

# Montana Influenza Summary

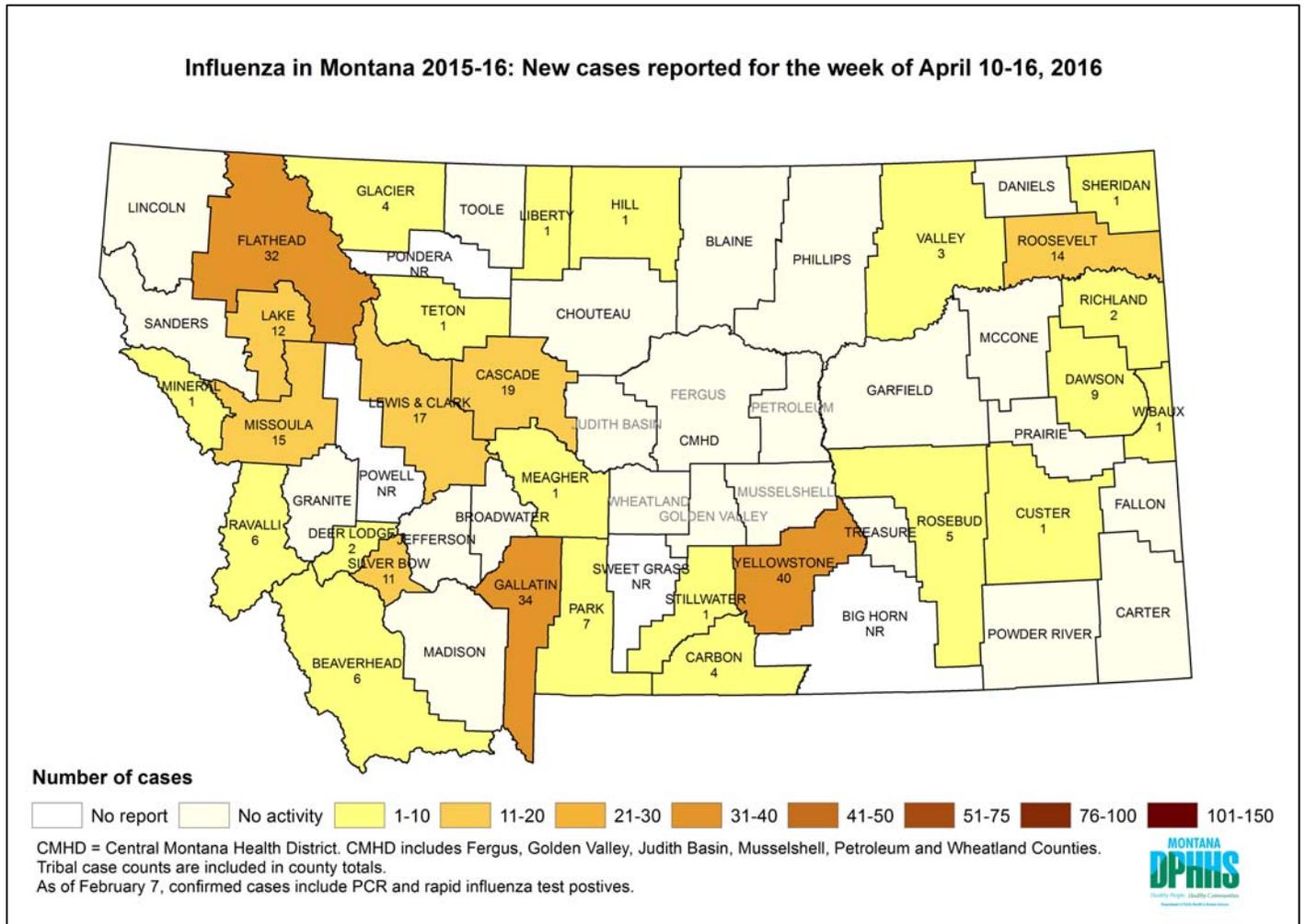
Confirmed or Suspected Influenza Cases Reported as of 4/16/2016 (MMWR Week 15)



