flu A and 45 (75.0%) were positive for flu B. One specimen has been subtyped as flu A H1N1.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>5-17 yrs</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>18-49 yrs</td>
<td>13</td>
<td>21.7</td>
</tr>
<tr>
<td>50-64 yrs</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>≥ 65 yrs</td>
<td>22</td>
<td>36.7</td>
</tr>
</tbody>
</table>

Influenza Outbreaks: There was 1 influenza outbreak reported during Week 49, 2019. There have been a total of 6 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 3 occurred in a long-term care facility, and 3 occurred in a school.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 146 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 49 of 2019 was 3.5%. Regionally, the percent was highest in the Eastern region (6.6%) and lowest in the North Coast (1.9%).
Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through epi week 49 of 2019 (December 7th). Epi week 49 reporting covers the National Influenza Vaccination Week (NIVW- December 2nd to 8th), which was established by the CDC in 2005 to highlight the importance of flu vaccinations through the holiday season. Along with the NIVC we saw a spike upwards in new influenza immunizations at the start of December, and influenza immunization totals continue to run or above last season’s levels for all age groups in Oregon. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.

Figure 6: 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epi Week

Figure 7: 2019-2020 Flu Vaccination in ALERT IIS by Epi Week, Cumulative Doses Compared to Last Season
US Data (from CDC FluView):
Seasonal influenza activity in the United States has been elevated for five weeks and continues to increase.

**Viruses**
- **Clinical Lab:** 11.3% of respiratory specimens tested by clinical laboratories were positive for influenza viruses. This is higher than the previous week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 and A(H3N2) viruses. The predominant virus varies by region and age group.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of viruses collected in the U.S. this season are now being reported.

**Illness**
- **ILINet Outpatient Illness:** 3.2% of visits to health care providers were for influenza-like illness (ILI). ILI has been at or above the national baseline of 2.4% for five weeks. All regions were at or above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity decreased to 12 this week compared to 13 last week. In addition, 12 jurisdictions had moderate activity compared to 15 last week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread activity increased to 38 this week from 30 last week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season is 3.9 per 100,000. This is similar to what has been seen at this time during other recent seasons.
- **P&I Mortality:** 5.0% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 6.5%.
- **Pediatric Deaths:** Four new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week. The total for the season is 10.

**Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists**
Week Ending Dec 07, 2019 - Week 49

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.1% during week 48, 2019.

**Data at a Glance**
**November 24—November 30, 2019 (Week 48)**

<table>
<thead>
<tr>
<th></th>
<th>Current Week (48)</th>
<th>Previous Week (47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI¹</td>
<td>2.1%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Percentage positive influenza tests²</td>
<td>14.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations³</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity⁴</td>
<td>5.8%</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 2.1% during week 48, 2019.*
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 14.0% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
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<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive (%)</th>
<th>Flu A (%)</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1313</td>
<td>220 16.8%</td>
<td>19 8.6%</td>
<td>201 91.4%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>382</td>
<td>25 6.5%</td>
<td>6 24.0%</td>
<td>19 76.0%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>34</td>
<td>6 17.6%</td>
<td>0 0.0%</td>
<td>6 100.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>210</td>
<td>35 16.7%</td>
<td>9 25.7%</td>
<td>26 74.3%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>239</td>
<td>19 7.9%</td>
<td>2 10.5%</td>
<td>17 89.5%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>2178</strong></td>
<td><strong>305 14.0%</strong></td>
<td><strong>36 11.8%</strong></td>
<td><strong>269 88.2%</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 16 influenza-associated hospitalizations were reported during week 48 of 2019. In total, there have been 45 hospitalizations; 14 (31.1%) were positive for flu A and 31 (68.9%) were positive for flu B. One specimen has been subtyped as flu A H1N1.

**Influenza Outbreaks:** There were 4 influenza outbreaks reported during Week 48, 2019. There have been a total of 5 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 3 occurred in a long-term care facility, and 2 occurred in a school.
Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 146 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 48 of 2019 was 2.7%. Regionally, the percent was highest in the Eastern region (3.8%) and lowest in the North Coast (1.3%).

Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020

- Central and Gorge
- Eastern
- Southern
- North Coast
- Portland Metro
- Willamette Valley

Week Ending Date

0.0% 1.0% 2.0% 3.0% 4.0% 5.0% 6.0% 7.0% 8.0% 9.0% 10.0%
Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 48 of 2019 (November 30th). This week’s data shows the expected drop in immunization over the Thanksgiving holiday. Influenza immunization totals continue to run at a comparable level to last season. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed—current weekly totals will be adjusted upward later.
US Data (from CDC FluView):
Seasonal influenza activity in the United States has been elevated for four weeks and continues to increase.

**Viruses**
- **Clinical Lab:** 10.2% of respiratory specimens tested by clinical laboratories were positive for influenza viruses. This is higher than the previous week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 and A (H3N2) viruses, but the predominant virus varies by region and age group.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of viruses collected in the U.S. this season is now being reported.

