2018-19 WEEKLY INFLUENZA UPDATE

NORTH Dakota | Health
Be Legendary.™

Preliminary data through week **201913**, the week ending **3/30/2019**
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	365	165
Cumulative cases for season	7,130	7,811
Activity level	Regional	Regional

Influenza activity remains high in the United States, with an increasing proportion of activity due to influenza A(H3N2) viruses. Because influenza A(H3N2) viruses may be associated with severe disease in older adults, early empiric treatment with influenza antiviral medications is recommended for hospitalized and high-risk patients, especially those 65 years and older. Antiviral treatment should be started as soon as possible after illness onset and should not wait for laboratory confirmation.

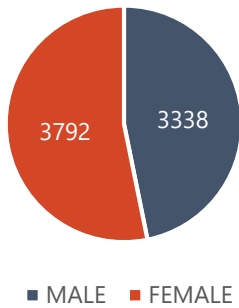Number of Reported Laboratory-Identified **Influenza Cases** by Week
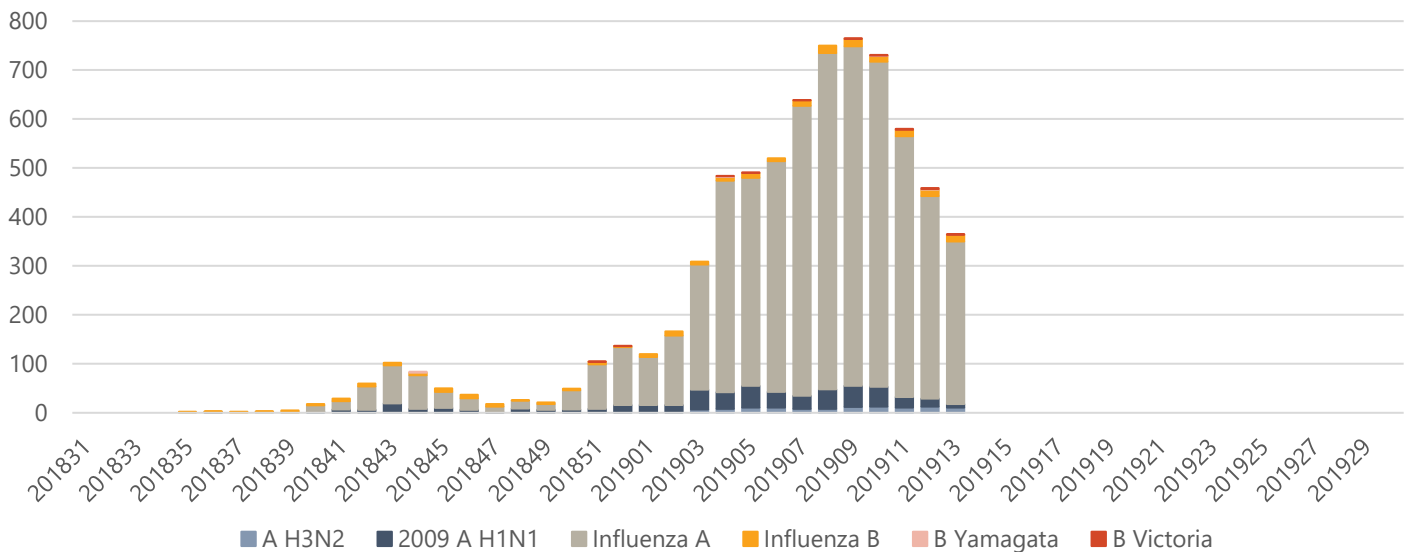
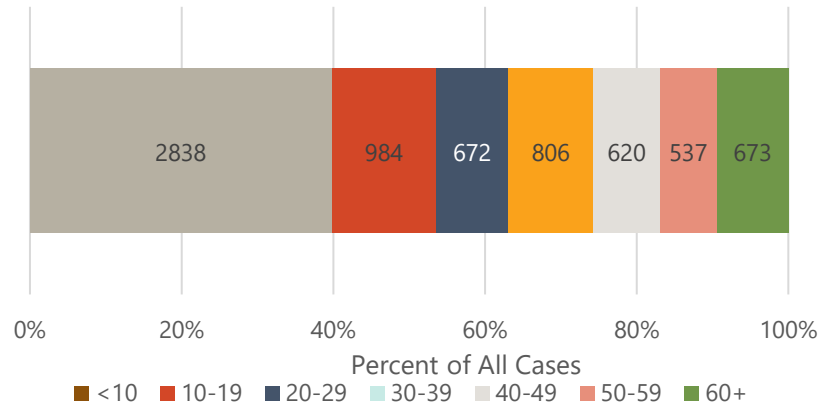| Number of cases:	A H3N2	2009 A H1N1	Influenza A	Influenza B	B Yamagata	B Victoria
This week	11	7	332	14	0	1
This season	117	478	6315	203	5	12

