

2018-19 WEEKLY INFLUENZA UPDATE

Preliminary data through week **201912**, the week ending **3/23/2019**

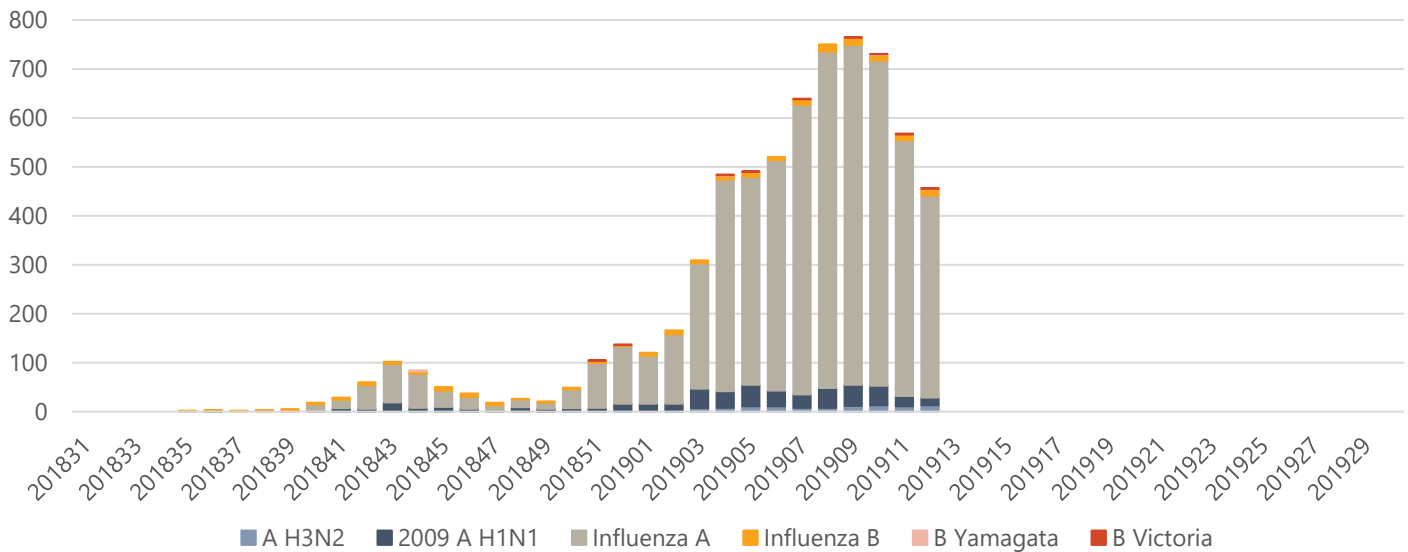
Edited by: Laura Cronquist, Enteric/Vectorborne/Zoonotic Disease Epidemiologist

OVERVIEW

As of this week:	This season (2018-19)	Last season (2017-18)
Cases reported for the week	457	152
Cumulative cases for season	6,751	7,642
Activity level	Regional	Regional

Influenza activity continues to decrease in our state and nationwide. CDC’s flu forecasts indicate a 90 percent chance that the flu season peaked nationally in mid-to-late February, although it appears influenza A H3N2 is causing a second wave of flu activity across the nation. H3N2 viruses are typically associated with more severe illness in older adults. The NDDoH continues to recommend flu vaccination and appropriate use of antiviral medications for high-risk persons and those who are severely ill.

Number of Reported Laboratory-Identified **Influenza Cases** by Week

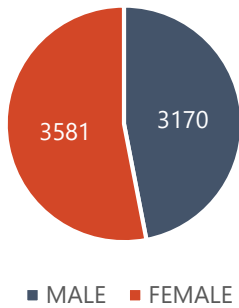


Number of cases:	A H3N2	2009 A H1N1	Influenza A	Influenza B	B Yamagata	B Victoria
This week	13	16	412	13	1	2
This season	106	471	5970	188	5	11

