



...for Parents and Caregivers



**Immunisation
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Cervical Cancer Prevention & Human Papillomavirus (HPV) Vaccine

Fact Sheet for Young Women, Parents and Caregivers

What is HPV?

Infection with HPV virus is necessary to develop cervical cancer. Human papillomaviruses (HPV) are commonly known as wart viruses. Some types infect the genital region, usually via sexual contact. This is very common and about four out of five people are exposed to these viruses at some stage in their life. Infection with some types of HPV can lead on to a range of genital cancers, while others cause visible genital warts. Although there are over 100 types of HPV, types 16 and 18 are responsible for around 70% of all cervical cancers. Types 6 and 11 cause approximately 90% of genital warts.

How common is cervical cancer?

Every year in New Zealand around 160 women are diagnosed with cervical cancer and around 60 die from the disease. Many other women have abnormalities in the cells of their cervix which are detected by cervical screening. These require invasive treatment to prevent the development of cancer. In New Zealand cervical cancer is the third most common cause of cancer in women aged 25 – 44 years.

Maori women are almost twice as likely to get cervical cancer and almost three times as likely to die from it, compared to non-Maori women. Additional risk factors include: early start of sexual activity, multiple partners, women who don't participate in regular cervical screening and smoking.

How serious is cervical cancer?

If left untreated, cervical cancer can spread to the bladder, intestines, lungs and liver and is ultimately fatal.

How do you catch the virus?

The HPV types that can lead to cervical cancer are spread primarily through sexual contact. Three years after becoming sexually active, around two thirds of women have been exposed to HPV (regardless of the number of sexual partners). Most infections resolve without any problems within 2 years. However, about 2% of infections are still present after 5 years. Persistent infection can cause abnormal cervical cell changes and if not diagnosed or treated over 10 years can lead to cancer.

What are the symptoms of HPV infection?

Some HPV types cause warts and verrucae but do not lead to cancers. Other HPV types cause no obvious infection at the time, but can persist in cells of the genital tract. If left undetected, HPV can lead to cervical cancer as well as other cancers affecting the vulva, vagina, anus, penis, mouth and throat. It takes about 10 – 20 years from infection to the development of cancer.

How do you prevent cervical cancer?

Regular cervical smears and treatment of abnormal cells prevent the majority of cervical cancer. Routine use of condoms can help reduce the spread of HPV infection, but is not fully protective.

Immunisation with HPV vaccine is highly effective in preventing infection with the 2 most common HPV types - 16 and 18, that cause at least 70% of cervical cancer.

Vaccination against HPV infection

The vaccine is given as a series of 3 injections over 6 months. It contains 4 HPV types – 2 types which cause 70% of cervical cancers (HPV types 16 and 18) and 2 types that cause 90% genital warts (HPV types 6 and 11).

How effective is the vaccine against HPV related diseases?

Studies in over 20,000 women show it is 95% effective in preventing serious cervical cell changes caused by HPV types 16 or 18 (and up to 100% effective in women who have not been exposed to those HPV types).

It is most effective when offered at a young age, before the onset of sexual activity. The vaccine will not treat existing HPV infections or their complications.

How long does HPV vaccination last?

Three doses provide a stable level of protection for at least five years. The vaccine induces a good immune memory and studies indicate that the efficacy of this vaccine is expected to be long-lasting. Studies will continue to monitor the protection the vaccine provides. Booster doses (as required for some other vaccines), are not expected to be needed for the cervical cancer vaccine, but this is being monitored.

Who should get the vaccine?

Girls born from 1 January 1990 are eligible for the HPV Immunisation Programme. The national immunisation programme will offer HPV vaccine to all year 8 girls from 2009, and a catch up programme for all girls 12 – 18 in a staggered rollout:

From 1 September 2008:

- Young women (born in 1990 & 1991) at their general practice or other health clinic

From 2009 & 2010:

- Girls in school Year 8 in the school-based immunisation programme (or age 12 years from family doctors)
- Girls aged 13 to 18 by school-based immunisation services, their family doctor, practice nurse or health clinic.

For details on when and where to get free immunisation contact your local District Health Board.

Why is HPV vaccine being offered to girls from 12 years old?

For best protection girls need to be vaccinated before they are likely to be exposed to HPV; which means before they start having any sexual contact. However, girls who are sexually active may not have been infected with the types of HPV covered by the vaccine and would still benefit from vaccination.

It is important to note that women who receive HPV vaccine must continue cervical screening, as about 30% of cervical cancers will not be prevented by the vaccine. As with any vaccine, the HPV vaccine may not provide protection for everyone who is vaccinated. Therefore, if a woman has ever been sexually active, she still needs to have a smear test every three years between the ages of 20 and 70.

How much does it cost?

HPV vaccine is free for young women born from 1 January 1990 (see above). However, other people who are not eligible for the free vaccine may consider that the benefits are worth purchasing the vaccine.

It is licensed for girls and women aged 9-26 years, given ideally before the start of sexual activity. It is also licensed for boys and men aged 9-15 years and may have some role in preventing genital warts and the spread of HPV.

For those who are not eligible for free vaccination there are two licensed HPV vaccines. These can be purchased via your general practice or other health centre and they can discuss the cost of the vaccine with you.

Who should seek more advice before having the vaccine?

People with a severe allergy (anaphylaxis) to any component of the vaccine (including yeast) should seek advice before being vaccinated. The vaccine is not recommended for pregnant women.

Is the vaccine safe?

Studies show HPV vaccine has an excellent safety profile, and is generally well tolerated. Injection site reactions with some pain, redness and swelling are the most common reaction, followed by headache or fever. Fainting can occur, usually caused by anxiety. Severe allergic reactions (anaphylaxis) have been reported very rarely.

Comparison of effects of HPV vaccine and HPV related diseases

HPV	Risks of infection	Side Effects of Vaccination
Human papillomavirus (HPV) is a common sexually transmitted virus and a major cause of cervical cancer	<ul style="list-style-type: none"> • Infection of partner • Risk of developing persistent infection (2%) • Risk of pre-cancerous changes in cervical cells requiring invasive treatment • Persistent infection can cause cervical cancer or cancers of the vulva, vagina, anus, penis, mouth and throat. • Some types cause genital warts. 	<ul style="list-style-type: none"> • Mild to moderate pain and inflammation at injection site – most vaccinees. • Severe pain and inflammation at injection site (<3%) • Mild to moderate fever (<1%) • Anaphylaxis (severe allergic reaction) 3.2 per million

Vaccines are prescription medicines. Talk to your doctor or nurse about the benefits and any risks