



COLDS AND FLU

Colds and influenza, “the flu,” are most common during the winter months when people are in close quarters with poor outdoor air circulation. Colds and flu cannot only sideline individuals, but can also decimate entire teams. Viruses cause colds and flu, not cold weather, getting wet or chilled, or becoming overheated. However, those things, along with a combination of other factors, can lower one’s resistance to colds and flu. Stress, allergies such as hay fever, poor nutrition, and fatigue from lack of sleep can all make one more susceptible to viruses that cause colds and flu.

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While colds and flu are not the same illness, they are caused by the same viruses. The best way to avoid contracting these two illnesses is not to come in contact with those who are infected! This is extremely difficult as there are more than 200 viruses causing colds and flu. Some people have naturally high resistance to the viruses that cause colds and flu. In fact, about 5% of the population never get colds or flu because of greater inherited immunity. **The rest of us can increase our immunity by washing our hands regularly, eating foods high in fruits and vegetables on a daily basis, avoiding extreme fatigue, controlling emotional stress, maintaining good personal hygiene, and avoiding cold, wet weather without adequate clothing.**

The best way to reduce the risk of catching colds and flu may be to wash ones hands frequently using soap and warm, running water for 15-20 seconds. Hands should be dried with an air dryer, paper towels, or a clean cloth towel. Another simple way of maintaining good personal hygiene is making tissues available at practices, in classrooms, and even on school buses. Using tissues to cover your mouth and nose when you cough or sneeze, rather than your hand, decreases the spread of germs. If a tissue is not available, simply use your upper sleeve or uniform instead of your hands. According to the Center for Disease Control and Prevention, students using proper hygiene miss significantly fewer days of school.

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Clean weight room equipment, door handles, handrails, desks, etc., as often as possible with a commercial disinfectant or a disinfectant bleach solution. Viruses can live up to two hours, or longer, on these types of surfaces. Commercial disinfectants or a solution of ¼ cup bleach in one gallon of water are equally effective in killing cold & flu viruses. Hot, soapy water can be used if a disinfectant is not available.

Colds and flu are most contagious during the first 24 - 48 hours after symptoms begin to appear. After exposure to cold and flu viruses, symptoms appear within one to three days, if they are going to appear at all. Colds and flu have similar symptoms, but flu symptoms usually have a more rapid onset, are more severe and last longer. *(Please refer to the chart in the supplement for a comparison of symptoms.)* It is important to closely monitor symptoms of both illnesses, as a severe cold may lead to a secondary infection in the middle ear or sinuses, and the flu can have potentially life-threatening complications, such as pneumonia.

The symptoms of a cold progress slowly and go away on their own in about a week. The first symptoms are usually a scratchy, sore throat followed by sneezing and a runny nose. A cough can develop a few days later and body temperature may become slightly elevated (up to 102 degrees).

Symptoms of the flu include a rapid onset of headache, dry cough, and chills. Most people also experience extreme fatigue, severe muscle aches in the back and legs, and a high temperature (104 degrees). When the fever begins to lessen, nasal congestion and sore throat often appear. Symptoms of the flu usually last a few days, with tiredness lasting for several weeks. There is usually no need to see a doctor for a cold or the flu, unless there are prolonged symptoms or symptoms become more severe. **The American Academy of Family Physicians recommends that children see a physician when a child has any of the following symptoms:**

- High (above 102 F) or prolonged fever
- A cold that lasts for more then 10 days
- Trouble breathing, fast breathing or wheezing
- Bluish skin color
- Not drinking enough fluids
- Earache or drainage from the ear

- Changes in mental state (such as not waking up, irritability or seizures)
- Flu-like symptoms that improve, but return with a fever and a worse cough
- Worsening of chronic medical condition (such as diabetes or heart disease).

The only cure for a cold or the flu is time to let the virus run its course! However, garlic, zinc, and vitamin C may help prevent and shorten the duration of colds and flu. Garlic has been shown to kill several types of bacteria and viruses, as well as boost one's immunity, which may help reduce the number and severity of colds one gets. The most potent garlic preparations are the "deodorized" forms, not odorless forms. These pills do not cause bad breath, but do contain the active ingredient found in real garlic cloves. The President of the American Preventative Medical Association recommends 350 - 500 milligrams twice a day.

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Zinc lozenges may be another way to prevent or shorten the duration of colds and flu. Some experts believe they can actually stop colds and flu, while others believe they can shorten the duration of symptoms by half. The most effective lozenges are those that do not contain any artificial sweeteners or fillers. While they may taste better, they are less effective. One expert recommends taking 13.3 milligrams every two hours when suffering from a cold or flu.

Vitamin C does not appear to prevent colds or flu, but may help reduce the duration and severity. Some experts recommend 200 milligrams per day, while others suggest up to 5,000 milligrams per day. **Caution:** When using a high dose of vitamin C, too much can cause diarrhea and distort the results of urine and blood tests a physician may use for diagnosis.

To feel more comfortable while waiting for cold and flu symptoms to subside, get plenty of rest, drink plenty of fluids, especially fruit juices and hot liquids, and eat healthy foods, especially fruits and vegetables, so the body has plenty of energy to fight the infection. Avoid using products that contain caffeine as they lead to dehydration. Also, avoid sharing glasses, water bottles, other drinks, spoons/forks, etc. Other methods of feeling more comfortable when suffering from colds and flu are: 1) gargling with warm salt water for a sore throat, 2) using petroleum jelly for a raw nose, and, 3) taking hot showers may help to briefly clear a stuffy nose.