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.
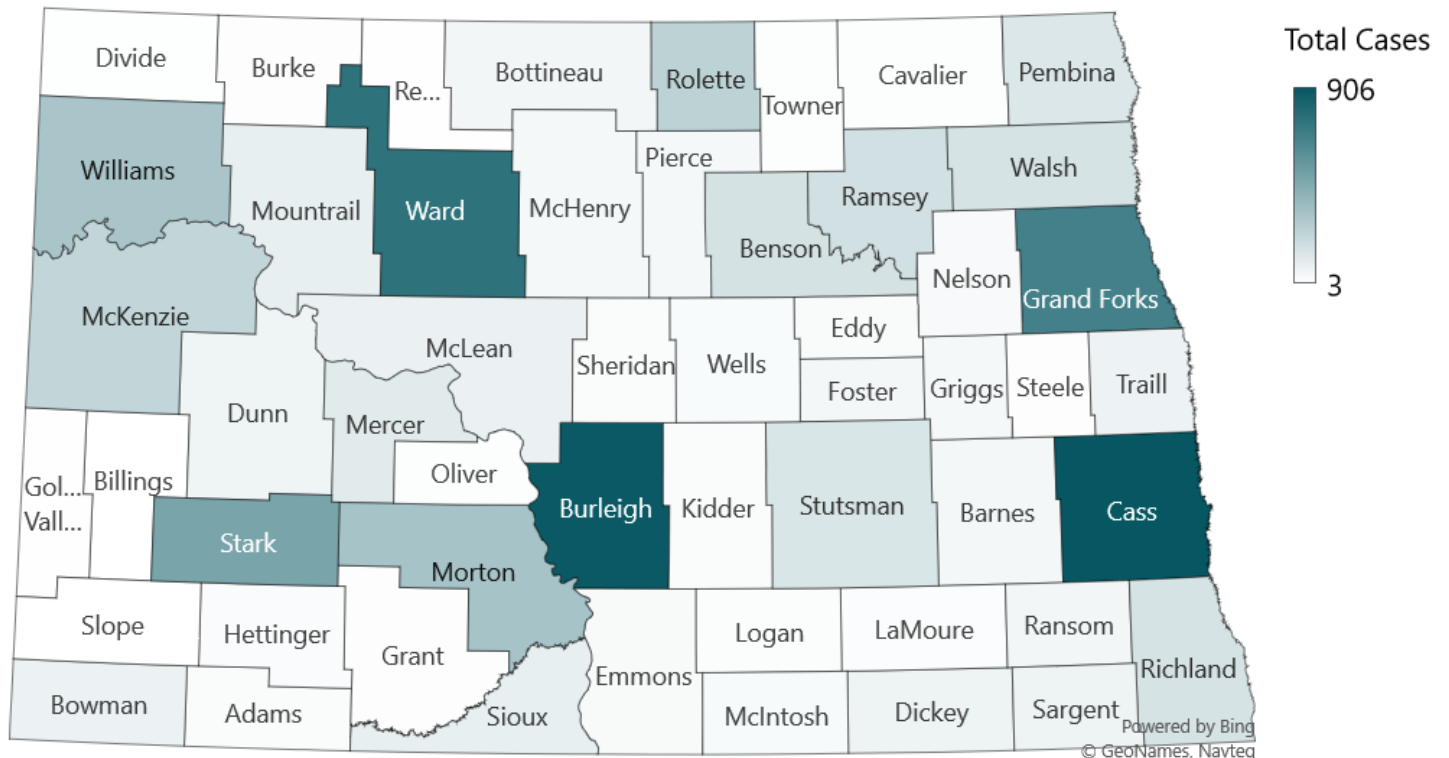
CASE DEMOGRAPHICS

