

Interim recommendations for the selection of antiviral treatment using laboratory test results and viral surveillance data, United States, 2008-09 season‡ (from CDC.gov)

NOTE: In Nebraska, influenza A (H1N1) has been predominant. Oseltamivir should not be used as monotherapy unless influenza A (H3N2) or Influenza B is identified.

Rapid antigen or other laboratory test	Predominant virus(es) in community	Preferred medication(s)	Alternative (combination antiviral treatment)
Not done or negative, but clinical suspicion for influenza	H1N1 or unknown	Zanamivir	Oseltamivir + Rimantadine*
Not done or negative, but clinical suspicion for influenza	H3N2 or B	Oseltamivir or Zanamivir	None**
Positive A	H1N1 or unknown	Zanamivir	Oseltamivir + Rimantadine*
Positive A	H3N2 or B	Oseltamivir or Zanamivir	None**
Positive B	Any	Oseltamivir or Zanamivir	None**
Positive A+B***	H1N1 or unknown	Zanamivir	Oseltamivir + Rimantadine*
Positive A+B***	H3N2 or B	Oseltamivir or Zanamivir	None**

*Amantadine can be substituted for rimantadine but has increased risk of adverse events. Human data are lacking to support the benefits of combination antiviral treatment of influenza; however, these interim recommendations are intended to assist clinicians treating patients who might be infected with oseltamivir-resistant influenza A (H1N1) virus.

** The adamantanes (amantadine and rimantadine) should not be used for H3N2 or B viruses.

*** Positive A+B indicates a rapid antigen test that cannot distinguish between influenza A and influenza B viruses.

‡ Influenza antiviral medications used for treatment are most beneficial when initiated within the first two days of illness. Clinicians should consult the package insert of each antiviral medication for specific dosing information, approved indications and ages, contraindications/warnings/precautions, and adverse effects.

Dosing Guidelines and Product Availability for Influenza Treatment and Prophylaxis

Drug	Adult Treatment	Adult Prophylaxis*	Pediatric Treatment	Pediatric Prophylaxis*	Special Considerations	TNMC Outpatient Pharmacy Availability
Zanamivir (Relenza ®)	2 inhalations BID x5 days	2 inhalations daily	2 inhalations BID x5 days for ≥ 7 yoa	2 inhalations daily for ≥ 5 yoa	Not recommended in patients with reactive airway disease.	Rotadisk inhaler, 5 mg/inhalation
Oseltamivir (Tamiflu ®)	75mg BID x5 days	75mg daily	≥ 1 yoa ≤ 15 kg: 30mg BID 16-23kg: 45mg BID 23-40kg: 60mg BID >40kg: 75mg BID All for 5 days	≥ 1 yoa ≤ 15 kg: 30mg daily 16-23kg: 45mg daily 23-40kg: 60mg daily >40kg: 75mg daily	Dosage adjustment required for renal impairment (CrCl < 30 mL/min).	75mg caps and 12mg/mL suspension
Rimantadine (Flumadine ®)	200mg/day in 1-2 doses x7 days	200mg/day in 1-2 doses	1-9yoa or <40kg: 6.6 mg/kg/day divided BID (max 150 mg/day) ≥ 10 yoa: 200 mg/day in 1-2 doses Treat 5-7 days	1-9yoa: 5 mg/kg daily (max 150 mg/day) ≥ 10 yoa: 200 mg/day in 1-2 doses	Oral solution is no longer available from manufacturer; dosage reduction to 100 mg daily recommended in severe hepatic or renal disease (CrCl <10 mL/min).	100mg tablets
Amantadine (Symmetrel ®)	200mg/day in 1-2 doses until 24-48h after symptom resolution	Same as treatment doses	>12yoa: same as adult 1-9yoa: 5mg/kg/day in 1-2 doses; MAX 150mg/day ≥ 10 -12yoa: 100 mg PO BID	Same as treatment doses	Dosage adjustment required for renal impairment (CrCl < 50 mL/min).	100mg caps or tabs and 50mg/mL solution

*If influenza vaccine is administered, prophylaxis can generally be stopped 14 days after vaccination for noninstitutionalized persons. When prophylaxis is being administered following a household exposure, prophylaxis should be continued for 10 days. In persons at high risk of complications from influenza for whom vaccination is contraindicated or expected to be ineffective, chemoprophylaxis should be continued for the duration that influenza viruses are circulating in the community during influenza season.

References:

1. Takemoto CK, Hodding JH, Kraus DM, eds. Pediatric Dosage Handbook. 15th ed. Lexi-Comp, Inc, 2008.
2. Micromedex® Healthcare Series. (n.d.) Retrieved March 18, 2009, from <http://www.thomsonhc.com>. Greenwood Village, CO: Thomson Healthcare.
3. CDC Interim Antiviral Guidelines for the 2008-2009 Influenza Season. Retrieved online March 18, 2009. <http://www2a.cdc.gov/HAN/ArchiveSys/ViewMsgV.asp?AlertNum=00279>
4. Harper SA, Bradley JS, Englund JA, et al. Seasonal Influenza in Adults and Children—Diagnosis, Treatment, Chemoprophylaxis and Institutional Outbreak Management: Clinical Practice Guidelines of the Infectious Diseases Society of America *CID* 2009;48:1003-32.

