# Gardasil and cervical cancer: some common questions and answers

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This handout provides information about Gardasil, a new vaccine used to help prevent HPV-related cancers, precancerous lesions of the cervix that are usually detected on Pap smear testing, and genital warts.

#### What is cervical cancer?

Cervical cancer is cancer of the cervix. The cervix is the lower part of the uterus (womb) and is situated at the top of the vagina. Cervical cancer develops when abnormal cells in the lining of the cervix begin to multiply out of control and form precancerous abnormalities. If undetected, these abnormalities can develop into tumours and spread into the surrounding tissue.

#### What causes cervical cancer and abnormal cervical cells?

Cervical cancer is caused by infection with certain types of a common virus called human papillomavirus (HPV). There are approximately 40 types of HPV that affect the genital areas. In most women the virus is harmless, but in some women who become infected with certain types of HPV the virus may persist and lead to cancer. Abnormal cervical cells, including precancerous abnormalities, are also caused by certain types of HPV infection.

## What is Gardasil?

Gardasil is a vaccine to help prevent certain types of cervical cancer and precancerous abnormalities in females aged 9 to 26 years.

#### How can a vaccine prevent cancer?

Gardasil works by causing the body to produce its own protection against HPV types 6, 11, 16 and 18. These four HPV types were included in the vaccine because they cause the majority of cervical cancers and precancers, as well as some low grade cervical abnormalities.

#### Does Gardasil prevent any other disease?

The Gardasil vaccine also helps to prevent genital warts as well as some anal, vulval and vaginal cancers and their associated precancers caused by the HPV types in the vaccine.

# If I get vaccinated, will I still need Pap smears?

Yes. The vaccine is designed to protect against cervical cancer due to the HPV types in the vaccine, which cause 70% of cervical cancers. The remaining 30% of cervical cancers



Gardasil is given as an injection into the muscle of the arm or leg.



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are caused by HPV types that are not included in the vaccine. Therefore, it is important to continue to have regular Pap smears to screen for cervical cancer.

## I am sexually active, will vaccination be of benefit to me?

Vaccination can be of benefit to women who are already sexually active. Your doctor can provide further information.

### How is Gardasil given?

Gardasil is given as three doses by injection into the muscle in the upper arm or thigh. Ideally, the doses should be given as follows:

- first dose, at a date you and your doctor (or other healthcare provider) choose
- second dose, two months after the first dose
- third dose, six months after the first dose

It is important to ensure that a complete course of three doses is received. This allows for maximum protection over the longest time.

#### What are the side effects?

As with all vaccines, side effects may occur. The more common side effects of Gardasil include pain, tenderness or soreness at the injection site; there may also be some redness, swelling or bruising. Fever has also been reported. For the most part, these side effects are mild, and usually improve or disappear within a few days.

# Where can I get further information?

This handout does not include all the information about Gardasil. A copy of the more detailed Consumer Medicine Information (CMI) leaflet is available from your doctor or pharmacist.

Further information can also be obtained from the following websites:

- www.i-can.net.au (from CSL, the company that markets Gardasil in Australia)
- www.cervicalscreen.health.gov.au/internet/screening/publishing.nsf/Content/pubs2 (from the Australian Government's Department of Health and Ageing).



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