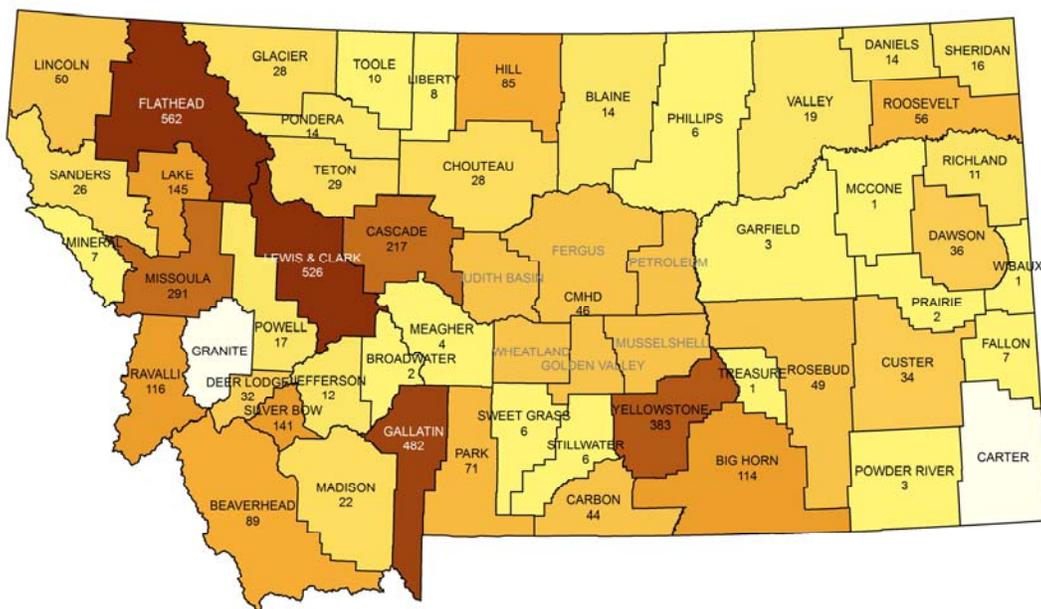
## Montana's influenza activity level for the week ending on 4/16/2016 is defined as: REGIONAL<sup>1</sup>

**Overview:** While surveillance for the 2015–2016 influenza season officially began on October 4, 2015, influenza activity has been reported in Montana since early September. 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 for the state of Montana. Data in this report should be considered provisional, and may change as more complete information is received.

**Current Influenza Activity:** Influenza activity declined across the state during the week of April 10–16, 2016 with 258 cases reported. Since September 1, 2015, 3886 cases and 339 hospitalizations have been reported to DPHHS. Fifteen deaths attributed to influenza have been reported this season. The following maps demonstrate influenza activity by case counts for the most recent reporting week, case counts for the flu season to date, and rates for the season to date (per 10,000 persons).



