

# North Dakota Weekly Influenza Update 2015-16 Influenza Season



Through week **201609**, the week ending **3/5/2016**

Edited by: Jill K Baber, MPH

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

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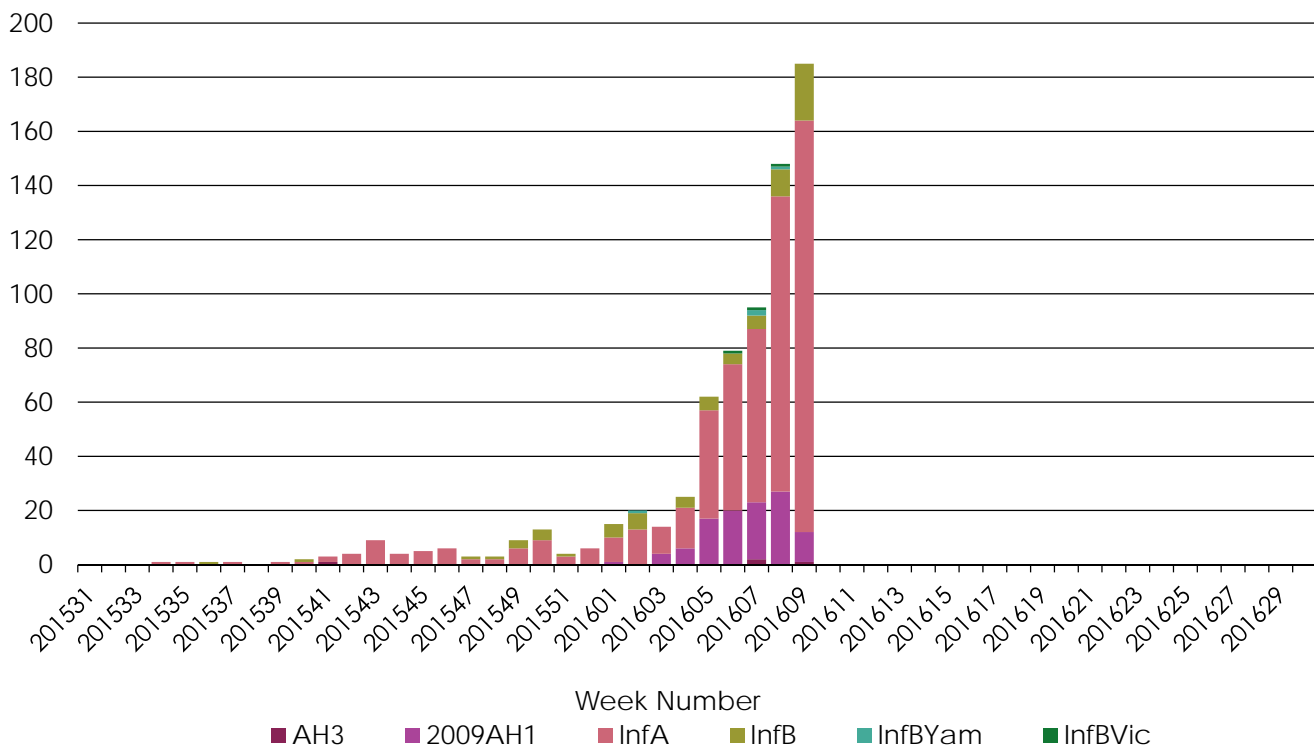
| Influenza Cases by Type |            |
|-------------------------|------------|
| <b>A, unspecified</b>   | 529        |
| <b>2009 A H1N1</b>      | 107        |
| <b>A H3</b>             | 4          |
| <b>B, unspecified</b>   | 72         |
| <b>B Yamagata</b>       | 4          |
| <b>B Victoria</b>       | 3          |
| <b>Total</b>            | <b>719</b> |

**Weekly Narrative** Case counts for influenza continue to increase for week nine, and other surveillance indicators are elevated. Most cases for a “typical” influenza season in North Dakota occur from January to March, so this season’s timing is slightly late, but not unusual. North Dakota’s influenza level of activity is similar to what is currently being seen across the United States.

Geographic activity is being reported as **Widespread**.