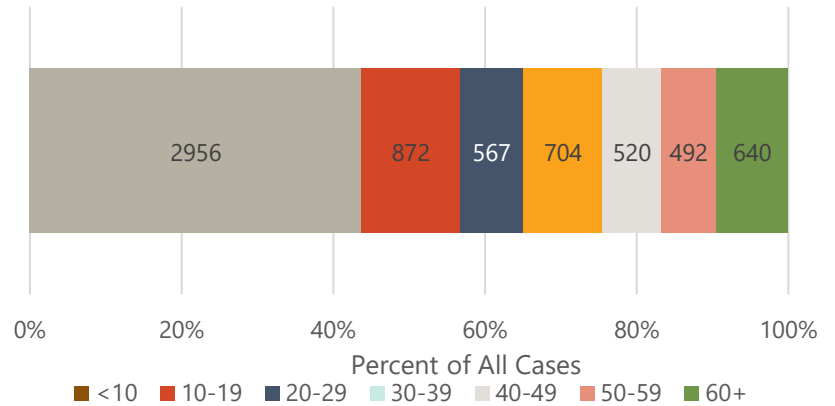
Laboratory-confirmed influenza is a reportable disease in North Dakota. Influenza “cases” include people that have tested positive for influenza in a healthcare setting. It does not include people with influenza who did not seek healthcare, or who were diagnosed without a lab test, which is common. The true number of people with influenza in North Dakota is underrepresented, but case data allows us to see where and in what populations influenza is circulating. It also provides context regarding how the current season compares with previous seasons. Find more information about cases on www.ndflu.com.

CASE DEMOGRAPHICS

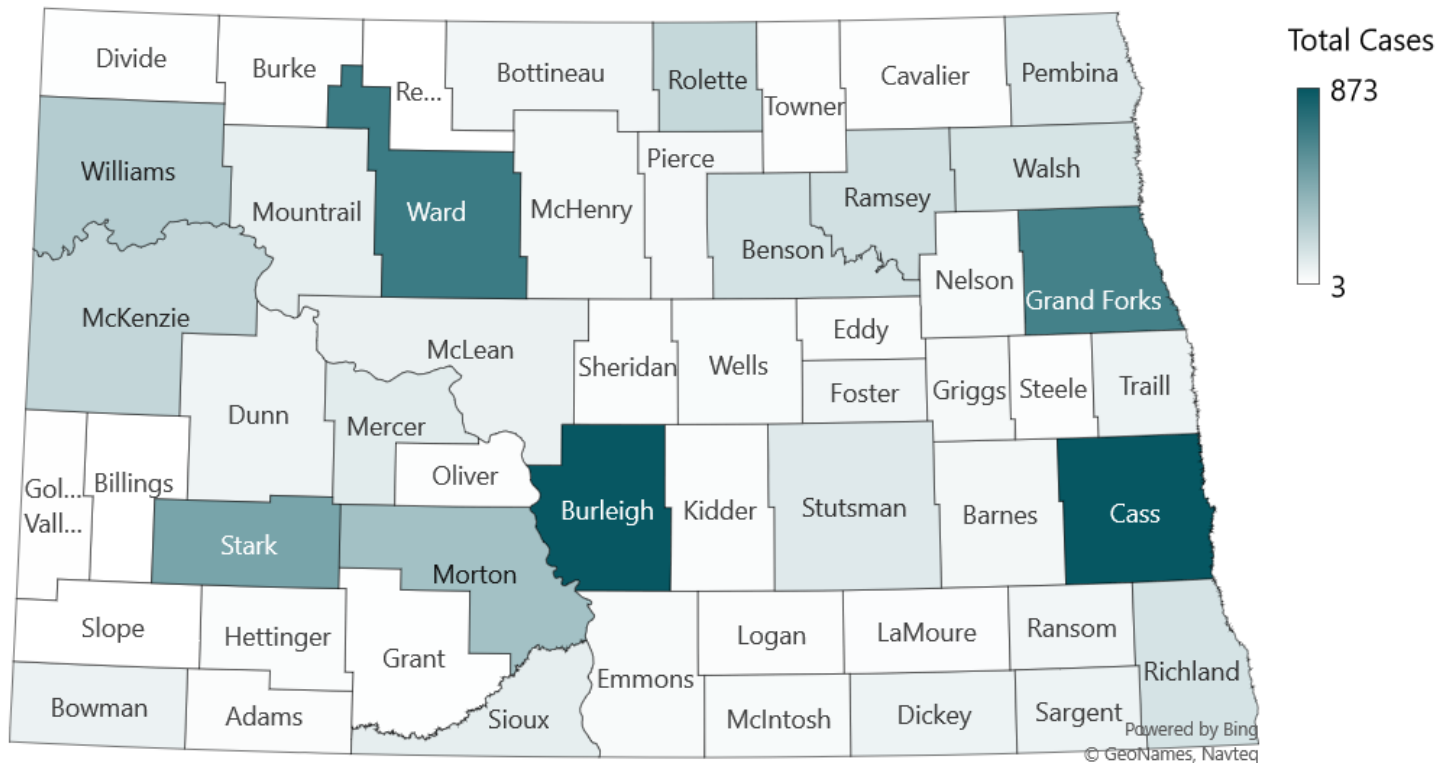
Case Count for Lab-Confirmed Cases by **Gender**



