CONDITION

Flu

Flu is a contagious viral infection that can cause fever, cough, body aches, and severe tiredness.

WHAT IT IS
Acute viral infection of the nose, throat, and lungs

BODY SYSTEM
Breathing system

MAIN SYMPTOMS
Fever, cough, body aches, severe tiredness

WHAT CAUSES IT
Infection with influenza viruses

HOW IT IS DIAGNOSED
Respiratory swab molecular or antigen testing

MAIN TREATMENT
Rest, fluids, symptom relief, and antiviral medicines

CAN IT BE CURED?
Yes - most infections clear completely

IS IT AN EMERGENCY?
Sometimes - trouble breathing or blue lips

LONG-TERM OUTLOOK
Most recover fully, though cough and tiredness may linger

Overview

Flu, also called influenza, is a contagious infection caused by influenza viruses. It mainly affects your nose, throat, and lungs.

Flu often begins more suddenly than a common cold. It can cause fever, a dry cough, headache, body aches, and enough tiredness to stop you doing normal activities. Not everyone develops every symptom, and flu can occur without a fever.

Most people recover at home. However, flu can sometimes lead to pneumonia or make an existing condition, such as asthma or heart disease, worse. Babies, older adults, pregnant people, and people with certain long-term health conditions have a higher risk of serious illness.

Flu is not the same as a stomach bug. Vomiting and diarrhoea can occur, particularly in children, but they are not usually its main features.

Symptoms

Symptoms usually appear about one to four days after exposure to the virus. They often come on quickly.

Common symptoms include:

Children may also have nausea, vomiting, diarrhoea, ear pain, or reduced interest in eating and drinking. Young children may not be able to describe aches or headache. They may instead seem unusually sleepy, irritable, or less active.

Flu, COVID-19, and other respiratory infections can cause similar symptoms. Symptoms alone cannot always show which infection you have.

- Fever or feeling feverish and chilled
- Dry or chesty cough
- Headache and body aches
- Marked tiredness or weakness
- Sore throat
- A blocked or runny nose

Causes and risk factors

Flu is caused mainly by influenza A and influenza B viruses. The strains circulating in the community change over time, which is one reason flu vaccines are updated regularly.

The virus spreads when an infected person breathes, talks, coughs, or sneezes. This releases virus-containing droplets and smaller airborne particles. Infection can also occur after touching a contaminated surface and then touching your eyes, nose, or mouth, although this is not thought to be the main route.

You are more likely to develop severe flu or complications if you:

A healthy person can still become seriously unwell, but this is less common.

- Are very young or aged 65 or older
- Are pregnant or have recently given birth

- Have asthma, long-term lung disease, heart disease, diabetes, or kidney disease
- Have a weakened immune system
- Have a condition affecting the brain, nerves, or muscles that makes breathing or swallowing difficult
- Live in a care home or another shared residential setting

Diagnosis

A healthcare professional may diagnose flu from your symptoms, examination, and whether influenza is circulating locally. Testing is not always needed when illness is mild and the result would not change your care.

Tests usually use a swab from the nose or throat. Molecular tests, including PCR tests, look for the virus's genetic material and are generally more sensitive than rapid antigen tests.

Rapid antigen tests can give results quickly, but they may miss some infections. A negative result does not always rule out flu, especially when many cases are circulating.

Testing may be more important if you are very unwell, are in hospital, have a higher risk of complications, or need to be separated from vulnerable people. A combined test may check for influenza, COVID-19, and other respiratory viruses from the same sample.

Treatment and management

Most people can manage flu at home with rest, sleep, and enough fluid to avoid dehydration. Water, soup, and oral rehydration drinks may be easier to take in small, frequent amounts.

Medicines such as paracetamol or ibuprofen can reduce fever and aches when they are suitable for you. Follow the label, and check combination cold-and-flu products carefully so that you do not take the same ingredient twice. A pharmacist can help if you are unsure which product is appropriate.

Children and teenagers should not take aspirin for flu unless a specialist has specifically prescribed it. Aspirin during a viral infection has been linked to Reye syndrome, a rare but serious condition affecting the brain and liver.

Prescription antiviral medicines can shorten illness and may reduce some complications. They work best when started early, ideally within the first two days of symptoms. Treatment may still help when started later if illness is severe, is getting worse, requires hospital care, or affects someone at higher risk.

Antiviral treatment is not needed for every mild case. The choice depends on factors such as age, pregnancy, other health conditions, symptom duration, and illness severity.

Antibiotics like amoxicillin or doxycycline do not treat influenza because flu is caused by a virus. They may be used if a bacterial complication, such as some types of pneumonia, develops.

Avoid smoking and second-hand smoke while recovering because they can make coughing and breathing symptoms worse.