**Illness**
- **ILI/Net Outpatient Illness:** 3.5% of visits to health care providers were for influenza-like illness (ILI). ILI has been at or above the national baseline of 2.4% for four weeks. Nine of 10 regions were at or above their baselines.
- **ILI/Net Activity Map:** The number of jurisdictions experiencing high ILI activity increased to 13 this week, compared to 8 last week. In addition, 15 jurisdictions had moderate activity compared to 7 last week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread activity increased to 24 this week from 15 last week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season is 2.7 per 100,000. This is similar to what has been seen at this time during other recent seasons.
- **P&I Mortality:** 4.8% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 6.4%.
- **Pediatric Deaths:** One new influenza-associated pediatric death occurring during the 2019-2020 season was reported to CDC this week. The total for the season to date is 6.

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.7% during week 47, 2019.
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](https://www.cdc.gov).

Table 1 shows the tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 10.0% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

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**Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season**

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Positive (%)</th>
<th>Flu A No.</th>
<th>Flu A (%)</th>
<th>Flu B No.</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1166</td>
<td>143</td>
<td>12.3%</td>
<td>15</td>
<td>10.5%</td>
<td>128</td>
<td>89.5%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>308</td>
<td>13</td>
<td>4.2%</td>
<td>3</td>
<td>23.1%</td>
<td>10</td>
<td>76.9%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>39</td>
<td>2</td>
<td>5.1%</td>
<td>0</td>
<td>0.0%</td>
<td>2</td>
<td>0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>175</td>
<td>20</td>
<td>11.4%</td>
<td>12</td>
<td>60.0%</td>
<td>8</td>
<td>40.0%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>255</td>
<td>17</td>
<td>0.0%</td>
<td>4</td>
<td>0.0%</td>
<td>13</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1943</strong></td>
<td><strong>195</strong></td>
<td><strong>10.0%</strong></td>
<td><strong>34</strong></td>
<td><strong>17.4%</strong></td>
<td><strong>161</strong></td>
<td><strong>82.6%</strong></td>
</tr>
</tbody>
</table>

---

**Figure 2. Oregon Influenza Laboratory Surveillance**

**Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season**

- **Flu A**
- **Flu B**
- **Percent Positive**

**Graph Description:**
- The graph shows the percentage of positive influenza tests over time.
- The x-axis represents the week ending dates, starting from 10/5/2019 to 5/31/2020.
- The y-axis represents the percentage of tests positive for influenza.
- The graph includes data points for Flu A, Flu B, and the overall percent positive for each week.
Hospitalizations: In Clackamas, Multnomah, and Washington counties 14 influenza-associated hospitalizations were reported during week 47 of 2019. In total, there have been 27 hospitalizations; 8 (29.6%) were positive for flu A and 19 (70.3%) were positive for flu B. One specimen has been subtyped as flu A H1N1.

Influenza Outbreaks: There were 0 influenza outbreaks reported during Week 47, 2019. There have been a total of 2 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 1 occurred in a long-term care facility, and the other occurred in a school.

Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>5-17 yrs</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>18-49 yrs</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>50-64 yrs</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>≥ 65 yrs</td>
<td>13</td>
<td>48.1</td>
</tr>
</tbody>
</table>

Figure 4. Number of Influenza Outbreaks in Oregon by Setting, 2019-2020 Season
**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 180 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 47 of 2019 was 2.5%. Regionally, the percent was highest in the Eastern region (4.7%) and lowest in the Willamette Valley (1.2%).

**Vaccination Information:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 47 of 2019 (November 23rd). The ALERT IIS to date this season has received 1.2 million influenza immunization reports.

**Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020**

**Figure 6: 2019/2020 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek**
Vaccination Information (continued): Influenza immunization totals in November are running above prior season totals, with less of a drop-off than expected going into Thanksgiving. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed; current weekly totals will be adjusted upward later.

**Figure 7: 2019/2020 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season**

**Figure 8: Weekly Influenza Immunization Rate Among Not-Yet Immunized Oregonians, 2019-20 Compared to 2018-19 by Epiweek**
US Data (from CDC FluView):
According to this week’s FluView report, seasonal influenza activity in the United States continues to increase but the amount of activity and the predominant influenza virus varies by region.

**Virtuses**
- **Clinical Lab:** 8.0% of respiratory specimens tested by clinical laboratories were positive for influenza viruses. This is higher than the previous week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 and A(H3N2) viruses. The predominant virus varies by region and age group.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of viruses collected in the U.S. this season is now being reported.

**Illness**
- **ILINet Outpatient Illness:** 2.9% of visits to health care providers were for influenza-like illness (ILI). ILI has been at or above the national baseline of 2.4% for three weeks. Four of 10 regions were at or above their baselines.
- **ILINet Activity Map:** The number of jurisdictions experiencing high ILI activity remained at 8 this week. In addition, 7 jurisdictions had moderate activity compared to 0 last week.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread activity increased from 15 last week to 24 this week.