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



Cases by **County**



OUTBREAKS

During the influenza season, influenza outbreaks are common anywhere people gather, including schools, child care centers, and health care facilities. Outbreaks of influenza or influenza-like illness may be reported to the NDDoH. The following outbreaks have been reported this season:

Setting	Number of outbreaks	Identified pathogens
Long Term Care, Basic Care, Assisted Living	17	11 influenza A; 1 influenza A/B; 1 rhinovirus/ <i>Haemophilus influenzae</i> ; 4 unknown
Schools	3	1 influenza A/B; 2 influenza A
Child Care Centers and Preschools	3	1 influenza A; 1 unknown, 1 influenza A/RSV

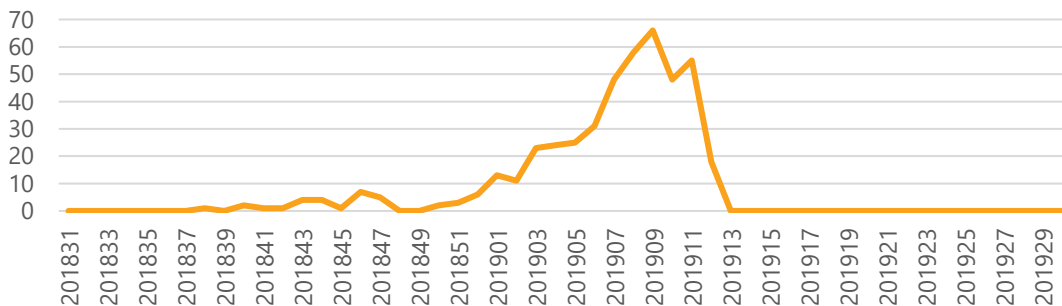
SURVEILLANCE PROGRAMS

In addition to case reporting, the NDDoH uses a variety of information sources to fully describe what is happening during the influenza season.

Hospitalizations

This season, the NDDoH has introduced a new influenza hospitalization surveillance program. Select North Dakota hospitals report the number of influenza-related hospitalizations weekly to the NDDoH. Because this surveillance methodology is new, hospitalization numbers this year may not be comparable to those seen in previous years.

Number of Influenza **Hospitalizations** by Week

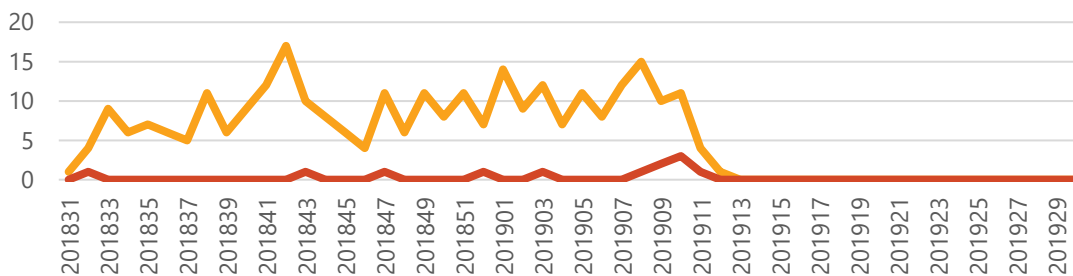


Total number of hospitalizations:
This week 18
This season 457

Deaths

Data on pneumonia and influenza deaths is obtained from Vital Records and based on the cause of death listed on the death certificate.

