Human papillomavirus (HPV) and HPV testing

FACTS

What is HPV?
HPV stands for human papillomavirus. HPV is a virus infection that can be sexually transmitted and in most women has no obvious symptoms. There are many different types of HPV of which about 40 affect the genital area.

Only a few types of HPV are considered ‘high risk’, that is, they may lead to abnormal cell changes in the cervix. Other low risk types can cause genital warts.

How do people get HPV?
Genital HPV is a very common virus amongst people who have ever been sexually active. It is spread by skin-to-skin contact during sexual activity with a person who has the virus. Most people will come into contact with HPV at some stage during their lives. HPV is so common that most people get it soon after they start having sex.

It is usually impossible to know when a person got HPV or from whom. HPV may be found fairly soon after contact or not until many years later.

How does HPV cause cervical cancer?
High risk types of HPV can cause normal cells on the cervix to turn abnormal. Most HPV infections clear on their own in 6 to 24 months through the body's own immune system, without a woman knowing she has had it. When HPV goes away, the cervical cells go back to normal. This is especially the case for those women under 30 years. However, some women will not clear their HPV and may develop a persistent infection. If abnormal cells occur and go undetected and untreated they can progress to cervical cancer. This usually takes 10 years or more.

The vast majority of women with HPV infection never get abnormal cervical smears or cervical cancer.

What is HPV testing?
The HPV test looks for high risk types of HPV, which can cause cell changes. The HPV test is a very accurate way to tell if high-risk HPV is present in a woman’s cervix. This helps to define the future risk of cervical cancer.

How is the test done?
The HPV test is usually taken at the same time as the cervical smear test using the same sample of cells, so there is no need to have a second test. The cells are looked at in a laboratory to see if high risk HPV is found and the laboratory reports the results to your smear taker at the same time as your cervical smear result.
When should I have an HPV test?

The NCSP’s Guidelines for Cervical Screening in New Zealand recommend HPV testing in the following circumstances:

- If you are over 30 and your smear shows mild (low grade) changes. In this situation the lab will do an HPV test on your original liquid based cytology sample, so there is no need to return to your smear taker for another test. If the HPV test is negative you will have a follow-up smear in one year. If the HPV test is positive you will be referred to colposcopy.

- If you have previously been treated at colposcopy, HPV testing can be used to enable you to return to three yearly screening rather than having annual smear tests. This needs to be discussed with your smear taker.

- Sometimes your colposcopist may recommend an HPV test to help determine whether treatment is necessary.

Why is HPV testing not recommended for women under 30 years who have a mildly abnormal smear result?

Women under 30 years should not have an HPV screening test in this situation because HPV infection is very common in this age group and usually goes away. For younger women, including an HPV test along with a smear test provides no real health benefit and might lead to too many tests and unnecessary treatment.

What are the benefits of HPV testing?

HPV testing helps to determine those women who need further assessment and those who don’t. It can reduce the need for repeat smears.

HPV testing is a very sensitive test. A negative test result indicates a woman is extremely unlikely to be at risk of developing cervical cancer in the next few years.

What do the HPV test results mean?

A negative (‘undetected’) test result indicates that an HPV type that is linked to cervical cancer has not been found in the sample.

A positive (‘detected’) test result means that a high risk type of HPV has been found. This result needs to be discussed with your smear taker or specialist. It is important to attend follow-up appointments. That way, any cell changes can be found and treated early.

A positive HPV test does not mean that a woman has cancer.

Can an HPV infection be treated?

There is no treatment for persistent HPV infections, but there is treatment for the abnormal cells that HPV can cause. You can download the NCSP resource Colposcopy: information for women who have abnormal cervical smear results from www.nsu.govt.nz
How can infection with HPV be prevented?

Together, screening and immunisation will offer the most effective protection against cervical cancer. Having a smear test every three years is the best way to detect changes to the cells of the cervix that may later lead to cancer.

Practice safe (or safer) sex: if used properly and consistently, condoms will give good protection against infection with HPV.

Smoking can increase a woman's risk of HPV becoming persistent and the development of cervical cancer.

What about immunisation against HPV?

Immunisation is now available to help protect young women against the two common types of high-risk HPV (types 16 and 18) that cause up to 70% of cervical cancer and the two common types of low-risk HPV (types 6 and 11) and that cause up to 90% of genital warts. The vaccine is most effective if given before exposure to these HPV types, which means before young women start having any form of sexual contact. The vaccine doesn't protect against all HPV types that can cause cervical cancer, so women who have been immunised must have regular cervical screening between the ages of 20-70 years.

Should I have an HPV test before HPV immunisation?

No. It is not necessary to know whether someone already has HPV before giving them the vaccine. Those who have already acquired one HPV type targeted by the vaccine may still benefit from immunisation to help protect them from infection with other types.

Where can I find out more about HPV, cervical cancer and cervical screening?

If you would like more information about HPV testing, HPV immunisation, or anything else mentioned in this fact sheet you can:

- talk to your smear taker
- visit the National Screening Unit website at www.nsu.govt.nz
- visit www.cervicalcancervaccine.govt.nz
- visit www.immune.org.nz
- refer to the following NCSP resources for women, available from your GP practice or from www.nsu.govt.nz
  - Cervical smear tests – what women need to know
  - Cervical screening – understanding cervical smear tests
  - Colposcopy – information for women who have abnormal smear results
  - Prevention of cervical cancer – a guide for women in New Zealand (detailed booklet)