**Severe Disease**
- **Hospitalizations:** The overall hospitalization rate for the season is 2.0 per 100,000. This is similar to what has been seen at this time during other recent seasons.
- **P&I Mortality:** 5.1% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 6.2%.
- **Pediatric Deaths:** One new influenza-associated pediatric death occurring during the 2019-2020 season was reported to CDC this week. The total for the season is 5.
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.7% during week 46, 2019.
**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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 7.1% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive</th>
<th>Flu A</th>
<th>Flu B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>1014</td>
<td>89</td>
<td>9</td>
<td>80</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>316</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>23</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>174</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>227</td>
<td>9</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1754</strong></td>
<td><strong>125</strong></td>
<td><strong>26</strong></td>
<td><strong>99</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance

Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 4 influenza-associated hospitalizations were reported during week 46 of 2019. In total, there have been 13 hospitalizations; 7 were positive for flu A and 6 were positive for flu B. One specimen has been subtyped as H1N1.

Influenza Outbreaks: There was 1 influenza outbreak reported during Week 46, 2019. There have been a total of 2 influenza outbreaks reported to the Oregon Health Authority in the 2019—2020 flu season, 1 occurred in a long-term care facility, and the other occurred in a school.
**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 179 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 46 of 2019 was 1.9%. Regionally, the percent was highest in the Central and Gorge region (2.7%) and lowest in the Willamette Valley (0.8%).

**Figure 5. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020**

**Vaccination Information:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 46 of 2019 (November 16th). The ALERT IIS to date this season has received over 1.1 million influenza immunization reports (Figure 7).

**Figure 6. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek**
Vaccination Information (continued): It is typical that influenza immunization seeking will drop off from Thanksgiving onward (see Figure 8). During October of 2019, on average, every week 4.2% of all Oregonians who had not yet gotten an influenza immunization got one. In contrast, the average weekly rate among Oregonians who were not yet immunized last season in October was 4.1%; with a November weekly average rate of 1.5%; and a December weekly average rate of only 0.5%. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.

Figure 7. 2019-2020 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season

Figure 8. Weekly Influenza Immunization Rate Among Not-Yet Immunized Oregonians, 2019-20 and 2018-19 by Epiweek
US Data (from CDC FluView): According to this week’s FluView report, seasonal influenza activity in the United States continues to increase but the amount of activity and the predominant influenza virus varies by region.

Viruses
- **Clinical Lab:** 7.3% of respiratory specimens tested by clinical laboratories were positive for influenza viruses. This is higher than the previous week.
- **Public Health Lab:** Nationally, B/Victoria viruses are most common followed by A(H1N1)pdm09 and A(H3N2) viruses. The predominant virus varies by region and age.
- **Virus Characterization:** Genetic and antigenic characterization and antiviral susceptibility of viruses collected in the U.S. this season is now being reported.

Illness
- **ILI Net Outpatient Illness:** 2.5% of visits to health care providers were for influenza-like illness (ILI). ILI was above the baseline of 2.4% for the first time. Four of 10 regions were at or above their baselines.
- **ILI Net Activity Map:** The number of jurisdictions experiencing high ILI activity increased from 1 last week to 8 this week; however 44 jurisdictions experienced minimal to low ILI activity.
- **Geographic Spread:** The number of jurisdictions reporting regional or widespread activity increased from 10 last week to 15 this week.

Severe Disease
- **Hospitalizations:** The overall hospitalization rate for the season is 1.4 per 100,000. This is similar to what has been seen at this time during other recent seasons.
- **P&I Mortality:** 5.2% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 6.2%.
- **Pediatric Deaths:** One new influenza-associated pediatric death occurring during the 2019-2020 season was reported to CDC this week. The total for the season is 4.

**Map above:** 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 and Territorial Epidemiologists**

**Week Ending Nov 16, 2019 - Week 46**

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx)
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.5% during week 45, 2019.
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 tests conducted and results by region for the current week 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 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Flu A No.</th>
<th>Flu B No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>720</td>
<td>42 5.8%</td>
<td>7 16.7%</td>
<td>35 83.3%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>280</td>
<td>4 1.4%</td>
<td>0 0.0%</td>
<td>4 100.0%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>30</td>
<td>0 0.0%</td>
<td>0 0.0%</td>
<td>0 0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>170</td>
<td>10 5.9%</td>
<td>5 50.0%</td>
<td>5 50.0%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>29</td>
<td>0 0.0%</td>
<td>0 0.0%</td>
<td>0 0.0%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1229</strong></td>
<td><strong>56 4.6%</strong></td>
<td><strong>12 21.4%</strong></td>
<td><strong>44 78.6%</strong></td>
</tr>
</tbody>
</table>
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties 1 influenza-associated hospitalization was reported during week 45 of 2019. In total, there have been 10 hospitalizations; 7 of which were positive for flu A and 3 of which were positive for flu B. One specimen has been subtyped as H1N1.

![Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season](image)

**Influenza Outbreaks:** There were 0 influenza outbreaks reported to the Oregon Health Authority during Week 45, 2019.

**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 180 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 45 of 2019 was 2.0%. Regionally, the percent was highest in the Central and Gorge region (3.1%) and lowest in the Willamette Valley (1.0%).

![Figure 4. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020](image)
**Vaccination Information:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 45 of 2019 (November 9th). So far, the patterns of influenza immunization reported to ALERT IIS are a close match to last season. A comparison of statewide total immunization volume reported to ALERT IIS this season versus last season's total immunization volume at this time of year shows no change. Based on this, state-wide, we are likely to see a repeat of last season's 45% immunization rate for influenza. However, there are differences in immunization volume on a county level: Fewer influenza immunizations have been reported this season compared to last season for residents of Tillamook (16% decrease), Morrow (15% decrease), Union (11% decrease), Lake (8% decrease), Harney (8% decrease), and Baker (8% decrease) counties. Other counties are showing increases in influenza immunization this season compared to last season, including Clatsop and Malheur counties (each with a 6% increase). Counties not named above all have numbers of total influenza immunizations that are within +/- 5% of last year's numbers, indicating little change either up or down to date. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed; current weekly totals will be adjusted upward later.

![Figure 5: 2019/2020 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek](image1)

![Figure 6: 2019/2020 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season](image2)
US Data (from CDC FluView): According to this week’s FluView report, seasonal influenza activity in the United States is increasing.

**Viruses**
- Clinical Lab: Due to technical issues, data from clinical laboratories are not available this week.
- Public Health Lab: Nationally, B/Victoria viruses are predominant; however, A(H3N2) and A(H1N1) pdm09 viruses are also circulating widely. The predominant virus varies by region and age.
- Virus Characterization: Data for this season will be reported when a sufficient number of viruses have been characterized. Virus characterization data through September 28 is available.

**Illness**
- ILINet Outpatient Illness: 2.3% of visits to a health care provider were for influenza-like illness (ILI). Nationally, ILI was below the baseline (2.4%); however, 4 of 10 regions were at or above their baselines.
- ILINet Activity Map: The majority of jurisdictions experienced minimal ILI activity; however, Louisiana experienced high ILI activity and 14 jurisdictions experienced moderate or low ILI activity.
- Geographic Spread: The majority of jurisdictions reported sporadic or local activity. Ten states reported regional or widespread activity, and one state reported no activity.

**Severe Disease**
- Hospitalizations: Data for this season will be provided when a sufficient number of hospitalizations have been reported.
- P&I Mortality: 4.9% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 6.0%.
- Pediatric Deaths: One new influenza-associated pediatric death occurring during the 2019-2020 season was reported to CDC this week. The total for the season is 3.

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**Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists**

Week Ending Nov 09, 2019 - Week 45

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.1% during week 44, 2019.

<table>
<thead>
<tr>
<th>Data at a Glance</th>
<th>Current Week (44)</th>
<th>Previous Week (43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI¹</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Percentage positive influenza tests²</td>
<td>2.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations³</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity⁴</td>
<td>1.4%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

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.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 2.4% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

### Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Positive (%)</th>
<th>Flu A No.</th>
<th>Flu A (%)</th>
<th>Flu B No.</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>344</td>
<td>12</td>
<td>3.5%</td>
<td>6</td>
<td>50.0%</td>
<td>6</td>
<td>50.0%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>242</td>
<td>3</td>
<td>1.2%</td>
<td>2</td>
<td>66.7%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>17</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>121</td>
<td>2</td>
<td>1.7%</td>
<td>2</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>184</td>
<td>5</td>
<td>2.7%</td>
<td>1</td>
<td>20.0%</td>
<td>4</td>
<td>80.0%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>908</strong></td>
<td><strong>22</strong></td>
<td><strong>2.4%</strong></td>
<td><strong>11</strong></td>
<td><strong>50.0%</strong></td>
<td><strong>11</strong></td>
<td><strong>50.0%</strong></td>
</tr>
</tbody>
</table>

### Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season

- Flu B
- Flu A
- Percent Positive
Hospitalizations: In Clackamas, Multnomah, and Washington counties 4 influenza-associated hospitalizations were reported during week 44 of 2019. In total, there have been 6 hospitalizations; 4 were subtyped as flu A and two as flu B.

Influenza Outbreaks: There were 0 influenza outbreaks reported to the Oregon Health Authority during Week 44, 2019.

Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 180 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 44 of 2019 was 1.9%. Regionally, the percent was highest in the Central and Gorge region (2.7%) and lowest in the Willamette Valley (0.8%).
Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 44 of 2019 (November 2nd). To date, over a million influenza immunizations have been reported to ALERT IIS. As we move into November, the weekly total of new influenza immunizations is declining, and is a close match to the pattern of previous seasons. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed – current weekly totals will be adjusted upward later.
US Data (from CDC FluView): According to this week’s FluView report, seasonal influenza activity in the United States remains low but is increasing.

