



A cold or the flu – why is it important to know?

Sumari Davis, BPharm
Amayeza Information Services

Introduction

The pharmacy is often the first stop for patients with symptoms of a cold or the flu (influenza). Symptom management may be the same, but because flu can be life threatening in some cases, it is important that the pharmacist assistant knows how to distinguish between these two respiratory infections and when to refer patients to a doctor. More important, though, is to provide advice on how to avoid getting a cold or the flu. This article describes the most important differences between a cold and the flu, management and prevention of these conditions, and important signs and symptoms that indicate referral to a doctor.

Differentiating between a cold and the flu

A cold usually develops gradually. It starts with a sore throat, which lasts for a day or two, followed by a runny, stuffy nose with a cough by the third and fourth days. A slight fever can develop in children but is usually uncommon in adults.¹

In contrast, flu symptoms are more severe and start abruptly. Fever, chills and sweats, muscle aches and pains, a sore throat, headache, congestion and a cough are commonly experienced.^{1,2} Table 1 compares the symptoms for a cold and the flu.^{1,3}

Complications that can develop with a cold include sinus congestion and middle ear infection.² Flu can result in an asthma flare-up and worsening of diabetes or heart conditions.⁴ Other complications from flu include ear infections, bronchitis and pneumonia, which can be deadly, especially in the elderly and children under the age of five years.²

Cold	Symptom	Flu
Mild or none	Fever	Very common; high fever (>38°C) lasting 3-4 days
Slight	General aches and pains	Very common; often severe
Occasionally	Headache	Very Common
Sometimes; mild fatigue or weakness	Fatigue	Very common; can last 2-3 weeks
Normal, may feel sluggish	Energy	Extreme exhaustion at the beginning of the illness
Stuffy, runny nose is common	Nasal symptoms	Sometimes; stuffy, runny nose
Very common	Sneezing	Sometimes
Common	Sore Throat	Sometimes
Mild to moderate hacking cough	Cough	Common, can become severe with chest discomfort
Symptoms lasts 7-10 days	Duration	Symptoms can continue for several weeks

Managing the symptoms

Most cold and flu patients need nothing more than bed rest and plenty of fluids to recover.⁵ Water, juice and warm drinks such as soup prevent dehydration and help keep respiratory secretions thin. Getting more sleep helps the immune system to fight the virus. Paracetamol or ibuprofen may be taken to relieve pain and reduce fever in adults and children. Aspirin should not be given to children and adolescents under the age of 16 years owing to the possible risk of Reye's syndrome. Pregnant women should discuss medical treatment options with their doctor.

Warm steam and decongestant medicines can be helpful in reducing nasal discomfort and stuffiness. Over-the-counter cough medications may also be useful to soothe coughs and, although there is little proof that these medicines work, many patients with a cough report obtaining benefit from their use. Gargling with warm salt water is recommended to relieve symptoms of a sore throat.³

When to refer patients to a doctor

It is important to refer patients who are at risk of developing complications from flu to a doctor as soon as possible. Antivirals may reduce the duration of the flu and can prevent more serious problems, but they have to be started within 48 hours after onset of the symptoms and are available on prescription only.²

The following conditions increase the risk of complications from flu:^{4,7}

- pregnancy
- diabetes
- chronic lung disease, such as asthma and chronic obstructive pulmonary disease (COPD)
- chronic heart disease
- HIV infection
- tuberculosis
- immunosuppression (e.g. patients on cancer treatment or medication to prevent rejection of a transplant)
- kidney or liver disease
- neurological conditions such as epilepsy, stroke, mental retardation, etc.
- blood disorders, for example sickle cell disease
- obesity

Patients younger than 2 years, those older than 65 and patients younger than 18 who are on chronic aspirin treatment also have a higher risk of developing complications from flu.⁴ Patients with a cold or the flu should also be referred to a doctor to exclude other conditions in case of:²

- a fever that lasts longer than three days; this may be an indication of a bacterial infection that needs further investigation and treatment
- severe pain when swallowing; this can be an indication of streptococcal throat infection that needs further investigation and treatment
- coughing that persists for more than two or three weeks; this could be due to a sinus infection, bronchitis or asthma
- persistent congestion (nasal stuffiness) and headache

Urgent referral to get emergency treatment is recommended in the following cases:²

Adults	Children
Severe chest pain	Difficult breathing or rapid breathing
Severe headache	Bluish skin colour
Dizziness	Sluggish behaviour and failure to respond normally
Confusion	Extreme irritability or distress
Persistent vomiting	Fever associated with a rash
	Not drinking enough fluids
	Sudden worsening of symptoms after initial improvement

Prevention

Some viruses that enter the body through mucous membranes in the eyes, nose or mouth can cause a cold, whereas others can cause the flu. These viruses can be spread through droplets in the air. If the virus is transferred onto a patient's

hand, it can enter the body if the eyes, nose or mouth is touched. It is therefore very important to inform patients that they should wash their hands often, not only to prevent their own infection but also to help prevent the infection from spreading to others.² Coughing and sneezing into a tissue or the sleeve instead of the hand can also prevent the spread of the virus. It is also advisable to avoid crowds during peak flu season.

The flu vaccine can help prevent infection from the strains of influenza contained in the vaccine. It is important that all patients at high risk of complications from flu get vaccinated annually. However, any individual older than six months may be vaccinated to reduce the risk of contracting the flu. It takes about two weeks before the flu vaccine is effective and it should be given as soon as it becomes available. Patients younger than three years get half a dose, whereas all other patients should receive the full adult dose. Patients younger than 9 years of age receiving the flu vaccine for the first time, need a second dose of the flu vaccine at least 4 weeks after the first dose. Patients who previously developed a severe reaction to the flu vaccine and those with a history of severe allergy to any of the ingredients of the flu vaccine should not be vaccinated with the flu vaccine again.

Conclusion

Although the symptoms of a cold are usually mild, those of the flu tend to be more severe and start abruptly. In most cases, bed rest, together with increased intake of liquids, is sufficient. Treatment with medicines may be directed at alleviating symptoms such as pain, fever, nasal congestion and a sore throat. Patients who are at high risk of complications should be referred to a doctor if flu is suspected, so that antiviral treatment can be started as soon as possible. Annual vaccination is the best way to prevent flu and should be given to anyone wanting to reduce their risk of contracting flu, and especially all high-risk patients. All patients older than six months may receive the vaccine if they have not previously had serious allergic reactions to the vaccine or any of its ingredients.

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