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

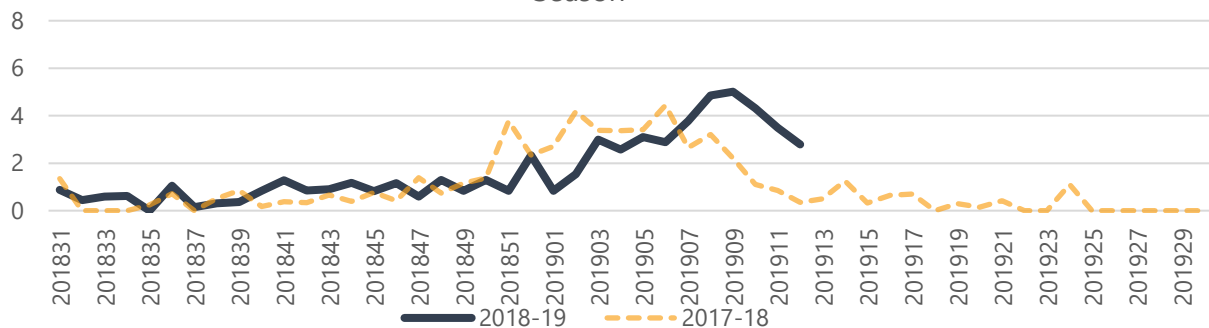


Total number of deaths for the season:
Pneumonia 289
Influenza 12

Outpatient Influenza-like Illness

The NDDoH participates in the national U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). Data from participating outpatient providers in North Dakota are pooled to create a state-wide estimate for the weekly percent of healthcare visits due to influenza-like illness (ILI). Patients presenting with a fever of 100°F or greater and a cough and/or sore throat are considered to have ILI. For more information on state and national ILINet data, see [FluView Interactive](#).

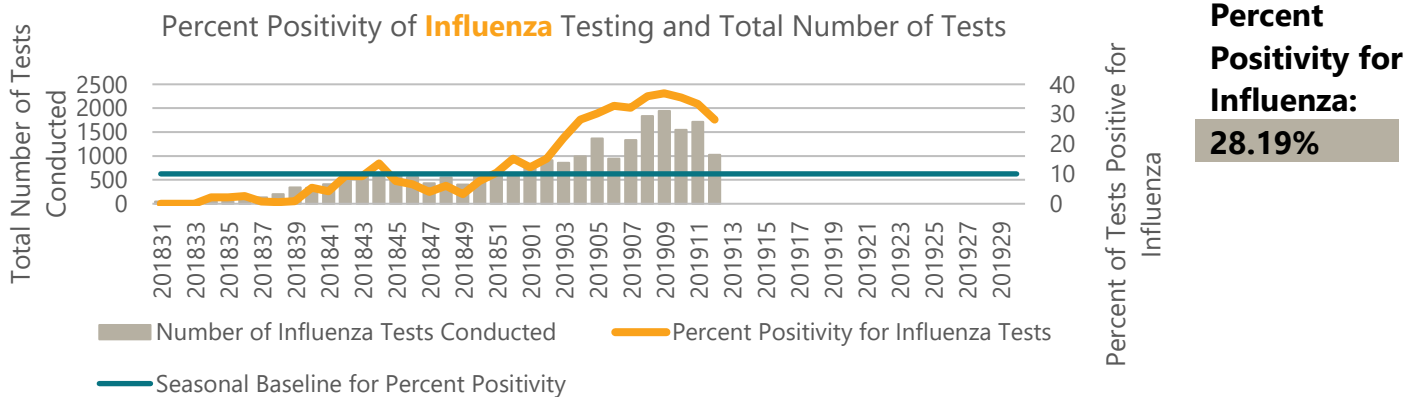
Percent of Outpatient Visits Due to **Influenza-like Illness** by Week, Current and Previous Season