Sentinel site surveillance indicates Respiratory Syncytial Virus (RSV) activity is also circulating at high levels.

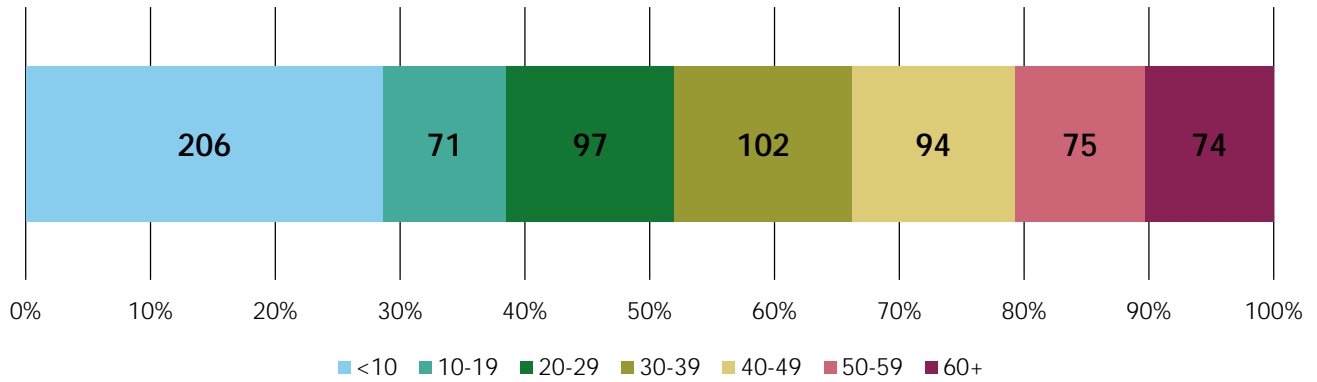
Number of Reported Laboratory-Identified Influenza Cases by Week



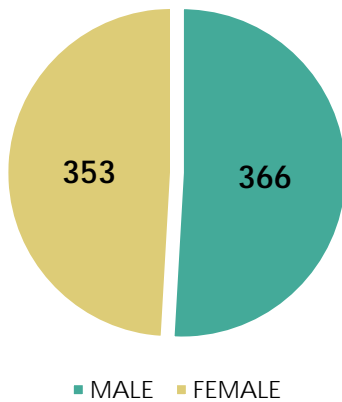
All laboratory-identified cases of influenza (including identification via rapid test) are reportable in North Dakota. Statistics do not include data from people who did not seek medical care for their illness, or who sought medical care but were diagnosed based on symptoms, not with a laboratory test.

## Demographic Data

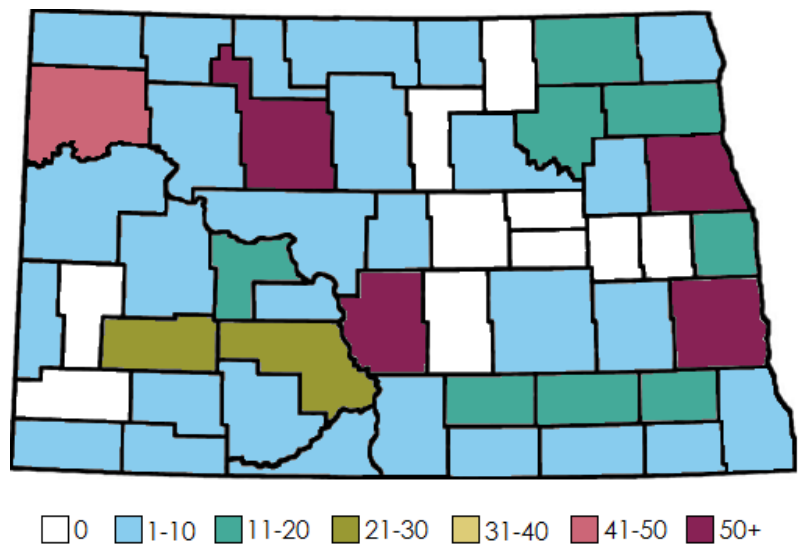
### Case Count for Lab-Confirmed Cases by Age Group



