

# Montana Influenza Summary

Cases reported as of December 1, 2018 (MMWR Week 48)

Montana DPHHS, Communicable Disease Epidemiology

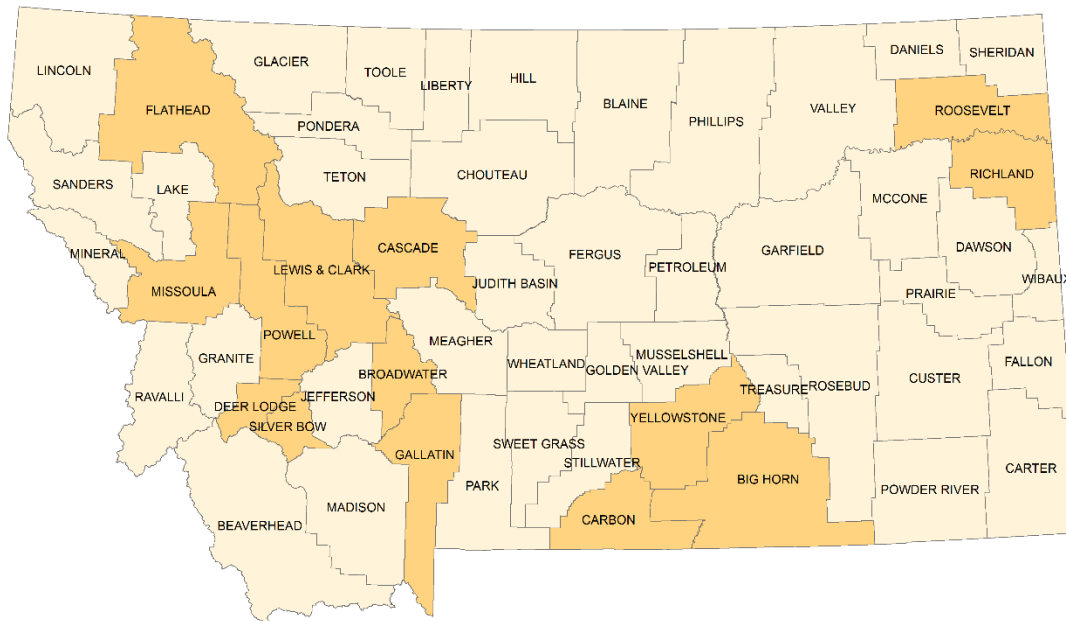


The Montana Department of Health and Human Services (DPHHS) provides a weekly report throughout the influenza season that coordinates data from a variety of sources to give the most complete and up to date view of influenza activity in the state of Montana. All data are preliminary and may change as more complete information is received.

## State Summary: Flu activity is defined as LOCAL<sup>1</sup>

- Influenza activity remained low during week 48 of 2018 with nine new cases reported.
- Season to date, 45 cases, 7 hospitalizations, and 1 death (pediatric) due to influenza have been reported from 14 counties.
- The most common influenza type identified this season is Influenza A H1N1 (2009).
- During week 48, the proportion of healthcare provider and emergency room visits for influenza like illness (ILI) decreased slightly.
- No new influenza outbreaks have been reported to date this season.
- RSV activity increased slightly during week 48, but remains below the 10% positivity threshold. Detailed RSV information is found on page 6.

