



# Health Alert Network

## Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

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The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

## HAN ALERT

Number of pages including cover: 5

Subject: **Alert - Increasing Influenza activity and the importance of antiviral use**

Message ID: 12/28/2017 4:00:00 PM

Recipients: HAN Community Members.

From: TRI-COUNTY HEALTH DEPARTMENT

Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: **Tri-County Health Department is forwarding you the attached HAN. You may have already received a similar broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.**

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You have received this message based upon the information contained within our Health Alert Network Notification System. If you have a different or additional e-mail or fax address that you would like us to use, or if you have additional questions, call 720-200-1477.

### Categories of Health Alert Network 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.

**Info Service/Public Health Brief:** Provides general information that is not necessarily considered to be of an emergent nature.



HEALTH ALERT | Increasing influenza activity and the importance of antiviral use | Dec. 28, 2017

Health care providers: Please distribute widely in your office

### Key points

- Influenza activity continues to increase across Colorado and the United States, with Influenza A (H3N2) viruses predominating thus far.
- In the past, A(H3N2) virus-predominant influenza seasons have been associated with more hospitalizations and deaths.
- From Oct. 1, 2017, through the week ending Dec. 23, 2017, 851 influenza hospitalizations have been reported in Colorado. This is three to four times higher what was reported in previous years, and the most cases reported at this point in the season since 2014, which was Colorado's most severe flu season.
- There have been 32 outbreaks in long-term care and residential facilities reported statewide since Oct. 1, 2017.
- Antiviral treatment is recommended for hospitalized patients; children under age 5 (and especially those under age 2) adults age 65 years and older 3) pregnant women and those up to two weeks postpartum and 4) individuals with underlying health conditions.
- Antiviral chemoprophylaxis is also recommended for all eligible long-term care facility residents during an outbreak; **regardless** of whether they received influenza vaccine.
- Presentation of influenza illness in the oldest age groups may be atypical.

### Background information

In Colorado and the United States, influenza activity has increased significantly over recent weeks, with influenza A(H3N2) viruses predominating so far this season. In the past, A(H3N2) virus-predominant influenza seasons have been associated with more hospitalizations and deaths in young children and people aged 65 and older, compared to other age groups.

From Oct. 1, 2017, through the week ending Dec. 23, 2017, 851 influenza hospitalizations have been reported in Colorado. This is three to four times higher than what was reported in previous years and the most cases reported at this point in the season since 2014, which was Colorado's most severe flu season. Thirty-two outbreaks in long-term care and residential facilities have been reported statewide since Oct. 1, 2017.

In addition, influenza vaccine effectiveness (VE) in general has been lower against A(H3N2) viruses than against influenza A(H1N1)pdm09 or influenza B viruses. Last season, VE against circulating influenza A(H3N2) viruses was estimated to be 32 percent in the U.S. CDC expects VE could be similar this season, should the same A(H3N2) viruses continue to predominate. For this reason, in addition to influenza vaccination for prevention of influenza, the use of antiviral medications for treatment of influenza becomes more important than usual. The neuraminidase inhibitor (NAI) antiviral medications are most effective in treating influenza and reducing complications when treatment is started early. Evidence from previous influenza seasons suggests that NAI antivirals are underutilized in outpatients and hospitalized patients with influenza who are recommended for treatment.

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## Recommendations / guidance

### CDC antiviral recommendations for the 2017-2018 season

- CDC recommends antiviral medications for treatment of influenza as an important adjunct to annual influenza vaccination. Treatment with neuraminidase inhibitors has been shown to have clinical and public health benefits in reducing illness and severe outcomes of influenza based on evidence from randomized controlled trials, meta-analyses of randomized controlled trials, and observational studies during past influenza seasons and during the 2009 H1N1 pandemic.
- Any patient with suspected or confirmed influenza in the following categories should be treated as soon as possible with a neuraminidase inhibitor:
  - All hospitalized patients.
  - Any patient who has severe, complicated, or progressive illness. This may include outpatients with severe or prolonged progressive symptoms or who develop complications such as pneumonia but who are not hospitalized.
  - Any patient who is at higher risk for influenza complications but not hospitalized. Patients in this group include:
    - Children younger than 2 years (although all children younger than 5 years are considered at higher risk for complications from influenza, the highest risk is for those younger than 2 years).
    - Adults aged 65 years and older.
    - People with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), and metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopmental 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).

- People with immunosuppression, including that caused by medications or by HIV infection.
- Women who are pregnant or postpartum (within two weeks after delivery).
- People aged younger than 19 years who are receiving long-term aspirin therapy.
- American Indians/Alaska natives.
- People with extreme obesity (i.e., body-mass index is equal to or greater than 40).
- Residents of nursing homes and other chronic-care facilities.

