

Through week **201803**, the week ending **1/20/2018**

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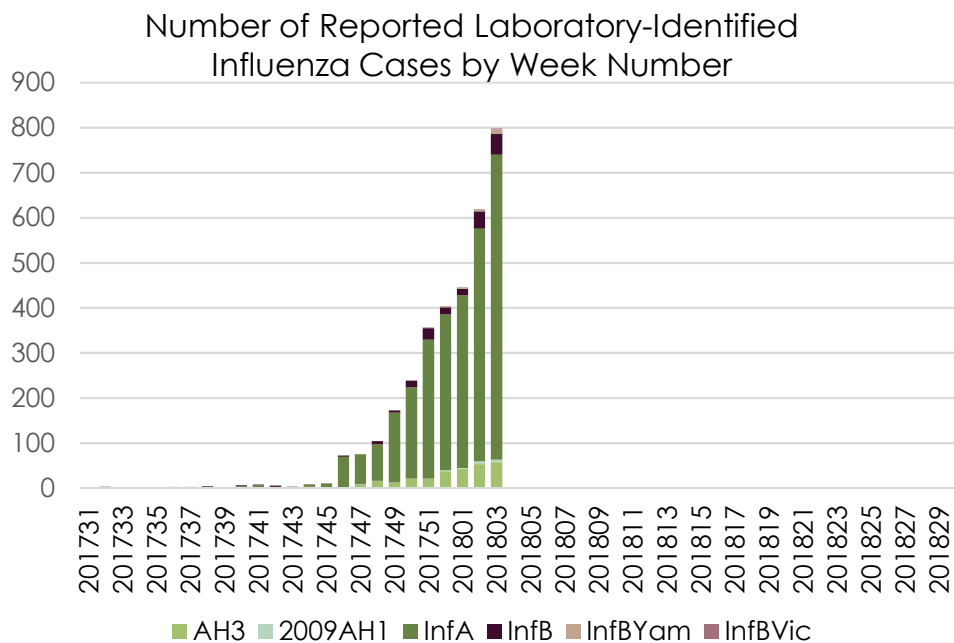
All data are preliminary and based on reports received at the time of publication.

Published 1/25/2018

As of week 3:	This season (2017-18)	Last season (2016-17)
Cases reported for week	798	301
Cumulative cases for season	3339	797
Activity level	Widespread	Widespread

The influenza case count for North Dakota increased again this week. Like the rest of the nation, we are seeing significant influenza circulation. To decrease circulation, people are reminded to get vaccinated if they have not already done so, follow excellent handwashing etiquette, cover coughs and sneezes, and stay home when ill.

One interesting anomaly this season: the NDDoH discovered an individual co-infected with both the influenza A 2009 H1N1 strain and A H3N2 through surveillance testing. The result was confirmed by the Centers for Disease Control and Prevention (CDC). Co-infections with influenza A viruses are rare, with only a handful identified each year nationwide. Dual-flu A infections are of special interest because the presence of two influenza viruses in one host at the same time can lead to genetic re-assortment between the viruses, possibly resulting in a new influenza virus. (Not that this always happens—this is no cause for alarm.) In clinical labs, dual infection results are typically indicative of a problem with the influenza test. This instance highlights the importance statewide laboratory participation in the national influenza laboratory surveillance program that the NDDoH and all other states participate in with the CDC.