**Influenza in Montana 2015-16: Reported cases by county**  
**Season to date week ending 4/16/2016**



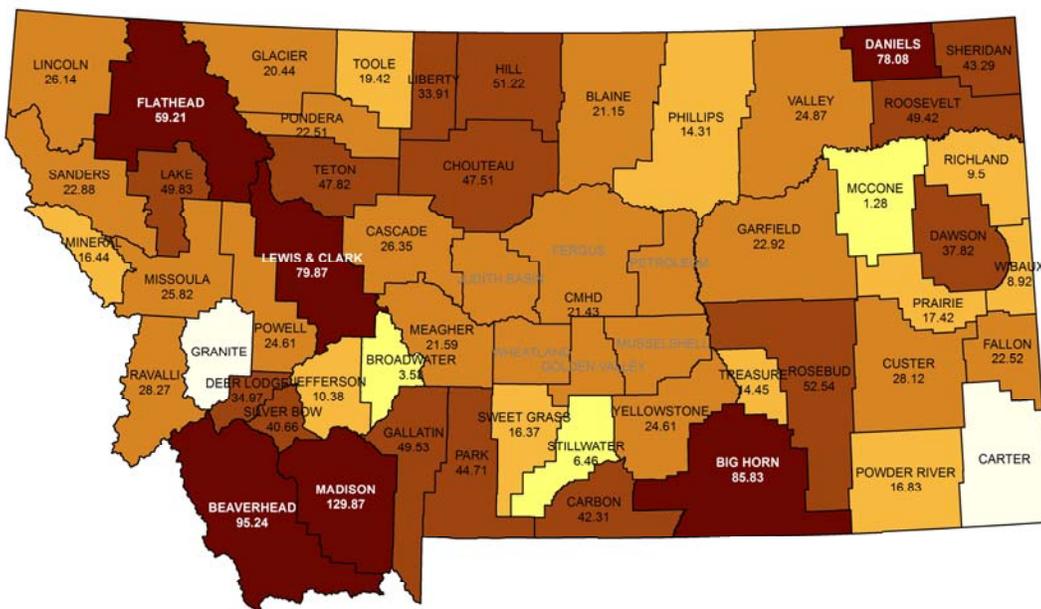
**Number of cases**



CMHD = Central Montana Health District. CMHD includes Fergus, Golden Valley, Judith Basin, Musselshell, Petroleum and Wheatland Counties. Tribal case counts are included in county totals. As of February 7, confirmed cases include PCR and rapid influenza test positives.



**Influenza in Montana 2015-16: Case rates by county**  
**Season to date week ending 4/16/2016**



**Rate per 10,000 population**



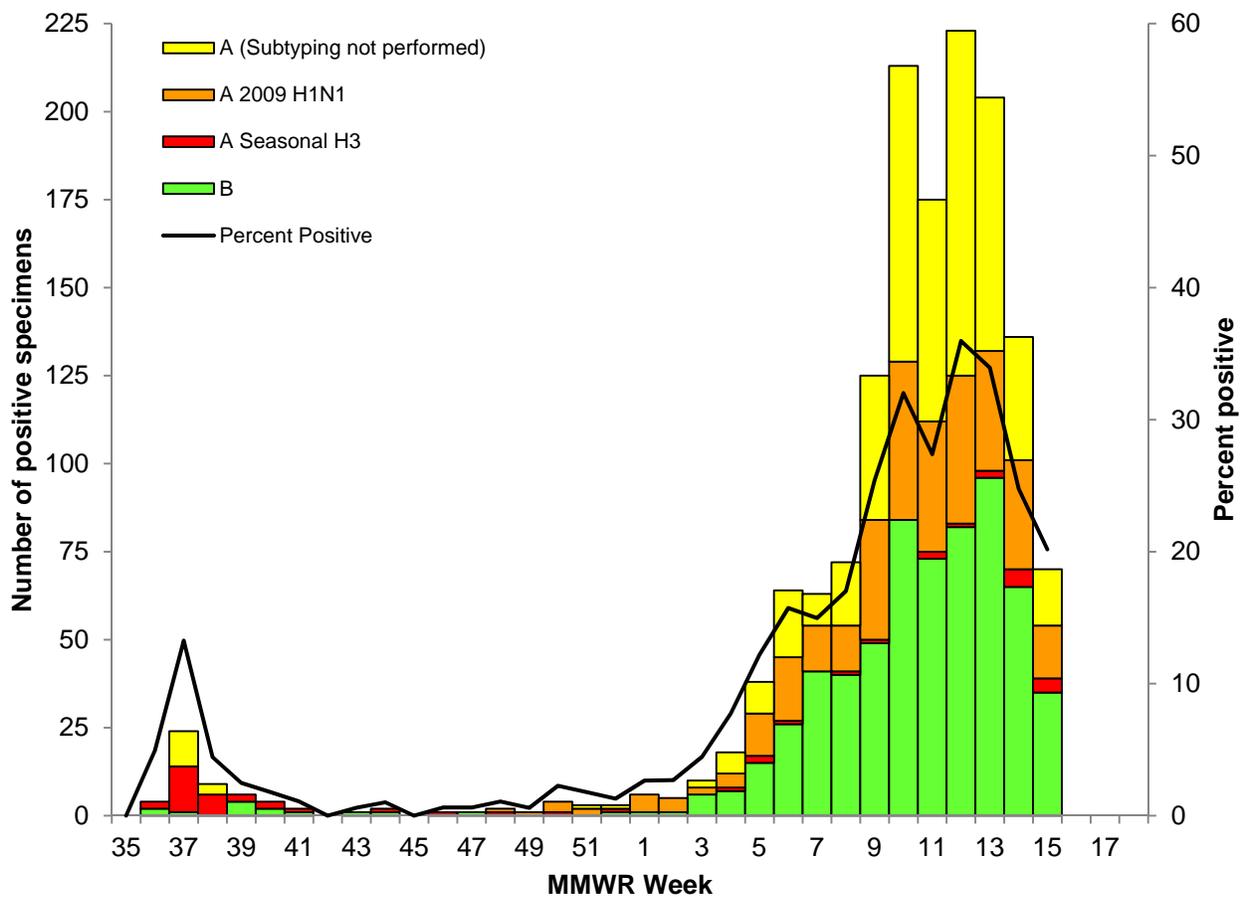
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**Laboratory Surveillance:** The Montana Public Health Laboratory (MTPHL) and partners report the number of specimens tested for influenza by Polymerase Chain Reaction (PCR) as well as the number of positives by influenza virus type and influenza A virus subtype. The table presented below contains data for MMWR Week 15.