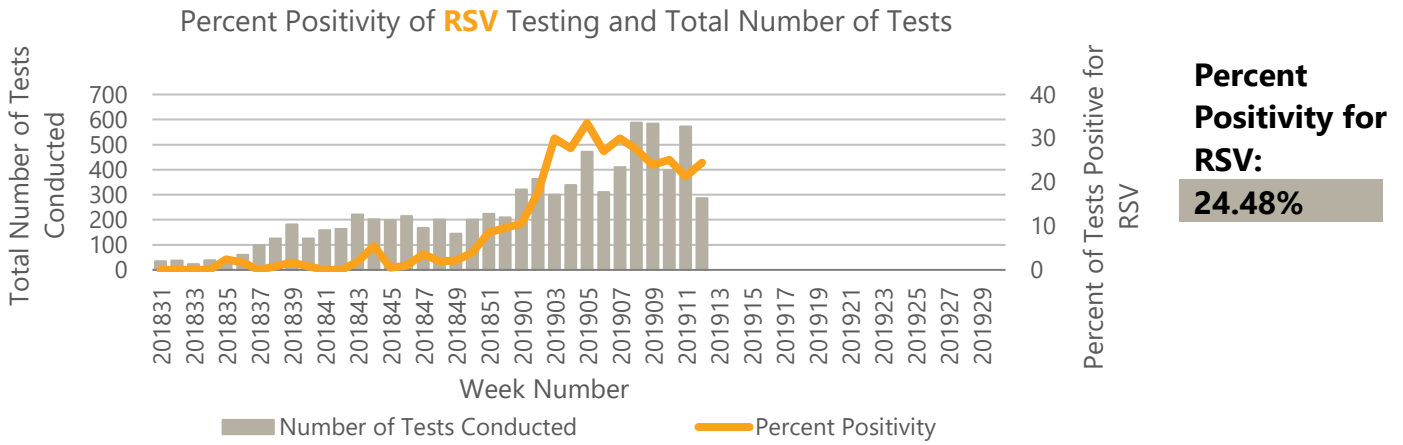


Week Number	Percent ILI	# ILI 0-4 age group	# ILI 5-24 age group	# ILI 25-49 age group	# ILI 50-64 age group	# ILI 65+ age group	Total # visits
201909	4.94%	43	67	61	19	11	4071
201910	4.31%	37	57	43	22	17	4086
201911	3.87%	36	34	43	19	7	3591
201912	2.79%	21	39	29	10	7	3801

Sentinel Laboratory Data

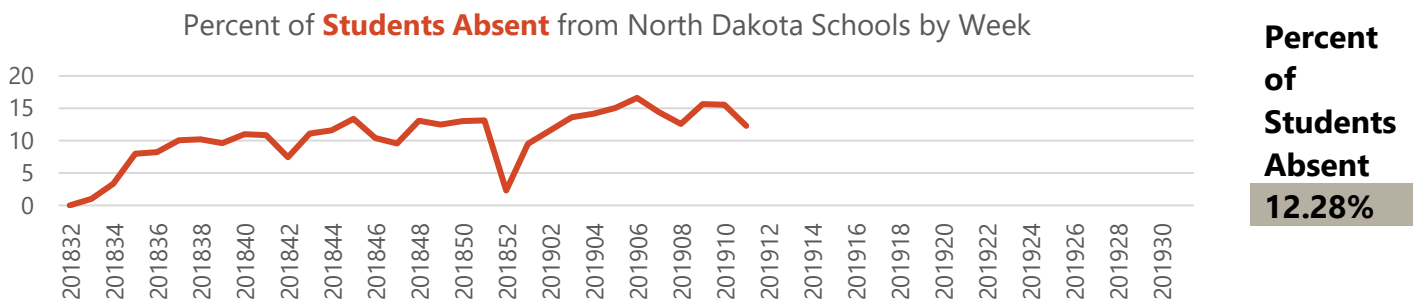
The NDDoH receives influenza and RSV testing data from participating sentinel laboratories across the state. The total number of positive tests and the total number of tests conducted are reported and used to create a state-wide percent positivity statistic. For influenza, percent positivity of 10% or greater indicates "season level" influenza activity.