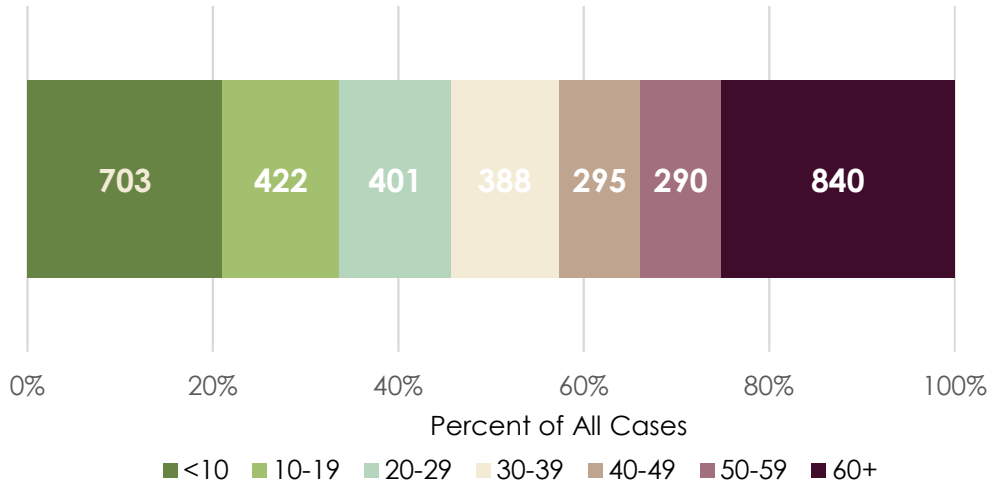


Influenza Cases by Type	
A, unspecified	2839
2009 A H1N1	16
A H3	277
B, unspecified	180
B Yamagata	24
B Victoria	3

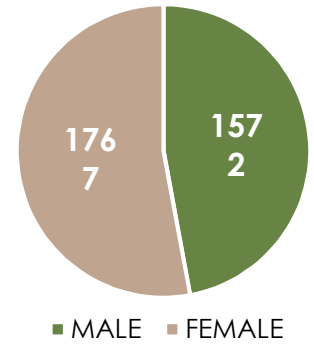
All laboratory-identified cases of influenza (including identification via rapid test) are reportable in North Dakota. Statistics do not include data from people who did not seek medical care for their illness, or who sought medical care but were diagnosed based on symptoms, not with a laboratory test.

Demographic Data

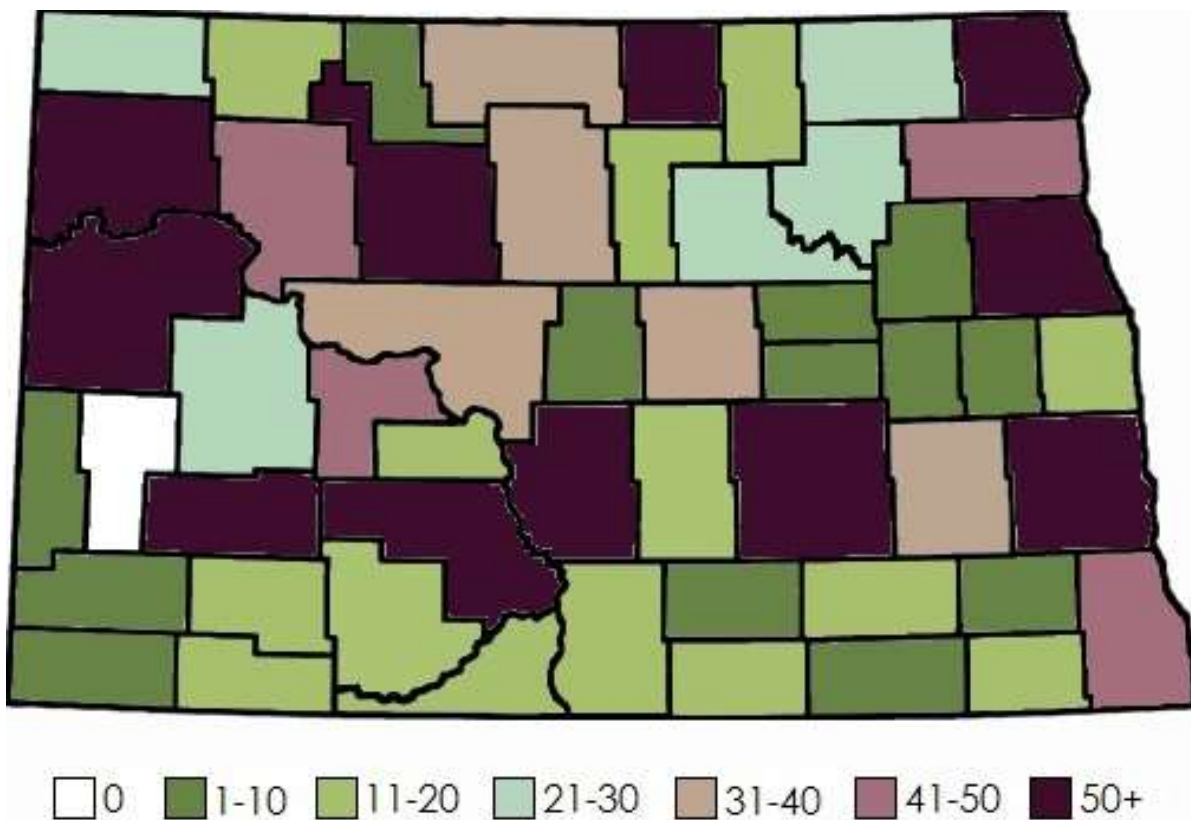
Case Count for Lab-Confirmed Cases by Age Group



