



PREVENTION OPPORTUNITIES UNDER THE BIG SKY

2012-2013 Influenza Season Coming to an End

The 2012-2013 influenza season in Montana and elsewhere in the U.S. started early and was intense compared with previous seasons.^{1,2} This issue of *Montana Public Health* discusses the characteristics of the Montana 2012-2013 influenza season. National outpatient influenza like illness (ILI) surveillance indicated that the 2012-2013 season was exceeded only by the 2007-2008 and 2003-2004 seasons in intensity during the last decade.³ To date, eleven influenza outbreaks have been reported in facilities ranging from child daycare to adult long term care facilities. The influenza season started atypically early in 2012 and reported hospitalizations stood out as a marker of the intensity of illness this season.

Seasonal Timing The first confirmed case of influenza was reported on October 4, 2012. In contrast, the first confirmed case for the 2011-2012 season was reported on November 29, 2011. The peak of the 2012-2013 season in Montana occurred in mid-January. This was later than in many areas of the country but still early for Montana. By comparison from 1982-1983 through 2011-2012 the peak month for seasonal influenza in the U.S. was February.⁴ By April 2013 in Montana only sporadic cases were being reported.

Hospitalizations and Deaths The first reported influenza-related hospitalization in Montana occurred on September 10, 2012, and by April 13, 2013, 360 hospitalizations had been reported. Influenza-related hospitalizations began to increase in late December and peaked in early January. While hospitalization rates increased for all age groups (data not shown), the greatest increase was in individuals 65 years and older. This age group accounted for 54% of all reported influenza-related hospitalizations; the rate for all ages combined was 36.1 per 100,000.

Of the fifteen influenza-related deaths reported, thirteen were in adults aged 65 years or more. No pediatric deaths (age 0-17 years) have been reported this season to date.

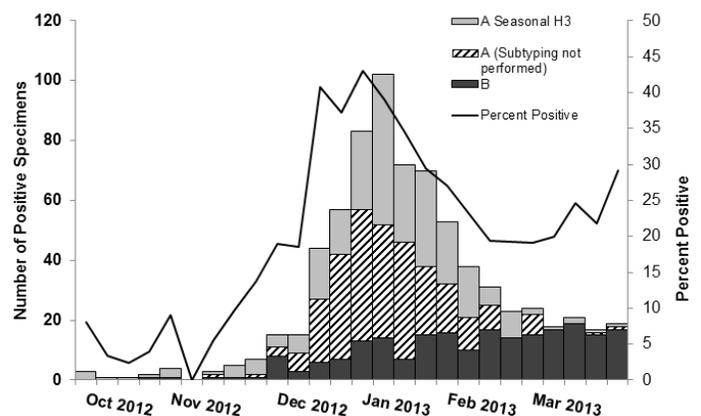
Laboratory Data and Influenza Types

The Montana Public Health Laboratory (MTPHL) performs real time polymerase chain reaction (PCR) molecular testing on specimens submitted for influenza surveillance or diagnostic testing. The Centers for Disease Control and Prevention (CDC) describes these tests as highly sensitive and specific for detecting influenza when compared to culture or

rapid influenza diagnostic tests, with a resulting high positive and negative predictive value.⁵

Four years ago, at the beginning of the 2009 influenza pandemic, MTPHL was the only laboratory in Montana using PCR for influenza diagnostic testing. Now several clinical laboratories in Montana are conducting molecular testing, although only the MTPHL assay can subtype all circulating influenza A viruses. The figure displays influenza molecular testing reported during the 2012-2013 season. During the first part of the season most isolates subtyped were influenza A, seasonal H3; later in the season most were influenza B.

Figure. Influenza Positive Tests Reported by the Montana Public Health Laboratory and Partners*, 2012-13



*Partner laboratories include: Benefis, Bozeman Deaconess Hospital, Kalispell Regional Medical Center, Missoula Community Hospital and St. Patrick's Hospital.

Vaccination In February the protective benefits of the 2012-2013 seasonal influenza vaccine were assessed with interim adjusted national estimates by the CDC.⁶ The overall vaccine effectiveness against influenza A and B was 56%, although the

effectiveness estimate for influenza A for adults aged 65 years and older was much less. Overall these estimates indicate that vaccination with the 2012-2013 influenza seasonal vaccine reduced the risk of influenza-related outpatient visits by more than half for most persons. Vaccination remains the single most important prevention step to control influenza.

Influenza Antiviral Medication Recommendations

Early treatment with oral oseltamivir or inhaled

zanamivir can reduce severity and complications of influenza-related illness.⁷ During the 2012-2013 season antiviral treatment of older persons with influenza has been especially important. CDC recommends initiating antiviral medications for patients with suspected influenza, regardless of their vaccination status if the patient is aged 65 years or more, hospitalized, or is otherwise at high risk for complications from influenza.⁶

Recommendations

- Report all confirmed cases of influenza to your local public health department immediately. Additional information must be reported in association with hospitalizations and deaths. Lists of reportable diseases and contact information can be readily obtained from your local public health department.
- Monitor seasonal influenza messages from the Health Alert Network (HAN) system and other communications from your local public health department. This will keep you informed of local, state and national issues that may impact your practice. If you presently do not receive HAN messages, contact your local public health department to become a recipient.

For more information, contact the Communicable Disease Section at 406-444-0273

References

¹ Montana DPHHS. Montana Influenza Summary, Weekly Confirmed or Suspected Cases.

<http://www.dphhs.mt.gov/influenza/documents/InfluenzaSurveillance.pdf>

² CDC. 2012-2013 Flu Season Drawing to a Close. <http://www.cdc.gov/flu/spotlights/2012-2013-flu-season-wrapup.htm>

³ CDC. Flu View 2012-2013 Influenza Season Week 17 ending April 27, 2013.

<http://www.cdc.gov/flu/weekly/index.htm#OISmap>

⁴ CDC. The Flu Season. <http://www.cdc.gov/flu/about/season/flu-season.htm>

⁵ CDC. Guidance for Clinicians on the use of RT-PCR and other Molecular Assays for Diagnosis of Influenza Virus Infection.

<http://www.cdc.gov/flu/professionals/diagnosis/molecular-assays.htm>

⁶ CDC. Interim Adjusted Estimates of Seasonal Influenza Vaccine Effectiveness – United States February 2013. MMWR. 2013;62:119-123

⁷ CDC. Antiviral Agents for the Treatment and Chemoprophylaxis of Influenza, Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR.2011;60(RR01):1-24

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1400 Broadway
Helena, MT 59620-2951

Richard Opper, Director, DPHHS
Steven Helgerson, MD, MPH, State Med. Officer
Jane Smilie, MPH, Administrator, PHSD