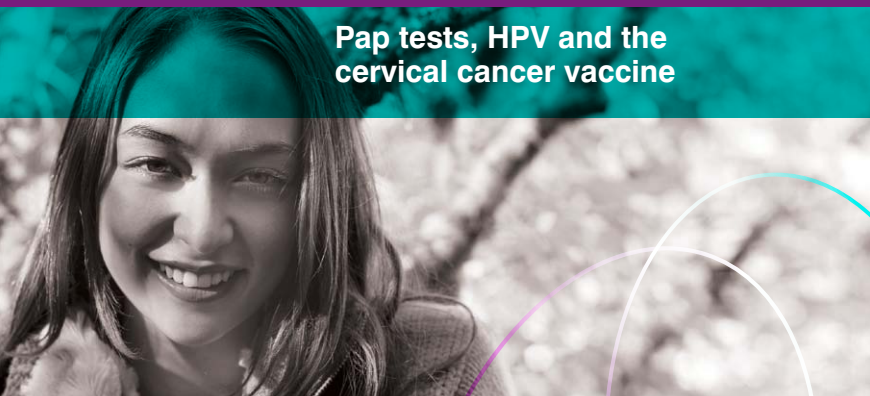




Protecting yourself against cervical cancer

**Pap tests, HPV and the
cervical cancer vaccine**



**This PapScreen Victoria
brochure contains
information about:**

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Introduction

Most women who develop cervical cancer haven't had regular Pap tests.

Worldwide, cervical cancer is the second most common cancer in women. This is because women in developing countries don't have access to Pap tests like we do in Australia.

Cervical cancer is caused by infection with the human papillomavirus (HPV). This virus is spread by genital-skin to genital-skin contact during sexual activity.

Both men and women can get HPV and pass it to sexual partners.

HPV can cause changes in the cells of the cervix. Depending on the type of HPV, and how persistent the infection is, these changes can develop into cervical cancer over many years if left untreated.

These cell changes usually have no symptoms. The only way to know whether they are there is to have regular Pap tests. If these changes are found at an early stage, they can usually be treated quickly and easily.

In Australia, around 200 women die each year from cervical cancer. The vast majority of these women have not had regular Pap tests.

In contrast, regular Pap tests save 1,200 women from developing the disease every year.

Having a Pap test every two years could save your life.



The human papillomavirus (HPV)

Infection with HPV is so common it can be considered a normal part of being sexually active.

What is HPV?

There are many different types of HPV, which infect different parts of the body. Around 50 types can infect the genital skin, including the cervix.

Four out of five people who have ever had sex will have HPV at some point in their lives. In most of us the infection is invisible, harmless and transient – that is, it goes away after a few months without causing any problems.

Occasionally, some types of HPV persist in the body. We don't know why this happens in some people and not others, although some factors (like smoking) seem to make it happen more easily. Condoms may offer some protection from infection with HPV, but this is limited as they do not cover all the genital skin.

Most women with genital HPV infection do not develop cervical cancer.

How is HPV related to cervical cancer?

Although genital HPV infection is very common, most women with HPV do not develop cervical cancer. However, when cervical cancer does occur, HPV is always present.

The different genital HPV types are called 'low risk' or 'high risk', according to their potential for causing cell changes which, if left untreated, could lead to cancer.

Some low-risk types can cause minor changes to the cells of the cervix, but these usually go away over 12 months or so as our body's natural immunity clears the virus. The cells then return to normal.

High-risk HPV types (for example, types 16 and 18) are also often cleared by the body's immune system, but these types are more likely to persist in the body than the low-risk types. More serious cell changes occur when the high-risk types persist, however they can be detected by a Pap test and treated.

Cervical cancer usually takes many years to develop, but it is important to have Pap tests regularly so that significant cell changes can be found.

If women don't have regular Pap tests, cell changes may remain undetected and untreated, meaning these women have a greater risk of developing cervical cancer.

In some people, HPV may remain inactive in their bodies for many years. For this reason it is important to continue having regular Pap tests throughout your life.

How do I know if I have HPV?

Most people have HPV at some time in their life but are never aware of it. There is a test which can detect some of the high-risk HPV types, but this test is not recommended in women under the age of 30. This is because infection with these high-risk types is very common in this age group and usually goes away.

Most women only become aware of having HPV when their Pap test shows some cell changes or if they are infected with HPV types that cause genital warts.

Genital warts are caused by low-risk HPV types and do not cause cervical cancer.

Most people have HPV at some time in their life but are never aware of it.



How is HPV treated?

There is no 'cure' for HPV – the body usually clears the virus naturally.