Case Count for Lab-Confirmed Cases by Gender



Lab-Confirmed Cases by County

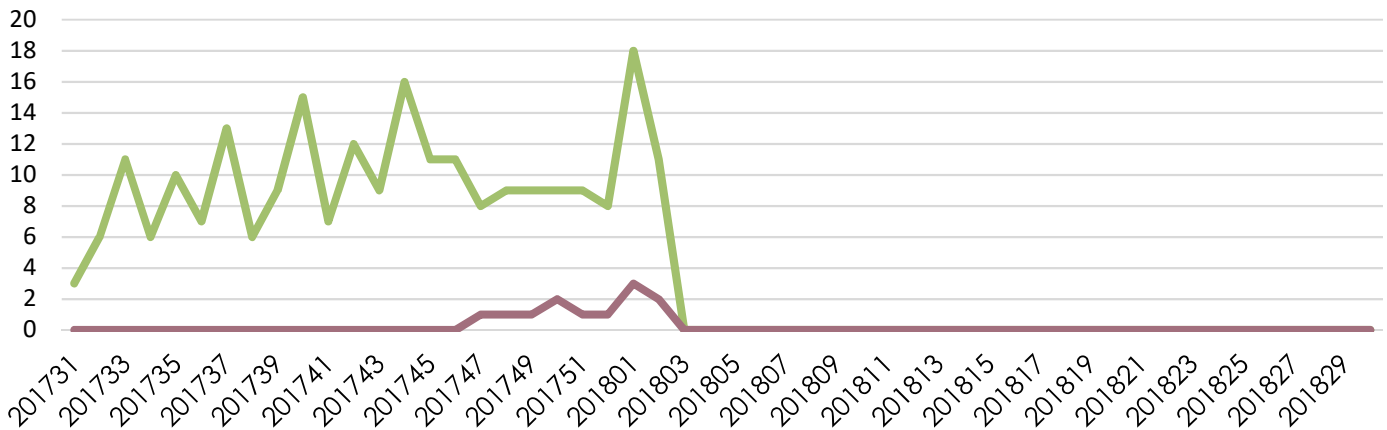


Deaths, Hospitalizations, and Outbreaks

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.

Number of Deaths for 2017-18	
Pneumonia	233
Influenza	12

Number of **Pneumonia** and **Influenza** Deaths by Week Number



Hospitalizations There have been **155** 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 **23** reported outbreaks of influenza-like illness in long term, assisted, basic care, or group home settings; 19 caused by Influenza A (not subtyped), one caused by influenza A H3N2, and three caused by influenza B.

The NDDoH has also received reports of two influenza A outbreaks in child care settings.

