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.
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 (Bend, 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>1744</td>
<td>393</td>
<td>33</td>
<td>360</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22.5%</td>
<td>8.4%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Southern Oregon</td>
<td>509</td>
<td>51</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.0%</td>
<td>27.5%</td>
<td>72.5%</td>
</tr>
<tr>
<td>Columbia Gorge</td>
<td>90</td>
<td>25</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.8%</td>
<td>0.0%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Central Oregon</td>
<td>300</td>
<td>59</td>
<td>13</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19.7%</td>
<td>22.0%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>295</td>
<td>41</td>
<td>3</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13.9%</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>64</strong></td>
<td><strong>505</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>19.4%</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.

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%).

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 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**
- **ILI Net 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.
- **ILI Net 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.

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 07, 2019 - Week 49

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: