



Vaccines and porcine gelatine

This leaflet describes how and why porcine gelatine is used in vaccines

The issue of using porcine (pork) gelatine in some vaccines has raised concerns among some groups.

This leaflet provides information about vaccines that contain this product and the alternatives that may be available.

What is gelatine?

Gelatine is a substance found in the collagen of tendons, ligaments, bones and cartilage of animals. Porcine gelatine comes from collagen in pigs. All forms of gelatine used in medicines are manufactured under strict hygiene and safety regulations.

Why is porcine gelatine used in vaccines?

Gelatine is used in a very wide range of medicines, including many capsules and some vaccines. Porcine gelatine is used in vaccines as a stabiliser, to make sure the vaccine remains safe and effective during storage. Vaccine manufacturers normally test a wide range of stabilisers and choose one that is stable, good quality and can meet demand. Unlike the gelatine used in foods, the product used in vaccines is highly purified and broken down into very small molecules called peptides.

Why can't vaccines be made with other stabilisers or other types of gelatine?

Developing a vaccine takes many years of laboratory testing and clinical studies to make sure that it is both safe and effective. Once the manufacturer has chosen the stabiliser for

the vaccine, any change in this could require extensive laboratory and clinical studies to show that the vaccine is still safe and effective. Because of this, developing a new safe and effective vaccine with a different stabiliser may take several years or may never happen.

Which vaccines contain porcine gelatine?

In the UK routine immunisation programme, the following vaccines contain porcine gelatine.

- Fluenz Tetra, a nasal spray vaccine that protects children against flu
- MMR VaxPro, a vaccine that protects against measles, mumps and rubella
- Zostavax, a vaccine that protects older adults against shingles.

What is the view of the faith communities?

The UK Health Security Agency (UKHSA) have consulted the Kashrut and Medicines Information Service, who 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.'

However, UKHSA accept there is diversity within the British Muslim and Jewish communities and they, and some other groups, may consider medicines and vaccines containing any porcine product to be forbidden. In these circumstances, it is likely that some people in these groups would not be able to accept many pharmaceutical products unless there was no suitable alternative or the product was considered life-saving.

Are there any suitable alternatives to these vaccines?

MMR. In the UK we have two types of MMR vaccine – MMR VaxPro and Priorix. Priorix does not contain gelatine and is as safe and effective as MMR VaxPro.

Shingles. In the UK we have two types of shingles vaccine – Zostavax and Shingrix. Shingrix does not contain gelatine but is only currently available to people who have a weakened immune system and cannot have the Zostavax vaccine.

Fluenz Tetra. For children from the age of two, there is no alternative nasal vaccine. There are flu vaccines that can be injected that do not contain pork gelatine, but these are expected to be less effective than Fluenz Tetra in children. They may also do less to reduce the spread of flu in the community.

What if I don't want myself or my children to have vaccines containing porcine gelatine?

The final decision about whether or not you or your child should be vaccinated is yours. To help you decide, you may want to consider the evidence about the advantages and disadvantages of having yourself or your child vaccinated.

If you do not want your child to have the MMR vaccine that contains porcine gelatine, ask your GP for the Priorix vaccine. A full course of two doses will protect against measles, mumps and rubella. Your GP practice may need to order this vaccine in specially, so it will be helpful to tell them your views before the appointment.

The nasal vaccine is considered the most effective flu vaccination for children. If you decide you do not want your child to have the nasal spray because of the porcine gelatine, or if your child cannot have it for medical reasons, they should have a flu vaccine by injection.

For older people wanting to protect themselves against shingles there is currently no alternative to Zostavax. Shingrix is only currently available to eligible adults who have a weakened immune system.

Further information

You can find out more information on vaccines offered in Wales at:
phw.nhs.wales/vaccines