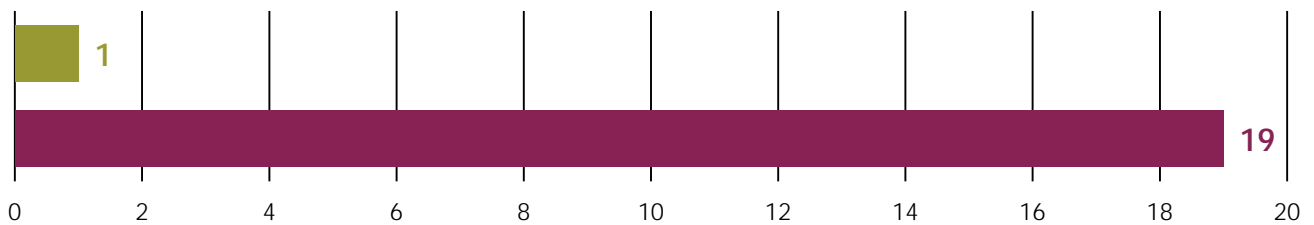
### Case Count for Lab-Confirmed Cases by Gender



### Lab-Confirmed Cases by County



### Reported Influenza Deaths and Hospitalizations\*



\*Data obtained from ad-hoc reports and state Vital Statistics. Hospitalizations and deaths are not required to be reported in North Dakota, although pediatric flu deaths are nationally reportable. Due to the increase in electronic lab reporting, which does not include hospitalization status, hospitalization numbers are likely lower than and--not comparable to--previous seasons.

## Outbreaks and Multi-season Comparison

**Outbreaks** There have been 6 reported outbreaks of influenza-like illness in long term and basic care setting so far this season. Two outbreaks were attributed to influenza A, one attributed to rhinovirus, and for three no agent was identified via lab test.

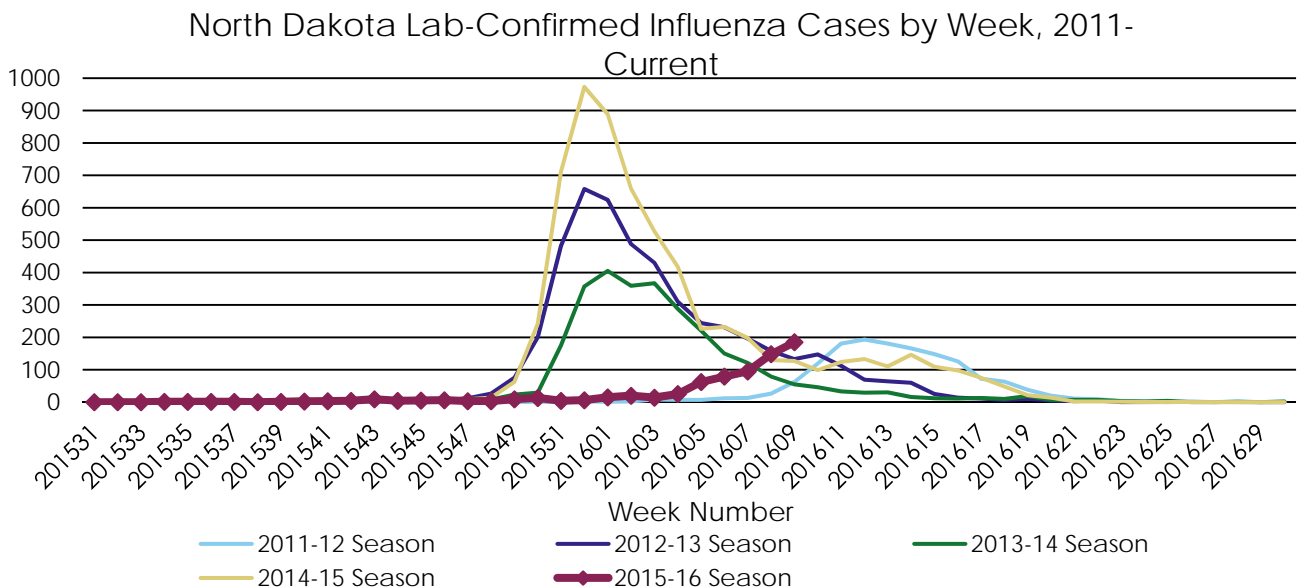
We also receive reports for outbreaks in other community settings. For this season, 2 influenza outbreaks have been confirmed in daycare settings. One was confirmed as influenza A 2009 H1N1, and the other as unsubtyped influenza A.