Figure 1. Counties with PCR confirmed influenza cases as of December 1, 2018



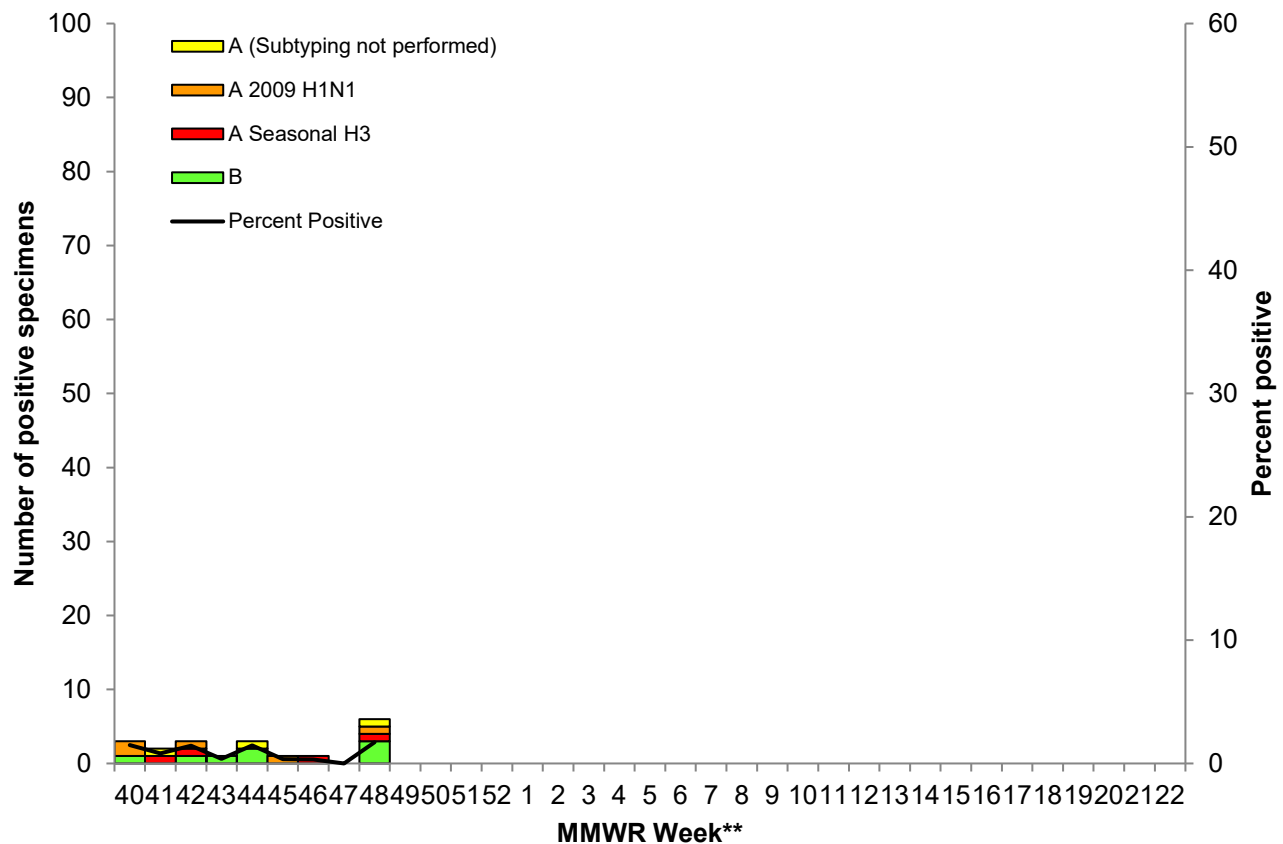
## Laboratory Surveillance

The Montana Public Health Laboratory (MTPHL) and partners report the number of specimens tested for influenza by Polymerase Chain Reaction (PCR) as well as the number of positives by influenza virus type and influenza A virus subtype. The table presented below contains data for week 48 and the season to date.

**Table 1. Influenza type confirmed by Montana Public Health Laboratory and partners<sup>2</sup>**

	Week 48	Season to date
<b>Number of specimens tested</b>	349	2368
<b>Number of positive specimens (%)</b>	6(1.7)	20(0.8)
<b>Positive specimens by type/subtype</b>		
<b>Influenza A (%)</b>	12(60)	8(40)
<b>2009 H1N1</b>	1	5
<b>Subtyping not performed</b>	1	3
<b>H3</b>	1	4
<b>Influenza B (%)</b>	3	8

**Figure. Influenza positive tests reported by the Montana Public Health Laboratory and partners<sup>2</sup>, 2018-2019 season**



\*\*The MMWR week is the week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of MMWR disease incidence reporting and publishing. Values for MMWR week range from 1 to 53, although most years consist of 52 weeks.

## Hospitalizations and deaths

Influenza cases, including hospitalizations and deaths, are reportable to local public health in Montana<sup>3</sup>. Since September 1, 2018, six influenza-associated hospitalizations have been reported, with a cumulative rate of 0.7 per 100,000 population (Figure).

