

Influenza



What is influenza?

Influenza (commonly known as flu) is a viral respiratory illness caused by infection with a virus (usually influenza A or B). Influenza is usually more severe than a simple cold (although the illness can be mild in some cases). More severe illness is associated with the elderly, very young and those with other chronic medical conditions like chest or heart disease and diabetes but can occur in people who are fit and well of any age group.

What are the symptoms of influenza?

The most common symptoms of influenza are an abrupt onset of:

- Fever
- Shivering
- Headache
- Sore throat
- Muscle ache
- Dry cough
- Lethargy

People can confuse uncomplicated mild influenza with a heavy cold. Unfortunately some people call even a simple cold 'a touch of flu' which is incorrect as they are caused by different viruses.

How serious is influenza?

- Most people recover completely from influenza in a matter of days or a week. For others (e.g. the elderly, those with other illnesses (such as chest or heart disease, or diabetes) and newborn babies), influenza can be a very serious illness or even fatal.
- Serious illness from influenza is usually not due to the flu itself, but to secondary bacterial infections causing lung infections (bronchitis and pneumonia) or to a worsening of underlying chronic medical condition such as heart disease.

What are the symptoms of the common cold and how do they differ from simple (uncomplicated) influenza?

Cold symptoms are limited to the nose and throat with runny nose, sneezing, watery eyes, throat irritation and headache. The symptoms usually occur gradually and only rarely cause a high fever or body aches. In those with chronic respiratory conditions e.g. people with asthma, a cold can make those conditions worse for a few days.

Symptom	Common Cold	Influenza with symptoms
Fever	Uncommon and then low (under 38°)	Common and often a high fever (over 38°)
Aching muscles – body	Rare	Common
General malaise and lack of energy	Rare	Common
Headache	Common	Common
Running nose	Almost always	Common but a minor feature
Sneezing	Almost always	Common but a minor feature
Watery eyes	Common	A minor feature
Throat irritation	Almost always	A minor feature
Coughing	Common	Common

What type of viruses cause influenza?

There are three main types of influenza virus known as A, B and C. Only influenza types A and B are important in human disease. Influenza B usually produces less severe illness than Influenza A.

Is it infectious?

Influenza is very infectious and spreads easily in crowded or enclosed spaces. The virus changes regularly so the strain will vary each year, resulting in the need for annual vaccination. On average, an infectious person will infect another one to two non-immune people.

What is the incubation period?

Usually about two to three days (but can be from one to seven days).

What is the treatment?

- Most people with influenza need no special treatment. Influenza is caused by a virus so antibiotics do not help unless there is a complication. Occasionally, a special 'antiviral' medicine may be given
- Affected individuals should be excluded from school while feeling ill (until at least 24 hours after the resolution of any fever) as this also reduces the chance of spreading the infection to others.
- Affected individuals should rest and drink lots of fluids to prevent dehydration.
- Paracetamol can be given to reduce the fever but aspirin must~~not~~ be given to children.
- Parents should be advised to seek medical advice if an individual appears particularly unwell or has other medical conditions.

When is a person with influenza infectious to others?

- The infectious period varies slightly from person to person and depending on the current strain but in an adult, they can pass on the infection from the day before their symptoms appear and remain potentially infectious for three - four days.
- Children are similar but they can remain infectious for up to seven days after onset.

The risk to others is not constant throughout and may vary according to individual factors.

How can spread be prevented?

Influenza is spread in two main ways:

- By people breathing in the larger droplets coming from infectious people coughing or sneezing. If the infected person doesn't cover his or her mouth and nose, people within a range of three meters can be infected. Smaller droplets and 'aerosols' seem to be less liable to carry the virus. Because only the larger droplets are infectious it is generally only people close to an infectious person who are at risk.
- Influenza infection can also be spread by direct contact of the mucous membranes of the nose, mouth and throat with virus, for example from the hands of infectious people who have rubbed their noses.

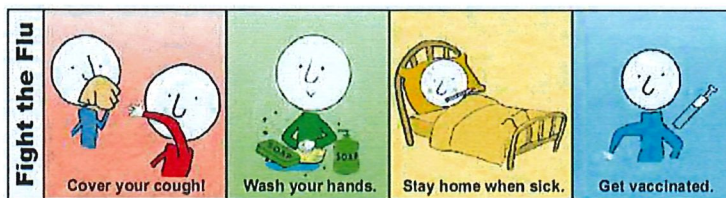
Spread can be prevented by;

- Encouraging individuals who are eligible to have the influenza vaccine. In 2017, all children from two to eight years old (including those in reception to year group four) are eligible to receive the vaccine. This programme will include more year groups in the future so schools should liaise with their relevant school health team (or health protection team) if further information is required. Individuals falling into the risk categories listed below are also eligible for

influenza vaccinations and should be encouraged to receive it. Staff and children aged six months to 65 years with:

- Chronic lung disease
 - Chronic heart disease
 - Chronic kidney disease
 - Chronic liver disease
 - Chronic neurological disease (including learning disabilities)
 - Immuno-suppression (whether caused by disease or treatment)
 - Diabetes mellitus
 - Pregnant women
 - Staff aged 65 years and older
 - Obese people with a BMI > 40
- Individuals with symptoms should be excluded from school until they have recovered and for at least 24 hours after the resolution of any fever.
 - Good respiratory hygiene should be encouraged (covering noses and mouths with disposable tissues when coughing or sneezing and discarding it after use).
 - Good hand hygiene should also be encouraged (after using the toilet and before eating as per usual but also after coughing, sneezing or assisting others with respiratory hygiene).
 - Additional environmental cleaning should be implemented which includes 'high contact' areas such as door handles, flush handle, light switches

This should all be routine practice whether or not there is an outbreak.



What is an outbreak?

An outbreak is defined as two or more linked cases with similar symptoms **over and above** that which would normally be expected. The school should contact the health protection team as soon as they suspect an outbreak to discuss the situation, obtain an integrated care pathway and discuss any actions required.

The health protection team will give advice on:

- Infection prevention and control
- Cleaning and disinfection
- Exclusion
- Taking swabs (nose/throat) from affected individuals

An outbreak committee may be convened if necessary with representation from school staff to advise on the investigation and control of illness.

Boarding Schools

Boarding schools must ensure that symptomatic students are sent home or go to stay with their guardians. Staying in the boarding houses may infect other students and staff. The health protection team can provide further advice and guidance.

Further infection control precautions will be addressed at the time of an incident. It is important that the school:

- Isolate symptomatic students until they can be sent home (potentially in the medical centre or cohort in a separate dormitory from other students))
- Ensure good hand and respiratory measures are maintained during the outbreak

During an outbreak the health protection team will contact the school regularly to monitor the situation and collect information about new cases to ensure appropriate interventions are implemented. Schools should ensure that the 'Record of cases' table in the integrated care pathway is updated daily and is easily available to discuss with the health protection team when required.

More information on Influenza can be found in chapter nine of the [Health protection in schools and childcare facilities](#) guidance.