National Foundation for Infectious Diseases

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Antiviral Medication for Influenza Prevention and Treatment

Fact Sheet

What are antiviral medications?

Although vaccination is the first line of defense against influenza, prescription antiviral medications also play an important role in prevention and treatment, particularly for people who suffer from chronic diseases. Antiviral medications should not be considered a replacement for vaccination. The Centers for Disease Control and Prevention(CDC) currently recommends use of two antiviral medications, oseltamivir (Tamiflu) or zanamivir (Relenza), if antiviral treatment or chemoprophylaxis of influenza is indicated.

As with vaccines, prescription antiviral medications will be in ample supply during the 2006-2007 flu season in pharmacies across the U.S.

Are antivirals a substitute for the influenza vaccine?

Antiviral drugs are not a substitute for vaccination but may be extremely helpful in preventing and controlling the spread of influenza. For example, antiviral medications can be given prophylactically to people who have been exposed to influenza to help contain the spread in certain settings, such as family members passing the flu to one another in a household, or in the workplace.

- Prophylactic use of antivirals is recommended by the CDC for people at high risk of influenza as well as health care workers and institutional settings, such as nursing homes.[i]
- When outbreaks occur in institutions, chemoprophylaxis should be administered to all residents, regardless of whether they received influenza vaccinations during the previous fall, and should continue for a minimum of 2 weeks.

In addition to nursing homes, chemoprophylaxis also can be considered for controlling influenza outbreaks in other closed or semi-closed settings (e.g., dormitories or other settings in which persons live in close proximity).

Antivirals can also be used in those patients who cannot receive a traditional influenza vaccine (“flu shot”) because of egg allergies.

How effective are antivirals in treating the flu?

Studies have shown that antiviral medications effectively treat the flu, reducing the duration of illness and risk of serious complications. In particular, people with chronic diseases such as asthma, diabetes, and heart disease, should consider seeing their doctor for antiviral treatment, since those people are at high risk for complications.

How do antiviral medications work?

Both oseltamivir (Tamiflu) and zanamivir (Relenza) belong to a group of medicines called neuraminidase inhibitors (NAIs), which help prevent the flu virus from spreading inside the body. NAIs target the neuraminidase protein on the surface of the influenza virus, interfering with the ability of the virus to replicate and spread throughout the body.

When should antivirals be prescribed?

With antiviral therapy, speed is critical. If taken within 48 hours of symptom onset, antiviral medications can reduce the duration of influenza, which is characterized by fever (up to 103°), aches, chills, and tiredness, and sudden onset. For post-exposure prophylaxis, antivirals should also be prescribed within 48 hours.

About NFID

Founded in 1973, the National Foundation for Infectious Diseases is a non-profit organization dedicated to public and professional educational programs about the causes, treatment and prevention of infectious diseases.

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[i] *Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices.* www.cdc.gov/mmwr/preview/mmwrhtml/rr55e628a1.htm (p. 26-7)