Outbreaks in schools, assisted living facilities, workplaces, and in the general community are common during the influenza season.

| Season  | Total Cases | Peak Week (week ending) | Predominant Strain |
|---------|-------------|-------------------------|--------------------|
| 2011-12 | 1487        | 3/24/2012               | A H3N2             |
| 2012-13 | 4831        | 12/29/2012              | A H3N2             |
| 2013-14 | 2923        | 1/4/2014                | 2009 A H1N1        |
| 2014-15 | 6443        | 12/27/2014              | A H3N2             |
| 2015-16 | 719         | TBD                     | TBD                |

**Multi-Season Comparison** So far, the 2015-16 influenza season is shaping up to be a later season than the previous three seasons. It is still too early to tell if the season will be mild overall, and also too early to tell what the

predominant circulating strain will be. However, reported cases of influenza A 2009 H1N1 have continued to increase over the past few weeks in North Dakota, and the current age distribution for our cases (see page 2) is indicative of A 2009 H1N1 circulation, with fewer cases in the elderly than is typical, and larger percentage of cases in children.



## Sentinel Surveillance: Outpatient Influenza-like Illness

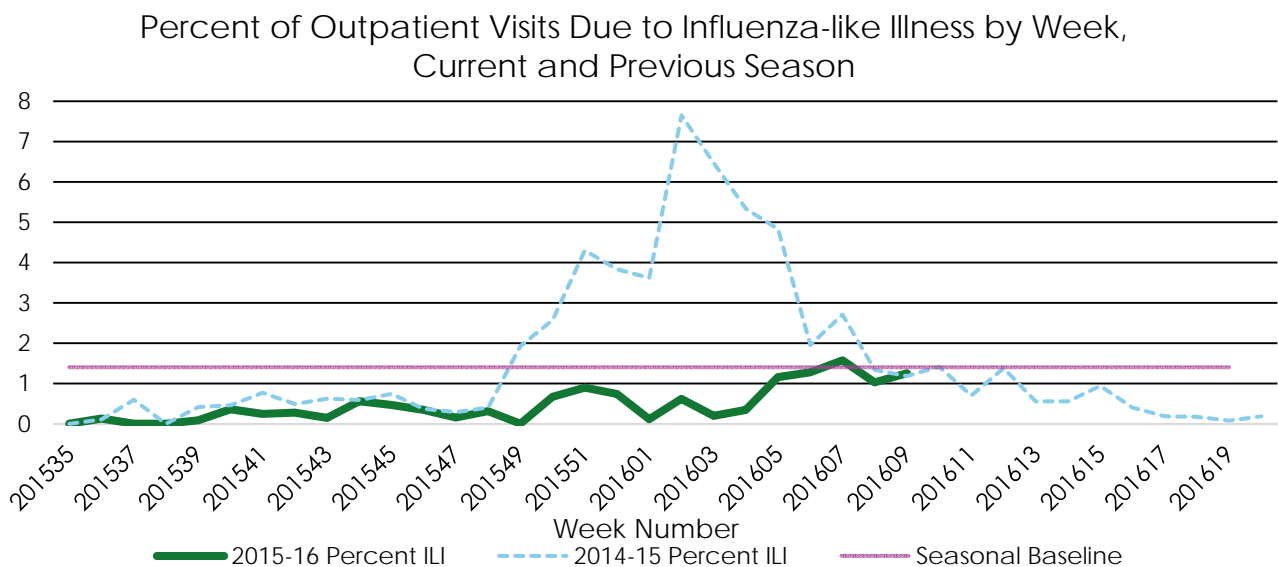
**Outpatient Surveillance** The North Dakota Department of Health (NDDoH) participates with other states and jurisdictions in the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINET). Participating outpatient clinics send data on the number of patients in each of five age groups experiencing 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 **1.4%** or greater is considered season-level activity.