Multi-Season Comparison

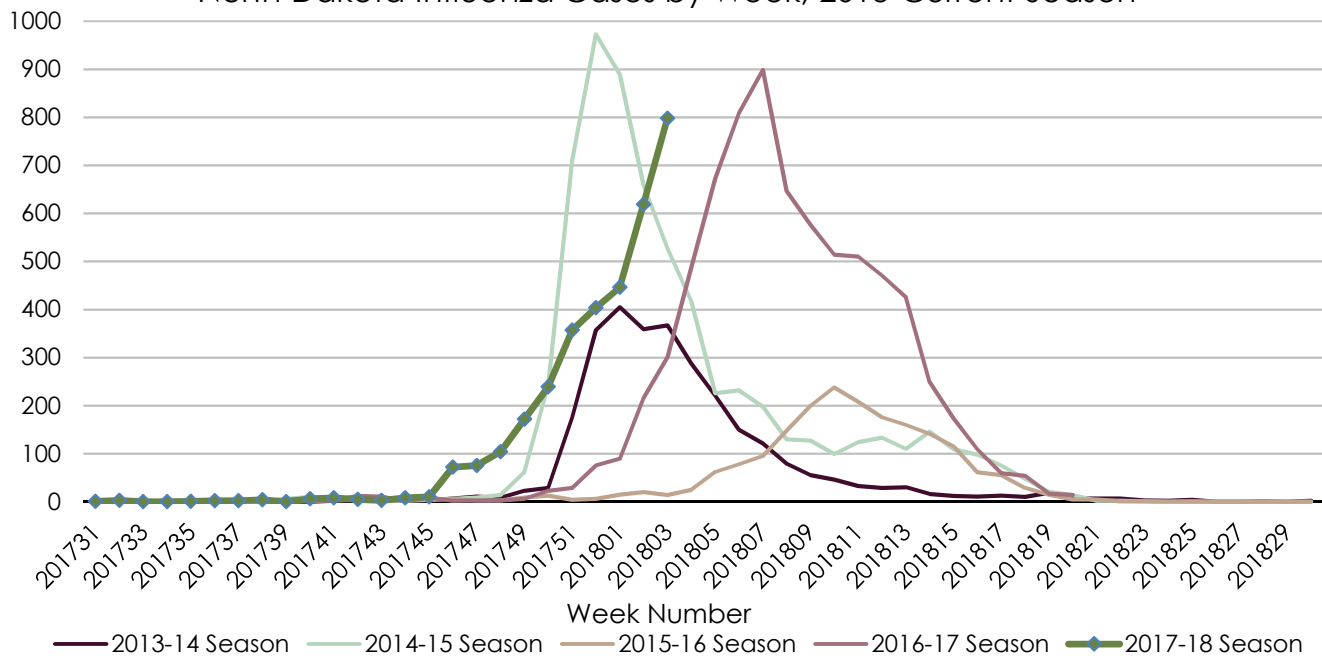
Season	Total Cases	Peak Week (week ending)	Predominant Strain
2013-14	2,923	1/4/2014	2009 A H1N1
2014-15	6,443	12/27/2014	A H3N2
2015-16	1,942	3/12/2016	2009 A H1N1
2016-17	7,507	2/18/2017	A H3N2
2017-18	3,339	TBD	A H3N2

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.

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:

