



**Welcome to the winter newsletter from Public Health England London, providing key information on:**

- **Anti-microbial resistance and steps that can help prevent the unnecessary use of antibiotics**
- **Influenza and the annual vaccination programme**
- **Norovirus and steps to help reduce the risk of spreading infection**

## **ANTIMICROBIAL RESISTANCE**

### **What is Antibiotic Resistance and why is it important?**

Antibiotics are some of our most precious medicines, used to treat both animals and humans.

Antibiotics treat infections by killing bacteria, but now the bacteria are fighting back. Our medicines are becoming less effective, which means more deaths and more complications.

It is estimated that 25,000 people die each year in Europe due to infections that are resistant to antibiotics.

Since the 1940s, antibiotics have helped us to fight infections and save millions of lives. But they are becoming ineffective against many infections because we aren't using them properly.

A recent study showed that the likelihood of GPs prescribing antibiotics for coughs

and colds rose by 40% between 1999 and 2011. Research has shown that only 10% of sore throats and 20% of acute sinusitis benefit from treatment with antibiotics, but the prescription rates are much higher than this. Antibiotics do not work for viruses. Antibiotics treat infections caused by bacteria and that is why they are not effective against cold and coughs.

We all have a responsibility to protect antibiotics against the growing threat of antibiotic resistance, by using antibiotics responsibly. We have to tackle this problem before it becomes worse.

### **Actions you can take to prevent unnecessary use of antibiotics:**

- Don't ask for antibiotics. Treat your cold and flu symptoms with pharmacist advice and over the counter medicines because cough and cold viruses do not respond to antibiotics
- Take antibiotics exactly as prescribed, never save them for later and never share them with others
- If you stop taking the antibiotics before the course has finished you could become resistant the next time you need to take antibiotics
- Spread the word - tell your friends and family about antibiotic resistance

### **More information:**

<https://www.gov.uk/government/news/make-your-pledge-today-and-join-over-17000-antibiotic-guardians>

## **INFLUENZA (Flu)**

### **What is influenza?**

Influenza or 'flu' is a viral infection that mainly affects the nose, throat and the lungs.

There are two main types of influenza that cause infection: influenza A and influenza B. Influenza A is usually a more severe infection than influenza B. Although influenza B tends to occur most often in children it can affect any age.

Influenza symptoms include the abrupt onset of fever, shivering, headache, cough, sore throat, aching muscles and joints.

Influenza symptoms are different from a cold as a cold is often limited to a runny nose, sneezing, watery eyes and throat irritation. The symptoms usually occur gradually and do not cause a fever or body aches. Usually what people call "gastric flu" is a gastrointestinal infection with another virus – usually norovirus or rotavirus.

### **Who catches influenza?**

Anyone can catch influenza. The highest rates of infection are usually in school age children. Most influenza infections occur during the winter months.

The amount of illness occurring each year varies, depending on the particular strain that is circulating. Some influenza viruses cause more severe illness than others. This is why in some winters people may be more unwell with influenza than in other years.

### **How do you catch influenza?**

Influenza is mostly caught by breathing in air containing the virus when an infected person coughs/sneezes or by touching a surface where the virus has landed and then touching your mouth or nose.

### **How infectious is influenza?**

Influenza is infectious and can spread rapidly from person to person. Some strains of virus are more infectious than others, or cause more severe illness.

### **What is influenza like?**

Influenza is worse than an ordinary cold. It usually starts suddenly with a high fever over 38°C which can last for three to four days.

A dry cough, headaches and chills are common, as are general muscle aches and pains. A stuffy nose, sneezing and a sore throat can also be present.

The fever tends to decrease after the second day when a stuffy nose and a sore throat become more noticeable. Some children may also feel sick (nausea), or have diarrhoea. Tiredness can last two to three weeks.

### **How serious is influenza?**

Most people recover completely from influenza in a matter of days or a week. For vulnerable groups, for example older people, pregnant women, those with other illnesses (such as chest or heart disease, or diabetes) and newborn babies, influenza can be a serious illness.

Serious illness from influenza can range from the virus itself causing a severe viral pneumonia, to a secondary bacterial infection causing bronchitis and pneumonia or to a worsening of any underlying chronic medical condition such as heart disease.