Table 1. Influenza Types Confirmed by MTPHL and Partners		
	Week 15	YTD
Number of specimens tested	347	9489
Number of positive specimens (%)	70	1493(15.7)
Positive specimens by type/subtype		
Influenza A	35	858
2009 H1N1	15	316
Subtyping not performed	16	487
H3	4	51
Influenza B	35	635

**Figure 2. Influenza positive tests reported by the Montana Public Health Laboratory and Partners,<sup>†</sup> 2015–16 Season**



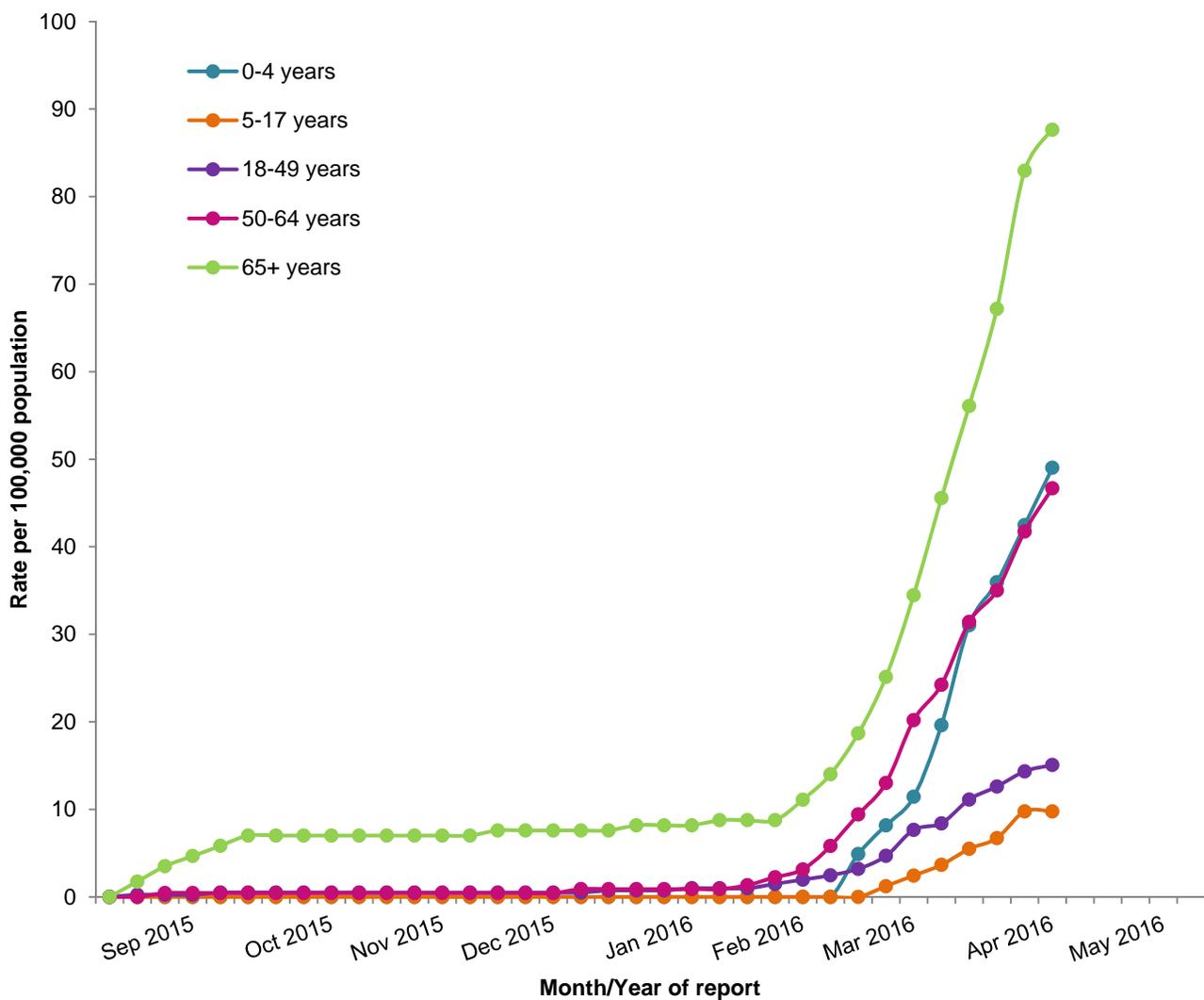
<sup>†</sup>Partner laboratories include: Barrett Hospital, Benefis Hospital, Billings Clinic Hospital, Bozeman Deaconess Hospital, Community Medical Center, Deer Lodge Medical Center, Great Falls Clinic, Holy Rosary Health Care, Kalispell Regional Medical Center, St. Patrick Hospital, St. Peter's Hospital, and St. Vincent Healthcare. <sup>†</sup>Week 15 data does not include Great Falls Clinic or St. Patrick Hospital.

