



Public Health
England

NHS

The science behind flu

**HELP US
HELP YOU**

STAY WELL THIS WINTER

NHS
Cheril Sowell
Nurse



Flu is a common infectious viral illness spread by coughs and sneezes that affects the respiratory system. Flu – short for influenza – is especially common in winter, which is why it’s also known as “seasonal flu”.

Flu is caused by a different virus than the common cold. It can lead to hospitalisation, permanent disability or even death among vulnerable groups including older people, pregnant women and people with an underlying health condition. For otherwise healthy people flu can be very unpleasant, however most people will recover from flu within a week or two.

Because flu is caused by viruses and not bacteria, antibiotics won't treat it*

People spread the flu virus in tiny droplets of saliva over a wide area.






These droplets can then be breathed in by other people or they can be picked up by touching surfaces where the droplets have landed.

THE BEST WAY TO PREVENT FLU IS TO GET THE FLU VACCINATION

IT'S FREE FOR:

<p>65+ </p>	<p>People with an underlying health condition </p>
<p>Frontline health workers, carers and social care workers </p>	<p>Children aged 2–9** Children in school years reception and years 1–5 receive the vaccine in school. Children aged 2 and 3 receive it at their GP surgery. ** on 31 August 2018</p>
<p>Pregnant women </p>	<p></p>

Where can people get the flu vaccine?

<p>Their GP surgery</p>	
<p>Adults can get the flu vaccine from a pharmacy offering the service</p>	
<p>Children in school years reception and years 1–5 receive the vaccine in school</p>	
<p>Some midwifery services</p>	
<p>Health workers will be offered it by their employer</p>	

*However, if there are complications from flu, antibiotics may be needed.

What are the different strains of flu?

There are three main types of flu which spread in humans:

Influenza A

(normally seen every winter)

Influenza B

(normally seen every winter)

Influenza C

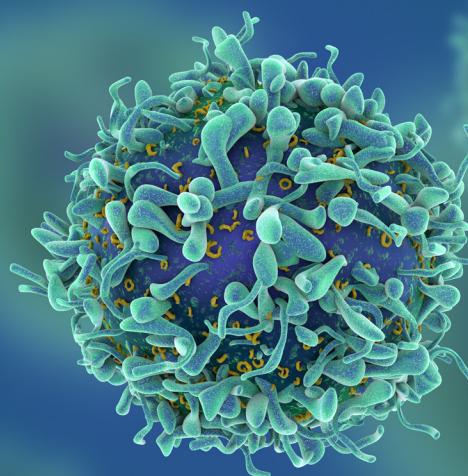
(symptoms of this are much less severe)

Common types of flu

"Influenza A H3N2" first emerged in Hong Kong in 1968. It tends to affect older age groups. It often circulates in the winter, the last time being 2017/18, which was a particularly bad flu season.

"Influenza B" – Yamagata a strain of seasonal flu which we have seen circulating in previous seasons in the UK. This strain of flu often affects younger age groups.

"Influenza A H1N1" was a new strain of flu that emerged in 2009.



Flu strains first emerge as a pandemic because they have not been seen before. New strains tend to spread quicker and affect the population worse than seasonal flu as there is no base level of immunity in the population and no existing vaccine to protect against them. The last pandemic was in 2009 with the emergence of influenza A (H1N1).



Flu is potentially a very serious illness. We encourage everyone who is eligible to get the flu vaccine from their general practice or pharmacy before the end of November.



Professor Paul Cosford

Medical Director at Public Health England

What's new about the flu vaccine?

This winter, there is a newly available vaccine for those aged 65+ called an **adjuvanted vaccine** – this is the best vaccine currently available for the over 65s. It will provide better protection because it boosts the immune response in people of this age, whose bodies haven't responded as well to vaccines previously. This vaccine has been used successfully in other countries, and Public Health England expects the new vaccine to result in fewer hospitalisations and GP consultations from flu this winter.

For everyone else a **quadrivalent flu** vaccine is being offered. This protects against four strains of flu – two A types and two B types – and offers broader direct protection against influenza B. For most children this will be offered as a nasal spray.

Although the adjuvanted vaccine for older people is trivalent (that is, it protects against three strains of flu – two A types and one B type), it is the most effective vaccine for this age group.

When can people get the vaccine?

People are encouraged to get their flu vaccine when the appropriate vaccine for them becomes available before the end of November. If they have missed this time, they can still have the flu vaccine later in the winter.

Are there any side effects to the flu vaccine?

The flu vaccine cannot give people flu because it contains either a dead or weakened form of the virus.

Those having the injected vaccine may get a sore arm at the site of the injection, a slight temperature and aching muscles for a day or two after the vaccination.

Side effects of the nasal vaccine may include a runny or blocked nose, headache, tiredness and some loss of appetite.

Serious side effects with either the nasal spray or injection are very uncommon



Introducing an enhanced flu vaccine for those aged 65 and over means they will be better protected. Further protection will be gained by offering flu vaccine to more children this year, which aims to protect both the children themselves and those around them. A vaccine will be given that provides protection against 4 strains of flu to all eligible people under 65.

Professor Paul Cosford, Medical Director at Public Health England

