North Dakota Weekly Influenza Update
2017-18 Influenza Season

Through week 201810, the week ending 3/10/2018
All data are preliminary and based on reports received at the time of publication.

<table>
<thead>
<tr>
<th>As of week 10:</th>
<th>This season (2017-18)</th>
<th>Last season (2016-17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases reported for week</td>
<td>217</td>
<td>514</td>
</tr>
<tr>
<td>Cumulative cases for season</td>
<td>7,295</td>
<td>5,402</td>
</tr>
<tr>
<td>Activity level</td>
<td>Regional</td>
<td>Widespread</td>
</tr>
</tbody>
</table>

Reported influenza cases continue to decline. Geographic spread of influenza activity has decreased to regional. It is likely that the influenza season peaked the week ending January 27, 2018. Influenza B activity continues to surpass influenza A activity with nearly 60% of the reported influenza cases for week 10 being influenza B. An increase in influenza B is typical for this part of the season.

Although activity continues to decline, influenza activity will continue for some time, so it is not too late to get vaccinated. Handwashing and staying home when you are sick are also important for reducing the spread of influenza. It is recommended children with influenza be kept out of school or child care until they have been fever free, without the use of fever-reducing medication, for 24 hours regardless if the child is taking influenza antivirals.

Influenza Cases by Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, unspecified</td>
<td>5,499</td>
</tr>
<tr>
<td>2009 A H1N1</td>
<td>42</td>
</tr>
<tr>
<td>A H3</td>
<td>520</td>
</tr>
<tr>
<td>B, unspecified</td>
<td>1,134</td>
</tr>
<tr>
<td>B Yamagata</td>
<td>92</td>
</tr>
<tr>
<td>B Victoria</td>
<td>8</td>
</tr>
</tbody>
</table>

All laboratory-identified cases of influenza (including identification via rapid test) are reportable in North Dakota. Statistics do not include data from people who did not seek medical care for their illness, or who sought medical care but were diagnosed based on symptoms, not with a laboratory test.
Demographic Data

**Case Count** for Lab-Confirmed Cases by Age Group

- 1868 cases below 10
- 1083 cases 10-19
- 792 cases 20-29
- 811 cases 30-39
- 599 cases 40-49
- 614 cases 50-59
- 1528 cases 60+

**Case Count** for Lab-Confirmed Cases by Gender

- 384 MALE cases
- 345 FEMALE cases

Lab-Confirmed Cases by County

- Cases range from 0 to 50+
- Colors indicate case counts per age group and gender.
Deaths, Hospitalizations, and Outbreaks

Deaths The NDDoH obtains death information from state Vital Records data. For surveillance, both influenza and pneumonia death information is collected. Although a variety of pathogens can cause severe pneumonia, we know that when influenza is circulating, influenza contributes considerably to the number of pneumonia deaths, even when influenza is not diagnosed or coded on the death certificate.

*Death data has not been updated for the week ending 3/10/2018, this will be updated in the following weekly report.

Hospitalizations There have been **257** influenza-related hospitalizations reported for the 2017-18 season. Hospitalization status for influenza cases is not required to be reported. This information is also not received with electronic laboratory reports, greatly decreasing the number of hospitalizations reported to the NDDoH. We are currently exploring more reliable ways to receive this data.

Outbreaks Influenza or influenza-like illness outbreaks in institutional settings (schools, long term & basic care facilities, prisons, etc.) and in the general community are common during the influenza season. Institutional outbreaks are mandatorily reportable to the NDDoH. There have been **32** reported outbreaks of influenza-like illness in long term, assisted, basic care, or group home settings; 23 caused by Influenza A (not subtyped), one caused by influenza A H3N2, two caused by unknown influenza type, one caused by both influenza A and B, one caused by both Influenza A and RSV, and four caused by influenza B.

The NDDoH has also received reports of seven influenza A outbreaks in schools, and four influenza A outbreaks in child care settings.
For influenza A subtyping, a large majority of subtyped North Dakota A's have been A H3N2. This trend matches the current national trend for influenza A subtyping. At this point we are having an A H3N2-predominant season.

A variety of changes over the past few years has made comparing influenza case data over time more difficult. Widespread use electronic laboratory reporting in recent years has greatly reduced underreporting and increased our case counts. This is likely why the 2016-17 season, a fairly moderate season, saw our highest seasonal case counts on record. Starting this season, however, many of our providers and facilities, including those of our largest health system, are currently transitioning to new influenza testing protocol that affects who is tested and when testing occurs. The result will be fewer people tested, but higher data reliability.

Changes in how data are collected over time are inevitable. These changes are not bad, but need to be considered when reviewing data over time. At the moment, changes may be suppressing the true magnitude of the season when compared with previous seasons.
Sentinel Surveillance: Outpatient Influenza-like Illness

The North Dakota Department of Health (NDDoH) participates with other states and jurisdictions in the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINET). Data from this project is used in the CDC’s weekly FluView report. Participating outpatient clinics send data on the number of patients in each of five age groups experiencing ILI, and the number of patients seen for any reason each week. ILI is defined as:

- Fever of 100°F or greater
- with
- A cough AND/OR sore throat

Data for all providers is pooled, and a state-wide statistic for percent of visits for ILI is produced. In North Dakota, a percent ILI of 1.3% or greater is considered season-level activity.