### **Can you prevent influenza?**

The influenza vaccine is available to protect against the viral infection. Each year a new vaccine has to be produced to protect against the influenza viruses expected to be in circulation that winter because each year the circulating influenza strain can change. This is to boost the immune response.

The vaccine is very safe and side effects are uncommon and usually mild.

The vaccine is not recommended for everyone, but it is advisable for those likely to be more seriously affected by influenza.

This vaccine is recommended for:

- Those aged 65 years and over
- Pregnant women
- Children aged 2-7
- Frontline health care workers, including those who work in care homes
- People of any age with chronic heart, lung, neurological, metabolic disorders (including severe asthma and diabetes), kidney problems or a lowered immune system due to treatment or disease
- Those in long stay residential care accommodation where influenza, once introduced, may spread rapidly
- It is recommended that immunisations be offered to health and social care workers involved in direct care of and/or support to patients and also anyone caring for a person in the at risk groups
- Fit adults under the age of 65 years who are not in one of the groups mentioned above are not offered the vaccine as part of the national programme. This list is not exhaustive and if you are unsure if you should have the seasonal influenza immunisation then please discuss this with your pharmacist or GP

### How can you reduce the risk of influenza transmission in schools?

- Staff and children with influenza should be kept away from school until they are symptom free.
- Wash hands frequently with soap and water and dry thoroughly
- Avoid touching surfaces (such as door handles) and then the face

- Cover your mouth and nose with a tissue when coughing or sneezing and dispose of used/dirty tissues in a bin – “Catch it, Bin it, Kill it”

### How soon should a child be back at school after influenza?

Influenza is most infectious when symptoms start until about three to five days later. There are no recommended times of exclusion for an infected child: a child should return once they are well enough.

### What is the treatment for influenza?

Most people with the 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 is given to people in the 'at risk' groups or whose illness is getting worse.

Someone who is ill with influenza should keep warm, rest and drink lots of fluids to prevent dehydration.

Medication can be given to reduce fever, ask your pharmacist or GP for advice. It is best to stay at home while feeling ill with influenza as this reduces the chance of spreading the infection to others.

### More information:

**Stay Well This Winter campaign:**  
<https://www.nhs.uk/staywell/#OZuZe6r38EZIDlBq.97>

## **NOROVIRUS**

Norovirus, also called the 'winter vomiting bug' because it usually occurs during the winter months, is the most frequent cause of infectious gastro-enteritis in England and Wales and affects 600,000 to one million people in the United Kingdom every year.

Cases usually start to appear during the autumn, peaking during January.

Symptoms usually last from 12 to 60 hours and will start with the sudden onset of nausea followed by projectile vomiting and diarrhoea.

### **How does norovirus spread?**

The virus is easily transmitted from one person to another. It can be transmitted by contact with an infected person, by consuming contaminated food or water or by contact with contaminated surfaces or objects.

### **What are the symptoms?**

The symptoms of norovirus infection will begin around 12 to 48 hours after becoming infected. The illness is self-limiting and the symptoms will last for 12 to 60 hours. They will start with the sudden onset of nausea followed by projectile vomiting and watery diarrhoea.

Some people may have a raised temperature, headaches and aching limbs. Most people make a full recovery within one to two days. However some people (usually the very young or elderly) may become very dehydrated and require hospital treatment.

### **How is norovirus treated?**

There is no specific treatment for norovirus apart from letting the illness run its course. It is important to drink plenty of fluids to help prevent dehydration.

### **If I'm suffering from norovirus, how can I prevent others from becoming infected?**

Good hygiene is important in preventing others from becoming infected – this includes thorough hand washing before and after contact. Food preparation should also be avoided until 48 hours after the symptoms have subsided.

### **Are there any long term effects?**

No, there are no long term effects from norovirus.

### **What can be done to prevent infection?**

It is impossible to prevent norovirus. However taking good hygiene measures such as frequent hand washing around someone who is infected is important.

Other measures include the implementation of basic hygiene, food handling measures, prompt disinfection of contaminated areas, and staying at home for 48 hours after the symptoms have stopped.