Influenza activity was categorized as **Widespread** for MMWR Week 2

- Levels of Influenza-like Illness (ILI)* activity seen in emergency departments remained the same
  - Of the total emergency room visits, **2.2% were due to ILI**
- Increased levels of ILI activity reported by outpatient providers
  - Sentinel providers reported **3.6% of patients had ILI**
- Vermont Department of Health Laboratory reported **12 positive flu tests**
- National Respiratory and Enteric Virus Surveillance System reported **46 positive flu tests**
- Four ILI outbreaks reported
  - One at a school in the Northeast region
  - One at LTCF in the Southwest region
  - One at a school in the Southwest region
  - One at a school in the Central region

**ILI is defined as a measured fever of at least 100° F and cough or sore throat, without a known cause other than influenza.**

**VT Flu Geographic Spread**

<table>
<thead>
<tr>
<th>Spread</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activity</td>
<td></td>
</tr>
<tr>
<td>Sporadic</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td></td>
</tr>
<tr>
<td>Widespread</td>
<td></td>
</tr>
</tbody>
</table>

*Based on CDC’s Activity Estimates Definitions: [www.cdc.gov/flu/weekly/overview.htm](http://www.cdc.gov/flu/weekly/overview.htm)

**Outbreaks this week: 4**
**Total Outbreaks: 14**

**FLU SURVEILLANCE SEASON**

**START**
MMWR Week 40
(Week End Date 10/6/18)

**END**
MMWR Week 20
(Week End Date 5/18/19)
SYNDROMIC SURVEILLANCE

Syndromic Surveillance* of Influenza-Like Illness at Vermont Hospitals, 2018-2019 vs. Historic Data

Week ending 1/12/2019 (Week 2)

*Data pulled from ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics)
Sentinel providers report the number of patients with ILI seen by their practice each week.

There are 15 medical practices located throughout the state currently providing data.

Percent of Visits Reported by Vermont Sentinel Providers* with Influenza-like Illness by MMWR Week, 2016/17 – 2018/19 Flu Seasons

*The ILI data are more robust when a higher percentage of provider reports are received. Recent data are provisional due to reporting lags.
SENTINEL PROVIDER DATA

Percent of Visits Reported by Vermont Sentinel Providers* with Influenza-like Illness by Age Group by MMWR Week, 2016/17 – 2018/19 Flu Seasons

*The ILI data are more robust when a higher percentage of provider reports are received. Recent data are provisional due to reporting lags.
Percent of Visits Reported by Vermont Sentinel Providers* with Influenza-like Illness by Age Group by MMWR Week 2018/2019 Flu Season

*The ILI data are more robust when a higher percentage of provider reports are received. Recent data are provisional due to reporting lags.
**LABORATORY DATA**

Individual flu results are not reported to the Vermont Department of Health. The data below represents an unknown subset of the actual number of flu tests performed in Vermont.

Vermont Department of Health Laboratory (VDHL) tests specimens for flu to identify exactly which strains are currently causing illnesses in the state. Flu testing at the state laboratory is for surveillance purposes and is performed on specimens collected during an institutional outbreak and routinely by sentinel providers.

National Respiratory and Enteric Virus Surveillance System (NREVSS) data is collected from collaborating university and community hospital laboratories. These participating laboratories report positive results for a number of viruses, including influenza, on a weekly basis. Three Vermont hospitals voluntarily contribute data into this system.

<table>
<thead>
<tr>
<th>Specimens Tested</th>
<th>Number</th>
<th>Percentage</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDHL* Current Week (Jan 6-Jan 12, 2019)</td>
<td>13</td>
<td>72%</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>VDHL* 2018-2019 Season Total (Sep 30, 2018-Jan 12, 2019)</td>
<td>325</td>
<td>2537</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Specimens</td>
<td>12</td>
<td>92%</td>
<td>43</td>
<td>60%</td>
</tr>
<tr>
<td>NREVSS* Current Week (Jan 6-Jan 12, 2019)</td>
<td>46</td>
<td>14%</td>
<td>285</td>
<td>11%</td>
</tr>
<tr>
<td>NREVSS* 2018-2019 Season Total (Sep 30, 2018-Jan 12, 2019)</td>
<td>2537</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Specimens by Type/Subtype</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza A</td>
<td>12</td>
<td>100%</td>
<td>43</td>
<td>100%</td>
</tr>
<tr>
<td>A (2009 H1N1)</td>
<td>5</td>
<td>42%</td>
<td>16</td>
<td>37%</td>
</tr>
<tr>
<td>A (H1)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>A (H3)</td>
<td>6</td>
<td>50%</td>
<td>24</td>
<td>56%</td>
</tr>
<tr>
<td>A (unsubtyped)</td>
<td>1</td>
<td>8%</td>
<td>3</td>
<td>7%</td>
</tr>
<tr>
<td>Influenza B</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>NREVSS* Current Week (Jan 6-Jan 12, 2019)</td>
<td>46</td>
<td>100%</td>
<td>279</td>
<td>98%</td>
</tr>
<tr>
<td>NREVSS* 2018-2019 Season Total (Sep 30, 2018-Jan 12, 2019)</td>
<td>279</td>
<td>98%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Laboratory data obtained from VDHL and NREVSS may include the same specimens tested for flu, they are not mutually exclusive. Facilities that report to NREVSS may submit a specimen to VDHl for additional testing, therefore being reported both in NREVSS and VDHL.
**ILI OUTBREAK DATA**