#### **Antivirals in non-high risk patients with uncomplicated influenza**

- Neuraminidase inhibitors can benefit other individuals with influenza. While current guidance focuses on antiviral treatment of those with severe illness or at high risk of complications from influenza, antiviral treatment may be prescribed on the basis of clinical judgment for any previously healthy (non-high risk) outpatient with suspected or confirmed influenza who presents within two days after illness onset.
- Neuraminidase inhibitors can reduce the duration of uncomplicated influenza illness by approximately one day when started within two days after illness onset in otherwise healthy persons. It is possible that antiviral treatment started after 48 hours may offer some benefit.

#### **Antiviral chemoprophylaxis for long-term care facility residents during an influenza outbreak**

- Antiviral chemoprophylaxis is recommended for all eligible long-term care residents (regardless of whether they received influenza vaccine) who are not exhibiting influenza-like illness once an influenza outbreak is identified. Residents that develop influenza-like illness while on prophylaxis should be switched to treatment doses of antiviral medications.
- Consideration can be given to restricting antiviral chemoprophylaxis to residents of a particular unit when the outbreak is clearly confined to that unit or care area. When the outbreak involves multiple units or care areas, or is widespread in the facility, antiviral chemoprophylaxis of the entire facility is recommended.
- Full chemoprophylaxis guidelines can be found in the Prevention and Control of Influenza Outbreaks in Long Term Care Facilities Guidelines, at: <https://drive.google.com/file/d/0B0tmPQ67k3NVN1pIdWNRUTdFNUE/view>

#### **Antiviral medications**

Three prescription neuraminidase inhibitor antiviral medications are approved by the U.S. Food and Drug Administration (FDA) and are recommended for use in the U.S. during the 2017-2018 influenza season: oseltamivir (available as a generic version or under the trade name Tamiflu®), zanamivir (Relenza®), and peramivir (Rapivab®).

- Oral oseltamivir is FDA-approved for treatment of uncomplicated influenza within two days of illness onset in persons aged 2 weeks and older, and for chemoprophylaxis to prevent influenza in people 1 year of age and older. Although not part of the FDA-approved indications, use of oral oseltamivir for treatment of influenza in infants younger than 14 days old, and for chemoprophylaxis in infants 3 months to 1 year of age, is recommended by CDC and the American Academy of Pediatrics. Due to limited data, use of oseltamivir for

chemoprophylaxis is not recommended in children younger than 3 months, unless the situation is judged critical. CDC recommends oseltamivir treatment as soon as possible for hospitalized patients with suspected or confirmed influenza, high-risk outpatients with suspected or confirmed influenza, and those with progressive disease.

- Inhaled zanamivir is FDA-approved for treatment of uncomplicated influenza within two days of illness onset in persons 7 years and older and for prevention of influenza in persons 5 years and older. Inhaled zanamivir is not recommended for treatment of influenza in hospitalized patients due to limited data.
- Intravenous peramivir is FDA-approved for the treatment of acute uncomplicated influenza within two days of illness onset in persons aged 2 years and older.
- Adamantanes (rimantadine and amantadine) are not currently recommended for antiviral treatment or chemoprophylaxis of influenza A because of high levels of resistance among circulating influenza A viruses.
- There are no current national shortages of neuraminidase inhibitors (i.e., oseltamivir, zanamivir and peramivir), and manufacturers report they expect to meet projected seasonal demands. If there is difficulty locating oseltamivir for oral suspension, as there has been in some previous seasons, oral suspension can be compounded by a pharmacy from oseltamivir capsules. However, this compounded suspension should not be used for convenience or when oseltamivir oral suspension is commercially available.

#### Special considerations for older adults

- People 65 years and older bear the greatest burden of severe flu disease; it is estimated that between 71 and 85 percent of seasonal flu-related deaths occur in people 65 years and older.
- Older adults experiencing respiratory symptoms during flu season should be evaluated promptly and providers should have a low threshold for testing and treating older adults.
- Patients in the oldest age groups frequently present atypically: without fever, with mental status changes, or with exacerbation of underlying illness such as COPD or CHF.

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#### For more information

- Summary of Influenza Antiviral Treatment Recommendations for Clinicians  
<http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>
- Colorado Influenza Report: <https://www.colorado.gov/pacific/cdphe/influenza-data>
- Guidelines for Prevention and Control of Influenza Outbreaks in Long Term Care Facilities  
<https://drive.google.com/file/d/0B0tmPQ67k3NVN1pIdWNRUTdFNUE/view>
- CDPHE Disease Reporting Line: 303-692-2700 or 303-370-9395 (after hours)