State of Montana *Health Alert Network*

DPHHS HAN

Health Advisory

Cover Sheet

DATE: December 24, 2013

SUBJECT: Notice to Clinicians: Early Reports of pH1N1-Associated Illnesses for the 2013-14 Influenza Season and Antiviral, Vaccine and Clinical Care Recommendations

For LOCAL HEALTH DEPARTMENT reference only

DPHHS Subject Matter Resource for more information regarding this HAN, contact:

DPHHS CDCP
Epidemiology Section
1-406-444-0273

INSTRUCTIONS:

REDISTRIBUTE AT YOUR DISCRETION. Share this information with relevant SMEs or contacts (internal and external) as you see fit.

DPHHS Health Alert Hotline:
1-800-701-5769

DPHHS HAN Website:
www.han.mt.gov

REMOVE THIS COVER SHEET BEFORE REDISTRIBUTING AND REPLACE IT WITH YOUR OWN

Please ensure that DPHHS is included on your HAN distribution list.

Categories of Health Alert Messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.
Information Service: passes along low level priority messages that do not fit other HAN categories and are for informational purposes only.

Please call DPHHS to update contact information at 444-0919 or 444-6906

State of Montana *Health Alert Network*

DPHHS HAN

Information Sheet

Date: December 24, 2013

Subject: Notice to Clinicians: Early Reports of pH1N1-Associated Illnesses for the 2013-14 Influenza Season and Antiviral, Vaccine and Clinical Care Recommendations

Background: From November through December 2013, CDC has received a number of reports of severe respiratory illness among young and middle-aged adults, many of whom were infected with influenza A (H1N1) pdm09 (pH1N1) virus. Multiple pH1N1-associated hospitalizations, including many requiring intensive care unit (ICU) admission, and some fatalities have been reported. While it is not possible to predict which influenza viruses will predominate during the entire 2013-14 influenza season, pH1N1 has been the predominant circulating virus so far.

In Montana, 78% of influenza A positive PCR tests were subtyped as 2009 H1N1. Testing data is from October 1 through December 14, 2013 and comprised of reports from the Montana Public Health Laboratory and partners (Benefis, Bozeman Deaconess Hospital, Kalispell Regional Medical Center, Missoula Community Hospital, St. Patrick's Hospital, St. Peter's Hospital, and St. Vincent's Hospital). As of December 14, there have been 15 reported influenza-associated hospitalizations.

Table 1. Influenza Types Confirmed by MTPHL and Partners

	Week 50	YTD
Number of specimens tested	174	1010
Number of positive specimens (%)	32(18.4)	58(5.7)
Positive specimens by type/subtype		
Influenza A	32	55
2009 H1N1	23	43
Subtyping not performed	9	12
H3	0	0
Influenza B	0	3

Information: For the 2013-14 season, if pH1N1 virus continues to circulate widely, illness that disproportionately affects young and middle-aged adults may occur.

Recommendations for Healthcare Providers: As noted above, the majority of Montana cases have consisted of the H1N1 subtype. CDC recommends annual influenza vaccination for everyone 6 months and older. Anyone who has not yet been vaccinated this season should get an influenza vaccine now. While annual vaccination is the best tool for prevention of influenza and its complications, **treatment with antiviral drugs (oral oseltamivir and inhaled zanamivir) is an important second line of defense for those who become ill** to reduce morbidity and mortality. **Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who is hospitalized; has severe, complicated, or progressive illness; or is at higher risk for influenza complications.**

For more information, please review the attached Centers for Disease Control and Prevention (CDC) Health Alert Network Advisory.

This is an official

CDC HEALTH ADVISORY

Distributed via the CDC Health Alert Network
December 24, 2013, 14:30 ET (2:30 PM ET)
CDCHAN-00359

Notice to Clinicians: Early Reports of pH1N1-Associated Illnesses for the 2013-14 Influenza Season

Summary
From November through December 2013, CDC has received a number of reports of severe respiratory illness among young and middle-aged adults, many of whom were infected with influenza A (H1N1) pdm09 (pH1N1) virus. Multiple pH1N1-associated hospitalizations, including many requiring intensive care unit (ICU) admission, and some fatalities have been reported. The pH1N1 virus that emerged in 2009 caused more illness in children and young adults, compared to older adults, although severe illness was seen in all age groups. While it is not possible to predict which influenza viruses will predominate during the entire 2013-14 influenza season, pH1N1 has been the predominant circulating virus so far. **For the 2013-14 season, if pH1N1 virus continues to circulate widely, illness that disproportionately affects young and middle-aged adults may occur.**

Seasonal influenza contributes to substantial morbidity and mortality each year in the United States. In the 2012-13 influenza season, CDC estimates that there were approximately 380,000 influenza-associated hospitalizations [1]. Although influenza activity nationally is currently at low levels, some areas of the United States are already experiencing high activity, and influenza activity is expected to increase during the next few weeks.

