



# Genesee County Health Department

Mark Valacak, MPH, Health Officer  
Gary K. Johnson, MD, MPH, Medical Director

November 19, 2009

<http://www.gchd.us>

**Floyd J. McCree Courts & Human Services Building**  
630 S. Saginaw Street, Ste. 4  
Flint, Michigan, 48502-1540  
Phone: 810-257-3612  
Fax: 810-257-3147

**Community Health**  
Phone: 810-257-3612  
Fax: 810-257-3147

**Environmental Health**  
Phone: 810-257-3603  
Fax: 810-257-3125

**Personal Health**  
Phone: 810-257-3132  
Fax: 810-237-6162

**Burton Branch**  
G-3373 S. Saginaw St.  
Burton, Michigan 48529  
Phone: 810-742-2255  
Fax: 810-742-2561

**McCree North Health Center**  
115 E. Pierson Rd.  
Flint, Michigan 48505  
Phone: 810-600-2400  
Fax: 810-785-9675

RE: Antiviral Medications

Dear Colleague,

Surveillance of schools, childcare centers, hospitals, and private providers indicates that influenza activity remains high in Genesee County and is being spread easily from person-to-person. Similar to Michigan and the United States, the majority of this activity is due to the 2009 H1N1 influenza virus. While this virus is not more severe than the seasonal influenza some groups appear to be at increased risk of influenza-related complications. Influenza antiviral medications can reduce the severity and duration of influenza illness and can reduce the risk of influenza-related complications, including severe illness and death.

I have attached a summary of the most recent recommendations for antiviral use from the Centers for Disease Control and Prevention (CDC). The full recommendations can be found at <http://www.cdc.gov/h1n1flu/recommendations.htm>.

I have also attached a health advisory recently issued by the CDC encouraging early empiric treatment with antiviral medications in patients who are suspected to have influenza. Clinical judgment is always an essential part of treatment decisions. It is not necessary to wait for laboratory confirmation to begin treatment with antiviral drugs. Also, a negative rapid influenza test result does not rule out influenza virus infection, so patients with a negative rapid influenza diagnostic test should be considered for treatment if clinically indicated.

Lastly, the Genesee County Health Department (GCHD) is distributing Tamiflu and Relenza from the Strategic National Stockpile to pharmacies in Genesee County. All doses from the SNS are free of charge to underinsured or uninsured patients. A prescription is required to receive antivirals. Health care providers prescribing antivirals to patients who are underinsured or uninsured should call the prescription into one of these designated pharmacies or instruct patients to get the prescription filled at one these designated pharmacies.

The pharmacies that have received a supply of antivirals are:

- Diplomat Pharmacy (G3320 Beecher Rd, Flint, MI 48532, ph: (810) 732-8720)
- Walgreens (1570 E Pierson Rd, Flushing, MI 48433, ph: (810) 659-1062)
- Walgreens (3270 Silver Lake Rd, Fenton, MI 48430, ph: (810) 629-3134)

*Note:* The GCHD is in the process of distributing antivirals from the Strategic National Stockpile to more pharmacies in Genesee County. For the latest list of pharmacies please call the GCHD at (810) 257-3833.

For further information, please visit the GCHD website at [www.gchd.us](http://www.gchd.us) or contact me at (810) 257-3155 or [gjohnson@gchd.us](mailto:gjohnson@gchd.us). Thank you for your assistance.

Sincerely,

Gary K. Johnson, MD, MPH  
Medical Director

Attachments

**Better Life Through Better Health**

## Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season

(Full document can be found at: <http://www.cdc.gov/h1n1flu/recommendations.htm> )

Clinical judgment is an important factor in treatment decisions. Most patients who have had 2009 H1N1 virus infection have had a self-limited respiratory illness similar to typical seasonal influenza. Most healthy persons who develop suspected or confirmed 2009 H1N1 influenza or seasonal influenza who present with an uncomplicated febrile illness generally do not require antiviral treatment. In addition, persons who appear to be recovering from influenza generally do not require antiviral treatment. However, some groups appear to be at increased risk of influenza-related complications. Once the decision to administer antiviral treatment is made by the health care provider, treatment with zanamivir or oseltamivir should be initiated as soon as possible after the onset of symptoms.

