



Influenza

Distinguish influenza from « flu-like » infection



« Influenza » or « real flu » is an extremely contagious respiratory disease caused by the influenza virus (Typ A or B). It is important to distinguish the real flu from the flu-like infection. A « flu-like infection » is also a respiratory infection, but usually not with the influenza virus, but a cold, triggered by approx. 200 different « cold viruses » (adeno-, rhino-, corona- and other viruses).

Stomach and intestine flu also has nothing to do with influenza. This term is used for gastrointestinal infections caused by various pathogens and leads to diarrhoea and vomiting.



How is influenza transmitted?

The flu viruses are only a few thousandths millimetre in size. They attack mucosal cells, for example in the nose, and multiply there. People are infected with the flu virus usually through droplet infection. This can happen, for example, when a sick person sneezes and the droplets are inhaled. Influenza viruses can also survive up to several hours outside the body, and even longer at low temperatures. If the hands come into contact with objects that contain virus-containing secretions (e.g. door handles, handshakes, phones) and are subsequently touched by the nose or other mucous membranes, infection is also possible.

Symptômes (grippe ou rhume)

Because colds and flu share many symptoms, it can be difficult or even impossible to tell the difference between them based on symptoms alone. Special tests that usually must be done within the first few days of illness can tell if a person has the flu.

Is it a cold or flu?

Signs and Symptoms

Symptom onset

Fever

Aches

Chills

Fatigue weakness

Sneezing

Stuffy nose

Sore throat

Chest discomfort cough

Headache

Influenza

Abrupt

Usual

Usual

Fairly common

Usual

Sometimes

Sometimes

Sometimes

Common

Common

Cold

Gradual

Rare

Slight

Uncommon

Sometimes

Common

Common

Common

Mild to moderate

Rare

source: <https://www.cdc.gov/flu/about/qa/coldflu.htm>

So the flu with its sudden onset is likely to cause high fever for several days, with headache, body aches and general fatigue and weakness.

While anyone can catch flu, it puts especially people with chronic health issues, such as

- heart disease
- diabetes
- lung disease,
- kidney disorders
- immunodeficiencies
- elderly (>60 years)
- pregnant women

at higher risk for any possible complications (vaccination recommended).

Often you don't realize you have the flu: In 80 percent of cases, influenza infection goes unnoticed or only like a « mild cold ».

The World Health Organization (WHO) estimates that 10 to 20 percent of the world's population is affected every year, but the majority of them do not notice this. This means that you can act as a vector and transmit the virus to other people without knowing.

In the remaining 20 percent of those infected, the course is more severe. The symptoms usually appear suddenly and one to two days after infection. The infection starts with chills and a strong feeling of illness. Fever can reach 40 degrees; sore throat, dry cough, watery eyes, a runny nose, nausea, headaches and aching limbs are also possible. If no complications occur, the infection usually lasts from a few days to a week.

But the flu also makes us more susceptible to bacteria. If the immune system is weakened by the virus infection, other pathogens have an easy job. Most influenza deaths are not caused by the virus itself, but by bacterial infections (so-called secondary infections).

According to new estimates published by the Centers for Disease Control and Prevention (CDC) 12/2017, between 291,000 and 646,000 people worldwide die from seasonal influenza-related respiratory illnesses each year.

The virus infection is already contagious during the incubation period, i.e. the period between infection and onset of a disease. The incubation period for influenza is a few hours to three days. After the outbreak of influenza, there is – on average - a risk of contagion for about four to five days. Children can even spread the virus for up to seven days after the first symptoms appear.

Diagnosis

Since many other respiratory pathogens can produce clinical images very similar to seasonal influenza, reliable differentiation can ultimately only be achieved by laboratory diagnostics. However, during the peak phase of an influenza wave and during epidemics, the typical influenza symptoms have such a good predictive value that the disease can be diagnosed in most patients with sufficient probability on the basis of the clinical presentation (see symptoms above).

Antiviral treatment

Usually there is nothing more needed than bed rest, antipyretic medication and plenty of fluids to treat the flu. Antiviral therapy should be considered if a serious course of influenza is suspected or if there is an increased risk of a serious course, especially for those affected who belong to the above-mentioned risk group.





Vaccination

Vaccination is the best method available to prevent flu. The vaccine is updated annually to protect against the influenza strains most likely to circulate each season (broad genetic variability). Even in the cases when vaccination does not prevent infection completely, it can reduce the severity of the disease and prevent the most serious complications of flu, including hospitalization and death.

Efficacy may vary from season to season. In healthy adults, influenza vaccination reduces the risk of influenza by 70-90% in most winters. Flu vaccines do not protect the vaccinated against colds.

Approximately 5% of those vaccinated experience vaccination reactions (reaction of the immune system) with symptoms similar to flu symptoms. They are usually harmless and subside quickly. This explains why it is easy to get the impression that flu vaccination is of little use. The side effects of seasonal flu vaccination are usually much more harmless than the complications of influenza disease.

All flu vaccines approved and available in Luxembourg are inactivated and therefore contain no pathogenic agents. It is therefore impossible that the flu vaccination triggers flu.

Usually the annual wave of influenza starts after the turn of the year. After the vaccination it takes 10 to 14 days until the vaccination protection is completely built up. In order to be protected in time, it is therefore recommended to be vaccinated in the months of October or November. Even at the beginning and during the flu epidemic it can still make sense to make up for a missed vaccination. The duration of immunity after influenza vaccination is generally 6 to 12 months.

Healthy habits

Healthy habits like covering your coughs and sneezes and washing your hands often can help stop the spread of germs that cause respiratory illnesses like the flu.

- *Avoid close contact with sick people. While sick, contact with others should be limited so infection does not spread.*
- *Cover your nose and mouth with a tissue when you cough or sneeze and throw the tissue away after. If you don't have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.*
- *Clean your hands often with soap and water. If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60 percent alcohol.*
- *Avoid touching your eyes, nose, and mouth to prevent the spread of germs.*
- *Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.*

Links to more information on the topic

- [Institut Pasteur](#) (French)
- [Robert Koch Institut](#) (German)
- [Organisation Mondiale de la Santé](#) (English)
- [Infektionsschutz.de](#) (Available for download in English, French, German)
- [Centers for Disease Control and Prevention](#) (English)