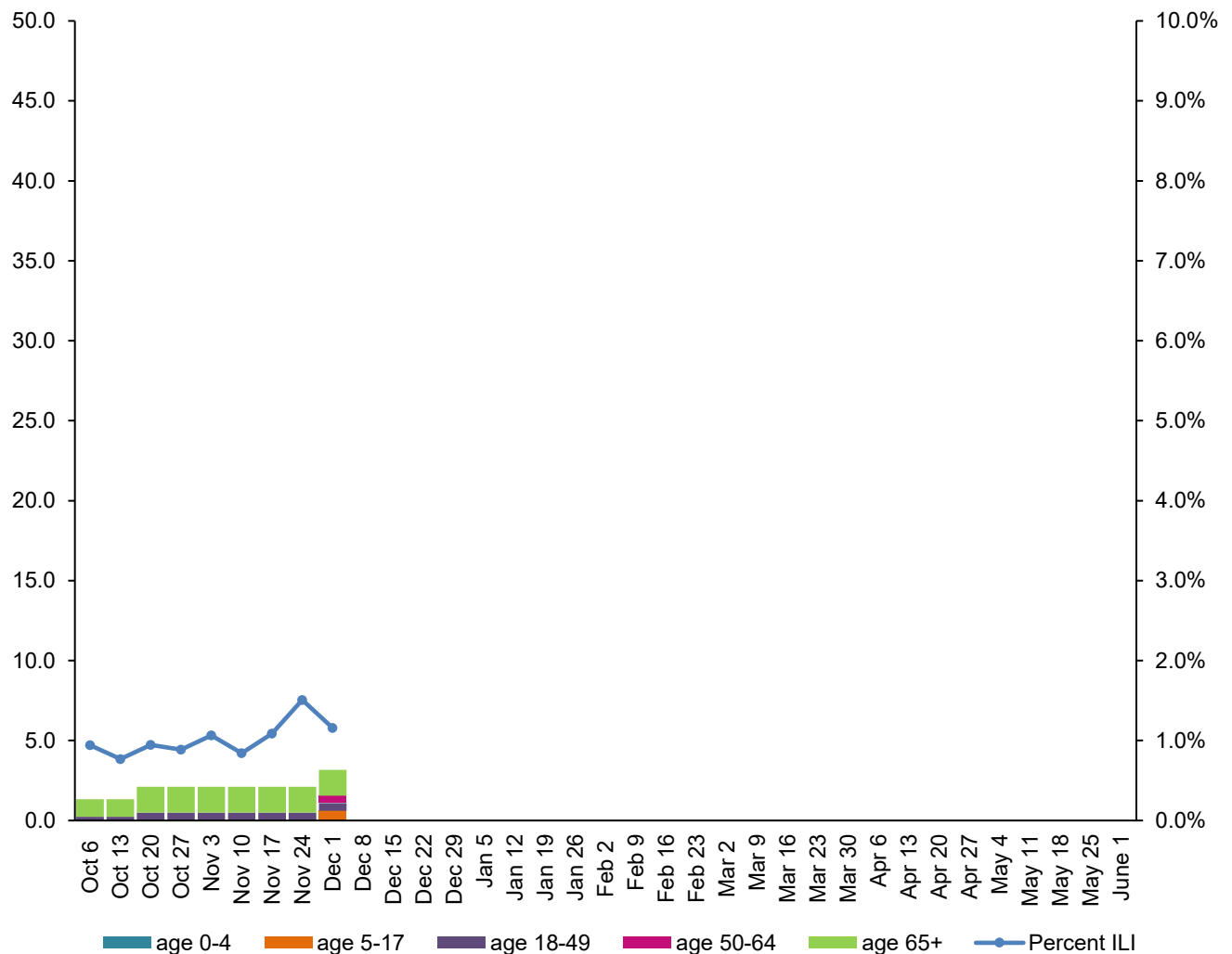
An influenza related death is included in season totals when it is reported to DPHHS or if influenza is indicated on a death record. Season to date, there has been one death attributed to influenza, in a child.

Table 2 presents influenza hospitalizations and deaths current as of the week ending December 1, 2018.