Complications

Pneumonia is one of the main complications of flu. It may be caused by the influenza virus itself or by bacteria that infect damaged airways. Warning signs can include worsening breathlessness, chest pain, confusion, or a fever and cough that improve and then return.

Flu can also worsen asthma, chronic obstructive pulmonary disease, heart failure, diabetes, and other long-term conditions.

Less common complications include inflammation of the heart muscle, brain, or muscles. Severe infection can cause dehydration, sepsis, or failure of the lungs or other organs. These complications need urgent hospital care.

Children can sometimes develop ear infections or febrile seizures. A febrile seizure is a seizure linked to fever, usually in a young child.

Prevention

Flu cannot always be prevented, but vaccination lowers the chance of infection and serious illness. Because circulating strains change and protection decreases over time, flu vaccination is offered annually in many countries. Eligibility and timing differ between health systems.

It takes time for your immune system to respond after vaccination. The vaccine cannot prevent every case, but a vaccinated person who catches flu may have a lower risk of severe illness.

Other ways to reduce spread include:

Do not share drinking containers, utensils, or towels while you are ill. Clean commonly touched surfaces, particularly in shared homes.

- Staying away from others while feverish or acutely unwell

- Covering coughs and sneezes with a tissue or your elbow
- Washing your hands after coughing, sneezing, or blowing your nose
- Improving indoor ventilation
- Avoiding close contact with people at high risk while you are infectious
- Wearing a well-fitting mask when close contact cannot be avoided

Living with it and what to expect

For many people, the worst symptoms last several days. Fever often settles before the cough and tiredness. A cough, weakness, or reduced stamina may continue for two weeks or longer, even when the infection itself is clearing.

Return to normal activity gradually. Trying to do too much while you still feel weak can leave you exhausted, although it does not mean that the flu has returned. Eating regular meals, drinking enough, and rebuilding sleep and activity routines can help recovery.

Stay home until your symptoms are improving and you have been free of fever for at least 24 hours without fever-reducing medicine. Local advice for schools, workplaces, hospitals, or care settings may be different. Extra care around vulnerable people remains sensible for several more days.

Most people recover fully without lasting effects. Recovery may take longer after severe flu, pneumonia, or a hospital stay. Persistent breathlessness, chest discomfort, or declining ability to manage normal activities should be reviewed rather than assumed to be part of recovery.

When to get medical help

Seek prompt medical advice if you may have flu and are pregnant, have a weakened immune system, have a significant long-term condition, or are in an age group at higher risk. Early advice matters because antiviral treatment works best when started soon after symptoms begin.

Arrange medical review if symptoms are getting worse, are not beginning to improve after about a week, or improve and then return with fever or a worse cough. You should also seek help for signs of dehydration, such as very dark urine, much less urination, a dry mouth, or difficulty keeping fluids down.

Call emergency services or seek emergency care for:

These signs can have causes other than flu, but they need urgent assessment.

- Severe difficulty breathing, gasping, or ribs pulling inward with breathing
- Blue, grey, or very pale lips, skin, or face
- Persistent chest pain or pressure
- New confusion, extreme drowsiness, collapse, or difficulty waking
- A seizure
- Coughing up significant amounts of blood
- Severe weakness or inability to stand
- A child who is not responding normally or cannot drink
- Any fever in a baby younger than 12 weeks

Common questions

How can I tell flu from a cold or COVID-19?

Flu often starts suddenly and causes stronger tiredness, fever, headache, and body aches than a cold. COVID-19 can look very similar. A respiratory test is the most reliable way to tell them apart when knowing the cause will affect care.

How long is flu contagious?

Adults may spread flu from about one day before symptoms begin until roughly five to seven days afterward. Infectiousness is usually greatest during the first few days. Children and people with weakened immune systems may spread the virus for longer.

Can the flu vaccine give me flu?

An injected flu vaccine cannot cause influenza. It does not contain virus capable of causing flu. Some people have temporary soreness, tiredness, or a mild fever as their immune system responds. The nasal vaccine contains weakened virus but is designed not to cause typical influenza.

Can I get flu more than once in the same season?

Yes. More than one influenza strain may circulate, and infection with one strain does not provide reliable protection against the others. Other respiratory viruses can also cause a second flu-like illness.

Do antibiotics help flu?

No. Antibiotics kill bacteria, not influenza viruses. They are only useful when a bacterial

infection develops alongside or after flu. Unnecessary antibiotics can cause side effects and contribute to antibiotic resistance.

Should I exercise when I have flu?

Rest is usually appropriate while you have fever, marked tiredness, chest symptoms, or body aches. Once you are improving and fever-free, restart activity slowly. Stop and seek advice if exercise causes unusual breathlessness, chest pain, dizziness, or a major return of symptoms.

Sources

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