The spectrum of illness observed thus far in the 2013-14 season has ranged from mild to severe and is consistent with that of other influenza seasons. While CDC has not detected any significant changes in pH1N1 viruses that would suggest increased virulence or transmissibility, the agency is continuing to monitor for antigenic and genetic changes in circulating viruses, as well as watching morbidity and mortality surveillance systems that might indicate increased severity from pH1N1 virus infection. In addition, CDC is actively collaborating with state and local health departments in investigation and control efforts.

CDC recommends annual influenza vaccination for everyone 6 months and older. Anyone who has not yet been vaccinated this season should get an influenza vaccine now. While annual vaccination is the best tool for prevention of influenza and its complications, **treatment with antiviral drugs (oral oseltamivir and inhaled zanamivir) is an important second line of defense for those who become ill** to reduce morbidity and mortality. **Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who is hospitalized; has severe, complicated, or progressive illness; or is at higher risk for influenza complications.**

Background
The risk of severe disease and complications from influenza is higher among children younger than 5 years of age, adults aged 65 years and older, pregnant women, and those with underlying medical conditions. In most influenza seasons, the majority of influenza-associated hospitalizations and deaths are among adults aged 65 years and older [2, 3]. However, during the 2009 pandemic, pH1N1 caused more illness in children and young adults than in older adults [4]. This was likely due in part to protection in older adults provided by cross-reactive immunity to pH1N1 caused by prior infection with antigenically-

related viruses. The pandemic also was notable for reports of severe illness among pregnant women infected with pH1N1 and adverse neonatal outcomes [5].

Early observations from the 2013-14 influenza season indicate that some persons infected with pH1N1 virus have had severe illness. While most of these people with severe illness have had risk factors for influenza-associated complications, including pregnancy and morbid obesity, several have not.

CDC recommends annual vaccination as the best tool for prevention. However, for persons with suspected or confirmed influenza, treatment with neuraminidase inhibitor antiviral drugs (oral oseltamivir and inhaled zanamivir) can be an important component of clinical care. Evidence from past influenza seasons and the 2009 H1N1 pandemic has consistently shown that treatment with antiviral medications reduces severe outcomes of influenza when initiated as soon as possible after illness onset. Clinical trials and observational data show that early antiviral treatment may (1) shorten the duration of fever and illness symptoms, (2) reduce the risk of complications from influenza (e.g., otitis media in young children, pneumonia, respiratory failure and death), and (3) shorten the duration of hospitalization.

Recommendations for Healthcare Providers

- Clinicians should encourage all patients 6 months of age and older who have not yet received an influenza vaccine this season to be vaccinated against influenza. There are several flu vaccine options for the 2013-2014 flu season (see http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6207a1.htm?s_cid=rr6207a1_w#Tab1), and all available vaccine formulations this season contain a pH1N1 component; CDC does not recommend one flu vaccine formulation over another.

- Clinicians should encourage all persons with influenza-like illness who are at high risk for influenza complications (see list below) to seek care promptly to determine if treatment with influenza antiviral medications is warranted.

Summary of CDC Recommendations for Influenza Antiviral Medications for Health Care Providers for the 2013-2014 Influenza Season

- CDC guidelines for influenza antiviral use during 2013-14 season are the same as during prior seasons. Clinical benefit is greatest when antiviral treatment is administered early. When indicated, antiviral treatment should be started as soon as possible after illness onset, ideally within 48 hours of symptom onset. However, antiviral treatment might still be beneficial in patients with severe, complicated, or progressive illness, and in hospitalized patients and in some outpatients when started after 48 hours of illness onset, as indicated by clinical and observational studies.

- Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who
  - is hospitalized;
  - has severe, complicated, or progressive illness; or
  - is at higher risk for influenza complications. This list includes:
    - children aged younger than 2 years;
    - adults aged 65 years and older;
    - persons with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopment conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury);
    - persons with immunosuppression, including that caused by medications or by HIV infection;
    - women who are pregnant or postpartum (within 2 weeks after delivery);
    - persons aged younger than 19 years who are receiving long-term aspirin therapy;
    - American Indians/Alaska Natives;
    - persons who are morbidly obese (i.e., body-mass index is equal to or greater than 40); and
    - residents of nursing homes and other chronic-care facilities.

- Antiviral treatment can also be considered for suspected or confirmed influenza in previously healthy, symptomatic outpatients not at high risk on the basis of clinical judgment, especially if treatment can be initiated within 48 hours of illness onset.
    - Clinical judgment, on the basis of the patient's disease severity and progression, age, underlying medical conditions, likelihood of influenza, and time since onset of symptoms, is important when making antiviral treatment decisions for outpatients.

- Decisions about starting antiviral treatment should not wait for laboratory confirmation of influenza.

- Rapid influenza diagnostic tests (RIDTs) have limited sensitivities and predictive values; negative results of RIDTs do not exclude influenza virus infection in patients with signs and symptoms suggestive of influenza. Therefore, antiviral treatment should not be withheld from patients with suspected influenza, even if they test negative.

- While influenza vaccination is the best way to prevent influenza, a history of influenza vaccination does not rule out influenza virus infection in an ill patient with clinical signs and symptoms compatible with influenza.

For more information:

- Summary of Weekly U.S. Influenza Surveillance Report (http:/www.cdc.gov/flu/weekly/summary.htm)
- People at High Risk of Developing Flu–Related Complications (http://www.cdc.gov/flu/about/disease/high_risk.htm)
- Clinical Signs and Symptoms of Influenza (http://www.cdc.gov/flu/professionals/acip/clinical.htm)
- ACIP Recommendations for the Prevention and Control of Influenza with Vaccines, United States, 2013-14: Summary for Clinicians (http://www.cdc.gov/flu/professionals/acip/2013-summary-recommendations.htm)
- Influenza Antiviral Medications: Summary for Clinicians (http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm)
- Guidance for Clinicians on the Use of Rapid Influenza Diagnostic Tests (http://www.cdc.gov/flu/professionals/diagnosis/clinician_guidance_ridt.htm)
- Prevention Strategies for Seasonal Influenza in Healthcare Settings (http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm)
- Guidance for the Prevention and Control of Influenza in the Peri- and Postpartum Settings (http://www.cdc.gov/flu/professionals/infectioncontrol/peri-post-settings.htm)
- Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities (http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm)
- Patient Education: Influenza Brochures, Fact Sheets, and Posters (http://www.cdc.gov/flu/freeresources/index.htm)

Endnotes

1. Centers for Disease, C. and Prevention, *Estimated influenza illnesses and hospitalizations averted by influenza vaccination - United States, 2012-13 influenza season.* MMWR Morb Mortal Wkly Rep, 2013. 62(49): p. 997-1000. (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6249a2.htm?s_cid=mm6249a2_w)
2. Mullooly, J.P., et al., *Influenza- and RSV-associated hospitalizations among adults.* Vaccine, 2007. 25(5): p. 846-55. (http://www.ncbi.nlm.nih.gov/pubmed/21342884)
3. Centers for Disease, C. and Prevention, *Estimates of deaths associated with seasonal influenza --- United States, 1976-2007.* MMWR Morb Mortal Wkly Rep, 2010. 59(33): p. 1057-62. (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5933a1.htm)
4. Jhung, M.A., et al., *Epidemiology of 2009 pandemic influenza A (H1N1) in the United States.* Clin Infect Dis, 2011. 52(5): p. S13-26.

(http://www.ncbi.nlm.nih.gov/pubmed/21342884)
5. Creanga, A.A., et al., *Severity of 2009 pandemic influenza A (H1N1) virus infection in pregnant women.* Obstet Gynecol, 2010. 115(4): p. 717-26. (http://www.ncbi.nlm.nih.gov/pubmed/20308830)

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

Categories of Health Alert Network messages:

Health Alert	Requires immediate action or attention; highest level of importance
Health Advisory	May not require immediate action; provides important information for a specific incident or situation
Health Update	Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service	Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##