Cell changes caused by HPV and found by a Pap test should be followed by either repeat Pap tests to see if the virus has been cleared, or (if they are more serious) confirmed by other tests (e.g. colposcopy) and treated if necessary.

Genital warts can also be treated – ask your doctor or nurse about the most appropriate treatment for you.

How can I protect myself against cervical cancer?

Regular Pap tests can prevent around 90% of cervical cancers.

Pap tests

Making the decision to have a Pap test is an individual choice. This screening test has benefits and some limitations.

Cervical cancer is one of the few cancers that can be largely prevented through screening. Having regular Pap tests is the best way women can protect themselves against cervical cancer – regular Pap tests can prevent around 90% of cervical cancers.

A Pap test is a quick and simple test which can be performed by your doctor and some nurses.

An instrument called a speculum is used to part the walls of the vagina to get a clear view of the cervix, then a small sample of cells is taken from the surface of the cervix and put onto a glass slide. The slide is examined at a laboratory to look for cell changes.

Some women find Pap tests a bit awkward or embarrassing, but they should not be painful. Talk to your doctor or nurse about any concerns you might have.

Who should have Pap tests?

A Pap test is a screening test for women without symptoms. If you have symptoms such as abnormal bleeding or discharge, always see your doctor, even if your last Pap test was normal.

PapScreen Victoria recommends that all women aged 18–70 who have ever been sexually active should have a Pap test every two years, even if they have had the cervical cancer vaccine.

Lesbians also need Pap tests, as HPV can also be passed on through genital-skin to genital-skin contact between women.

Women who have never had genital-skin to genital-skin contact with anyone do not need Pap tests.

The risk of cervical cancer increases with age, so it is important for women to have regular Pap tests until they turn 70. If you have had two normal Pap test results in the five years before you turn 70, you can stop having Pap tests. After 70, the risk of developing cervical cancer after having regular, normal Pap tests throughout your life is minimal.

Some women who have had a hysterectomy may need to continue having Pap tests. It depends on the type of hysterectomy, the reason for the hysterectomy and the woman's screening history prior to surgery. If you have had a hysterectomy, ask your doctor whether you still need to have Pap tests.

Where can I have a Pap test?

Your doctor will either be able to take your Pap test, or direct you to someone in the clinic who can. There are now many specially trained nurses who take Pap tests.

If you live in Victoria, visit papscreen.org.au or call the Cancer Council Helpline on 13 11 20 to find your nearest doctor or nurse.

The website and Helpline also have information on where to find a female Pap test provider, languages spoken at each service, and whether bulk billing or disability access is available.

**Visit papscreen.org.au or call the
Cancer Council Helpline on 13 11 20
to find your nearest Pap test provider.**

Limitations of the Pap test

The Pap test is an effective tool for preventing cervical cancer.

However screening tests are not perfect and may not always detect cell changes. This may be because:

- › The sample does not contain abnormal cells which may be present on the cervix.
- › Some samples are hard to interpret. For example, blood or mucus may make it hard to see the cells.
- › Occasionally, abnormal cells are missed under the microscope.
- › Sometimes abnormal cells occur high up in the cervix or deep in the glands of the cervix. It is not always possible to get samples from these areas.

However, most cases of cervical cancer take up to 10 years to develop, so having a Pap test regularly means changes missed on one test are usually found on the next, well before they become a serious problem.

Having a Pap test more than once every two years is not necessary, unless your doctor advises it.

What does an abnormal Pap test mean?

Low-grade changes

Sometimes, very minor changes to the cervical cells are detected on a Pap test. The cause of these changes is not always obvious. The changes may be due to inflammation, but are often caused by HPV.

For most women, these changes are monitored with more frequent Pap tests. If they persist, your doctor or nurse will organise further investigations such as a colposcopy.

High-grade changes

High-grade changes are more serious changes to the cells of the cervix. If left untreated, these changes have a greater chance of developing into cervical cancer.

These changes require investigation, but can still usually be treated easily and successfully if detected early.

Colposcopy and treatment

If low-grade changes persist or if a high-grade change is found, you will be referred to a gynaecologist for an examination called a colposcopy.

A colposcope (an instrument that magnifies the cells of the cervix) gives a closer view of the cervix to check the extent and nature of the problem.

Once this is determined, there are various treatment options available. Your doctor will recommend what's right for you.

PapScreen Victoria's booklet *Pap test results: for women with an abnormal Pap test* is available at papscreen.org.au. It contains more information about abnormal results and treatment.

Hard copies can be ordered online at papscreen.org.au or by calling the Cancer Council Helpline on 13 11 20.



The HPV or cervical cancer vaccine

The HPV vaccine can prevent around 70% of cervical cancers if given before the start of sexual activity.