**Viruses**
- **Clinical Lab:** 3.2% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is higher than the previous week.
- **Public Health Lab:** Nationally, influenza A(H3N2) and influenza B/Victoria viruses have been most common; however, A(H1N1) pdm09 viruses also circulated. The predominant virus varies by region.
- **Virus Characterization:** Data for this season will be reported when a sufficient number of viruses have been characterized. Virus characterization data through September 28 is available.

**Illness**
- **ILINet Outpatient Illness:** 2.1% of visits to a health care provider were for influenza-like illness (ILI). ILI activity is higher than the previous week but remains below the national baseline of 2.4%.
- **ILINet Activity Map:** The majority of jurisdictions experienced minimal ILI activity; however, Louisiana and Puerto Rico experienced high ILI activity and 9 states experienced low ILI activity.
- **Geographic Spread:** The majority of jurisdictions reported sporadic or local activity. Three states reported regional or widespread activity, and one state reported no activity.

**Severe Disease**
- **Hospitalizations:** Data for this season will be provided when a sufficient number of hospitalizations have been reported.
- **P&I Mortality:** Due to technical issues, data from the NCHS mortality surveillance system are not available this week.
- **Pediatric Deaths:** No new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week. The total for the season is 2.

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**Map above:** 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 and Territorial Epidemiologists**

<table>
<thead>
<tr>
<th>Activity Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Minimal</td>
</tr>
<tr>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Sporadic</td>
<td>High</td>
</tr>
<tr>
<td>Local</td>
<td>Sporadic</td>
</tr>
<tr>
<td>Regional</td>
<td>Local</td>
</tr>
<tr>
<td>Widespread</td>
<td>Regional</td>
</tr>
</tbody>
</table>

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: [http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx](http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx)
Oregon Public Health Division

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.1% during week 43, 2019.

### Data at a Glance
October 20—October 26, 2019 (Week 43)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (43)</th>
<th>Previous Week (42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Percentage positive influenza tests&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations&lt;sup&gt;3&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity&lt;sup&gt;4&lt;/sup&gt;</td>
<td>1.1%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

<sup>1</sup>Based on Oregon ESSENCE Syndromic Surveillance. Data represent statewide aggregate percent.

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

<sup>3</sup>Based on hospitalization surveillance in Clackamas, Multnomah, and Washington counties only.

<sup>4</sup>Percent positivity based on data from Oregon’s RSV Laboratory Surveillance System.

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![Figure 1. Percentage of ED Visits for ILI, Oregon ESSENCE Syndromic Surveillance, 2016–2017, 2017–2018, 2018-2019, 2019-2020](image-url)
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 1.0% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brooks, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive</th>
<th>Flu A</th>
<th>Flu B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. (%)</td>
<td>No. (%)</td>
<td>No. (%)</td>
<td>No. (%)</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>594</td>
<td>7 (1.2%)</td>
<td>3 (42.9%)</td>
<td>4 (57.1%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>239</td>
<td>2 (0.8%)</td>
<td>2 (100.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>34</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>170</td>
<td>1 (0.6%)</td>
<td>0 (0.0%)</td>
<td>1 (100.0%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>195</td>
<td>2 (1.0%)</td>
<td>1 (50.0%)</td>
<td>1 (50.0%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1232</strong></td>
<td><strong>12 (1.0%)</strong></td>
<td><strong>6 (50.0%)</strong></td>
<td><strong>6 (50.0%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019–2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties no influenza-associated hospitalizations were reported during week 43 of 2019. In total, there have been 2 hospitalizations; one was sub-typed as flu A and the second as flu B.

![Figure 3. Portland Metro Area Influenza-Associated Hospitalizations by Week and Age Group, 2019-2020 Season](image)

**Influenza Outbreaks:** There were 0 influenza outbreaks reported to the Oregon Health Authority during Week 43, 2019.

**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 180 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 43 of 2019 was 1.9%. Regionally, the percent was highest in the Eastern region (2.6%) and lowest in the Willamette Valley (0.7%).

![Figure 4. Percentage of Visits for ILI at Outpatient Clinics & Emergency Departments, by Oregon Region, 2019-2020](image)
**Vaccination Information:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 43 of 2019 (October 26th). At this time, the peak of immunization delivery has already passed. So far this season, over 820,000 influenza immunizations for Oregonians have been reported to ALERT IIS. While most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed. Current weekly totals will be adjusted upward later.

![Figure 5. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek](image)

![Figure 6. 2018-2019 Flu Vaccination in ALERT IIS by Epiweek, Cumulative Doses Compared to Last Season](image)

This week we are including a chart showing the percentage of influenza immunizations by age that were reported by pharmacies. Oregon law allows pharmacists to give immunizations from age seven without a prescription; this is reflected in Figure 7. For seniors, pharmacies give roughly half of all influenza immunizations in Oregon. A large number of pharmacy influenza immunizations are also given at grocery stores. To date, 57% of pharmacy influenza immunizations were given at grocery stores. Grocery store pharmacies tend to immunize a slightly older mix of patients; 55% of grocery store pharmacy influenza immunizations were given to seniors, compared to 48% of influenza immunizations going to seniors at other pharmacy locations.

