

Fact Sheet:

Human Papillomavirus (HPV) Vaccine (Gardasil® 9)

1. What is HPV and the complications of illnesses caused by HPV?

HPV is a highly contagious virus that is spread by skin-to-skin contact. It can infect the skin, mouth, rectum, anus, cervix, the skin on the penis, the area around the vagina and the lining of the vagina. HPV is one of the most common sexually transmitted infections and it is easily spread through any kind of intimacy that involves genital contact - not just intercourse. HPV commonly affects teenagers and young adults. It is estimated that 75% of sexually active Canadians will have at least one HPV infection over their lifetime. While most HPV infections clear on their own, some remain and create risk for a variety of cancers.

There are over 100 types of HPV with some leading to health problems such as warts on the hands and feet and genital warts. There is evidence that ongoing infection with some HPV types can lead to the development of pre-cancerous lesions progressing to cancers of the cervix, vulva and vagina in females, penile cancer in males and anal, mouth and neck cancer in both males and females.

HPV 16 and 18 have been estimated to cause up to 78% of all cases of cervical cancer.

2. What are the contents of the HPV vaccine?

The HPV vaccine (Gardasil® 9) is an inactive vaccine that helps protect against the diseases caused by HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58. It works best when given before the person becomes sexually active. When given at a young age, the immunity level achieved is known to be very strong. The number of doses recommended is dependent upon the age and the health of the person receiving this vaccine. The duration of protection following HPV vaccination is not yet known.

There is no mercury in the vaccine.

Immunization against HPV types 16 and 18 with HPV9 can prevent approximately 70% of anogenital cancers, 90% of high risk pre-cancerous cervical lesions, and 85% of anogenital warts.

HPV vaccination after the onset of sexual activity is still beneficial because the vaccine recipient is very unlikely to be infected with all HPV types in the vaccine. Sexually active individuals may already be infected with a vaccine HPV type and the vaccine will not have any therapeutic effect on pre-existing vaccine HPV type infections.

3. What are the possible reactions from the vaccine?

The most common side effect is soreness around the injection site. Minor side effects may include localized swelling, redness and itching at the injection site. Other side effects may include headache, fever, dizziness and/or nausea. It is not necessary to give acetaminophen (e.g. Tylenol® or Tempra®) with every immunization. However, if your child is experiencing discomfort or fever, acetaminophen can relieve these symptoms.

The most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life threatening and usually occurs within 15-20 minutes of receiving the vaccine. Procedures are in place for the nurse to quickly respond to anaphylaxis.

**Please remain in the waiting room for 15 minutes after immunization.
See a doctor or seek medical attention if any serious side effect occurs.
Report any serious reaction to the Public Health Nurse.**

4. Who should receive the vaccine?

- HPV vaccine is administered to boys and girls in grade 6 and individuals who missed the HPV immunization in Grade 6 since 2007
- HPV vaccine is recommended for adult males 18 to 26 years of age with the following risk factors:
 - having unprotected sex with multiple partners (male and female)
 - history of genital warts
 - individuals who missed the HPV immunization in Grade 6 since 2012
- HPV vaccine is recommended for all men who have sex with men (MSM) and for immunocompetent males and females who have HIV regardless of age
- HPV vaccine is recommended for adult females 18 to 45 years of age with the following risk factors:
 - having unprotected sex with multiple partners (male and female)
 - history of genital warts
 - an abnormal PAP test

5. When should the vaccine not be given?

- Those who are allergic to any contents of the vaccine should not receive this vaccine.
- Those who have had an anaphylactic reaction after getting a previous dose of the vaccine.
- Those who are ill and have a fever should return for their immunization at a later date.

Those who have impaired immune function may require an additional dose of HPV vaccine and should contact their Public Health Nurse for additional information.

6. What are the risks if the vaccine is not received?

HPV infection is very common, and while most HPV infections go away by themselves, those that persist are more likely to develop into cancer.

At least one in 10 Canadians will develop genital warts in their lifetime, and though warts caused by the virus can be treated, they are difficult to remove and often come back after treatment. Genital warts spread to two-thirds of people who come into contact with them and have significant psychosocial impact in those who are affected.

7. Should those who receive HPV vaccine continue to have regular screening done?

Yes, those who have received the HPV vaccine should have regular screening and testing done as recommended by their health care provider. For example, males and females who have been advised to have anal cancer screening are recommended to follow the advice of their health care provider to continue that screening.

Women should have Pap smears at the appropriate intervals. Even if a person is already infected with one or more vaccine HPV types, the vaccine will provide protection against the other types contained in the vaccine.

Revised May 2017