<table>
<thead>
<tr>
<th>Long-Term Care Facility Outbreaks</th>
<th>School Outbreaks</th>
<th>Outbreaks at Other Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Outbreaks</strong></td>
<td><strong>Number of Outbreaks</strong></td>
<td><strong>Number of Outbreaks</strong></td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Outbreak Regions</strong></td>
<td><strong>Outbreak Regions</strong></td>
<td><strong>Outbreak Regions</strong></td>
</tr>
<tr>
<td>Central: 2</td>
<td>Central: 2</td>
<td>Central: 0</td>
</tr>
<tr>
<td>Northeastern: 0</td>
<td>Northeastern: 1</td>
<td>Northeastern: 0</td>
</tr>
<tr>
<td>Northwestern: 2</td>
<td>Northwestern: 0</td>
<td>Northwestern: 1</td>
</tr>
<tr>
<td>Southeastern: 0</td>
<td>Southeastern: 0</td>
<td>Southeastern: 0</td>
</tr>
<tr>
<td>Southwestern: 4</td>
<td>Southwestern: 1</td>
<td>Southwestern: 1</td>
</tr>
</tbody>
</table>

*Suspected outbreaks of ILI should be reported to the health department*

**MAP OF INFLUENZA SURVEILLANCE REGIONS IN VERMONT**

Influenza activity remains elevated in the United States. Influenza A viruses have predominated in the United States since the beginning of October. Influenza A(H1N1) viruses have predominated in most areas of the country, however Influenza A(H3) have predominated in the southeastern United States.
Three influenza-associated pediatric deaths were reported to CDC during week 2.
So far this season, there have been 19 influenza-associated pediatric deaths reported to CDC.
There have been no influenza-associated pediatric deaths reported in Vermont this season.

Full FluView report can be found here: https://www.cdc.gov/flu/weekly/index.htm
The proportion of outpatient visits for Influenza-like Illness for week 2 was 3.1% which is **above the national baseline of 2.2%**.
During week 2, the following ILI activity levels were experienced:

- Nine states (Colorado, Connecticut, Georgia, Kentucky, Louisiana, New Hampshire, New Jersey, New Mexico, and Oklahoma) experienced high ILI activity.
- New York City and 13 states (Alabama, Arizona, Indiana, Kansas, Massachusetts, Maryland, Nevada, Pennsylvania, South Carolina, Texas, Utah, Virginia, and Vermont) experienced moderate ILI activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2018-19 Influenza Season Week 2 ending Jan 12, 2019

*This map uses the proportion of outpatient visits to health care 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.

Data collected in ILINet may disproportionately represent certain populations within a state, and therefore, may not accurately depict the full picture of influenza activity for the whole state.

Data displayed in this map are based on data collected in ILINet, whereas the State and Territorial flu activity map is based on reports from state and territorial epidemiologists. The data presented in this map is preliminary and may change as more data are received. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

Full FluView report can be found here: https://www.cdc.gov/flu/weekly/index.htm
Geographic spread for week 2**:

- **No activity** was not reported.
- **Sporadic** activity was reported by D.C., the US Virgin Islands, and 1 state.
- **Local** activity reported by 3 states.
- **Regional** activity was reported by Puerto Rico and 16 states.
- **Widespread** activity was reported by Guam and 30 states.

**Based on CDC’s Activity Estimates Definitions:**

www.cdc.gov/flu/weekly/overview.htm

Full FluView report can be found here:
https://www.cdc.gov/flu/weekly/index.htm
RESOURCES

NATIONAL WEEKLY FLU REPORT
http://www.cdc.gov/flu/weekly/index.htm

NATIONAL WEEKLY FLU REPORT - INTERACTIVE
https://www.cdc.gov/flu/weekly/fluviewinteractive.htm

VERMONT FLU WEBSITE
www.healthvermont.gov/prevent/flu/flusurveillance.aspx

CDC SEASONAL INFLUENZA WEBSITE
https://www.cdc.gov/flu/index.htm

KEY FACTS ABOUT SEASONAL FLU VACCINE
https://www.cdc.gov/flu/protect/keyfacts.htm