Influenza activity in Tennessee

- The percentage of outpatients with ILI visiting the state's Sentinel clinic sites was 6.76%. The CDC's baseline rate is 2.2%.
- 26.3% of specimens tested positive for influenza viruses.
- 63 of 95 Tennessee counties have had at least one confirmed influenza-positive result in recent weeks.
- Influenza-related deaths reported in 2017-18 season: 6 pediatric and 1 pregnancy-associated.

The percentage of patients with ILI reported in Week 5 was 6.76% as compared to 5.47% in Week 4. To date, 791 specimens from Week 5 have been tested by TDH Laboratory Services and two commercial laboratories that serve clinics and hospitals across Tennessee; 208 (26.3%) tested positive for influenza viruses. A map of counties with recent influenza-positive isolates is included. Tennessee requires reporting of influenza-related deaths among children and pregnant women. So far this season, Tennessee has reported 6 influenza-related deaths in children <18 years and one influenza-related death of a pregnant woman.

SPN sites should submit specimens year-round from ALL patients meeting the ILI case definition: Fever > 100°F (37.8°C) plus cough and/or sore throat, in the absence of a known cause (other than influenza). Case definition is not dependent on any test. If you have questions, contact your regional or state SPN representative. The TDH specimen submission form dated September 2015 should be used.

Specimens are critical to be able to track the geographic spread and intensity of seasonal influenza viruses, to detect the emergence of novel virus and/or antiviral resistance and provide data for vaccine strain selections.

### Respiratory Viral Panel

**Number of Positive Specimens, by week**

<table>
<thead>
<tr>
<th>Month/Week</th>
<th>#</th>
<th>Flu A (H1N1)</th>
<th>Flu A (H3)</th>
<th>Unsub. Flu A</th>
<th>Flu B</th>
<th>RSV A</th>
<th>RSV B</th>
<th>Parafflu 1</th>
<th>Rhino</th>
<th>Meta-pneumo</th>
<th>Adeno</th>
<th>Corona OC43</th>
<th>Corona HKU1</th>
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</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Current</td>
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<td>42</td>
<td>43</td>
<td>78</td>
<td>45</td>
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<td>37</td>
<td>33</td>
<td>9</td>
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<td>1</td>
<td>4</td>
<td>2</td>
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</tr>
</tbody>
</table>

Influenza Confirmed by Culture or PCR in Tennessee from Specimens Collected by Any Source within the Past 4 Weeks

January 7 through February 3, 2018

- Strains are reported by county of case residence.
- Counties where influenza sentinel providers are located are identified with bold boundary lines.
- Stars mark counties with large metropolitan populations (Memphis, Jackson, Nashville, Chattanooga, Knoxville, and the Tri-Cities area).

Note: TDH weekly laboratory surveillance for influenza includes PCR and culture results for Tennessee specimens submitted to two commercial laboratories serving outpatient clinics and hospitals statewide. These numbers are added to those from TDH Laboratory Services and help provide a picture of influenza activity areas of the state in which there are not Sentinel surveillance sites.
Reference Information for Sentinel Provider Network

1. Influenza-like illness (ILI) is defined as fever > 100°F (37.8°C) plus cough and/or sore throat, in the absence of a known cause (other than influenza). Classification of ILI is based upon symptoms only and does not require any test.

2. The percentage of patients with ILI seen in each region is compared to the statewide average. Regions with % statistically-significantly different from the state average are noted as “higher” or “lower.” The CDC reports that the percentage of patients visiting outpatient healthcare providers in the Sentinel Provider Network (SPN) with influenza-like-illness (ILI) when influenza viruses are not circulating is expected to fall at or below a specific SPN baseline (nationwide = 2.2%, East South Central region (AL, TN, MS, KY) = 2.3%). When the percentage of patients with ILI exceeds this baseline, this suggests that influenza viruses may be circulating.

Important Information for Sentinel Providers

Sentinel Providers report ILI by the end of Wednesday following the end of the reporting week (https://wwwn.cdc.gov/illinet/) and collect and ship specimens from ILI cases Monday through Thursday (maximum 10/week per provider). All Sentinel Provider specimens MUST be accompanied by the Influenza and Respiratory Viral Panel Submission form or testing will not be done. The Respiratory Viral Panel is only validated for nasopharyngeal (NP) specimens. Specimens collected from other sites cannot be tested.

Additional laboratory supplies can be obtained by completing the lab order supply form. To ensure the order is filled, please include the CDC Provider ID Code.

Contact Information
Submit weekly reports to: https://wwwn.cdc.gov/illinet/ OR Fax 888-232-1322
State Lab: Bryan Mason (Virology, Respiratory Viral Panel) 615-262-6300
SPN Questions:
State: Robb Garman 800-404-3006 OR 615-741-7247
County/Region: Regional SPN Coordinator (see map)