Medications can also be helpful in treating the symptoms of a cold and the flu. **Acetaminophen can help relieve the aches and pains that accompany colds**

and flu. The American Academy of Pediatrics recommends children and teenagers not be given any medication containing aspirin when they have a viral infection. Use of aspirin can lead to Reye's syndrome, which can be a life-threatening illness. Aspirin also causes the body to spread more of the cold viruses in nasal secretions creating a greater risk to others. Instead of aspirin, the American Lung Association recommends giving children medicine such as: children's acetaminophen. Researchers have also found that both aspirin and acetaminophen may suppress the immune system in adults and can increase nasal stuffiness. To reduce negative effects, these two medications should only be used when one has a headache or fever.

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Nasal decongestants help open nasal passages to make breathing easier. Using these products for longer than three days, especially in the form of drops or spray, may make congestion worse and should be done only with a doctor's recommendation. Although no conclusive evidence supports their use, many people report relief from nasal congestion when using nasal strips, such as Breathe Right Strips.

Several different **cough medications** are also available. **Cough suppressants, whether syrup or lozenges, help suppress coughs due to minor throat irritations.** The use of ointments and a vaporizer can accomplish similar results, especially at night. **Expectorants help loosen mucus in the throat and make coughing more productive in expelling the mucous.**

Antihistamines help relieve nasal congestion and watery eyes, however, antihistamines can also cause drowsiness. Antihistamines should not be used when one needs to stay alert!

People who exercise moderately have slightly improved immunity to colds and flu. People who exercise to the point of extreme exertion have slightly reduced immunity. **For athletes who already have a cold or the flu, physicians offer the following guidelines regarding exercise.**

If cold and flu symptoms are located above the neck (runny nose, sneezing, scratchy throat) exercise is generally safe. Athletes with these symptoms may want to give themselves a "test run" before attempting an entire workout. This simply means an athlete should work out for approximately 10 minutes at about half

speed. If their head clears up and they don't feel worse, it is probably alright to continue with the workout. If symptoms become worse, it is advisable to discontinue the workout.

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If cold and flu symptoms are located below the neck (fever, muscle aches and pains, loss of appetite, and hacking cough) it is best for the athlete not to exercise. Athletes with a fever should not exercise! No matter what the symptoms, an athlete should consider the quality of the workout when he or she has a cold or the flu. On some days, it may be better to get the extra rest than to work out.

If cold and flu symptoms are located below the neck (fever, muscle aches and pains, loss of appetite, and hacking cough) it is best for the athlete not to exercise. ATHLETES WITH A FEVER SHOULD NOT EXERCISE!

Questions and comments about student-athlete wellness are welcomed and encouraged. They should be directed to Alan Beste, ATC, Administrative Assistant, Iowa High School Athletic Association, PO Box 10, Boone, IA 50036-0010. (515) 432-2011.

Sources: Arnheim, Daniel, D. Modern Principles of Athletic Training, St. Louis, Times Mirror/Mosby College Publishing, 1989; Berkow, Robert, MD. Merck Manual, Rahway, NJ, Merck, Sharp, and Dohme Research Laboratories, 1982; "Colds and Flu: Time is the Only Sure Cure," The Food and Drug Administration Consumer Magazine, May 1999; Eichner, E, Randy, MD. "Contagious Infections in Competitive Sports," Sports Science Exchange, Volume 8, Number 3, 1995; Excite Health with WebMD, <wysiwyg://66/http://health.excite.com/content/dmk/dmk_article_55315>; Griffith, H. Winter. Complete Guide to Symptoms, Illnesses, and Surgery, Los Angeles, The Body Press, 1989; Merki, Mary Bronson. Glencoe Health: A Guide to Wellness, Mission Hills, CA, Glencoe Publishing, 1989; "Common Concerns About the Common Cold," The Physician and Sports Medicine, 18 (1990), pp 120+; "The Common Cold," The National Institute of Allergy and Infectious Diseases of the National Institutes of Health, May 1998. "What to do for Colds and Flu," Food and Drug Administration, <http://www.fda.gov/opacom/lowlit/clds&flu.html>: 2001. "The Flu and Colds: Tips on Feeling Better," familydoctor.org, 10/04. "Influenza ("The Flu"), Iowa Dept. of Public Health, 10/04. "Cover your Cough," Iowa Dept. of Public Health.

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02/05

CHOOSE THE RIGHT MEDICINE FOR YOUR SYMPTOMS

If You Want to Do This:

Unclog a Stuffy nose

Quiet a cough

Loosen mucus so you can cough it up

Stop runny nose and sneezing

Ease Fever, headaches, minor aches and pains

Choose Medicine With This:

Nasal decongestant

Cough suppressant

Expectorant

Antihistamine

Pain Reliever (Analgesic)

COLD AND FLU SYMPTOMS

Source: National Institute of Allergy and Infectious Diseases Publication (FDA)99-1264

<u>Symptoms</u>	<u>Cold</u>	<u>Flu</u>
Fever	Rare	Characteristic of: high (102-104 degrees); lasts 3-4 days
Headache	Rare	Very common
General aches & pains	Slight to Moderate	Very common and often severe
Fatigue and weakness	Quite mild	Moderate – severe; Can last up to 2-3 days
Extreme exhaustion – feeling “wiped out”	Never	Characteristic & early symptom in illness
Stuffy nose	Very common	Common
Sneezing	Usual	Sometimes
Sore throat	Common	Common
Chest discomfort & cough	Mild to moderate; hacking cough	Common; can become severe