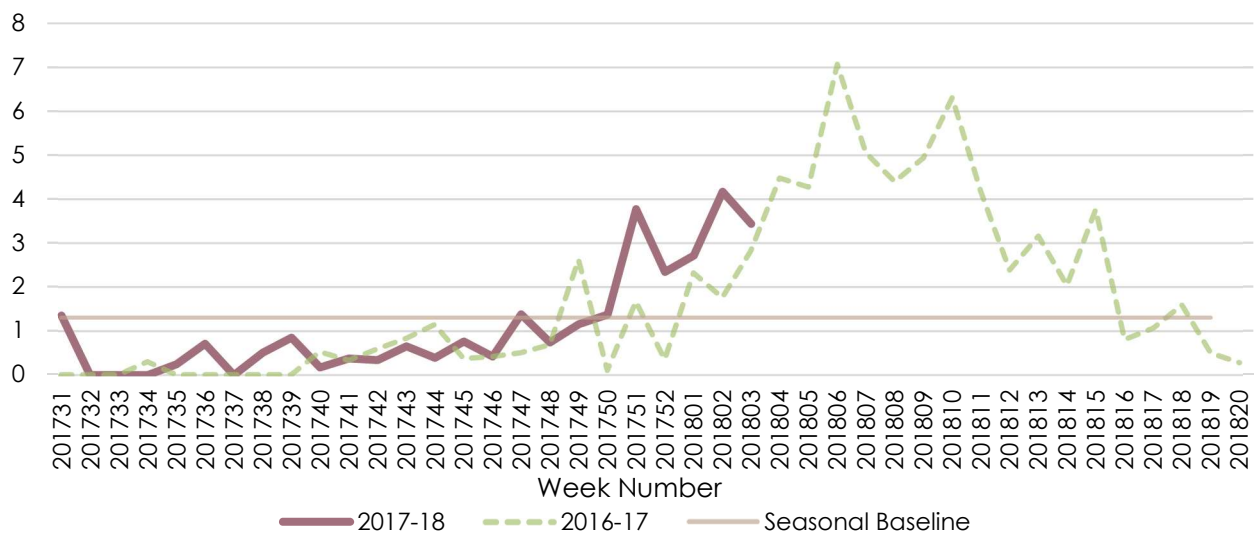
Fever of 100°F or greater
with
A cough AND/OR sore throat

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 **3.44%**. We are above the seasonal baseline.

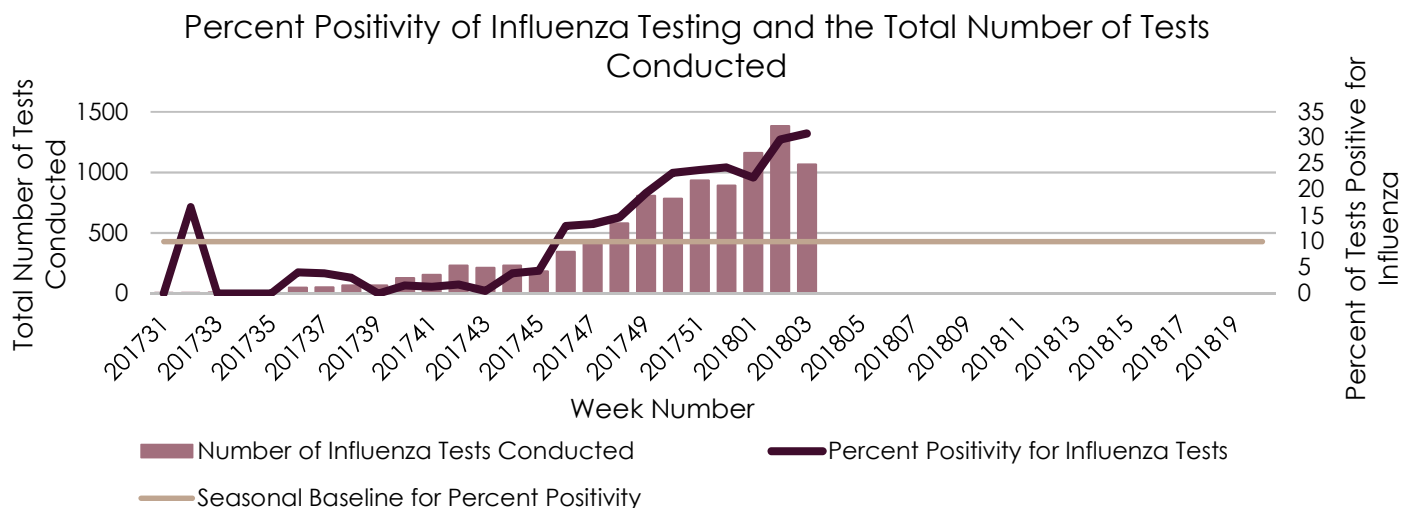
Week Number	2017-18 Percent ILI	# ILI 0-4 age group	# ILI 5-24 age group	# ILI 25-49 age group	# ILI 50-64 age group	# ILI 65+ age group	Total # visits
201752	2.35%	8	4	7	6	6	1321
201801	2.72%	6	7	10	6	5	1252
201802	4.17%	9	28	18	9	1	1558
201803	3.44%	9	11	16	3	5	1280

