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Fact Sheet: The common cold

Colds are a part of life. They are usually harmless and get better on their own within a week. But symptoms like coughing, a sore throat or a headache can be bothersome. This fact sheet describes what you can do to prevent colds, and what can help if you do come down with one.

What is a common cold exactly, and how is it different from the flu?

A common cold is an infection that develops over a few days. It is usually caused by a virus and generally begins with a sore or scratchy throat. Within a few days, more symptoms can start: a blocked or runny nose, sneezing, coughing and a headache. Sometimes people have a mild fever and feel weak too.

Even though a cold can make you feel really sick, if you are otherwise healthy, a cold will mostly get a lot better by itself within a week. The worst is usually over within three or four days.

Colds are very common, especially in children. It is not unusual for a child to pick up a cold at school or childcare between six and ten times a year. In babies and small children, the cold can cross over from the throat to the ear, and cause a middle ear infection (called "acute otitis media"). Adults get between two and four colds a year on average, usually in winter.

The types of virus that cause colds are basically different from those that cause the flu (influenza). The flu is usually associated with more severe symptoms than a cold. It can be hard to tell the difference, though, between a very bad cold and a mild case of the flu. You will find more detailed information about the flu in our feature (URL: <http://www.informedhealthonline.org/index.249.56.en.html>)

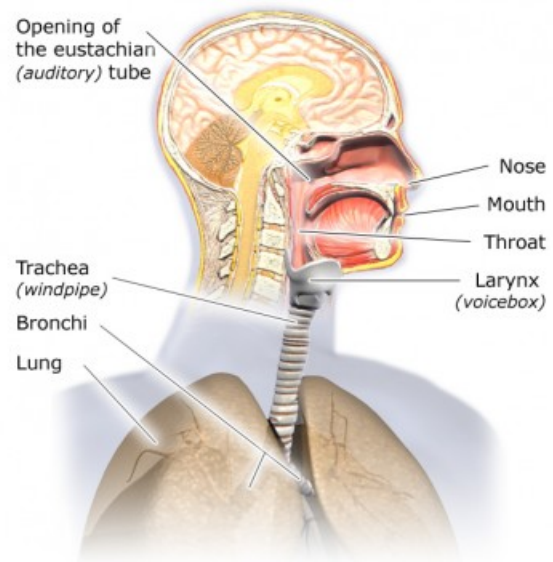
The flu usually starts quite suddenly, with a high fever, shivering, achy joints and muscle ache. Flu hits faster, harder, and lasts longer than a cold.

It may be necessary to go to the doctor if

- you have a fever (body temperature over 38 degrees Celsius),
- your symptoms are severe or getting worse,
- you have pain, especially in your chest,
- you are having difficulties breathing,
- your symptoms do not get better within a week or so.

What are the symptoms of a cold?

The cold is an "upper respiratory tract infection" (URTI) – an infection of the nose and throat. Typical symptoms include a runny or blocked nose (rhinitis). Inflammation of the throat, causing a sore throat, is also common. This is called "pharyngitis".



You can have other illnesses at the same time as a cold, such as:

- Sinusitis: an infection of the sinuses (little spaces under the bones around the nose) which can cause headaches – you can read more about that here;
- Laryngitis: an infection of the voice box (larynx), which can make it hard to talk;
- Tonsillitis: an infection of the tonsils, which are on either side of the throat
- Bronchitis and pneumonia: infections that affect the lungs. These so-called "lower respiratory tract" infections are caused by other types of germs.

The above illnesses will not be discussed in more detail here because they may require special treatments.

What helps against colds?

The viruses that cause colds can quickly change over time, which means that having one cold does not protect

you from colds in the future. That is also why there is no treatment or vaccination that directly affects these viruses.

Your body will generally fight off colds without needing any help. However, there are a number of remedies or medicines you can try out that could help relieve the symptoms and discomfort.

These include inhaling steam, bed rest and chest compresses, as well as taking zinc tablets or herbal remedies containing echinacea, for example. None of these remedies have been proven to work, though. There is some evidence to suggest, though, that some echinacea products made from the coneflower called *Echinacea purpurea* might relieve the symptoms if they are taken at the beginning of a cold. You can read more about the research into echinacea [here](http://www.informedhealthonline.org/index.300.en.html) (URL: <http://www.informedhealthonline.org/index.300.en.html>).