**Table 2. Influenza Hospitalizations and deaths – Montana, week ending 12/1/2018**

Hospitalizations		Deaths (season to date)		
Current Week	Season to date	Pediatric	Adult <65 years	Adult >65 years
2	7	1	0	0

**Figure. Influenza-associated hospitalizations by age group and percentage of emergency room outpatient visits due to ILI – Montana, 2018-19 season\***



\*Reported by hospital admission date

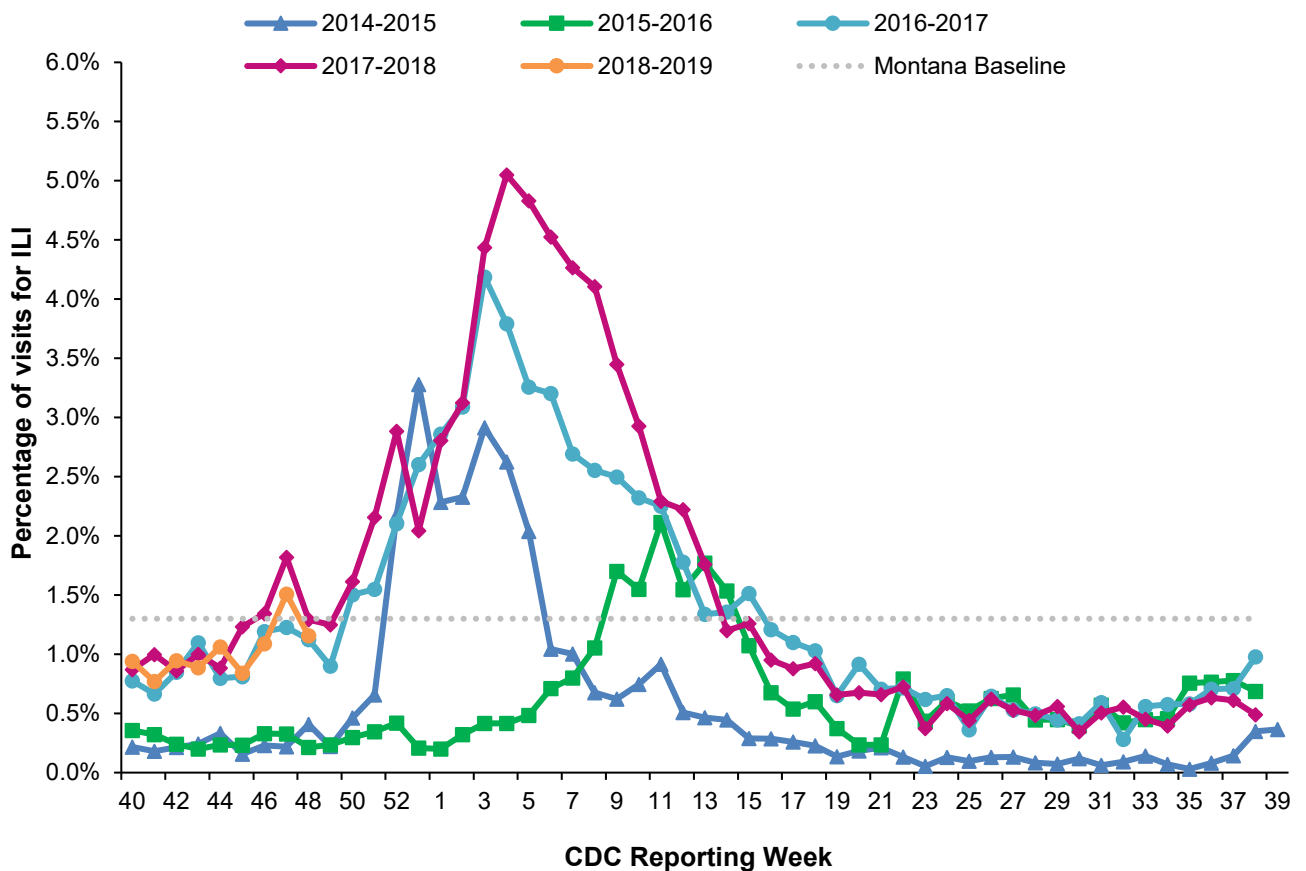
## Influenza like Illness Network (ILINet) and Syndromic Surveillance

The U.S. Outpatient ILI Surveillance Network (ILINet) is a national system that conducts surveillance for Influenza-like illness (ILI) in outpatient healthcare facilities. ILI has a standardized definition which includes a fever (temperature of 100° F or greater), cough, and/or sore throat. Currently, 38 facilities participate in ILINet in Montana, either through manual data entry or through syndromic surveillance data. Syndromic surveillance data in Montana is analyzed in ESSENCE, which collects real-time emergency department (ED) data from facilities across Montana.