**Influenza Hospitalizations:** Influenza cases, including hospitalizations and deaths, are reportable to local public health in Montana. As of April 16, 2016, 339 influenza-associated hospitalizations have been reported. This is a rate of 35.2 per 100,000 population. Hospitalization rates by age group are presented by admission date in the figure below.

Season to date, there have been 15 deaths attributed to influenza. Table 2 presents influenza hospitalizations and deaths current as of the week ending April 16, 2016.

Table 2. Influenza Hospitalizations and Deaths — Montana, Week Ending 4/16/2016				
Hospitalizations		Deaths (Season to Date)		
Current Week	Season to Date	Pediatric	Adult <65 years	Adult >65 years
15	339	2	7	6

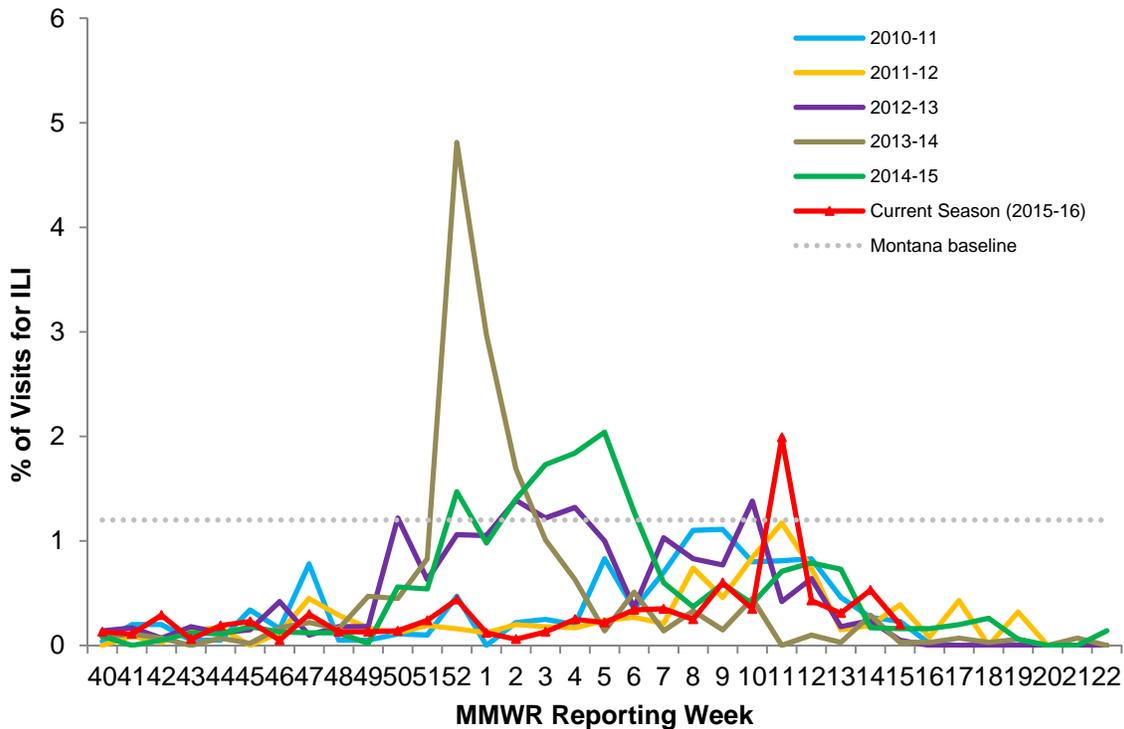
**Cumulative Influenza Hospitalization Rates by age group — Montana, 2015–16 Season\*†**



\*Reported by hospital admission date. †Data is provisional and subject to change as additional reports are received.