Another drug that is very popular in Germany and is often used to treat respiratory infections is an extract from the root of Pelargonium, a certain kind of geranium plant. It is marketed in Germany under the names Umckaloabo or Kaloba. There is some weak evidence that this herbal remedy might relieve the symptoms of respiratory tract infections and speed up recovery. But it can have adverse effects too, such as gastrointestinal (stomach and bowel) problems. You can find out more about this [here](http://www.informedhealthonline.org/index.496.en.html) (URL: <http://www.informedhealthonline.org/index.496.en.html>).

There is better evidence for drugs like paracetamol (acetaminophen) and acetylsalicylic acid (ASA, or ASS in German). Although they are not able to speed up recovery, they can at least relieve some symptoms, like a sore throat. Children should not take ASA, as it can cause a rare but dangerous adverse effect.

People are often advised to drink plenty of fluids if they have a cold, but this has not been scientifically proven to speed up recovery, at least not in children and teenagers. So there is no medical reason to drink more than feels comfortable when you have a cold.

Can antibiotics help?

Although many people believe that antibiotics work against all infections, this is not the case. They only fight infections that are caused by bacteria. They are powerless against viral infections.

That is why antibiotics cannot usually do much against the

common cold. Most colds are caused by viruses. Only in rare cases there is also bacterial infection, which can be caused by streptococcal bacteria (so-called 'strep throat'). Drugs for colds are being developed, but these have not yet been thoroughly tested and approved for widespread use.

Antibiotics have not been shown to have a clear benefit in the treatment of simple colds. At the same time, about 1 in 10 people who take antibiotics will get adverse effects from the medication (10%). The most common of these include diarrhea, nausea, vomiting, headaches, skin rashes and vaginal thrush (vaginitis).

If the runny or blocked nose symptoms are not better after about a week, an additional bacterial infection may have developed. If that is so, antibiotics are more likely to help. One sign of bacterial infection is if the mucus discharge from the nose is yellow or green.

Antibiotics are not very helpful against common sore throats either, with the exception of bacterial infections like 'strep throat'. Sore throats also get better on their own within a week. Research has shown that, without treatment, symptoms of a sore throat will get better within three days in 4 out of 10 people (40%). Antibiotics against strep throat increase this to about 6 out of 10 people (60%). But here again, you need to take the same risk of adverse effects into account.

Apart from the potential adverse effects, which can happen immediately, using antibiotics unnecessarily can cause other problems too: they may become less effective. For years now, it has been observed that many disease-causing bacteria are becoming increasingly resistant (unresponsive) to antibiotics. This means that a lot of medical conditions can no longer be treated as successfully as they used to be. You can read more about this [topic in our feature](http://www.informedhealthonline.org/index.571.56.en.html) (URL: <http://www.informedhealthonline.org/index.571.56.en.html>) on the safe use of antibiotics.

If your doctor does not think you need antibiotics for your cold, it is very likely to get a lot better on its own within a few days. You may be given a prescription just in case, so that you can use antibiotics if your symptoms have still not improved after a week. Even though we tend to pick up medications from the pharmacy earlier – particularly if it is your own child who is ill – it often makes sense to wait a bit first. You can read more about that [here](http://www.informedhealthonline.org/index.178.en.html) (URL: <http://www.informedhealthonline.org/index.178.en.html>)

. As we have already said: most colds are caused by viruses, and antibiotics do not work against viruses.

What about vitamin C?

Many people regularly take vitamin C tablets to prevent a cold, or take them when they have a cold to try to cure it. However, trials show that vitamin C can only in exceptional cases prevent the common cold. Taking vitamin C at the start of a cold does not relieve symptoms or shorten the illness. Taking very high doses of vitamin C every day can also cause adverse effects such as diarrhea. This can be a worse health problem than the cold, particularly for older people and young children. You can read more about research into the effect of vitamin C on the common cold [here](http://www.informedhealthonline.org/index.174.en.html) (URL: <http://www.informedhealthonline.org/index.174.en.html>) .

What can you do to limit the spread of colds?

The viruses that cause colds are spread to others from everything that has touched the mouth or nose of someone who has a cold. This includes cups the sick person has been drinking from, as well as their hands and, of course, used tissues and handkerchiefs. That is why it is important not to leave used tissues lying around in places where other people might come into contact with.

Every time a person with a cold sneezes or coughs, lots of tiny virus-containing droplets are sprayed into the air. If you touch something that these droplets have landed on, the viruses spread to your hands. When you then touch your nose or mouth, you can easily get infected. This means that keeping your hands away from your face could help reduce your chances of getting a cold. Washing your hands regularly with normal soap has been shown to be a very good way to prevent colds. You can read more about how you can protect yourself and your family from respiratory infections [here](http://www.informedhealthonline.org/index.319.en.html) (URL: <http://www.informedhealthonline.org/index.319.en.html>) .