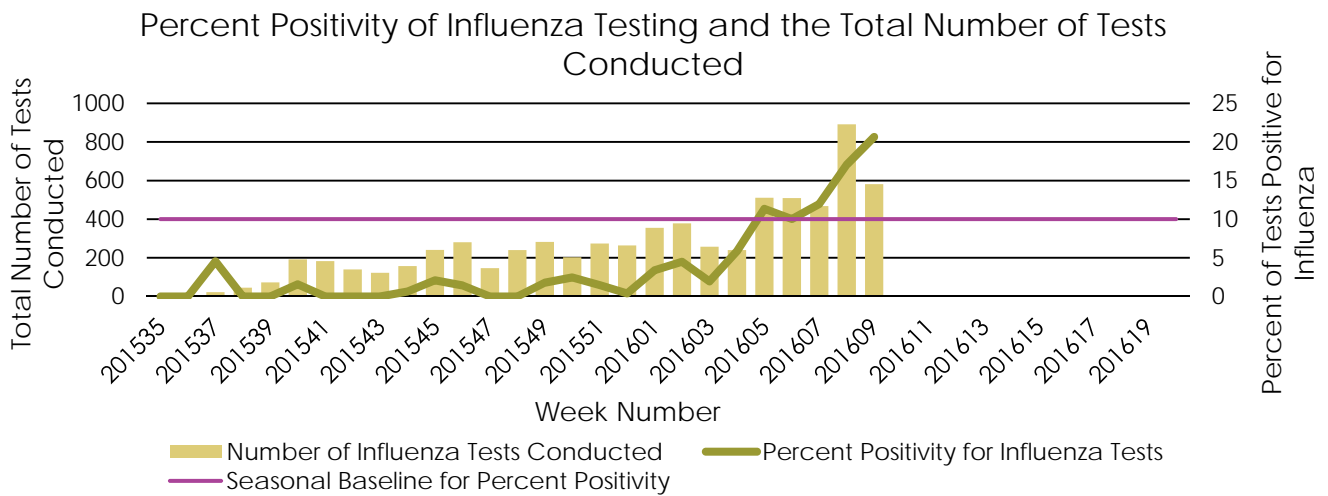
**Current Activity** This week ILI is **1.25%**, below the seasonal baseline. However, we are still waiting for reports from our sentinel urgent care sites for the last two weeks. Urgent care centers typically see slightly higher ILI numbers, so comparison to our state baseline is not currently reliable.

| Week Number | 2015-16 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 |
|-------------|---------------------|---------------------|----------------------|-----------------------|-----------------------|---------------------|
| 201607      | 1.57%               | 3                   | 3                    | 5                     | 1                     | 1                   |
| 201608      | 1.03 %              | 4                   | 2                    | 1                     | 1                     | 0                   |
| 201609      | 1.25%               | 2                   | 1                    | 2                     | 1                     | 0                   |