Case Count for Lab-Confirmed Cases by Gender

3792   3338

■ MALE   ■ FEMALE

Case Count for Lab-Confirmed Cases by Age Group

| 2838 | 984 | 672 | 806 | 620 | 537 | 673 |

0%   20%   40%   60%   80%   100%
Percent of All Cases

■ <10   ■ 10-19   ■ 20-29   30-39   40-49   ■ 50-59   ■ 60+

Cases by County

Total Cases
906
3

Powered by Bing
© GeoNames, Navteq

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/*Haemophilus influenzae*; 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.
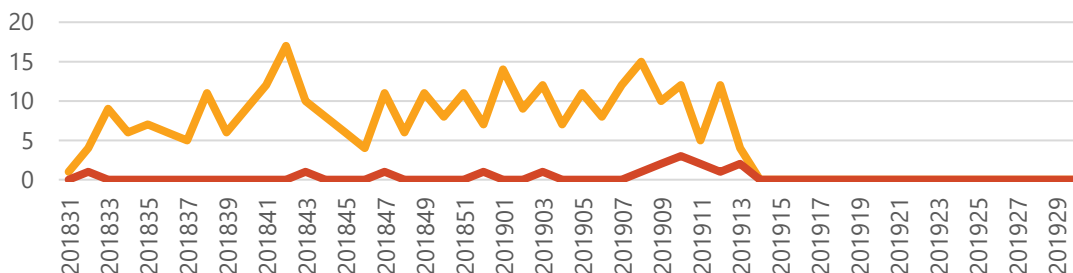
Number of Influenza **Hospitalizations** by Week
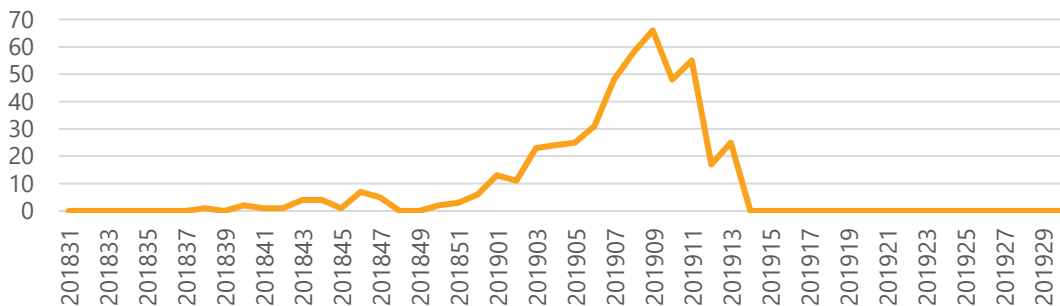
Total number of hospitalizations:

This week	25
This season	481

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	306
Influenza	16

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 100ºF 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.

