Influenza activity was categorized as **Widespread** for MMWR Week 4

- Increased levels of Influenza-like Illness (ILI) activity seen in emergency departments
  - Of the total emergency room visits, **6.5% were due to ILI**
- Increased levels of ILI activity reported by outpatient providers
  - Sentinel providers reported **5.6% of patients had ILI**
- Vermont Department of Health Laboratory reported **24 positive flu tests**
- National Respiratory and Enteric Virus Surveillance System reported **125 positive flu tests**
- **6 Outbreaks**
  - 3 outbreaks at LTCFs: 1 in the Northwest, 1 in the Southwest, and 1 in the Central Region.
  - 2 outbreaks at schools: 1 in the Central and one in the Northwest Region
  - 1 Outbreak at a childcare facility in the Southwest Region

*Based on CDC’s Activity Estimates Definitions: [www.cdc.gov/flu/weekly/overview.htm](http://www.cdc.gov/flu/weekly/overview.htm)
Week ending 1/27/2018 (Week 4)

**Note:** For the 2017-2018 flu season, VDH switched from using EARS (Early Aberration Reporting System) for syndromic surveillance to using ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics).

*Note: 2009-2010 flu season excluded*
Sentinel providers report the number of patients with an ILI seen by their practices each week.

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

There are 16 medical practices located throughout the state currently partnering with the Health Department as sentinel sites.

Percent of Visits Reported by Vermont Sentinel Providers* with Influenza-like Illness by MMWR Week, 2015/16 – 2017/18 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, 2015/16 – 2017/18 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 2017/2018 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.
Individual influenza laboratory results are not reported to the Vermont Department of Health. The data below represents an unknown subset of the actual number of flu tests done 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 completed on specimens submitted to VDHL.

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>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens Tested</td>
<td>35</td>
<td>136</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Positive Specimens</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Specimens</td>
<td>24</td>
<td>68.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Positive Specimens by Type/Subtype</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td>21</td>
<td>87.5%</td>
</tr>
<tr>
<td>A (2009 H1N1)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>A (H1)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>A (H3)</td>
<td>21</td>
<td>100%</td>
</tr>
<tr>
<td>A (unsubtyped)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Influenza B</td>
<td>3</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NREVSS* Current Week (Jan 21-Jan 27, 2018)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NREVSS* 2017-2018 Season Total (Oct 1, 2017-Jan 27, 2018)</td>
<td>539</td>
<td>2,861</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NREVSS* Current Week (Jan 21-Jan 27, 2018)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NREVSS* 2017-2018 Season Total (Oct 1, 2017-Jan 27, 2018)</td>
<td>125</td>
<td>453</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NREVSS* Current Week (Jan 21-Jan 27, 2018)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NREVSS* 2017-2018 Season Total (Oct 1, 2017-Jan 27, 2018)</td>
<td>106</td>
<td>385</td>
</tr>
</tbody>
</table>

*Laboratory data obtained from VDHL and from NREVSS may include the same specimens tested for flu. They are not mutually exclusive. Facilities that report to NREVSS may submit a specimen to VHDl for additional testing, therefore being reported both in NREVSS and VDHL.
Suspected outbreaks of ILI should be reported to the health department.

### Long-Term Care Facility Outbreaks
- **Number of Lab Confirmed Outbreaks**: 13
  - Central: 2
  - Northeastern: 2
  - Northwestern: 5
  - Southeastern: 4
  - Southwestern: 3

### School Outbreaks
- **Number of Outbreaks**: 3
  - Central: 1
  - Northeastern: 0
  - Northwestern: 1
  - Southeastern: 0
  - Southwestern: 1

### Outbreaks at Other Facilities
- **Number of Outbreaks**: 1
  - Central: 0
  - Northeastern: 0
  - Northwestern: 1
  - Southeastern: 0
  - Southwestern: 0

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**MAP OF INFLUENZA SURVEILLANCE REGIONS IN VERMONT**


*An outbreak at a LTCF is defined as a single resident with a positive flu test plus other cases of respiratory illness OR two or more residents with ILI which includes two or more of the following symptoms: fever, nonproductive cough, myalgia, pharyngitis.*
During week 4, influenza activity increased in the United States. The most frequently identified flu virus type reported by public health laboratories was flu A(H3).
Sixteen influenza-associated pediatric death were reported to CDC during week 4. So far this season, there has been 53 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](https://www.cdc.gov/flu/weekly/index.htm)
The proportion of outpatient visits for influenza-like Illness for week 4 was **7.1%** which was **above the national baseline of 2.2%**.

Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2017-2018 and Selected Previous Seasons

Full FLuView report can be found here: [https://www.cdc.gov/flu/weekly/index.htm](https://www.cdc.gov/flu/weekly/index.htm)
During week 4, the following ILI activity levels were experienced:

- Puerto Rico and two states experienced moderate ILI activity (California and Idaho).
- Three states experienced low ILI activity (Delaware, North Dakota and Washington).
- Three states experienced minimal ILI activity (Maine, Montana, and Utah).

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2017-18 Influenza Season Week 4 ending Jan 27, 2018

*This map uses the proportion of outpatient visits to healthcare 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 disproportionally 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 4**:

- **Sporadic** activity was reported by the US Virgin Islands.
- **Local** activity reported by D.C. and 1 state.
- **Regional** activity reported by Guam and 1 state.
- **Widespread** activity reported by Puerto Rico 48 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
Flu Near You is a website where people can anonymously self-report any symptoms they experienced in the past week or if they were healthy. These reports help us track flu both in Vermont and the US.

Click [here](#) to sign up.

Click [here](#) to go to the interactive map.

The percentage of flu-like symptoms reports in the United States has increased by 0.1% since last week.

Visit healthmap.org/flutrends to view forecast estimates of flu activity in the USA.
### Flu activity in Vermont

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
<th>Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu-like symptoms</td>
<td>2.74%</td>
<td>2</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>12.33%</td>
<td>9</td>
</tr>
<tr>
<td>No symptoms</td>
<td>87.67%</td>
<td>64</td>
</tr>
</tbody>
</table>

The percentage of flu-like symptoms reports in Vermont has increased by 2.7% since last week.

Visit healthmap.org/flutrends to view forecast estimates of flu activity in the USA.
Resources

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