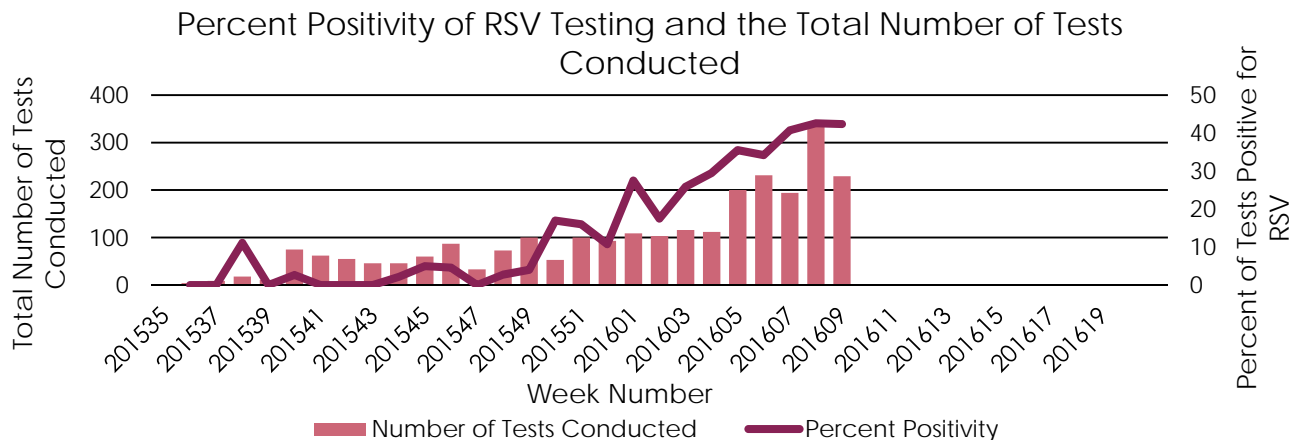


## Sentinel Surveillance: Laboratory Data

**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 tests of **10%** or greater is considered a general indicator for season-level influenza activity. **This week percent positivity for influenza is 20.65%.**



