Cases and influenza indicators increased slightly this week. It is typical to see sporadic activity at this point, although we are seeing slightly more influenza B than is usual for early in the season, with several PCR-confirmed influenza B cases already identified. The influenza B Victoria strain was identified in our only subtyped B specimen. The North Dakota Department of Health (NDDoH) always offers free influenza PCR confirmation and typing, and would be interested in receiving more B specimens to type and to send on to the Centers for Disease Control and Prevention (CDC) for molecular sequencing. Our lab sends one specimen of each of the four circulating influenza subtypes to the CDC each week.

As influenza cases continue to increase in this early part of the season, now is a great time to get vaccinated if you have not already!
Demographic Data

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

- <10: 2
- 10-19: 3
- 20-29: 3
- 30-39: 1
- 40-49: 2
- 50-59: 15

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

- MALE: 16
- FEMALE: 10

Lab-Confirmed Cases by County

- 0
- 1-10
- 11-20
- 21-30
- 31-40
- 41-50
- 50+
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.

<table>
<thead>
<tr>
<th>Number of Deaths for 2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
</tr>
<tr>
<td>Influenza</td>
</tr>
</tbody>
</table>

Hospitalizations There have been 3 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 There have been 0 reported outbreaks of influenza-like illness in long term or basic care settings, schools, or child care facilities this season. Outbreaks in schools, assisted living facilities, workplaces, and in the general community are common during the influenza season.
Multi-Season Comparison

The 2017-18 influenza season is off to a fairly "normal" start, with a small number of sporadic cases occurring in these early weeks. We are slightly ahead of the average case count for this time during the season over the last five year, but it is too early to tell if this is meaningful.

<table>
<thead>
<tr>
<th>Season</th>
<th>Total Cases</th>
<th>Peak Week (week ending)</th>
<th>Predominant Strain</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>2,923</td>
<td>1/4/2014</td>
<td>2009 A H1N1</td>
</tr>
<tr>
<td>2015-16</td>
<td>1,942</td>
<td>3/12/2016</td>
<td>2009 A H1N1</td>
</tr>
<tr>
<td>2016-17</td>
<td>7,507</td>
<td>2/18/2017</td>
<td>A H3N2</td>
</tr>
<tr>
<td>2017-18</td>
<td>26</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

North Dakota Influenza Cases by Week, 2013-Current Season
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 0.44%. We are below the seasonal baseline. It is normal for ILI to fluctuate early in the season (see weeks 38 and 39). This is an effect of small numbers as seasonal providers gear to up begin reporting.

<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>201738</td>
<td>1.83%</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>109</td>
</tr>
<tr>
<td>201739</td>
<td>2.50%</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>120</td>
</tr>
<tr>
<td>201740</td>
<td>0.36%</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>280</td>
</tr>
<tr>
<td><strong>201741</strong></td>
<td><strong>0.44%</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>4</strong></td>
<td><strong>1148</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 1.50%.**

![Percent Positivity of Influenza Testing and the Total Number of Tests Conducted](image1)

**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 0.00%.**

![Percent Positivity of RSV Testing and the Total Number of Tests Conducted](image2)
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 85,551 doses of 2017-18 influenza vaccine have been entered into the NDIIS so far this season.

![Influenza Doses Administered by Week](chart1)

**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 22.9%, and the age group with the lowest vaccination rate is 19-49 year-olds, with 5.4%.

![Influenza Vaccination Rates by Age Group, by Week, Estimated by the NDIIS](chart2)
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/, and is updated every Friday.

Need a flu vaccine? Visit 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.

ILINet 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.

Subscribe to this Report If you did not receive this report directly and would like to, please contact Jill Baber at jbaber@nd.gov or 701.328.3341 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.