

STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
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Antiviral Recommendations for Patients with Suspected or Confirmed Influenza A (H1N1) Virus Infection

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NOTE: This guidance may differ from CDC recommendations and may change as more information becomes available and as the situation in the state changes.

The purpose of these recommendations is to provide clear guidance on use of influenza antiviral medications to ensure local supplies are used most appropriately.

Persons with milder influenza-like illness who are not at higher risk for influenza complications should be encouraged to stay at home and not seek testing or prescription of antiviral medication.

CDPHE strongly discourages healthcare providers from prescribing and the public from requesting influenza antiviral medications for private stockpiling purposes.

CDPHE Recommendations for Antiviral Treatment

Antiviral treatment should be prioritized for the following patients with suspected* or confirmed swine influenza A (H1N1) virus infection:

- hospitalized patients with suspected or confirmed infection
- patients with suspected or confirmed infection who are at higher risk for influenza complications, which includes:
 - persons with certain chronic medical conditions**
 - persons aged 65 years or older
 - children aged less than 5 years
 - pregnant women

* Suspected swine influenza virus infection is currently based on presence of acute febrile respiratory illness PLUS a history of recent (within 7 days) travel to or residing in a community with confirmed cases, or recent (within 7 days) contact with a person who is a confirmed case.

** Chronic medical conditions include: asthma or other chronic pulmonary diseases such as cystic fibrosis in children or chronic obstructive pulmonary disease in adults; hemodynamically significant cardiac disease; immunosuppressive disorders or persons receiving immunosuppressive drugs; sickle cell anemia and other hemoglobinopathies; diseases that requiring long-term aspirin therapy such as rheumatoid arthritis or Kawasaki disease; chronic renal dysfunction; cancer; chronic metabolic disease such as diabetes mellitus; neuromuscular disorders; seizure disorders or cognitive dysfunction that may compromise the handling of respiratory secretions

The swine influenza A (H1N1) virus is susceptible to the neuraminidase inhibitor antiviral medications zanamivir and oseltamivir. It is resistant to amantadine and rimantadine. **Antiviral treatment with zanamivir or oseltamivir should be initiated as soon as possible after the onset of symptoms. Recommended duration of treatment is 5 days.**

Evidence for benefits from treatment in studies of seasonal influenza is strongest when treatment is started within 48 hours of illness onset. However, some studies of treatment of seasonal influenza have indicated benefit, including reductions in mortality or duration of hospitalization even for patients whose treatment was started more than 48 hours after illness onset.

Antiviral doses recommended for treatment of swine influenza A (H1N1) virus infection in adults or children 1 year of age or older are the same as those recommended for seasonal influenza (Table 1). Oseltamivir use for children < 1 year old was recently approved by the FDA under an Emergency Use Authorization, and dosing for these children is age-based (Table 2).

CDPHE Recommendations for Antiviral Chemoprophylaxis

Antiviral post-exposure chemoprophylaxis is recommended for the following persons:

- Health care workers or public health workers who were not using appropriate personal protective equipment during close contact with an ill suspected or confirmed case during the case's infectious period⁺

⁺ one day before until 7 days after the case's onset of illness

For antiviral chemoprophylaxis of swine influenza A (H1N1) virus infection, either oseltamivir or zanamivir are recommended (Table 1). Oseltamivir can also be used for chemoprophylaxis under an Emergency Use Authorization, and dosing for these children is age-based (Table 3).

Duration of antiviral post-exposure chemoprophylaxis is for 10 days after the last known exposure to an ill suspected or confirmed case of swine influenza A (H1N1) virus infection.

Table 1. Swine influenza antiviral medication dosing recommendations.

Agent, group		Treatment (for 5 days)	Chemoprophylaxis (for 10 days)
Oseltamivir			
Adults		75 mg capsule twice per day for 5 days	75 mg capsule once per day
Children (≥12 mos) weight:	<15 kg	60 mg per day divided into 2 doses	30 mg once per day
	15–23 kg	90 mg per day divided into 2 doses	30 mg once per day
	24–40 kg	120 mg per day divided into 2 doses	60 mg once per day
	>40 kg	150 mg per day divided into 2 doses	75 mg once per day
Zanamivir			
Adults		Two 5 mg inhalations (10 mg total) twice per day	Two 5 mg inhalations (10 mg total) once per day
Children		Two 5 mg inhalations (10 mg total) twice per day (age, 7 years or older)	Two 5 mg inhalations (10 mg total) once per day (age, 5 years or older)

Oseltamivir and zanamivir are “Pregnancy Category C” medications, indicating that no clinical studies have been conducted to assess the safety of these medications for pregnant women. These drugs should be used during pregnancy only if the potential benefit justifies the potential risk to the embryo or fetus. Pregnancy should not be considered a contraindication to oseltamivir or zanamivir use. Pregnant women might be at higher risk for severe complications from swine influenza, and the benefits of treatment or chemoprophylaxis with zanamivir or oseltamivir likely outweigh the theoretical risks of antiviral use.

Table 2. Dosing recommendations for antiviral treatment of children younger than 1 year using oseltamivir.

Age	Recommended treatment dose for 5 days
<3 months	12 mg twice daily
3-5 months	20 mg twice daily
6-11 months	25 mg twice daily

Limited safety data on the use of oseltamivir (or zanamivir) are available from children less than one year of age, and oseltamivir is not licensed for use in children less than 1 year of age. Available data come from use of oseltamivir for treatment of seasonal influenza. These data suggest that severe adverse events are rare, and the Infectious Diseases Society of America recently noted, with regard to use of oseltamivir in children younger than 1 year old with seasonal influenza, that "...limited retrospective data on the safety and efficacy of oseltamivir in this young age group have not demonstrated age-specific drug-attributable toxicities to date." (See IDSA guidelines for seasonal influenza.)

Table 3. Dosing recommendations for antiviral chemoprophylaxis of children younger than 1 year using oseltamivir.

Age	Recommended prophylaxis dose for 10 days
<3 months	Not recommended unless situation judged critical due to limited data on use in this age group
3-5 months	20 mg once daily
6-11 months	25 mg once daily