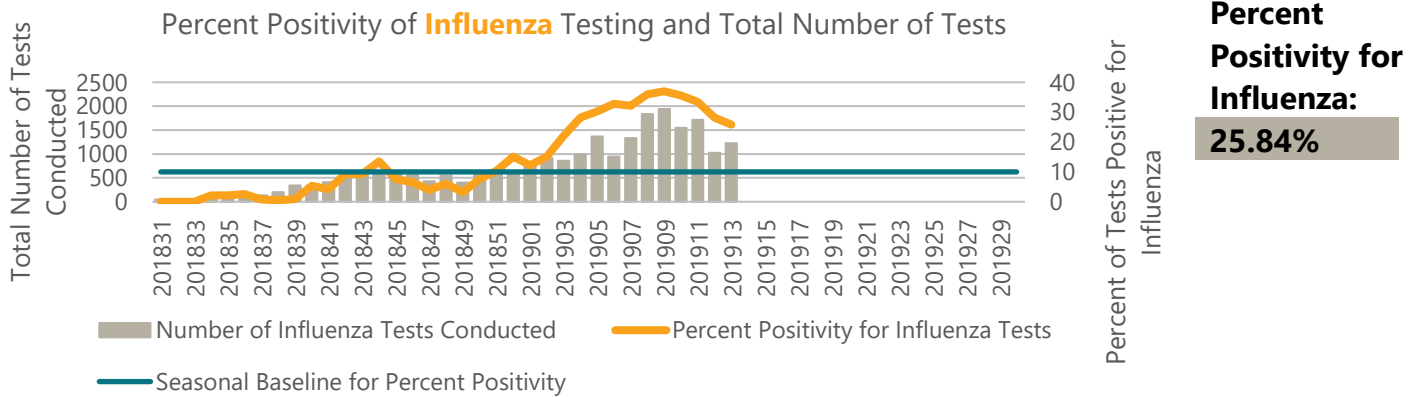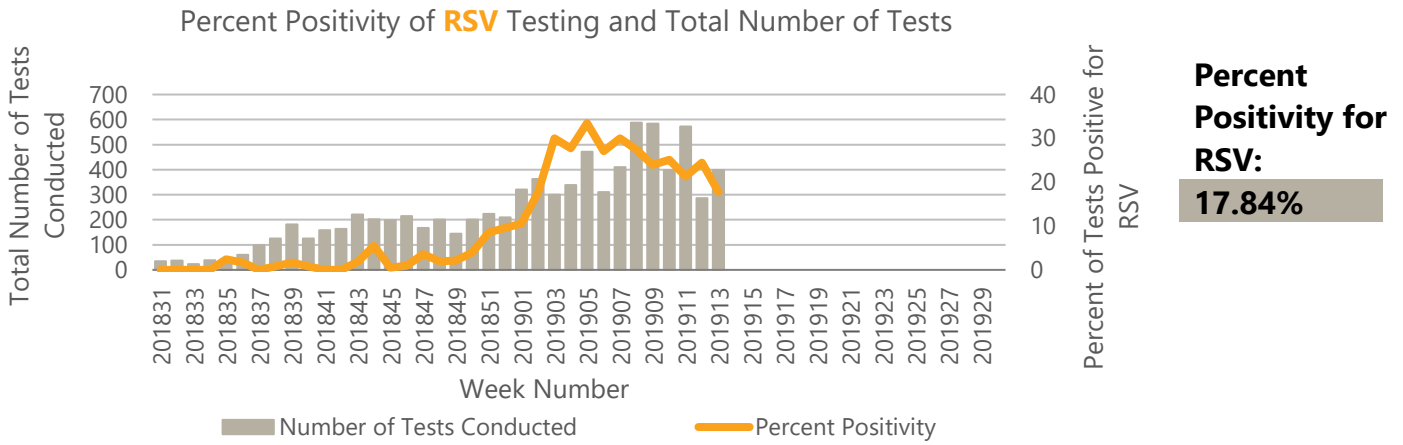Percent of Outpatient Visits Due to **Influenza-like Illness** by Week, Current and Previous Season
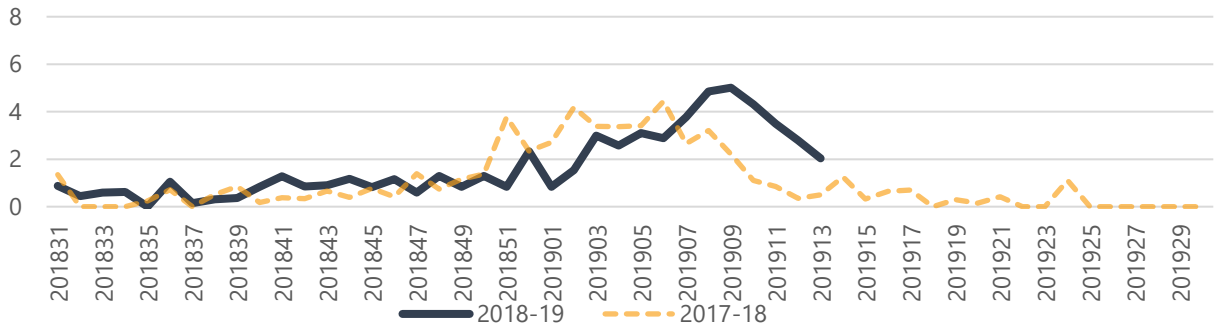
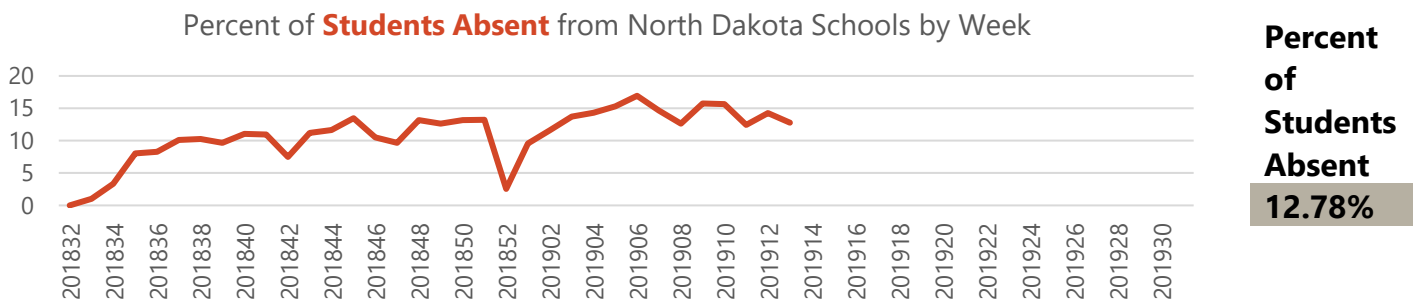| Week Number	Percent ILI	# ILI 0-4 age group	# ILI 5-24 age group	# ILI 25-49 age group	# ILI 50-64 age group	# ILI 65+ age group	Total # visits
201910	4.31%	37	57	43	22	17	4086
201911	3.87%	36	34	43	19	7	3591
201912	2.79%	21	39	29	10	7	3801
201913	2.04%	21	29	19	1	6	3730