**Current Activity** This week, ILI is 1.32%. We are slightly above the seasonal baseline.

<table>
<thead>
<tr>
<th>Week Number</th>
<th>2017-18 Percent ILI</th>
<th># ILI 0-4 age group</th>
<th># ILI 5-24 age group</th>
<th># ILI 25-49 age group</th>
<th># ILI 50-64 age group</th>
<th># ILI 65+ age group</th>
<th>Total # visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>201807</td>
<td>2.95%</td>
<td>5</td>
<td>14</td>
<td>14</td>
<td>8</td>
<td>2</td>
<td>1460</td>
</tr>
<tr>
<td>201808</td>
<td>3.20%</td>
<td>7</td>
<td>16</td>
<td>21</td>
<td>2</td>
<td>4</td>
<td>1562</td>
</tr>
<tr>
<td>201809</td>
<td>2.72%</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td>1324</td>
</tr>
<tr>
<td><strong>201810</strong></td>
<td><strong>1.32%</strong></td>
<td><strong>0</strong></td>
<td><strong>5</strong></td>
<td><strong>10</strong></td>
<td><strong>1</strong></td>
<td><strong>0</strong></td>
<td><strong>1208</strong></td>
</tr>
</tbody>
</table>

Percent of Outpatient Visits Due to Influenza-like Illness by Week, Current and Previous Season
Sentinel Surveillance: Laboratory Data

Laboratory Surveillance: Influenza The NDDoH receives influenza testing data from participating sentinel laboratories across North Dakota. The total number of influenza tests (all testing methodologies) and the total number of those tests that are positive are reported each week. Data for all labs is pooled, and a state-wide percent positivity statistic is produced. Percent positivity for influenza testing of 10% is greater is considered a general indicator for season-level influenza activity. This week, percent positivity for influenza is 23.23%.

![Percent Positivity of Influenza Testing and the Total Number of Tests Conducted]

Laboratory Surveillance: Respiratory Syncytial Virus (RSV) The NDDoH receives similar testing data for RSV. RSV is a common respiratory virus best known for affecting children; however, a person in any age group can become ill and people can get RSV multiple times. RSV also occurs seasonally, over a time period similar to influenza. This week, percent positivity for RSV is 26.32%.

![Percent Positivity of RSV Testing and the Total Number of Tests Conducted]
**Influenza Vaccination Statistics**

**Vaccine Doses Administered** The North Dakota Immunization Information System (NDIIS) provides information on vaccines given in North Dakota. Vaccines given to children are required to be entered into the NDIIS, while vaccines given to adults are often entered into the NDIIS, but are not required to be entered. Many providers in North Dakota have established an electronic connection with the NDIIS, allowing all vaccinations for that provider to be sent to the NDIIS automatically. A total of 277,178 doses of 2017-18 influenza vaccine have been entered into the NDIIS so far this season.

**Vaccination rates by Age Group** NDIIS data can also be used to estimate the percent of North Dakotans in each age group that have received an influenza vaccination so far this season. This week, the age group with the highest rates is 65+ with 52.4%, and the age group with the lowest vaccination rate is 19-49 year-olds, with 19.1%.
Additional Information and Announcements

**National Influenza Surveillance** National influenza activity and surveillance information is available from the CDC FluView website at: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/), and is updated every Friday.

**Need a flu vaccine?** Visit [www.vaccinefinder.org](http://www.vaccinefinder.org) to find locations providing influenza vaccine near you.

**Are you interested in tracking flu/helping others track flu?** Join **Flu Near You**! Flu Near You is a website where users self-report symptoms on a weekly basis. Information on influenza-like illness is aggregated at the regional, state, and national level and presented on the Flu Near You website. The website also provides information on where people can get vaccinated for flu. Information at the symptom level is available in aggregate form to state health departments. We will be adding North Dakota Flu Near You data to this report in the coming weeks. If you are interested in participating in Flu Near You, visit [www.flunearyou.org](http://www.flunearyou.org).

**ILI Net Recruitment** The NDDoH and CDC are looking for more outpatient providers to participate in the ILINet sentinel surveillance program. Data from this program is used at the state and national level for seasonal decision making. A large majority of current and past participants report participation takes less than 15 minutes each week. If your outpatient clinic is interested and willing to participate, please contact Jill Baber at jbaber@nd.gov or 701.328.3341. For more information see our brochure: [http://www.ndflu.com/Reporting/ILINetBrochure.pdf](http://www.ndflu.com/Reporting/ILINetBrochure.pdf).

**Subscribe to this Report** If you did not receive this report directly and would like to, please contact Michelle Feist at mafeist@nd.gov or 701.328.3177 to be added to the weekly report email group.

**Contact Information** For information on influenza surveillance, contact the North Dakota Department of Health Division of Disease Control at 701.328.2378 or visit [www.ndflu.com](http://www.ndflu.com).