



Public Health
England

Protecting and improving the nation's health

The children's flu vaccination programme, the nasal flu vaccine Fluenz and porcine gelatine

Your questions answered

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000

www.gov.uk/phe

Twitter: [@PHE_uk](https://twitter.com/PHE_uk)

Facebook: www.facebook.com/PublicHealthEngland

© Crown copyright 2014

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](https://www.ogil.io) or email psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned. Any enquiries regarding this publication should be sent to immunisation@phe.gov.uk

Published: December 2014

PHE publications gateway number: 2014589



Why are healthy children being offered flu vaccine?

Flu is a disease that spreads very rapidly, potentially causing widespread illness, especially in those who are already vulnerable because of their age or medical condition. So if children are vaccinated against flu they will not only benefit directly by being protected themselves, they will also reduce the spread of flu and help protect the whole population. In particular, they will help to protect those children and adults who cannot or do not have the vaccine. This includes children under the age of two and children with illnesses like severe asthma who can become very unwell but who cannot have the vaccine because it is not suitable.

Why is the Fluenz nasal spray vaccine being used?

The flu virus enters the body through the nose and mouth. From there it is transmitted to the throat and upper airways where it rapidly replicates and goes on to cause the symptoms of flu. Because Fluenz also enters the body through the nose it mimics the flu virus and results in a better immune response than an injected vaccine. This means that, compared with injected and less active vaccines, Fluenz:

- is more effective
- provides protection for longer
- may offer protection against slightly different types of flu virus
- is easier to give and more comfortable to have

Because Fluenz reduces the amount of flu among all children, not just the ones who have the vaccine, there should be less demands on doctors and nurses during the busy winter season and fewer days missed from childcare, nursery and school. In turn, this means less worry for parents and less time away from work and other activities, caring for children who are unwell.

But doesn't Fluenz contain ingredients that come from pork? What does that mean for children from some faith groups?

The nasal flu vaccine does contain gelatine that comes from pork as one of its additives. Gelatine is commonly used in a range of medicines, including many capsules and some other vaccines. The gelatine used in Fluenz is a highly purified product used to stabilise this live viral vaccine. Very many stabilisers were tried out by the manufacturers and this gelatine was chosen. A change to the stabiliser would require a major programme of additional testing before it could be approved for use in children.

The following statements from representatives of the Jewish community may help parents reach a decision about having their child vaccinated:

Rabbi Abraham Adler from the Kashrus and Medicines Information Service, said:

“It should be noted that according to Jewish laws, there is no problem with porcine or other animal derived ingredients in non-oral products. This includes vaccines, including those administered via the nose, injections, suppositories, creams and ointments.”

A vaccine the same as *Fluenz* has been used successfully in the U.S. for over ten years and has been quite widely accepted by many faith groups. However, Public Health England (PHE) has consulted the Muslim Council of Great Britain, and acknowledges that some individuals in the British Muslim community consider the porcine gelatine product to be forbidden. In this circumstance, these individuals may still be able to accept some pharmaceutical products containing gelatine if there was no suitable alternative and if the product was considered life saving.

Isn't inactivated flu vaccine a suitable alternative?

It is the considered view of PHE and the Department of Health that because this new programme is designed to protect as many people in the community as possible including those who cannot have flu vaccine, the inactivated injected vaccine is not a suitable alternative to *Fluenz*. Therefore, the recommendation is that the nasal spray vaccine *Fluenz* is used to vaccinate healthy children.

As in previous years, inactivated vaccine can be used in children over six months of age who have underlying illnesses that put them at particular risk of influenza; in most cases two injections will be required.

Dr Mary Ramsay, Head of Immunisation at PHE, said:

“We strongly recommend that anyone whose child is offered immunisation accepts this opportunity to give their child the best protection possible against the flu virus. This large programme has the potential to protect children against the severe complications of flu and to reduce spread to more vulnerable people such as young infants, pregnant women and those with underlying medical conditions.”

I notice that the consent forms and leaflets all mention the fact that the flu vaccine contains products derived from pork. Why is this?

It's important that all parents are fully informed before they consent to their child being vaccinated. Providing this information allows them to consider all of the aspects of the process involved before signing the form. Vaccines are very complex substances that take many years to develop. They are subject to intensive testing to make sure they are both safe and effective before they can be licensed for public use. They contain a wide variety of products all of which are needed to make the vaccine as safe and effective as possible; none of the contents can be replaced without further extensive testing and then resubmission for licensing.

Listing all the contents of a vaccine on the consent form or in the leaflets would be impractical but we recognise that substances derived from pork cause problems for certain Muslim communities so by drawing particular attention to these we hope that all parents are fully aware before they consent. For more details on the contents of the vaccine the NHS Choices website has a link to the scientific description of the products in *Fluenz* at www.nhs.uk/Conditions/vaccinations/Pages/child-flu-vaccine.aspx. Feedback from parents suggests that most prefer the consent forms and leaflets to be as simple as possible, as long as they can access more detail if they want to.

Why has PHE issued this clarification?

When the vaccine programme was launched in 2013, PHE referred to a document written by a Muslim representative of the World Health Organization (WHO) some years ago in response to queries from Muslims about gelatine in vaccines and other medicines.

After being informed that the WHO document is not acceptable to Muslims of many schools of Islamic jurisprudence (madhahib), PHE has consulted further with leading Muslim organisations. PHE is aware that Islamic scholars of the Hanafi school from the UK have classified *Fluenz* as not permissible.

Why is PHE still recommending a vaccine that may not be permissible for the parents of Muslim children?

PHE is still recommending the use of *Fluenz* because, compared with injected, inactivated vaccines, *Fluenz*:

- is more effective
- provides protection for longer
- may offer protection against slightly different types of flu virus
- is easier to give and more comfortable to have

PHE would like to inform the Muslim communities of the UK of the issues surrounding the vaccine so that they can make an informed decision about whether or not it is acceptable for their children.

Does the flu vaccine contain any DNA from pigs?

No; very sensitive scientific tests have shown that the flu vaccine does not contain any detectable DNA from pigs.

This analysis indicates that the gelatine is so degraded that the original source cannot be identified.

What should I do if I can't have the nasal flu vaccine?

Having fully informed yourself of the advantages and disadvantages of having or not having your child vaccinated, the consent decision is your's. If you or your child have any underlying medical conditions that put you at specific risk of flu, please talk to your doctor.