![Figure 7. Oregon Pharmacy Influenza Immunization by Age as a Percentage of Total, as of 10/30/2019](image)
US Data (from CDC FluView): According to this week’s FluView report, seasonal influenza activity in the United States increased slightly, but remains low.

**Viruses**
- **Clinical Lab:** 2.4% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is slightly higher than the previous week.
- **Public Health Lab:** Influenza A(H3N2) and influenza B/Victoria viruses have been most common so far, with influenza A(H3N2) viruses slightly outnumbering influenza B/Victoria viruses.
- **Virus Characterization:** Data for this season will be reported when a sufficient number of viruses have been characterized. Virus characterization data through September 28 is available.

**Illness**
- **ILI Net Outpatient Illness:** 1.9% of visits to a health care provider were for influenza-like illness (ILI). ILI activity is higher than the previous week but remains below the national baseline of 2.4%.
- **ILI Net Activity Map:** The majority of jurisdictions experienced minimal ILI activity; however, Louisiana and Puerto Rico experienced high ILI activity and 7 states experienced low ILI activity.
- **Geographic Spread:** The majority of jurisdictions reported sporadic or local activity; however, Louisiana reported regional activity and Rhode Island reported no activity.

**Severe Disease**
- **Hospitalizations:** Data for this season will be provided when a sufficient number of hospitalizations have been reported.
- **P&I Mortality:** 5.1% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 5.8%.
- **Pediatric Deaths:** No new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week. The total for the season is 2.

**Map above:** 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 dis-

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

**Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists**
- **No Activity**
- **Sporadic**
- **Local Activity**
- **Regional**
- **Widespread**
- **No Report**

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.0% during week 42, 2019.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 1.0% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Haney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Positive (%)</th>
<th>Flu A No.</th>
<th>Flu A (%)</th>
<th>Flu B No.</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>471</td>
<td>4</td>
<td>0.8%</td>
<td>4</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>287</td>
<td>1</td>
<td>0.3%</td>
<td>1</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>3</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>157</td>
<td>4</td>
<td>2.5%</td>
<td>0</td>
<td>0.0%</td>
<td>4</td>
<td>100.0%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>182</td>
<td>2</td>
<td>1.1%</td>
<td>0</td>
<td>0.0%</td>
<td>2</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1100</strong></td>
<td><strong>11</strong></td>
<td><strong>1.0%</strong></td>
<td><strong>5</strong></td>
<td><strong>45.5%</strong></td>
<td><strong>6</strong></td>
<td><strong>54.5%</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
**Hospitalizations:** In Clackamas, Multnomah, and Washington counties no influenza-associated hospitalizations were reported during week 42 of 2019. In total, there have been 2 hospitalizations; one was subtyped as flu A and the second as flu B.

**Influenza Outbreaks:** There were 0 influenza outbreaks reported to the Oregon Health Authority during Week 42, 2019.

**Outpatient Influenza-like Illness Surveillance:** Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 180 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 42 of 2019 was 1.9%. Regionally, the percent was highest in the Central and Gorge Area (2.8%) and lowest in the Willamette Valley (0.7%).
**Vaccination Information:** Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 42 of 2019 (October 19th). So far this season, almost 700,000 influenza immunizations for Oregonians have already been reported to the ALERT IIS, with 1.5 million expected in total. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed—current weekly totals will be adjusted upward later.

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**Figure 5. 2019-2020 Oregon Flu Vaccine Doses in ALERT IIS by Epiweek**

![Flu Vaccine Doses by Epiweek](image)  
- 2017-18  
- 2018-19  
- 2019-20 to date

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For this week we are including a look at who reports adult influenza immunizations to ALERT IIS. Overall, pharmacies and private clinics provide almost all influenza immunizations for adults. Seniors > age 65 years are more likely to receive their vaccination at pharmacies (50%) than non-seniors (34%), while non-seniors are more likely to receive flu vaccination at private clinics compared to seniors (54% vs 47%).

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**Figure 6. Sources of Adult Influenza Immunization Reporting in ALERT IIS by Age, as of Oct 23rd 2019**

![Sources of Adult Influenza Immunization](image)  
- Pharmacy  
- Private Practices  
- Other  
  - 19 to 64  
  - 65+
**US Data (from CDC FluView):** Seasonal influenza activity in the United States increased slightly, but remains low.

**Viruses**
- **Clinical Lab:** 2.4% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is slightly lower than the previous week.
- **Public Health Lab:** Influenza A (H3N2) and Influenza B/Victoria viruses have circulated at similar levels for the season overall.
- **Virus Characterization:** Data for this season will be reported when a sufficient number of viruses have been characterized. Virus characterization data through September 28 is available.