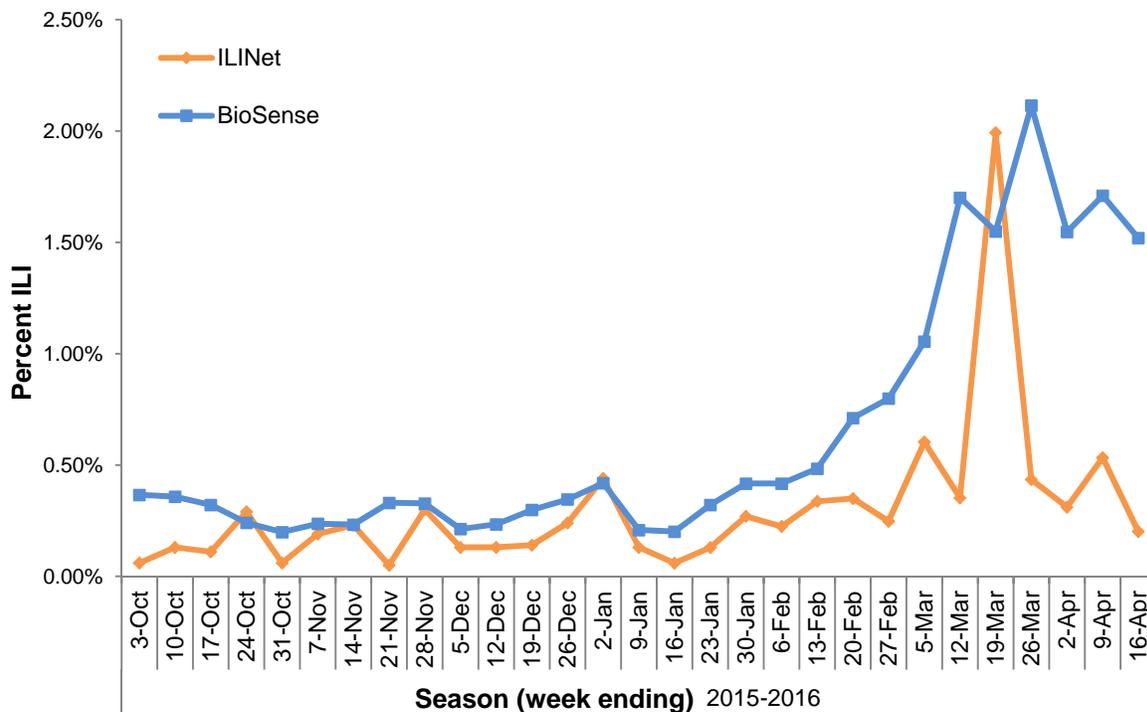
**Influenza-like Illness (ILI):** The U.S. Outpatient ILI Surveillance Network (ILINet) is a national system that conducts surveillance for Influenza-like illness (ILI) in outpatient healthcare facilities. ILI is defined as a fever (temperature of 100° F or greater) and cough and/or sore throat. Currently, 11 facilities participate in ILINet in Montana. For the week ending 4/16/2016, 0.20% of patient visits were due to ILI in Montana compared to 2.1% in the United States.

**Percentage of Influenza-Like Illness (ILI) reported by sentinel providers — Montana, Selected seasons**



**Syndromic Surveillance vs. ILI:** BioSense is the syndromic surveillance system in place for Montana that captures approximately 75% of emergency room visits across the state. ER visits associated with influenza like illness are compared below with the ILINet data for the 2014–15 and 2015–16 seasons in Montana.

**Comparison of ILINet and BioSense reports of Influenza-Like Illness (ILI) — Montana, 2015–16**



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<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.

*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*

*<http://www.dphhs.mt.gov/publichealth/cdepi/diseases/influenza.aspx>.*