

Human Papillomavirus (HPV) Vaccine

COMMUNICABLE DISEASE CONTROL

What is human papillomavirus (HPV)?

Human papillomavirus (HPV) is a virus that can infect many parts of the body in both men and women. There are over 100 different types of HPV. Some are low risk, some are high risk.

- Some low-risk types of HPV can develop into warts that are generally not harmful. These include common skin warts and plantar warts (warts on the soles of the feet).
- Other low-risk types can cause genital warts. Genital warts are single or multiple growths or bumps that look like small cauliflowers.
- There are 15 known high-risk types of HPV that can cause pre-cancerous lesions and cervical cancer; they can also cause oral cancer and anal cancer.
- HPV infections can occur without any symptoms; it is easy for people who are infected to pass it on to others without knowing it.
- It is possible to have more than one type of HPV at a time.
- While most HPV infections go away with no treatment, some do not and can go on to cause cancer.

How is genital HPV spread?

- Some types of HPV can be spread during sexual contact with a person who is already infected.
- Sexual contact includes (skin-to-skin) contact with the vagina, vulva (the outside parts of a woman's genitals), penis, scrotum or anus.

- Any person who has sexual contact can get the virus.

How common is sexually transmitted HPV?

HPV is estimated to be one of the most common sexually transmitted infections (STIs) in Canada and around the world.

- Most people who are sexually active will have at least one HPV infection in their lifetime.
- People in their late teens and early 20s are the age groups most commonly infected with HPV.

How can someone reduce their risk for getting HPV and cervical cancer?

- The only way to completely avoid HPV infection is not to have sexual contact.
- Delay onset of sexual activity. The reason is because the lining of the reproductive tract in teenage girls is still developing, which makes it easier to get infected with HPV.
- Get immunized with the HPV vaccine to reduce the risk of infection, pre-cancerous lesions and cervical cancer.
- Maintain and improve your overall health and ability to fight diseases. Good health practices include: not smoking, eating a healthy diet, getting plenty of exercise and rest.
- Once your body matures and you choose to become sexually active, it is recommended that you see your doctor for regular checks to detect changes in your body before cancer has developed.

What is the link between HPV and cervical cancer?

HPV can cause changes in the cells on the cervix, called cervical dysplasia (abnormal cells). Over time, if these changes remain and are not treated, cancer of the cervix can develop.

Approximately 1,350 Canadian women are diagnosed with cervical cancer each year; about 400 women annually die from the disease. In Manitoba, approximately 45 women are diagnosed with cervical cancer each year and approximately 15 deaths are reported each year.

Reducing the rate of high-risk HPV infections should reduce the number of follow-up pelvic examinations needed by women who have precancerous changes in their cervix.

What are vaccines?

Vaccines are also called needles or immunizations. Vaccines help your immune system recognize the germs that cause diseases and fight them.

In Manitoba, all immunization is voluntary.

What is the HPV vaccine and how effective is it?

HPV vaccines have been in development for many years. When this vaccine is given before being exposed to HPV, it is highly effective in preventing infection from two of the HPV high-risk types. These high-risk types (Type 16 and Type 18) account for about 70 per cent of cervical cancers. The vaccine also protects against two low-risk types (Type 6 and Type 11) of HPV, which cause about 90 per cent of all genital warts.

Is the HPV vaccine safe?

- Yes, the vaccine is considered safe, but as with all vaccines, adverse events may occur.
- Health Canada has done a scientific review of the quality, safety and effectiveness of the vaccine and has approved it for use. Once a vaccine is in use, Health Canada and the Public Health Agency of Canada continue to monitor its use. Over time, more will be known about the long-term effects of the vaccine.

- The National Advisory Committee on Immunization has recommended the use of this vaccine, based on its assessment that the potential benefit significantly outweighs the potential harm.
- You cannot get HPV from the vaccine as it does not contain a live virus.
- The vaccine does not contain thimerosal (a preservative) or antibiotics.

Why is the HPV vaccine recommended?

The goal of the HPV immunization program is to reduce the risk of cervical cancers and precancerous lesions in women.

