

common than fatal reactions to routine medical treatments.

Do people ever have severe adverse reactions to vaccinations?

They do, but it is much less common than many people think.

In rare cases, it is possible for someone who is vaccinated to have an allergic reaction, known as an anaphylactic reaction. These are very rare, with a recent study showing that only one anaphylactic reaction is reported for every million immunisations.

In addition, most anaphylactic reactions to vaccines do not result in death. According to data from the Office for National Statistics, there has not been a single recorded death due to anaphylactic shock following a vaccination for at least 10 years. This covers all recorded incidents between 1997 and 2007, the last year for which data are available.

What are the benefits of the HPV jab?

It's been calculated that the UK HPV vaccination programme will ultimately save 400 lives a year. Around 3,000 women a year are currently diagnosed with cervical cancer, and the disease kills more than 1,000 women a year in the UK.

Half of all sexually active women will be infected by a strain of HPV in their lifetime. These infections cause more than 99% of cervical cancer cases and a range of other cancers.

The HPV vaccine protects women from two types of HPV: strains 16 and 18. Together these cause around 70% of cervical cancers.

Have any side effects been reported?

Yes. All drugs have side effects and the HPV vaccine is no different.

Very common side effects include:

- pain or discomfort at the injection site,
- · redness or swelling at the injection site,
- headache,
- aching muscles, muscle tenderness or weakness (not caused by exercise), and
- tiredness.

Common side effects include:

- gastrointestinal symptoms including nausea, vomiting, diarrhoea and abdominal pain,
- · itching, red skin rash, hives (urticaria),
- joint pain, and
- fever (of 38°C or 100°F or more).

Uncommon side effects (occurring in less than one per 100 but more than one per 1,000 doses of vaccine):

- upper respiratory tract infection (infection of the nose, throat or trachea),
- · dizziness, and
- other injection site reactions such as a hard lump, tingling or numbness.

For more on the vaccine's known side effects go to <u>Health A-Z:</u> side effects.

Does the vaccine have a good safety record?

The vaccine's safety record is excellent and it has passed the rigorous safety tests needed for it to be used in the UK and other European countries.

It was safety tested as part of the licensing process, with over 70,000 doses used in clinical trials before a licence was granted. (It's now licensed in more than 90 other countries.)

In total, more than 1.4 million doses of the vaccine have since been given in Britain, and millions more worldwide.

Who should have the vaccine?

The HPV vaccine is being offered to all girls aged 12 and 13 as part of a national vaccination programme to cut deaths and serious illness from cervical cancer. The vaccination programme began in September 2008. By 2011, all girls between the ages of 12 and 18 in Britain will have been offered the jab. The vaccine is given in three injections over six months. A catch-up programme also started in September 2008 and offers the vaccine to older girls up to the age of 18.

How does the vaccine work?

Virtually all cases of cervical cancer are caused by a virus called human papilloma virus (HPV), which is passed on during sex (although sexual intercourse isn't always necessary to pass on the virus).

The vaccine, Cervarix, which is used in the NHS national programme, protects against two types of HPV, strains 16 and 18, which together cause around 70% of cervical cancers.

What is HPV?

HPV is a virus that infects the deepest layer of the skin or genital surfaces. There are over 100 different types of HPV, 13 of which are known to cause cervical cancer. The others are harmless or cause genital warts. The virus is transmitted through sexual contact and is very common, with over half of all women becoming infected at some point in their lifetime.

How does HPV cause cancer?

Most HPV infections clear up by themselves, but in some people the infection can last a long time.

HPV infects the cells of the surface of the cervix (the neck of the womb), where it can stay for years without anyone knowing.

HPV can damage these cells, causing changes in their appearance. Over time, these changes can develop into cervical cancer.

Will the cervical cancer programme be suspended?

No. There are no plans to suspend the vaccination programme.

As with any vaccine, Cervarix may have side effects, but overall this is a well-tested vaccine that has been introduced to tackle a serious health problem.

The MHRA has reviewed all reported side effects related to Cervarix and concluded that there is no evidence to suggest that the vaccine carries any long-term side effects.

The independent Expert Advisory Group of the Commission on Human Medicines has reviewed the data and endorses the MHRA's view that no new or serious risks have been identified and the balance of risks and benefits remains overwhelmingly favourable.

Should I let my daughter have the cervical cancer jab?

Yes. The established risks of getting cervical cancer are far greater than any risk from the HPV vaccine.