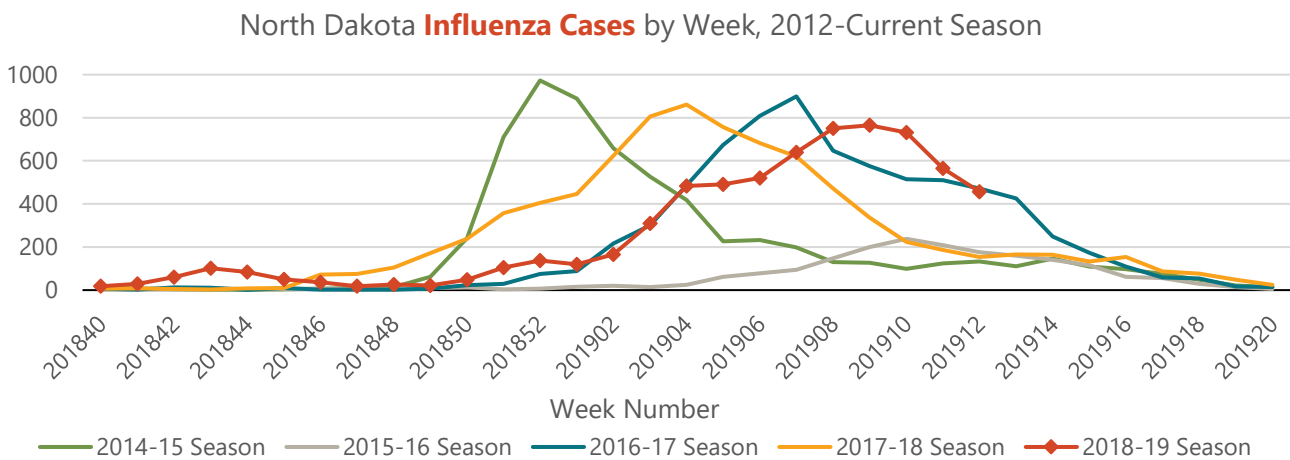


School Absenteeism

During the influenza season, increases in school absenteeism data can be used as an early indicator for influenza circulation. The NDDoH received absenteeism data from a majority of schools in the state. Data here include absences for all reasons.



MULTISEASON COMPARISON



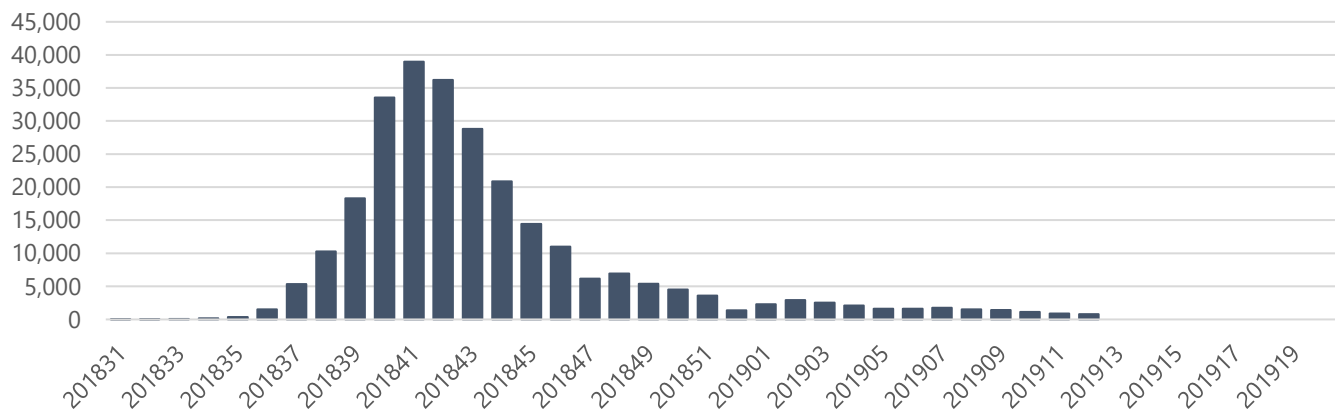
Season	Total Cases	Peak Week (week ending)	Predominant Strain
2014-15	6,443	12/27/2014	A H3N2 (vaccine mismatch)
2015-16	1,942	3/12/2016	2009 A H1N1
2016-17	7,507	2/18/2017	A H3N2

2018-19 VACCINATION STATS

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 **268,632** doses of 2018-19 influenza vaccine have been entered into the NDIIS so far this season.

Influenza **Vaccine** Doses Administered by Week Number



Vaccination Rates by Age

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+** at **52.9%**, and the age group with the lowest vaccination rate is **19-49 year-olds**, at **20.7%**.

Influenza **Vaccination Rates** by Age Group, by Week, Estimated by the NDIIS