Percent of Outpatient Visits Due to Influenza-like Illness by Week, Current and Previous Season



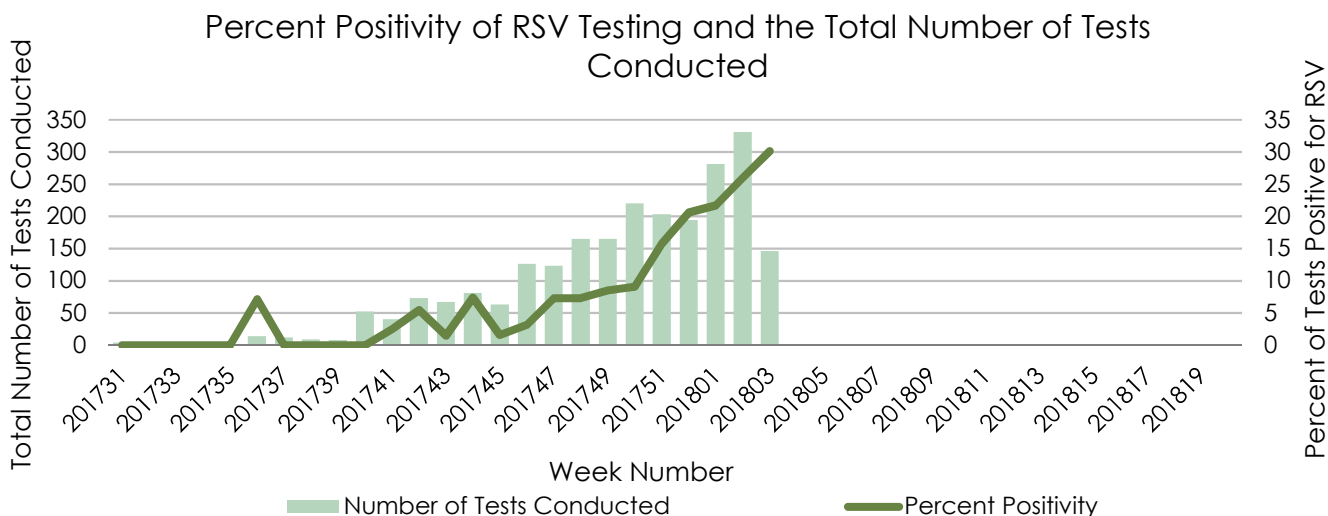
Sentinel Surveillance: Laboratory Data

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% or greater is considered a general indicator for season-level influenza activity. **This week, percent positivity for influenza is 30.83%.**



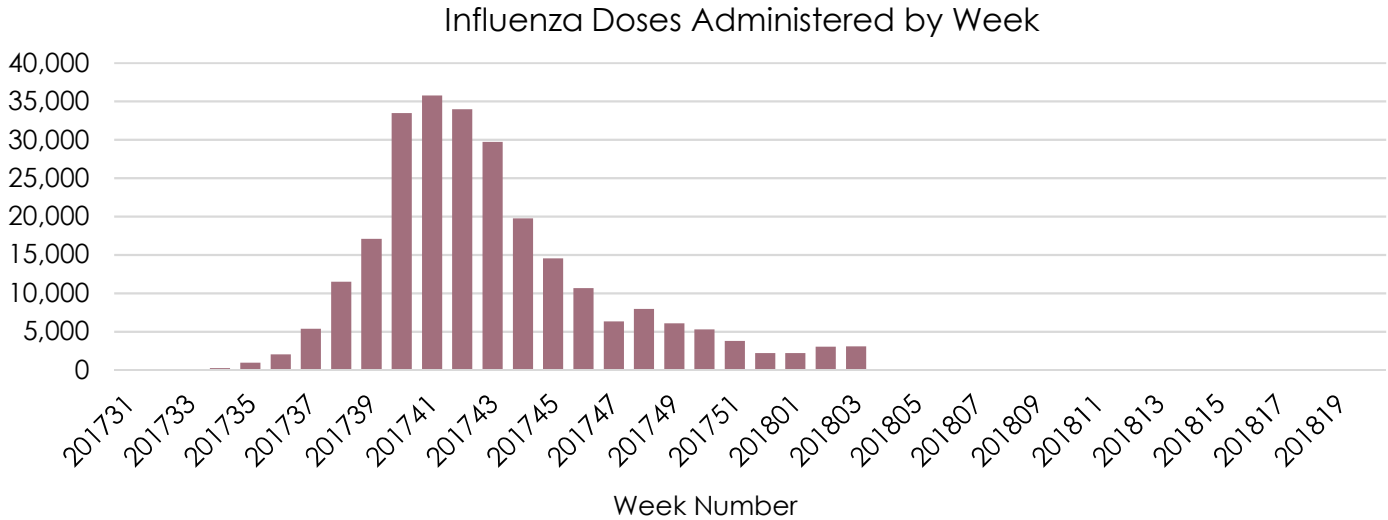
Laboratory Surveillance: Respiratory Syncytial Virus (RSV) The NDDoH receives similar testing data for RSV. RSV is a common respiratory virus best known for affecting children; however, a person in any age group can become ill and people can get RSV multiple times. RSV also occurs seasonally, over a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

