



# Pandemic Flu and You

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## **Antiviral Resistance An Increasingly Problematic Issue**

### **Current seasonal flu strain (H1N1) showing resistance to oseltamivir (Tamiflu®):**

Reports noting the frequency and impact of antiviral resistance to influenza (flu) are changing almost daily. An analysis of a current circulating strain of seasonal flu, H1N1, is showing marked resistance to oseltamivir (Tamiflu®). As of February 2, 2008, 4.5% of all influenza viruses analyzed by CDC this season have been found to be resistant to oseltamivir. Of those, 8.1% of H1N1 viruses and 0% of H3N2 viruses have been resistant to oseltamivir. Among European countries, viral resistant isolates have been identified in at least 9 countries with Norway showing the greatest percentage of resistance—70% of tested H1N1 isolates resistant as of January 2008.

**For an FAQ summary of the 2007-2008 flu season in the U.S., visit:**

<http://www.cdc.gov/flu/about/qa/season.htm>

**For a summary of the Eurosurveillance, visit:**

[http://www.eurosurveillance.org/edition/v13n05/080131\\_2.asp](http://www.eurosurveillance.org/edition/v13n05/080131_2.asp)



Antivirals: Not so strong after all!

### **CDC guidance for prescribing antivirals remains unchanged:**

These findings have not caused the CDC to issue a change to their current antiviral guidance for the 2007-08 season. Only four antiviral medications are available for the treatment and prevention of influenza; both of the neuraminidase inhibitors, oseltamivir and zanamivir (Relenza®) continue to be recommended by the CDC. However, it is important to note that both of the M2 ion channel inhibitors, amantadine (Symmetrel®) and rimantadine (Flumadine®), though FDA-approved, have not been recommended to treat or prevent flu due to ongoing viral resistance. And while this is now the second season that CDC has not approved the use of amantadine and rimantadine, a recent study revealed that many physicians are still prescribing these medications for their patients with flu-like symptoms.

**For more on this study of physician testing and prescribing practices, visit:**

[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5703a1.htm?s\\_cid=mm5703a1\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5703a1.htm?s_cid=mm5703a1_e)

**For the 2007 CDC Advisory Committee on Immunization Practices (ACIP) influenza recommendations, visit:**

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5606a1.htm>

### **Impact on pandemic influenza planning:**

While the implications of H1N1's resistance to oseltamivir are not yet fully understood, it is indisputable that antiviral resistance continues to be an important issue that should not be overlooked; and unfortunately, antiviral resistance will most likely become increasingly prevalent. Moreover, this illustrates that antivirals are not and should not be the sole solution to a pandemic, or even a severe flu season. Instead, other methods of prevention are essential, such as enacting and encouraging effective infection control practices and healthy habits (i.e., handwashing, proper respiratory hygiene, etc.).

**The LA County Department of Public Health urges physicians  
to be judicious in their prescribing of antivirals to help preserve their efficacy.**

## **It's not too late to vaccinate!**

### **Continuing influenza vaccination is important to public health.**

While flu is associated with cold winter months, flu often continues to circulate and can cause significant illness in the spring. In fact, in several recent years (2002 and 2005), flu didn't reach peak activity until March.

### **Those at "high risk" are always changing.**

Several groups are at greatest risk for complications from flu: • Infants and children • Pregnant women • People 50 years of age and older • People with chronic medical conditions • People who live in nursing homes and other long-term care facilities • Household contacts and healthcare providers that may expose these "high risk" individuals. However, these "high risk" groups are not static. Instead, many people are first identified as "high risk" throughout the year—and many may then be excluded from the influenza vaccination campaigns that focus on those groups when held during the fall. It is important to vaccinate these "high risk" individuals when newly diagnosed, even into spring, so that patients are protected.

### **Everyone can benefit from flu vaccination.**

The LA County Dept. Public Health urges everyone without contraindications be vaccinated against flu—not just for their own protection, but to protect vulnerable individuals that they may expose, and to reduce the overall burden of disease in our communities. And flu vaccination may have even wider reaching benefits. Research is only now noting the role influenza infection may play in exacerbating other illnesses and fatal conditions such as heart attacks and strokes—vaccination may promote public health in ways we are only now beginning to realize.

**For information on flu vaccination, call 211  
or visit: <http://lapublichealth.org/ip/index.htm>**