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.

Data at a Glance
January 12—January 18, 2020 (Week 03)

<table>
<thead>
<tr>
<th></th>
<th>Current Week (03)</th>
<th>Previous Week (02)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of emergency department visits for ILI</td>
<td>3.1%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Percentage positive influenza tests</td>
<td>19.8%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Influenza-associated hospitalizations</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>Reported influenza outbreaks</td>
<td>3</td>
<td>6</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>12.6%</td>
<td>11.5%</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.
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.

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

**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.

![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 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**
- **ILINet 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.
- **ILINet 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.

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 18, 2020 - Week 3

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