

# Treating Influenza (Flu)



## Information for People at High Risk for Serious Flu Complications



### Do you have Asthma, Chronic Obstructive Pulmonary Disease, Diabetes, or Heart Disease?

If so, you are at high risk of serious illness if you get flu. Treatment with an influenza antiviral drug can mean the difference between having milder illness instead of very serious illness that could result in a hospital stay. This fact sheet provides information about using prescription antiviral drugs to treat influenza in people at high risk for serious flu complications.

### Why am I at greater risk of serious flu complications?

Your medical condition makes it more likely that you will get complications from flu, like pneumonia. Flu also can make long-term health problems worse, even if they are well-managed. People with asthma, chronic obstructive pulmonary disease, or heart failure may experience worsening of their conditions and have difficulty breathing. Diabetes (type 1 and 2) can make the immune system less able to fight flu. Also, flu illness can raise blood sugar levels.

### Can flu be treated?

Yes. There are prescription medications called “antiviral drugs” that can be used to treat influenza illness. Antiviral drugs fight influenza viruses in your respiratory tract. They are different from antibiotics, which fight against bacterial infections.

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

Check with your doctor promptly if you are in a group at high risk for serious complications and you get flu symptoms. Symptoms of flu can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue. If you get flu, antiviral drugs are a treatment option. 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 vaccines can vary in how they work, flu vaccination is the first and best way to prevent influenza. You should receive flu vaccine every year. Antiviral drugs are a second line of defense to treat 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 when treatment is started early.

For people at high risk of serious flu complications, early treatment with an antiviral drug can mean the difference between having a milder illness instead of a more 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?

There are four FDA-approved influenza antiviral drugs recommended by CDC: oseltamivir (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. Peramivir is administered intravenously by a health care provider. Baloxavir is a pill given as a single dose by mouth.



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Health and age factors known to increase a person's risk for developing flu-related complications:

- Asthma
- Neurological and neurodevelopmental conditions
- 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)
- 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)
- People who are obese with a body mass index [BMI] of 40 or higher
- People younger than 19 years of age on long-term aspirin- or salicylate-containing medications
- People with a weakened immune system due to disease or medication (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 old<sup>1</sup>
- 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, younger than 6 months old.

## 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 wheezing and difficulty breathing (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, or you can check the Food and Drug Administration (FDA) website 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 started within two days of getting sick. However, starting them later can still be helpful, especially if the sick person is in a group at high risk for serious complications (see list in sidebar) or is very sick from flu (for example, hospitalized from flu). Follow your health care provider's instructions for taking these drugs. These antiviral drugs are given in different ways and are approved for different ages.

## How long should antiviral drugs be taken?

To treat flu, oseltamivir and zanamivir are usually taken for 5 days, although people hospitalized with flu may need the medicine for longer than 5 days. Peramivir is given once intravenously. Baloxavir is given as a single dose.

## Can children take antiviral drugs?

Yes. Oseltamivir is recommended by CDC and the American Academy of Pediatrics (AAP) for early treatment of flu in people of any age, and is approved for the prevention of flu (i.e., prophylaxis) in people 3 months and older. Zanamivir is recommended for early treatment of flu in people 7 years and older. Peramivir is recommended for early treatment of flu in people 6 months and older. Baloxavir is recommended for early treatment of flu in children aged 5 to less than 12 years without chronic medical conditions and in all persons aged 12 years and older.

## Can pregnant and breastfeeding women take antiviral drugs?

Oral oseltamivir is recommended for treatment of pregnant women it has the most studies available to suggest that it is 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 flu in people who are very sick with flu (for example, people who are in the hospital).

People who are sick with flu and have a high-risk factor related to a health condition like asthma, diabetes or chronic heart disease or their age. (See the full list of high-risk factors).

For more information, visit: [www.cdc.gov/flu](http://www.cdc.gov/flu)  
or call 1-800-CDC-INFO