The HPV vaccine

A Q&A sheet for girls and their parents on the HPV vaccination available from September 2012
This Q&A on HPV vaccine supports the leaflet that your daughter should have received from her school or GP surgery.

It is intended to answer your and her questions about the human papillomavirus vaccine for girls that will protect against cervical cancer. It provides more detailed information on the topics covered in the leaflet and is designed to answer further questions that you might have.

More information can be found at www.nhs.uk/hpv.
What is cervical cancer?

Cervical cancer affects the cervix – the entrance to the womb (see Figure 1). This cancer is caused by the human papillomavirus or HPV, which is spread from one person to another during sexual activity. There are over 100 types of human papillomaviruses but only 13 of these are known to cause cervical cancer and just two – types 16 and 18 – cause over 70% of the cases (see Figure 2).

![Figure 1 The cervix is the entrance to the womb](image)

The HPV vaccine is being offered to your daughter to protect her against cervical cancer. In the future, there may be a vaccine that protects against the other types of the virus that cause cervical cancer. In most people, the virus does not cause cancer but in some people it does. Around 1000 women die from cervical cancer in the UK each year.
There are over 100 types of human papillomavirus. More than a dozen of these cause cervical cancer. ...and two of these types – 16 and 18 – cause over 70% of the cases of cervical cancer.

**Figure 2** Diagrammatic representation of the human papillomavirus types that cause cervical cancer

**How does the virus cause cancer?**

The virus gets into the surface cells of the cervix where it can stay for several years without causing any harm. Then, and for no apparent reason, it may start to cause damage to these cells. The purpose of cervical screening is to detect these changes which, if detected early enough, can be treated to prevent cancer developing. If they are left untreated, cancer can develop and may lead to serious illness and death.

**Why should I be concerned about my daughter getting cervical cancer?**

The HPV virus is very common and is easily spread by sexual activity. As much as half the population will be infected at some time in their life. Although most girls don’t start having sex until after they’re 16 years of age, it is important that they get this protection early enough and a good time is in their early teenage years – getting the vaccine as early as possible will protect them in the future.
Does the vaccine protect against all cervical cancer?

This vaccine protects against the two virus types that cause over 70% of cervical cancer. The vaccine does not protect against all of the other cancer-causing types, so it’s vital that women still go for routine cervical screening tests when they are older.

*Having the vaccine reduces the risk of your daughter getting cervical cancer by over 70%.*

Does the vaccine protect against other sexually transmitted infections?

The vaccine also protects against two types of HPV that cause about 90% of the cases of genital warts. It does not protect against other infections spread during sex, such as chlamydia, nor will it stop your daughter getting pregnant, so it’s still very important that your daughter gets safer sex messages at the appropriate time.

Why are girls under 16 being offered the vaccine when the age of consent is 16?

The virus that causes cervical cancer is spread by someone having sex or being sexually intimate with another person who has the virus. Both men and women can become infected with this virus. Whilst most girls don’t start having sex until they are 16 or older, it is recommended that they routinely have the vaccination at 12 to 13 years of age to get the most benefit from the vaccine. If the vaccine is given after a young woman has started being sexually active, it is possible she may already have been infected by an HPV type that the vaccine can protect against, in which case she will not benefit fully from the vaccination.
Will being infected with HPV cause cancer in someone who hasn’t had the vaccination?

Most women who get infected with HPV do not get cervical cancer. Women usually do not even know they have been infected because they have no symptoms.

Nowadays, most women are regularly tested (screened) to see if they have any signs of infection, seen as changes to the lining of the cervix that could lead to cancer. These regular tests are often called ‘smear tests’. The vaccine protects against the two types of virus that cause most cervical cancer but it doesn’t protect against all HPV viruses, so:

**It will be essential for your daughter to have regular screening once she is old enough.**

What is the HPV vaccine?

The HPV vaccine stops the body being infected by the two human papillomaviruses that cause cervical cancer in over 70% of people. Three doses of the vaccine are needed over a six-month period.

At what age will the vaccination be given?

The vaccination programme introduced in 2008 means that all girls aged 12 to 13 years will now receive the HPV vaccine routinely in year 8 at school.

The vaccine will be given in her upper arm by a nurse or doctor. For the vaccine to work, three injections will be needed over a period of around six months.

It’s important that she has all three vaccinations to get the best protection.
How will I know when my daughter is going to have the vaccination?

You should have already received information and possibly a consent form if the vaccination is going to be given at school. It is important that the consent form is signed and returned to the school before your daughter’s vaccination is due.

Who will be giving my daughter the vaccination?

Your local primary care organisation will have a team to give the vaccinations or ask your GP practice. The person giving the vaccination will be fully qualified to do this and will know how to deal with any problems that may arise.

Will our GP know that our daughter has had the HPV vaccination?