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.

Percent Positivity of **Influenza** Testing and Total Number of Tests

Percent Positivity for Influenza:
25.84%

Percent Positivity of RSV Testing and Total Number of Tests

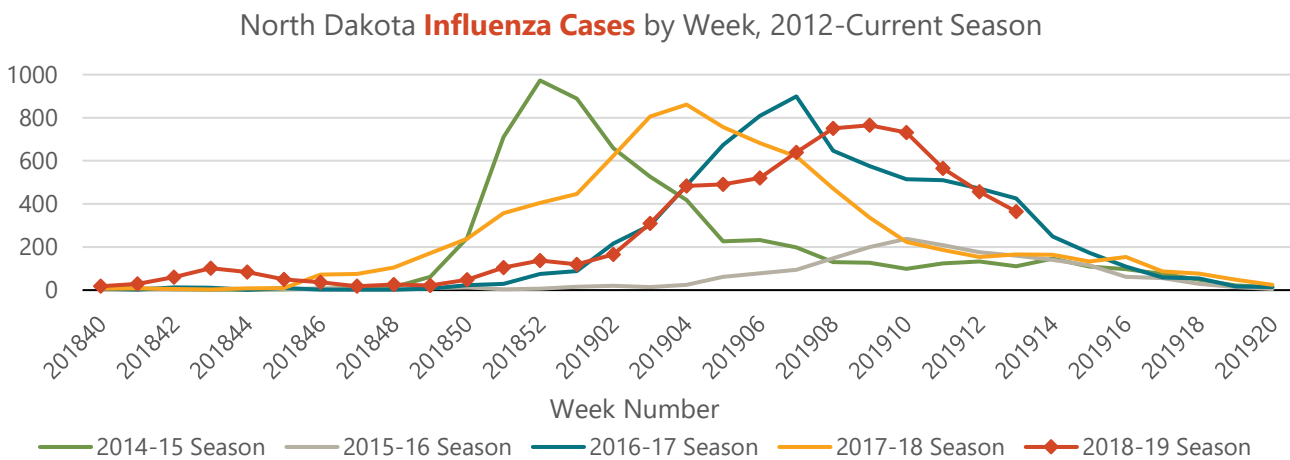**Percent Positivity for RSV:**
17.84%

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.

Percent of Students Absent from North Dakota Schools by Week

Percent of Students Absent
12.78%

MULTISEASON COMPARISON

North Dakota Influenza Cases by Week, 2012-Current Season

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

| 2017-18 | 8,498 | 1/27/2018 | A H3N3 |
| 2018-19 | **7,130 (current)** | **TBD** | **TBD** |

2018-19 VACCINATION STATS*

Vaccine Doses Administered

The North Dakota Immunization Information System (NDIIS) provides information on vaccines given in ND. 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.

MMWR week 13 data are currently pending.

Influenza **Vaccine** Doses Administered by Week Number
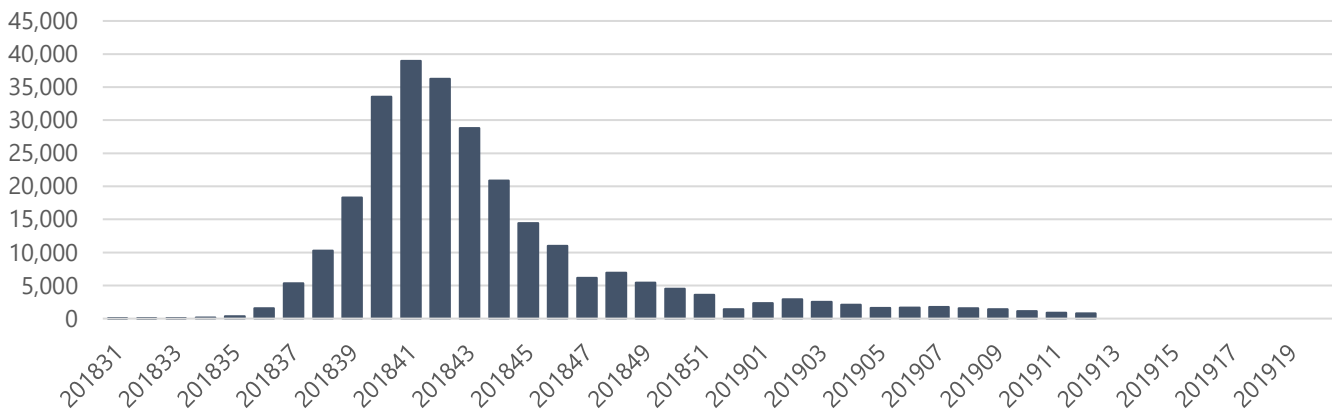
Vaccination Rates by Age

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

Legend:
- 6 months - 4 years
- 5 - 12 years
- 13 - 18 years
- 19 - 49 years
- 50 - 64 years
- 65 years and older