**Illness**
- **ILIOutpatient Illness:** 1.7% of visits to a health care provider were for influenza-like illness (ILI). ILI activity is higher than the previous week but remains below the national baseline of 2.4%.
- **ILIActivity Map:** The majority of jurisdictions experienced minimal ILI activity; however, Louisiana and Puerto Rico experienced high ILI activity.
- **Geographic Spread:** The majority of jurisdictions reported sporadic or local activity; however, Maryland reported widespread activity and Louisiana reported regional activity.

**Severe Disease**
- **Hospitalizations:** Data for this season will be provided when a sufficient number of hospitalizations have been reported.
- **P&I Mortality:** 4.9% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 5.7%.
- **Pediatric Deaths:** The first 2 influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week.

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

2019-20 Influenza Season Week 42 ending Oct 19, 2019

**Map above:** This map uses the proportion of outpatient visits to ILI Net 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 left:** The map left measures the geographic spread of influenza viruses, but does not measure the intensity of influenza activity.

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:
Oregon Public Health Division
Published October 18, 2019

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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.0% during week 41, 2019.

### Data at a Glance
October 6—October 12, 2019 (Week 41)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Current Week (41)</th>
<th>Previous Week (40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI¹</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Percentage positive influenza tests²</td>
<td>1.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations³</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV) activity⁴</td>
<td>0.4%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

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.

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Week Ending Date of 2018-2019 Season
**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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 1.0% 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), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District, (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

**Table 1. Influenza Test Results in Oregon by Region, NREVSS, Current Week, 2019–2020 Season**

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No.</th>
<th>Positive (%)</th>
<th>Flu A No.</th>
<th>Flu A (%)</th>
<th>Flu B No.</th>
<th>Flu B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>968</td>
<td>6</td>
<td>0.6%</td>
<td>4</td>
<td>66.7%</td>
<td>2</td>
<td>33.3%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>228</td>
<td>5</td>
<td>2.2%</td>
<td>5</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>21</td>
<td>1</td>
<td>4.8%</td>
<td>1</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>125</td>
<td>3</td>
<td>2.4%</td>
<td>2</td>
<td>66.7%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>210</td>
<td>1</td>
<td>0.5%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1552</strong></td>
<td><strong>16</strong></td>
<td><strong>1.0%</strong></td>
<td><strong>12</strong></td>
<td><strong>75.0%</strong></td>
<td><strong>4</strong></td>
<td><strong>25.0%</strong></td>
</tr>
</tbody>
</table>

**Figure 2. Oregon Influenza Laboratory Surveillance**

**Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season**

- Flu B
- Flu A
- Percent Positive

Week Ending Date

[Graph showing weekly positivity rates for Flu A and Flu B]
Hospitalizations: In Clackamas, Multnomah, and Washington counties 1 influenza-associated hospitalization was reported during week 41 of 2019. In total, there have been 2 hospitalizations, 1 of which was positive for flu A and one of which was positive for flu B. No subtyping information is available at this time.

Influenza Outbreaks: There were 0 influenza outbreaks reported to the Oregon Health Authority during Week 41, 2019.

Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 171 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 41 of 2019 was 1.8%. Regionally, the percent was highest in the Portland Metro Area (2.3%) and lowest in the Willamette Valley (0.7%).
Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epiweek 41 of 2019 (October 12th). For this season, almost 600,000 influenza immunizations for Oregonians have already been reported to the ALERT IIS. Influenza immunizations are expected to peak in the next two weeks.

In comparison to last season at the same time, ALERT has slightly more reports of influenza immunization, as shown in the graph below of influenza immunizations by age (Figure 6). As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed—current weekly totals will be adjusted upward later.
US Data (from CDC FluView): Seasonal influenza activity remains low in the United States.

Viruses
- Clinical Lab: 3.4% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is slightly higher than the previous week.
- Public Health Lab:
  - Influenza A(H3N2) viruses predominated this week and are the predominant virus at this point in the season.
- Virus Characterization: Data for this season will be reported when a sufficient number of viruses have been characterized. Virus characterization data through September 28 is available.

Illness
- ILINet Outpatient Illness: 1.5% of visits to a health care provider were for influenza-like illness (ILI). ILI activity remains below the national baseline of 2.4% and is at the same level as the previous week.
- ILINet Activity Map: The majority of jurisdictions experienced minimal ILI activity; however, Louisiana experienced high ILI activity.
- Geographic Spread: The majority of jurisdictions reported sporadic or no flu activity; however, Louisiana reported regional activity and 3 out of 54 jurisdictions reported local activity.

Severe Disease
- Hospitalizations: Data for this season will be provided when a sufficient number of hospitalizations have been reported.
- P&I Mortality: 4.7% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 5.7%.
- Pediatric Deaths: No influenza-associated pediatric deaths were reported to CDC this week. No pediatric deaths occurring during the 2019-20 season have been reported.

Map above: 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 12, 2019 - Week 41

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

All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at: http://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/InfluenzaPages/surveil.aspx
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 three flu seasons. The percent of ED visits for ILI in all of Oregon was 1.0% during week 40, 2019.
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 tests conducted and results by region for the current week for influenza in specimens tested at the Oregon laboratories reporting to NREVSS. Figure 2 shows that 1.5% 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 and percent positivity.