Information about the HPV vaccination will be transferred to your GP’s surgery so it can be entered on your daughter’s health record.

Will there be any side effects?

The most common side effects that have been reported in clinical studies of HPV vaccines include swelling, redness and pain at the site of the injection, and headaches. Other side effects such as raised temperature, sickness, itching, rash, and pain in the injected arm were reported in fewer than one in ten but more than one in 100 people. A full list of potential adverse reactions can be found on the patient information leaflet that comes with each vaccine.
What about girls who have allergies or other illnesses, can they still have the HPV vaccination?

Yes. Food intolerances, asthma, eczema, hay fever, and allergies generally do not prevent someone from having this vaccine. If you have any concerns about this, speak to your nurse or doctor.

Very rarely, some people have an allergic reaction soon after immunisation. This reaction may be a rash or itching affecting part or all of the body. The nurse will know how to treat this. It is not a reason to withhold further HPV vaccinations.

Even more rarely, people can have a severe reaction, within a few minutes of the injection with breathing difficulties and collapse. This is called an anaphylactic reaction. These are extremely rare and the nurse or doctor is trained to deal with vaccine anaphylactic reactions. Individuals recover completely with treatment, usually within a few hours.

What if my daughter is off school ill on the day of the vaccination?

The nurse will try to arrange for her to be offered the vaccine at another time.

It’s important that she has all three vaccinations to get the best protection. The type of vaccine used for the programme is changing in September 2012, so if your daughter has missed one or two of her injections before this date she will need to complete the course with the same vaccine she started with. Stocks of the original vaccine are being held back to deal with this situation.
What if she doesn’t want to have the vaccination?

She doesn’t have to have it, if she doesn’t want to.

But it is recommended that she does for the reasons given above. Having the vaccination now will protect her for many years. Suggest she speaks to the nurse or doctor if she wants more information, on her own, or with you, if she’d prefer.

What if she wants the vaccination but, as her parents, you would rather she didn’t have it?

You should discuss this with your daughter, the doctor or nurse to get more information. The decision is legally hers as long as she understands the issues in giving consent. Having the vaccination now will protect your daughter from the most common cause of cervical cancer for many years to come.

Is the HPV vaccine safe if it is given to a pregnant woman?

There is no known risk associated with giving HPV vaccine during pregnancy. HPV vaccine is an inactivated vaccine, which means that it doesn’t contain any live organisms, and so cannot cause infection in either the mother or her baby. However, as a matter of precaution, HPV vaccine is not recommended in pregnancy. This is not because of any specific safety concerns with giving HPV vaccine during pregnancy but because there is limited information on using the vaccine in pregnant women.
What should happen if HPV vaccine is given to a pregnant woman?

If a woman finds out she is pregnant after she has been given HPV vaccine, she should discuss this with her GP. Experience so far shows that there is no known risk that it will harm her or her baby and there is no reason to believe that the pregnancy cannot continue safely. Once the woman has completed her pregnancy, she can finish the three-dose course of HPV vaccine.

Due to the relatively limited experience so far of using HPV vaccine in pregnant women, it is important to follow up women who have been given the vaccine during pregnancy. This is to provide further information on the safety of the vaccine in these circumstances. Follow-up is being done at the Health Protection Agency (www.hpa.org.uk).

What should you do if you find you are pregnant soon after HPV vaccination?

If you are pregnant and have been given HPV vaccine you should discuss this with your GP. The Health Protection Agency (HPA) website (www.hpa.org.uk) has more information or you can telephone 01788 540298 or 0208 327 7471. Additional details on the registry are available on the HPA website.

What about girls with long-term conditions or who are on medication that reduces the effectiveness of their immune system?

Girls whose immune systems are affected through medication or long-term conditions can have the vaccine but the vaccine may not work as well for them.
Will the vaccine affect any other medication?

There is no evidence that the vaccination reduces the effectiveness of any medication or the contraceptive pill.

What if a girl has already been sexually active and has possibly caught the virus?

If a girl has been sexually active, there is a possibility that she may have already caught HPV. However, as it won’t be known which type of the virus she has been infected by she should still have the vaccine as it may still protect her.

Why aren’t boys being vaccinated?

The purpose of this campaign is to protect girls and women against cervical cancer. Obviously, boys do not get cervical cancer. By protecting all girls against the two most common causes of cervical cancer eventually there will be fewer viruses circulating and so the risk for boys of coming into contact with the virus will get less. Boys need to know about safer sex to reduce the risk of them catching and spreading the cancer-causing virus.

How long does the vaccine protection last for?

Studies suggest that vaccinated people maintain high levels of protection for at least seven years, and it is expected to last many years. Studies are in place to measure the long-term protection. If a booster dose of the vaccine is necessary later in life your daughter will be informed about this.