A vaccine is now available which protects against the two high-risk HPV types most commonly linked with cervical cancer (types 16 and 18). HPV types 16 and 18 cause around 70% of cervical cancers.

The vaccine has been approved for use by the World Health Organization. Two versions of the HPV vaccine have been approved for use in Australia, which protect against different types of HPV.

Gardasil™ (CSL)	HPV types 16 and 18 (cause 70% of cervical cancers)
	HPV types 6 and 11 (cause 90% of genital warts)
	Approved for use in females aged 9–45 years
	Approved for use in males aged 9–26 years
Cervarix™ (GlaxoSmith-Kline)	HPV types 16 and 18
	Approved for use in females aged 10–45 years

Both vaccine types are given in three doses across a 4–6 month period, in the upper arm. It is important to have all three doses as this improves the vaccine's effectiveness.

Who should have this vaccine?

Making the decision to have the HPV vaccine is an individual choice. Because the vaccine is currently offered to girls aged 12–13, parents and guardians also play a role in deciding whether their child should be vaccinated.

The recommended age for receiving the vaccine is around 12 years old. This is because the vaccine is most effective when given before sexual activity commences – that is, before exposure to HPV.

Additionally, the immune system at this age works more effectively to produce the antibodies which will protect against HPV infection. The vaccine is two to three times more effective at stimulating the body to produce antibodies when given between nine and 12 years of age than between 16 and 23 years of age.

Older women who did not receive the vaccine at school are advised to speak to their doctor about whether the vaccine will benefit them.

While one of the HPV vaccines has been approved for boys and may protect individuals from conditions associated with HPV (such as genital warts), boys are not able to receive the vaccine free of charge through the National Immunisation Program. The vaccine is currently given free to girls only, to reduce their risk of developing cervical cancer later in life.

Who should not have the vaccine?

People who should not have the vaccine include:

- › pregnant women
- › people with allergies to any of the vaccine components (including yeast).

What is in the vaccine and how does it work?

The vaccine does not contain HPV. It is made of a protein that looks like the outside of the virus. The body then makes substances called antibodies to protect you if you are then exposed to the real virus.

Because the vaccine is made from a protein and not the actual virus, it can't cause abnormal Pap tests and it can't cause cancer.

Where is the vaccine available and how much does it cost?

The vaccine is available free of charge for girls aged 12–13 through the school-based National Immunisation Program. Close to the time when vaccination commences, a consent form is sent to each girl's parent or guardian. Outside of this time, the vaccine costs around \$450 for the full three-dose course.

Do I still need Pap tests if I've had the vaccine?

Yes. All women aged 18–70 who have ever been sexually active should continue to have a Pap test every two years, even if they have had the vaccine.

This is because the vaccine only provides protection against the two most common types of cancer-causing HPV (which cause around 70% of cervical cancers). Cervical cell changes can still occur if you are exposed to HPV types not protected against by the vaccine.

Additionally, in some cases exposure to HPV may have occurred before receiving the vaccine.

Is the vaccine safe?

The vaccine was tested in more than 20,000 people from 33 countries prior to being approved, and was shown to be extremely safe and effective in preventing almost 100% of infections with HPV types 16 and 18.

The vaccine has now been approved for use in more than 100 countries, and more than 65 million doses of the vaccine have been distributed safely worldwide.

Even if you have had the HPV vaccine, you should continue to have Pap tests every two years between the ages of 18 and 70 if you have ever been sexually active.

Does the vaccine have any side effects?

All medicines can have side effects. Some people may suffer from mild side effects on receiving the vaccine. These side effects can occur on receiving any vaccination. They include:

- › dizziness or fainting
- › low fever
- › soreness or redness at injection site.

More severe side effects such as anaphylactic (allergic) reaction are extremely rare and usually occur if you are allergic to an ingredient in the vaccine. Ongoing monitoring of more severe side effects shows approximately three anaphylactic reactions occur per one million doses of vaccine administered. If an allergic reaction does occur, it can be treated.

How long does the vaccine provide protection for?

Studies have shown that the vaccine provides good continuing protection against HPV. Studies are ongoing to determine whether a booster dose will be necessary in the future.

For more information about the vaccine visit cervicalcancervaccine.org.au

For more information on Pap tests, cervical cancer and HPV visit papscreen.org.au or call the Cancer Council Helpline on **13 11 20**.

For more information about the HPV vaccine, visit cervicalcancervaccine.org.au

To receive this information in other languages call **03 9209 0169**. Tell us which language you speak and an interpreter will help you speak to a nurse.

For a range of information in other languages please visit our multilingual website at:
www.cancervic.org.au/other_languages

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