# What You Should Know About Influenza (Flu) Antiviral Drugs





#### Can flu illness be treated?

Yes. There are prescription medications called "antiviral drugs" that can be used to treat flu illness.

### What are antiviral drugs?

Influenza antiviral drugs are prescription medicines (pills, liquid, or an inhaled powder) that fight against flu in your body. Antiviral drugs are not sold over the counter. You can only get them if you have a prescription from a health care provider. Antiviral drugs are different from antibiotics, which fight against bacterial infections.

#### What should I do if I think I have the flu?

If you get sick with flu, antiviral drugs are a treatment option. Check with your health care provider promptly if you are at high risk of serious flu complications (see the next page for full list of high risk factors) and you get flu symptoms. Flu symptoms can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue. Your doctor may prescribe antiviral drugs to treat your flu illness.

# Should I still get a flu vaccine?

Yes. Antiviral drugs are not a substitute for getting a flu vaccine. While flu vaccine can vary in how well it works, a flu vaccine is the first and best way to prevent influenza. Everyone aged 6 months and older should receive flu vaccine every year. Antiviral drugs are a second line of defense to treat the flu if you get sick.

# What are the benefits of antiviral drugs?

Antiviral treatment works best when started within two days of getting symptoms. Antiviral drugs can lessen fever and other symptoms and shorten the time you are sick by about one day. They also can prevent serious flu complications, like pneumonia.

For people at high risk of serious flu complications, treatment with an antiviral drug can mean the difference between having a milder illness versus a very serious illness that could result in a hospital stay. For adults hospitalized with flu illness, some studies have reported that early antiviral treatment can reduce the risk of death.

# What antiviral drugs are recommended this flu season?

There are four FDA-approved antiviral drugs recommended by CDC this season: oseltamivir phosphate (available as a generic version or under the trade name Tamiflu®), zanamivir (trade name Relenza®), peramivir (trade name Rapivab®), and baloxavir marboxil (trade name Xofluza®).

Oseltamivir is available as a pill or liquid and zanamivir is a powder that is inhaled. (Zanamivir is not recommended for people with breathing problems like asthma or COPD). Oseltamivir and zanamivir are given twice a day for 5 days. Peramivir is given once intravenously by a health care provider, and baloxavir is a pill given as a single dose by mouth. These antiviral drugs are given in different ways and are approved for different ages.

# What are the possible side effects of antiviral drugs?

Side effects vary for each medication. For example, the most common side effects for oseltamivir are nausea and vomiting, zanamivir can cause bronchospasm, and peramivir can cause diarrhea.

Other less common side effects also have been reported. Your health care provider can give you more information about these drugs and you can check the <u>Food and Drug Administration (FDA) website</u> for specific information about antiviral drugs, including the manufacturer's package insert.



# When should antiviral drugs be taken for treatment?

Studies show that flu antiviral drugs work best for treatment when they are started within two days of getting sick. However, starting them later can still be helpful, especially if the sick person is at high risk of serious flu complications or is very sick from the flu. Follow instructions for taking these drugs.

# How long should antiviral drugs be taken?

To treat flu, oseltamvir or inhaled zanamivir are usually prescribed for 5 days, or one dose of intravenous peramivir or oral Baloxavir for 1 day. Oseltamivir treatment is given to hospitalized patients, and some patients might be treated for more than 5 days.

# Can children take antiviral drugs?

Yes, though this varies by medication. Oseltamivir is recommended by CDC for treatment of flu in children beginning from birth and the American Academy of Pediatrics (AAP) recommends oseltamivir for treatment of flu in children 2 weeks old or older. Zanamivir is approved for early treatment of flu in people 7 years and older, and for the prevention of flu in people 5 years and older, though it is not recommended for use in children with underlying respiratory disease, including asthma and other chronic lung diseases. Peramivir is recommended for early treatment in people 2 years and older. Baloxavir is approved for early treatment of flu in people 12 years and older.

# Can pregnant and breastfeeding women take antiviral drugs?

Yes, studies have shown that pregnant women who were treated early with antiviral medications were less likely to require intensive care and less likely to die. Oral oseltamivir or zanamivir are recommended for treatment of non-hospitalized pregnant women with flu because compared to other recommended antiviral medications they have, the most studies available to suggest that they are safe and beneficial during pregnancy. Baloxavir is not recommended for pregnant women or breastfeeding mothers.

# Who should take antiviral drugs?

It's very important that antiviral drugs be used early to treat people who are very sick with flu (for example, people who are in the hospital) and people who are sick with flu who are at high risk of serious flu complications, either because of their age or because they have a high risk medical condition. Other people also may be treated with antiviral drugs by their health care provider this season. Most people who are otherwise healthy and not at high risk for flu complications and who get the flu, do not need to be treated with antiviral drugs unless they are hospitalized.

# The following is a list of all the health and age factors that are known to increase a person's risk of getting serious complications from the flu:

- Asthma
- Blood disorders (such as sickle cell disease)
- Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
- Endocrine disorders (such as diabetes mellitus)
- People who are obese with a body mass index [BMI] of 40 or higher
- Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
- Kidney disorders
- Liver disorders
- Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
- Neurologic and neurodevelopment conditions
- People younger than 19 years old and on longterm aspirin or salicylate-containing medications
- People with a weakened immune system due to disease (such as people with HIV or AIDS, or some cancers such as leukemia) or medications

(such as those receiving chemotherapy or radiation treatment for cancer, or persons with chronic conditions requiring chronic corticosteroids or other drugs that suppress the immune system)

Other people at high risk from the flu:

- Adults 65 years and older
- Children younger than 2 years old¹
- Pregnant women and women up to 2 weeks after the end of pregnancy
- American Indians and Alaska Natives
- People who live in nursing homes and other long-term-care facilities

<sup>1</sup>Although all children younger than 5 years old are considered at high risk for serious flu complications, the highest risk is for those younger than 2 years old, with the highest hospitalization and death rates among infants younger than 6 months old.

It is especially important that these people get a flu vaccine every year and also seek medical treatment quickly if they get flu symptoms

For more information, visit: www.cdc.gov/flu

or call 1-800-CDC-INFO