The figure below shows the proportion of visits with a chief complaint of ILI each week for the current as well as past three seasons.

For the week ending 12/1/2018, 1.1% of patient visits were due to ILI in Montana compared to 2.2% in the United States.

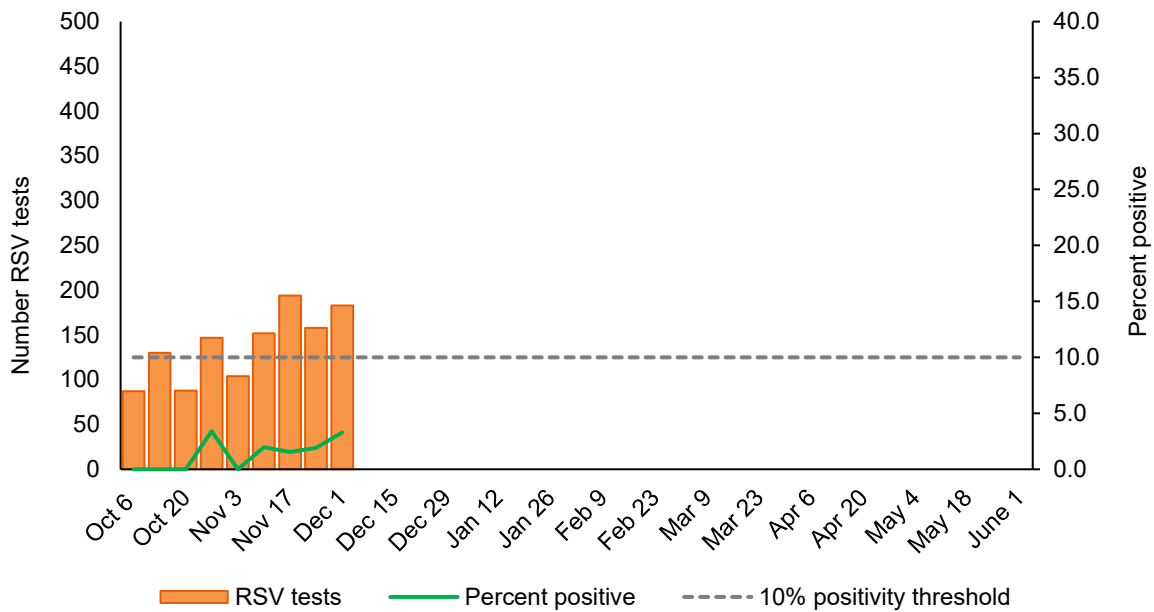
**Figure. Percentage of ER visits for chief complaint of ILI – Montana, selected seasons**



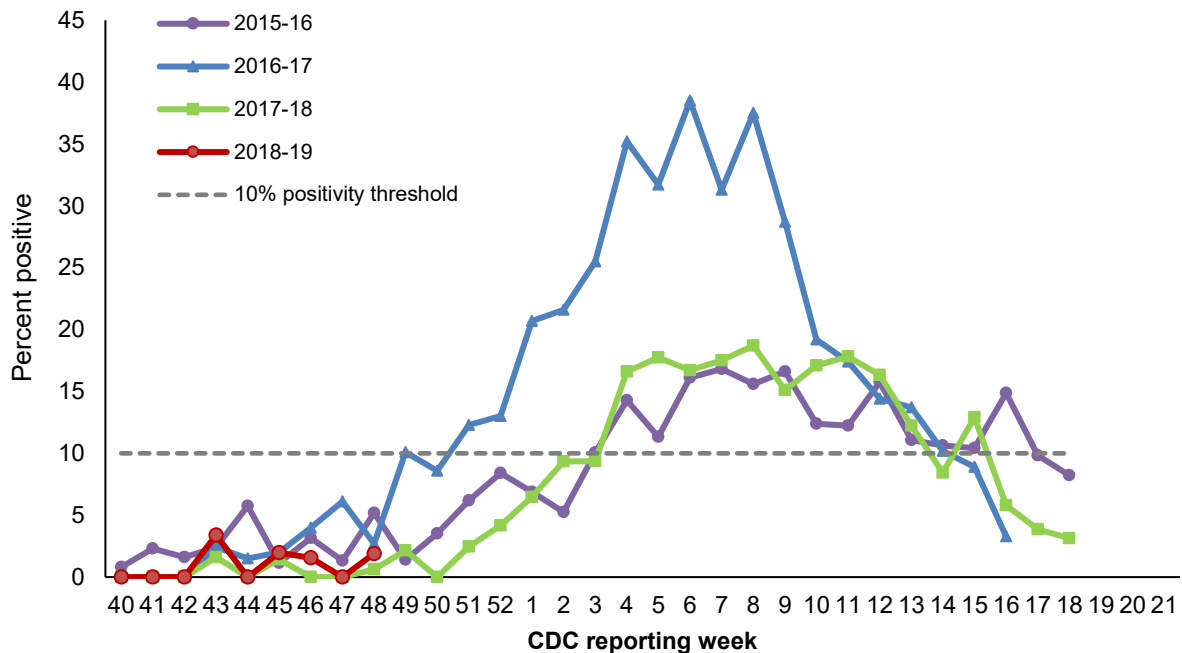
## Respiratory Syncytial Virus (RSV)