1. Treatment is recommended for all hospitalized patients with confirmed, probable or suspected 2009 H1N1 or seasonal influenza.
2. Early empiric treatment should be considered for outpatients who are at higher risk for influenza-related complications including:
  - Children younger than 2 years old;
  - Persons aged 65 years or older;
  - Pregnant women and women up to 2 weeks postpartum (including following pregnancy loss);
  - Persons of any age with certain chronic medical or immunosuppressive conditions; and,
  - Persons younger than 19 years of age who are receiving long-term aspirin therapy.
3. Treatment with oseltamivir or zanamivir is recommended for persons with suspected or confirmed influenza who are severely ill or who are showing evidence of rapid clinical deterioration. Signs and symptoms of severe illness due to suspected influenza are an indication for immediate treatment, regardless of previous health or age.
4. Treatment should be initiated empirically when the decision is made to treat patients who have illnesses that are clinically compatible with influenza. Treatment should not await laboratory confirmation because laboratory-based testing could delay treatment and because a negative rapid test does not rule out influenza.

Table 1. Antiviral medication dosing recommendations for treatment or chemoprophylaxis of 2009 H1N1 infection.  
(Table extracted from product information for Tamiflu® and Relenza®)

Medication		Treatment (5 days)	Chemoprophylaxis (10 days)
<b>Oseltamivir</b>			
<b>Adults</b>			
		75-mg capsule twice per day	75-mg capsule once per day
<b>Children ≥ 12 months</b>			
Body Weight (kg)	Body Weight (lbs)		
≤15 kg	≤33lbs	30 mg twice daily	30 mg once per day
> 15 kg to 23 kg	>33 lbs to 51 lbs	45 mg twice daily	45 mg once per day
>23 kg to 40 kg	>51 lbs to 88 lbs	60 mg twice daily	60 mg once per day
>40 kg	>88 lbs	75 mg twice daily	75 mg once per day
<b>Zanamivir</b>			
<b>Adults</b>			
		10 mg (two 5-mg inhalations) twice daily	10 mg (two 5-mg inhalations) once daily
<b>Children (≥7 years or older for treatment, ≥5 years for chemoprophylaxis)</b>			
		10 mg (two 5-mg inhalations) twice daily	10 mg (two 5-mg inhalations) once daily

Recommendations for use of antiviral medications may change as data on antiviral effectiveness, clinical spectrum of illness, adverse events from antiviral use, or resistance among circulating viruses become available. As of September 12, 2009, 99% of circulating influenza viruses were 2009 H1N1 viruses susceptible to both oseltamivir and zanamivir. These treatment guidelines therefore focus on use of antiviral medications effective against 2009 H1N1 viruses. For antiviral treatment of 2009 H1N1 virus infection, either oseltamivir or zanamivir are recommended.

## Antiviral Chemoprophylaxis

The infectious period for persons infected with the 2009 H1N1 virus appears to be similar to that observed in studies of seasonal influenza. Infected persons may shed influenza virus, and potentially be infectious to others, beginning one day before they develop symptoms to up to 7 days after they become ill. Children, especially younger children, and persons who are immune compromised can shed influenza virus for longer periods. However, the amount of virus shed generally correlates with magnitude of fever and for these recommendations, the *infectious period* for influenza is defined as one day before until 24 hours after fever ends.

- **Post exposure antiviral chemoprophylaxis with either oseltamivir or zanamivir can be considered for the following:**
  - Persons who are at higher risk for complications of influenza and are a close contact of a person with confirmed, probable, or suspected 2009 H1N1 or seasonal influenza during that person's infectious period.
  - Health care personnel, public health workers, or first responders who have had a recognized, unprotected close contact exposure to a person with confirmed, probable, or suspected 2009 H1N1 or seasonal influenza during that person's infectious period.
- Antiviral agents should not be used for post exposure chemoprophylaxis in healthy children or adults based on potential exposures in the community, school, camp or other settings.
- Chemoprophylaxis generally is not recommended if more than 48 hours have elapsed since the last contact with an infectious person.
- Chemoprophylaxis is not indicated when contact occurred before or after, but not during, the ill person's infectious period as defined above.