Who should receive the vaccine?

- The National Advisory Committee on Immunization recommends the vaccine for females from the ages of nine to 26 years.
- The vaccine works best when it is given to young women before they start having sexual contact.
- It does not work as well for women who have already been exposed to the viruses.

Who is eligible for the vaccine, at no cost, in Manitoba?

- All females entering Grade 6, beginning in the 2008/2009 school year will be offered the vaccine.
- This voluntary immunization program will continue to be offered every year to girls in Grade 6, whose parents/legal guardians have consented to their child receiving the vaccine.

Who should not receive the vaccine?

- Females under the age of nine or over the age of 26
- Anyone who is allergic to yeast or to any of the ingredients listed in the vaccine package information
- Pregnant women
- Males (the vaccine is not currently licensed or recommended for use in males, but studies are underway to see if this will be an option in the future.)

How is the HPV vaccine given?

The vaccine is given as an injection. A needle is given into the muscle in the upper arm.

How many doses are required?

The vaccine is given in a series of three doses over several months during the school year. All three doses should be given within a one-year period to get the full benefits of the vaccine.

Are additional doses required?

Additional booster doses are not recommended at this time; future recommendations will be based on scientific evidence.

Can the vaccine be given at the same time as other vaccines?

Yes. The vaccine can be given at the same time as most other vaccines. When one or more vaccines are given at the same time, they are given in separate arms.

What are the possible common side effects?

The most commonly reported side effects of this vaccine are:

- pain, swelling, itching and redness at the injection site
- fever, nausea, dizziness, headache and vomiting

What should you do if side effects occur?

- You may give Acetaminophen (Tylenol® or Tempra®) for fever. **Never** give acetylsalicylic acid (ASA or aspirin) to children.
- Placing a cold, damp cloth on the injection site may help ease swelling and minor pain.
- If other symptoms continue, contact your health care provider (nurse or doctor).

What are the rare side effects?

As with any vaccine or drug, severe, allergic, life-threatening (anaphylactic) reactions may occur with symptoms such as:

- difficulty breathing,
- wheezing (bronchospasm), and
- hives or rash.

As with other vaccines, side effects that have been observed after vaccination include:

- swollen glands (neck, armpit or groin),
- Guillain-Barré syndrome, a rare form of paralysis that is usually temporary has been reported but a confirmed link to the vaccine has not been established.

For additional information on other rarely reported side effects, please consult your public health nurse or doctor.

Report any serious or unusual side effects to your doctor or public health nurse. Unusual events that occur after a vaccine is given are recorded and monitored in Manitoba and across Canada.

Since the vaccine does not protect against all types of HPV that cause cancer of the cervix, women who receive the vaccine and become sexually active should have a Pap test at least every two years.

Recommended resources

1. Manitoba Health and Healthy Living, Communicable Disease Control Branch website
www.gov.mb.ca/health/publichealth/cdc/index.html
2. The Public Health Agency of Canada
 - a. *It's Your Health HPV*
www.hc-sc.gc.ca/hl-vs/iyh-vsv/diseases-maladies/hpv-vph-eng.php
 - b. *What everyone should know about HPV*
www.phac-aspc.gc.ca/std-mts/hpv-vph/hpv-vph-qaqr_e.html
3. Manitoba Cervical Cancer Screening Program
www.cancercare.mb.ca/home/patients_and_family/prevention_and_screening/

Information about the shots you or your children receive may be recorded in the Manitoba Immunization Monitoring System (MIMS). This computerized database allows your doctor, your child's doctor or your public health nurse to find out what shots you or your child have had or need to have. Information collected in MIMS may be used to produce vaccination records, or notify you or your doctor if someone has missed a particular shot. Manitoba Health and Healthy Living may use the information to monitor how well different vaccines work in preventing disease. If you need information on the shots that you or your child has received, contact your doctor, your local public health unit or nursing station.

For more information

Talk to your doctor or public health nurse, or call Health Links-Info Santé in Winnipeg at 788-8200; toll-free elsewhere in Manitoba 1-888-315-9257.

Local Public Health Unit Stamp