RSV is a respiratory virus and is the most common cause of bronchiolitis and pneumonia in children less than one year of age. Typically, the RSV season tends to mirror that of influenza. RSV surveillance is compiled from 15 sentinel laboratories in Montana that report weekly testing data<sup>4</sup>. The figures below describe RSV testing for the current season and a comparison of the percent positivity over the current and last three seasons, respectively.

**Figure. Number and percent positive RSV tests – Montana, 2018-2019**



**Figure. RSV positivity rates – Montana, select seasons**



## Additional Resources

Montana DPHHS Influenza: <http://dphhs.mt.gov/publichealth/cdepi/diseases/influenza>

National Influenza Surveillance Report (CDC Flu View): <https://www.cdc.gov/flu/weekly/>

International Influenza Data: <http://www.who.int/influenza/en/>

Influenza vaccine resources: visit <https://vaccinefinder.org> or [www.cdc.gov/flu](http://www.cdc.gov/flu) to find a location near you where you can get vaccinated.

## Notes

**<sup>1</sup>Influenza Activity:** State health departments report the estimated level of geographic spread of influenza activity in their states each week through the **State and Territorial Epidemiologists Reports**. States report geographic spread of influenza activity as no activity, sporadic, local, regional, or widespread. These levels are defined as follows:

- **No Activity:** No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.
- **Sporadic:** Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.
- **Local:** Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.
- **Regional:** Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.
- **Widespread:** Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.

**<sup>2</sup>Molecular influenza testing partner laboratories:** Barrett Hospital and Healthcare, Benefis Healthcare System, Big Sandy Medical Center, Bighorn County Hospital, Billings Clinic Hospital, Bozeman Deaconess Hospital, Community Medical Center, Deer Lodge Medical Center, Glacier Medical Associates, Grant Creek Family Practice, Great Falls Clinic, Holy Rosary Health Care, Kalispell Regional Medical Center, Liberty County Hospital, Phillips County Hospital, Poplar Community Hospital, Rosebud Healthcare, St. Joseph Hospital, St. Patrick's Hospital, St. Peter's Hospital, St. Vincent Hospital, Sidney Health Center, Trinity Hospital, and VA Ft. Harrison.

**<sup>3</sup>Per the Administrative Rules of Montana [37.114.203](#) and [37.114.316](#), influenza is a reportable condition for the following:**

- Influenza cases, hospitalizations, and deaths
- Influenza outbreaks in congregate settings
- Other illnesses of public health significance (novel influenza A)

**<sup>4</sup>RSV laboratory surveillance partners:** Barrett Hospital and Healthcare, Benefis Healthcare System, Bighorn County Hospital, Billings Clinic Hospital, Bozeman Deaconess Hospital, Community Medical Center, Deer Lodge Medical Center, Great Falls Clinic, Holy Rosary Health Care, Kalispell Regional Medical Center, Liberty County Hospital, Phillips County Hospital, Poplar Community Hospital, Rosebud Healthcare, St. Peter's Hospital, St. Vincent Hospital, and Trinity Hospital.

*For additional information on influenza activity in Montana, please contact your local health department or the Department of Public Health and Human Services' Communicable Disease Epidemiology Section at (406) 444-0273 or visit <https://dphhs.mt.gov/publichealth/cdepi/diseases/influenza>.*