This week, percent positivity for RSV is 30.14%.

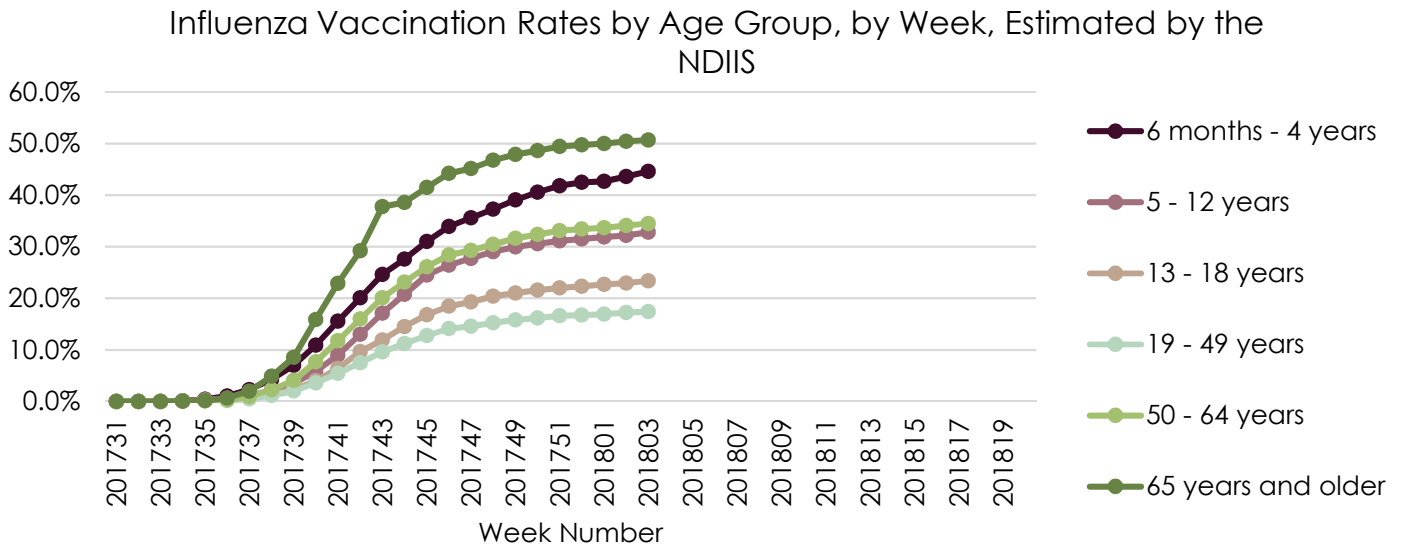


Influenza Vaccination Statistics

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 **255,082** 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 **50.7%**, and the age group with the lowest vaccination rate is **19-49 year-olds**, with **17.4%**.



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.