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

Legacy Emanuel Hospital and Health Center (Portland, OR), Oregon Health & Science University (Portland, OR), Providence Health (Oregon), Kaiser Permanente (Oregon), Veteran’s Administration Hospital (Portland, OR), Bay Area Hospital (Coos Bay, OR), Curry Health Network (Brookings, OR), Mercy Medical Center (Roseburg, OR), Sky Lakes Medical Center (Klamath Falls, OR), Lake Health District. (Lakeview, OR), Rogue Valley Medical Center (SW Oregon), Good Shepherd Medical Center (Hermiston, OR), Mid-Columbia Medical Center (The Dalles, OR), Central Oregon Pediatric Associates (Central Oregon), Harney District Hospital (Burns, OR), St. Charles (Bend, OR), Columbia Memorial Hospital (Astoria, OR), Salem Hospital (Salem, OR), Willamette Valley Medical Center (McMinnville, OR).

Table 1. Influenza Test Results in Oregon, NREVSS, Current Week, 2019–2020 Season

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Tests</th>
<th>Positive No. (%)</th>
<th>Flu A No. (%)</th>
<th>Flu B No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Metro</td>
<td>878</td>
<td>11 (1.3%)</td>
<td>8 (72.7%)</td>
<td>3 (27.3%)</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>258</td>
<td>6 (2.3%)</td>
<td>5 (83.3%)</td>
<td>1 (16.7%)</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>37</td>
<td>1 (2.7%)</td>
<td>0 (0.0%)</td>
<td>1 (100.0%)</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>137</td>
<td>3 (2.2%)</td>
<td>2 (66.7%)</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>106</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>1,416</strong></td>
<td><strong>21 (1.5%)</strong></td>
<td><strong>15 (71.4%)</strong></td>
<td><strong>6 (28.6%)</strong></td>
</tr>
</tbody>
</table>

Figure 2. Oregon Influenza Laboratory Surveillance
Percent Positive Influenza Tests by Week, NREVSS, 2019-2020 Season
Hospitalizations: In Clackamas, Multnomah, and Washington counties 1 influenza-associated hospitalization was reported during week 40 of 2019, the first week of surveillance this season. The test was positive for flu B.

Influenza Outbreaks: There were 0 influenza outbreaks reported to the Oregon Health Authority during Week 40, 2019.
Vaccination Information: Weekly influenza immunization reporting is based on ALERT Immunization Information System (ALERT IIS) data through Epi Week 40 of 2019 (October 5th). The ALERT IIS is Oregon’s all-age immunization registry. The Oregon Immunization Program estimates that last season, the ALERT IIS received reports for over 3/4th of all influenza immunizations given in Oregon, with greater than 90% reporting among children and seniors over age 65. We are currently building toward the peak of the influenza immunization season, which occurs in mid to late October. To date over 400,000 million influenza immunizations for Oregonians for this season have already been reported to the ALERT IIS. Patterns of influenza immunization uptake this season are so far a close match to the patterns of the last two seasons. As a caveat, while most immunizations are reported quickly and electronically to ALERT IIS, some reporting is delayed - current weekly totals will be adjusted upward later.

Outpatient Influenza-like Illness Surveillance: Oregon’s outpatient influenza-like illness (ILI) surveillance comprises 17 voluntary reporting outpatient providers, 64 emergency departments and urgent care clinics reporting to ESSENCE, and 175 OCHIN clinics from across Oregon. The percent of outpatients seen with ILI across the state during week 40 of 2019 was 1.9%. Regionally, the percent was highest in the Central Oregon and Gorge area (3.0%) and lowest in the Willamette Valley (0.6%).
US Data (from CDC FluView): Seasonal influenza activity remains low in the United States.

Viruses
- **Clinical Lab:** 3.1% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is approximately the same as the previous week.
- **Public Health Lab:** Influenza A viruses predominated this week with equal numbers of (H3N2) and (H1N1)pdm09 viruses reported.
- **Virus Characterization:** Influenza virus characterization information will be updated weekly starting later this season.

Illness
- **ILIOutpatient Illness:** 1.4% of visits to a health care provider were for ILI. ILI activity remains below the national baseline of 2.4% but increased slightly from the previous week.
- **ILI Activity Map:** The majority of jurisdictions experienced minimal ILI activity; however, Louisiana experienced moderate ILI activity.
- **Geographic Spread:** 4 out of 53 jurisdictions reported local flu activity; the remainder reported sporadic or no flu activity.

Severe Disease
- **Hospitalizations:** Hospitalization rates will be updated weekly starting later this season.
- **P&I Mortality:** 5.0% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 5.6%.
- **Pediatric Deaths:** No influenza-associated pediatric deaths occurring during the 2019-20 season have been reported to CDC. 138 pediatric deaths occurring during the 2018-2019 season have been reported.

**All Flu Bites data are preliminary and may change as additional reports are received. Find the most recent Flu Bites report online at:**