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Next planned update: August, 2014. You can find out more about how our health information is updated [here](http://www.informedhealthonline.org/index.643.en.html?bab[subpage_id]=0-8) (URL: [http://www.informedhealthonline.org/index.643.en.html?bab\[subpage_id\]=0-8](http://www.informedhealthonline.org/index.643.en.html?bab[subpage_id]=0-8))

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Glossary

vitamin C

Vitamin C is water-soluble. It is also called ascorbic acid. It is the vitamin that people need to have the most of every day. It occurs primarily in fresh fruit and vegetables. Vitamin C is one of the antioxidants. This means it protects cells from damage caused by particular aggressive atoms and molecules called free radicals. The food industry uses it frequently as a conservative. A major vitamin C deficiency leads to tiredness, irritability, and symptoms in bones, cartilage and teeth.

antibiotics

Antibiotics are medicines that can be used for bacterial and some fungal infections. Antibiotics do not work against viruses. Well-known antibiotics include penicillin, tetracycline and chloramphenicol.

bacteria

Bacteria are micro-organisms that, unlike viruses, can exist on their own. Viruses, on the other hand, can only exist inside a living cell. Most bacteria are not harmful to people, and some are actually beneficial. Bowel bacteria support bowel health. However if they get into the urinary system, they can cause an infection there. Doctors prescribe antibiotics for illnesses where bacteria need to be stopped or killed off. Immunisation is also possible against some bacterial infections, such as diphtheria, tetanus or whooping cough.

evidence

Evidence is what we call scientific proof from well-conducted, good-quality scientific trials that have been carefully designed to answer specific questions. Depending on the types of questions, different scientific research methods (types of study) are most appropriate to find reliable answers to these questions. Randomized controlled trials (RCTs), for example, are the best way to get reliable evidence on the effectiveness of medical treatments (interventions). This type of study, however, is not the best form of evidence for all possible questions, and does not provide the best answers to all kinds of questions, either. Epidemiological studies, for example, are very suitable for establishing well-founded proof for the spreading of a disease in the population.

infection

In medicine, we speak of an infection when a person has caught a germ (an infectious agent). This germ can be a bacterium, a virus, a fungus or a worm. The germ multiplies and then either spreads throughout the body or only attacks one particular organ. As long as there are no signs of a disease, this is called an asymptomatic infection. When the body shows a reaction to the germ in the form of symptoms, this is called a symptomatic infection (an infectious disease). The period between the moment the germs enter the body and the moment the first symptoms of the disease appear, is called the incubation period. It may last a few hours or days, or even many years. An infection does not necessarily have to lead to the onset of a disease.

vaccination

Vaccination involves stimulating the body's production of antibodies to a particular virus or bacteria, so that the person has increased resistance if they are exposed to the real infection. A vaccine aims to launch the body's defence system, without actually causing the disease. Depending on the vaccine, it could take some time after vaccination to develop immunity. With most vaccines, more than one vaccination is needed. Sometimes the immunity from a vaccine lessens over time. That means there are some types of vaccination that need be repeated after a few years to stay active. There are several types of vaccines. Some vaccines are "inactivated" or "killed", which means that even though they are made from a virus, for example, no "live" part of the virus remains. That means the vaccine itself cannot cause infection. Other vaccines are "live attenuated vaccines". This means that the virus has been made so much less infective than the real virus, that it should not be able to cause symptoms.

virus

Viruses are germs that enter living cells (plant, animal or human cells) to multiply. Viruses cause illnesses and diseases such as smallpox, influenza, colds, hepatitis, herpes and AIDS.

pneumonia

Pneumonia ("pneu" is of Greek origin and means "breeze") is the medical term for an inflammation of the lung. It can be caused by viruses, bacteria or fungi that pass through the upper airways to get into the lung. It is a

disease that more commonly affects old and very young people and other persons with a weak immune system. The symptoms include coughing up sputum, breathlessness, chest pain and fever. Breathing is rapid and can be accompanied by crackling or rattling noises.

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The German Institute for Quality and Efficiency in Health Care (IQWiG)

The German Institute for Quality and Efficiency in Health Care (IQWiG) was established by legislation to provide evaluations of the effectiveness, quality and efficiency of healthcare services. This includes the assessment of medicines as well as the publication of health information for consumers and patients.

Evidence basis of our health information

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

You can find a list of the evidence and other scientific literature on which this information is based at www.informedhealthonline.org

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