



for your best health

COLD & FLU PREVENTION

Ask Your Pharmacist

It's not difficult to tell when flu season arrives; offices and classrooms steadily empty while hospital waiting rooms fill to capacity. Yes, the winter is back and the new bugs are traveling! According to the Centers for Disease Control and Prevention (CDC), flu season in the United States usually ranges from November through March, and sometimes into early spring. Flu or influenza is caused by viruses, which infect the nose, throat, and lungs.

A highly contagious virus, influenza is transmitted through droplets in the air from the cough or sneeze of an infected person. Symptoms begin about 1-3 days after infection, with sudden fever reaching up to 102°F to 104°F. Patients also experience fatigue, headache, muscle ache, chills, cough, and sore throat.

For most patients, symptoms continue for about one week, and then subside as recovery begins. Patients who develop secondary infections do not have a chance to recover before the onset of secondary infection symptoms (usually bronchitis, then pneumonia).

Although most modern families view the flu as an annoying disturbance, the influenza virus still continues to kill, but to a lesser degree than in the past. Over the next few months, millions of Americans will suffer from aches, sinus congestion, fever, and chills brought on by the virus. The flu season generally peaks in February.

Viruses and bacterial illness used to be considered a regional occurrence. But with the increase in international travel and quick global flights, infectious diseases can stowaway in airplanes and boats and hit our shores with a vengeance at unprecedented rates.

On average, the flu kills about 36,000 people in the United States each year, according to the CDC. Undoubtedly the worst recorded influenza breakout occurred in 1918, when 21 million people died from the flu worldwide, 600,000 of them Americans.

The spread of the flu virus has always baffled experts. Now, however, a team of researchers at Mount Sinai School of Medicine in New York claim to have finally solved the mystery. According to the lead researcher, Peter Palese; contrary to popular belief, the spread of the flu has little to do with human activities, because the virus just seems to thrive when it's cold and dry.

The researchers conclude: "Influenza virus transmission indoors could potentially be curtailed by simply maintaining room air at warm temperatures (more than 20°C) and either intermediate (50 per cent) or high (80 per cent) relative humidity."

For their study, the researchers placed infected and uninfected guinea pigs in cages and then altered the

temperature and humidity levels. According to the results published in the journal PLoS Pathogens, the virus spreads more easily at 5°C than at 20°C, with no transmission at 30°C. A low relative humidity of 20 to 30 per cent also provides ideal conditions for the virus to flourish. So the virus appears to be more stable at lower temperatures and at the same time cool air, according to the research, helps increase the production of nasal mucus, providing a secure foundation for the virus to take hold and spread in the respiratory tract.

COLD OR FLU?

During the 'flu' season, everyone is achy, sneezing or complaining about a sore throat. So how can you determine if you have a cold or flu? It is hard to tell for sure, but there are some differences.

The National Institute of Allergy and Infectious Diseases offer these guidelines:

Fever - For colds, fever is rare; for flu, fever is characteristic, high (102-104°F), and lasts 3-4 days.

Headache - For colds, headache is rare; for flu, headaches are prominent.

General aches & pains - For colds, general aches are slight; for flu, aches and pains are typical and can be severe.

Fatigue, weakness - For colds, fatigue is quite mild; for flu, fatigue can last up to 2-3 weeks.

Extreme exhaustion - For colds, exhaustion is not a normal symptom; for flu, exhaustion is early and prominent.

Stuffy nose - For colds, stuffy nose is common; for flu, a stuffy nose is sometimes present.

Sneezing - For colds, sneezing is usual; for flu, sneezing is sometimes present.

Sore throat - For colds, sore throat is common; for flu, sore throat is sometimes present.

Chest discomfort, cough - For colds, chest discomfort is mild to moderate; for flu, chest discomfort is common and can become severe.

WHAT ARE THE OPTIONS FOR TREATMENT & PREVENTION?

No cure currently exists for the flu. Once infection begins, patients must wait for the virus to run its course. Current medications and remedies provide relief from the symptoms, and some may shorten the duration of infection.

For coughs with phlegm, there are many safe expectorants available in the pharmacy. Of course, there are also flu remedies and headache relievers among other products and you could easily end up with a large arsenal of OTC products at your bedside.

