Influenza activity was categorized as Regional for MMWR Week 49

- Increased levels of Influenza-like Illness (ILI)* activity seen in emergency departments
  - Of the total emergency room visits, 1.3% were due to ILI
- Increased levels of ILI activity reported by outpatient providers
  - Sentinel providers reported 1% of patients had ILI
- Vermont Department of Health Laboratory reported 3 positive flu test
- National Respiratory and Enteric Virus Surveillance System reported 12 positive flu tests
- One ILI outbreak reported at a child care center in the Northwest 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.

**Based on CDC’s Activity Estimates Definitions:
www.cdc.gov/flu/weekly/overview.htm
Syndromic Surveillance* of Influenza-Like Illness at Vermont Hospitals, 2018-2019 vs. Historic Data

Week ending 12/8/2018 (Week 49)

*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.
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.
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>VDHL* Current Week (Dec 2-Dec 8, 2018)</th>
<th>VDHL* 2018-2019 Season Total (Sep 30, 2018-Dec 8, 2018)</th>
<th>NREVSS* Current Week (Dec 2-Dec 8, 2018)</th>
<th>NREVSS* 2018-2019 Season Total (Sep 30, 2018-Dec 8, 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>6</td>
<td>31</td>
<td>139</td>
<td>1035</td>
</tr>
<tr>
<td>Percentage</td>
<td>31%</td>
<td>16.1%</td>
<td>8.6%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Positive Specimens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>3</td>
<td>5</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Percentage</td>
<td>50%</td>
<td>16.1%</td>
<td>8.6%</td>
<td>2.2%</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>3</td>
<td>100%</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>A (2009 H1N1)</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</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>3</td>
<td>100%</td>
<td>4</td>
<td>80%</td>
</tr>
<tr>
<td>A (unsubtyped)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Influenza B</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</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

Long-Term Care Facility Outbreaks

Number of Outbreaks: 1

Outbreak Regions:
- Central: 0
- Northeastern: 0
- Northwestern: 0
- Southeastern: 0
- Southwestern: 1

School Outbreaks

Number of Outbreaks: 0

Outbreak Regions:
- Central: 0
- Northeastern: 0
- Northwestern: 0
- Southeastern: 0
- Southwestern: 0

Outbreaks at Other Facilities

Number of Outbreaks: 1

Outbreak Regions:
- Central: 0
- Northeastern: 0
- Northwestern: 1
- Southeastern: 0
- Southwestern: 0

MAP OF INFLUENZA SURVEILLANCE REGIONS IN VERMONT

*Suspected outbreaks of ILI should be reported to the health department
Influenza activity in the United States remained slightly elevated. Influenza A(H1N1) viruses were most commonly reported by public health laboratories since September 30, 2018.

Full FluView report can be found here: https://www.cdc.gov/flu/weekly/index.htm
One influenza-associated pediatric death was reported to CDC during week 49.
So far this season, there has been 6 influenza-associated pediatric deaths reported to CDC.
There have been no influenza-associated pediatric deaths reported in Vermont this season.

Number of Influenza-Associated Pediatric Deaths by Week of Death:
2015-2016 season to present

- 2015-2016: Number of Deaths Reported = 94
- 2016-2017: Number of Deaths Reported = 110
- 2017-2018: Number of Deaths Reported = 185
- 2018-2019: Number of Deaths Reported = 6

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 49 was **2.2%** which is **at the national baseline of 2.2%**.
During week 49, the following ILI activity levels were experienced:

- One state (Georgia) experienced high ILI activity.
- Puerto Rico and four states (Colorado, Connecticut, Kentucky, and Louisiana) experienced moderate ILI activity.
- New York City, the District of Columbia and nine states (Alabama, Arizona, Mississippi, Missouri, New Jersey, Oklahoma, South Carolina, Utah and Virginia) experienced low ILI activity.

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

2018-19 Influenza Season Week 49 ending Dec 08, 2018
Geographic spread for week 49**:

**No activity** was not reported.

**Sporadic** activity was reported by D.C., Puerto Rico, the US Virgin Islands, and 16 states.

**Local** activity reported by Guam and 21 states.

**Regional** activity was reported by 10 states.

**Widespread** activity was reported by 3 states.

*This map indicates geographic spread & does not measure the severity of influenza activity*
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