This is an official  
**CDC Health Advisory**

Distributed via Health Alert Network  
November 6, 2009, 13:51 EST (01:51 PM EST)  
CDCHAN-00300-09-11-06-ADV-N

## **Key Issues for Clinicians Concerning Antiviral Treatments for 2009 H1N1**

*Although use of influenza antiviral drugs in the United States has increased during the 2009-2010 flu season, not all people recommended for antiviral treatment are getting treated. Listed below are important facts to consider when deciding whether a patient needs to be treated with antiviral medication.*

***It is critical to remember that it is not too late to treat, even if symptoms began more than 48 hours ago. Although antiviral treatment is most effective when begun within 48 hours of influenza illness onset, studies have shown that hospitalized patients still benefit when treatment with oseltamivir is started more than 48 hours after illness onset. Outpatients, particularly those with risk factors for severe illness who are not improving, might also benefit from treatment initiated more than 48 hours after illness onset.***

### **Recommendations for Clinicians:**

Many 2009 H1N1 patients can benefit from antiviral treatment, **and all hospitalized patients with suspected or confirmed 2009 H1N1 should receive antiviral treatment with a neuraminidase inhibitor – either oseltamivir or zanamivir – as early as possible** after illness onset. Moderately ill patients, especially those with risk factors for severe illness, and those who appear to be getting worse, can also benefit from treatment with neuraminidase inhibitors. A full listing of risk factors for severe influenza is available at: <http://www.cdc.gov/h1n1flu/highrisk.htm>

Although antiviral medications are recommended for treatment of 2009 H1N1 in patients with risk factors for severe disease, **some people without risk factors may also benefit from antivirals**. To date, 40% of children and 20% of adults hospitalized with complications of 2009 H1N1 did not have risk factors. Clinical judgment is always an essential part of treatment decisions.

When treatment of persons with suspected 2009 H1N1 influenza is indicated, it **should be started empirically. If a decision is made to test for influenza, treatment should not be delayed while waiting for laboratory confirmation**. The earlier antiviral treatment is given, the more effective it is for the patient. Also, rapid influenza tests often can give false negative results. If you suspect flu and feel antiviral treatment is warranted, treat even if the results of a rapid test are negative. Obtaining more accurate testing results can take more than one day, so treatment should not be delayed while waiting for these test results. For more information on influenza testing, please see: [http://www.cdc.gov/h1n1flu/guidance/diagnostic\\_tests.htm](http://www.cdc.gov/h1n1flu/guidance/diagnostic_tests.htm).

Although commercially produced pediatric oseltamivir suspension is in short supply, **there are ample supplies of children's oseltamivir capsules, which can be mixed with syrup at home. In addition, pharmacies can compound adult oseltamivir capsules into a suspension for treatment of ill infants and children.** Additional information on compounding can be found at: <http://www.cdc.gov/H1N1flu/pharmacist/>.

**For More Information**

Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season: <http://www.cdc.gov/H1N1flu/recommendations.htm>

Questions & Answers:

Antiviral Drugs, 2009-2010 Flu Season: <http://www.cdc.gov/h1n1flu/antiviral.htm>

Influenza Diagnostic Testing: [http://www.cdc.gov/h1n1flu/diagnostic\\_testing\\_clinicians\\_qa.htm](http://www.cdc.gov/h1n1flu/diagnostic_testing_clinicians_qa.htm)

Updated Interim Recommendations for Obstetric Health Care Providers Related to Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season: [http://www.cdc.gov/H1N1flu/pregnancy/antiviral\\_messages.htm](http://www.cdc.gov/H1N1flu/pregnancy/antiviral_messages.htm)

Antiviral Drugs: Summary of Side Effects: <http://www.cdc.gov/flu/protect/antiviral/sideeffects.htm>

General information for the public on antiviral drugs is available in "2009 H1N1 and Seasonal Flu: What You Should Know About Flu Antiviral Drugs" at <http://www.cdc.gov/H1N1flu/antivirals/geninfo.htm> .

Downloadable brochures and informational flyers, including one on antiviral drugs, are available at <http://www.cdc.gov/h1n1flu/flyers.htm> .

For the FDA page on antiviral influenza drugs: <http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm100228.htm>

For additional information, you can also call CDC's toll-free hotline, 800-CDC-INFO (800-232-4636) TTY: (888) 232-6348, which is available 24 hours a day, every day.

---

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.

##This Message was distributed to State and Local Health Officers, Public Information Officers, Epidemiologists and HAN Coordinators as well as Clinician organizations##

=====

You have received this message based upon the information contained within our emergency notification data base. If you have a different or additional e-mail or fax address that you would like us to use please contact your State-based Health Alert Network program at your State or local health department.

=====

---

*The CDC and HHS logos are the exclusive property of the Department of Health and Human Services and may not be used for any purpose without prior express written permission. Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.*