The best treatment for influenza therefore focuses on prevention, through taking the vaccine, avoiding infected people, washing hands frequently, drinking lots of fluid, and keeping immune function at its best.

Visit our pharmacy or website to learn more about Prevention of Colds & Flu.

COLDS & FLU (Continued)

Hand washing is one of the most important things you can do. Here are some additional tips that help prevent getting or spreading the flu bug:

Avoid close contact with people who are sick, and, when you are sick, keep your distance from others to protect them from getting sick too.

Stay home when you are sick to prevent others from catching your illness. If possible, stay home from work, school, or public places.

Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.

Avoid touching your face often because germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.

WHO SHOULD RECEIVE THE FLU VACCINE?

Every year the influenza virus makes changes to its genetic material, called mutations, thereby creating a different strain (form) of the virus. These genetic mutations prevent the immune system from developing resistance to the new strain, causing populations to become infected year after year. These mutations also prevent the creation of a life-long vaccine for influenza, making it necessary for people to vaccinate yearly with a dead version of the new strain.

Today the flu's mortality is generally limited to those with weak immune systems, including the elderly, young children, nursing home residents, or people with chronic disease.

A healthy immune system is vital for the defeat of influenza virus particles. Therefore, people whose immune systems are weakened should take the available influenza vaccine every year. This includes the very old, the very young, and the chronically ill.

From a natural standpoint, there are several ways to support your immune system and also get some relief from some of the symptoms. Let's consider the social misfit symptom, the persistent, nagging cough.

Different parts of the cherry tree, from the bark to the fruit, have been used to combat coughs, with long term history of success. You can now find Wild Cherry Bark capsules and teas that are specifically designated for aid against the chronic cough. Both Cherry Bark and Horehound are herbs used to combat the cough in Europe and American Folk Medicine.

Chronic coughs with mucus may be associated with bronchitis. The general guideline for treating this type of infection is the following: Eat as many fruits and vegetables as you can. With mucus, avoid sugar, salty foods, dairy products, and starchy foods that may create more mucus.

Mix a cocktail of pineapple juice and honey to activate bromelain and reduce phlegm. Lemon juice and honey is also quite effective as a tea. Take a good antioxidant vitamin with zinc, vitamin A, C, and folic acid. These nutrients will help support the immune system, to fight the infection. Also consider a good zinc lozenge.

Echinacea has been shown to increase the activity and production of non-specific immune cells, which usually represent the front line of attack against virus invasion. And the powerful antimicrobial agent, garlic, may prevent the growth of influenza virus particles.

A cup of hot ginger tea is invigorating and is also a great cold fighter. Ginger contains compounds called sesquiterpenes that have been found to be active against rhinoviruses, the most common group of cold viruses. Ginger is also a diaphoretic, meaning it fights colds by gently raising body temperature and promoting perspiration.

One remedy found in most kitchens is honey. Honey is wonderful when mixed with lemons. It is also a good cough elixir, when mixed with an onion. Cover the onion slices with honey overnight, then spoon out in teaspoons four or five times

a day.

NUTRITIONAL SUPPLEMENTS

Deficiencies in vitamin A may increase the severity of an influenza infection, and low-dose supplementation may therefore be of benefit. While numerous studies have documented the results of vitamin C in treating influenza, one study in particular reported an 85% decrease in symptoms among influenza patients taking high-dose vitamin C rather than pharmaceuticals. Zinc has been shown to improve the immune response and contribute to the death of viral particles.

Herbal Interactions

Avoid herbs with properties similar to aspirin: meadowsweet, European poplar, and willow with rimantidine, due to the known interactions between aspirin and the drug. Herbs such as Cat's claw, mountain laurel, scarlet pimpernel, and thuja all reportedly have antiviral properties; these agents may have additive effects or increase side effects of antiviral medications if used concomitantly.

It is important to understand that the best way to address flu is to stop problems before they occur. Fortify yourself this winter with a good multi-vitamin supplement and a number of immune enhancing nutraceuticals. Our bodies are stressed during the winter and we do not eat as much fresh foods, so the nutrients we need may be diminished from our food supply. Adding a good vitamin to the diet may keep us from being affected by seasonal changes and the unwanted bugs out there this time of year.