**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 42.36%.**

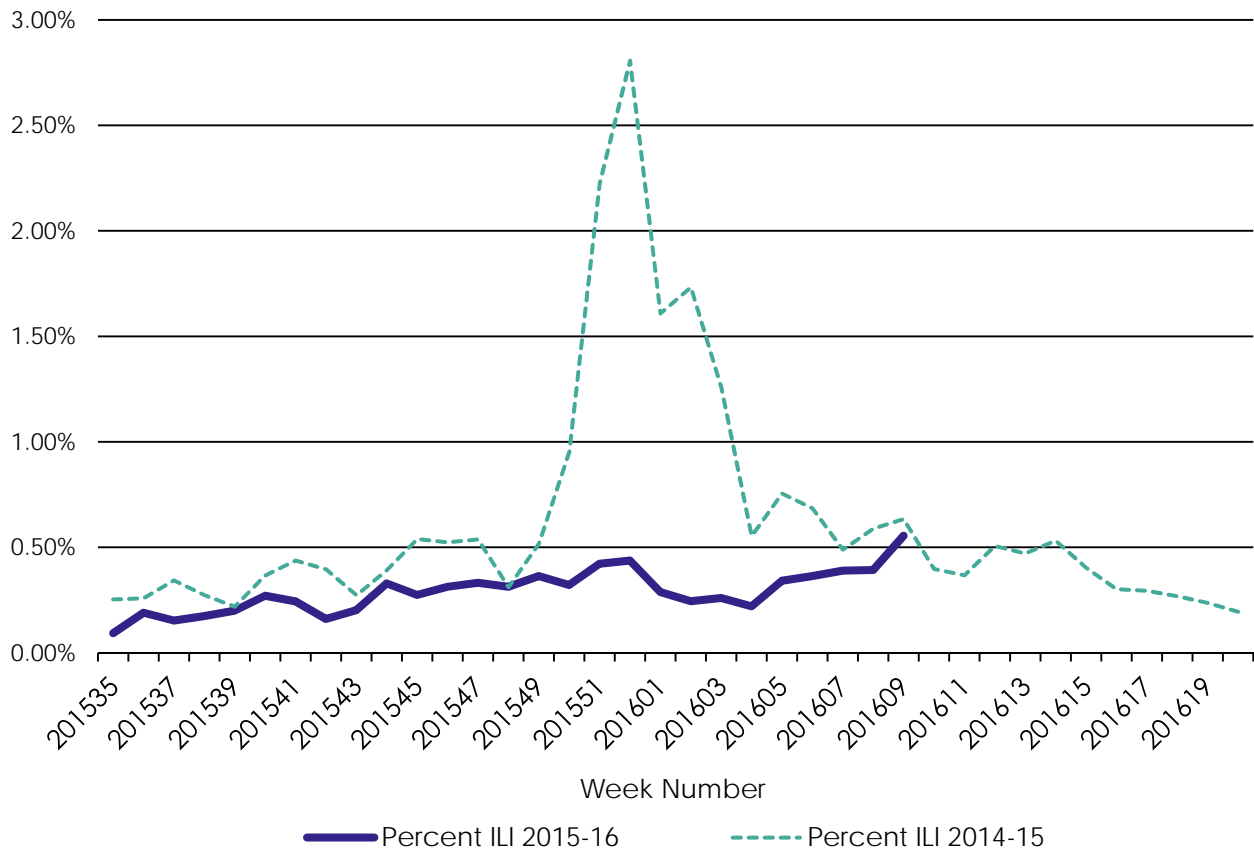


## Other Surveillance Methods

**Other Surveillance Methods: Syndromic Surveillance** The NDDoH receives data from emergency departments, hospitals, and clinics across the state participating in the NDDoH's Syndromic Surveillance program. Syndromic surveillance is the receipt of near-real time reason-for-visit data for all visits at participating locations. Visits are automatically sorted into "syndromes" (gastrointestinal, neurologic, rash, ILI, etc.). Because it is based off of data such as chief complaints or diagnosis codes, the ILI syndrome has a lower specificity than the traditional outpatient ILI definition. Nonetheless, syndromic data is well correlated with our other influenza indicators.

**Current Activity** This week ILI in our syndromic surveillance system is **0.55%**. So far this season, the ILI trend has not followed other influenza indicators as closely as last season. Evolving syndromic surveillance data sources, or how different influenza strains affect differently populations, are possible reasons for this difference. We will continue to explore reasons for this difference throughout the season.

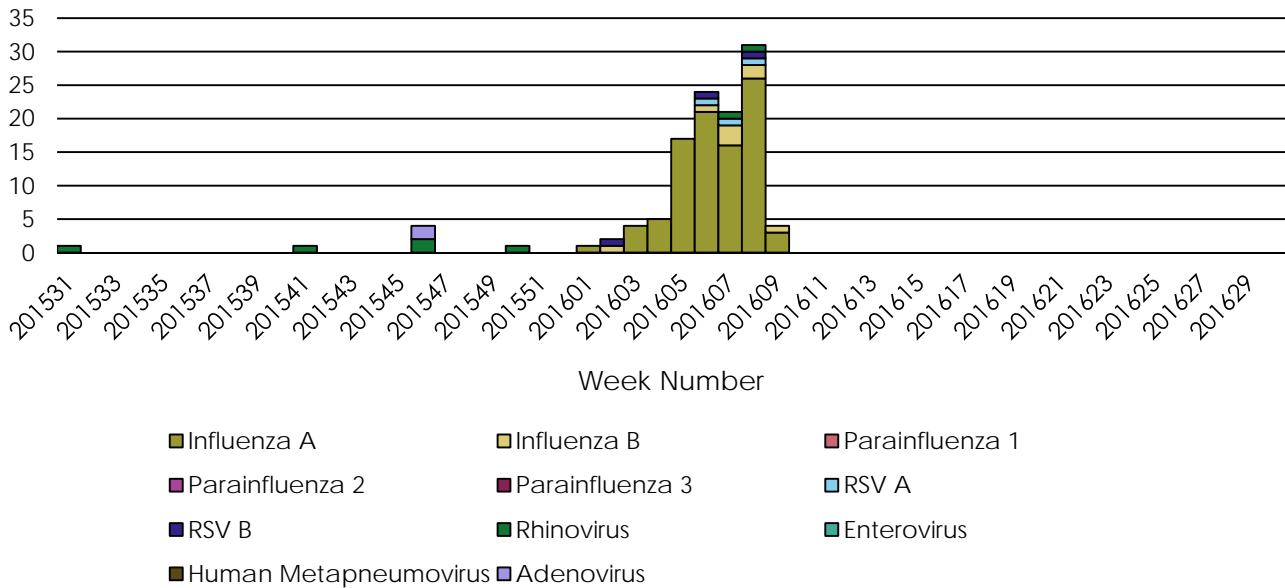
Percent of Outpatient, Emergency Department, and Hospital Visits Due to Influenza-like Illness by Week, Current and Previous Season



## Other Surveillance Methods

**Other Surveillance Methods: Influenza and Respiratory Viral Pathogen Testing** The NDDoH's Division of Laboratory Services conducts testing for influenza and a variety of respiratory viruses. Influenza samples come from providers across the state. Most of respiratory viral pathogen the samples tested come from sentinel sites participating in the Influenza Incidence Surveillance Project (IISP), which is like an extended version of ILINet.

State Lab Influenza Respiratory Viral Pathogen Testing



**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.

**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).

