Human Papillomavirus (HPV) Vaccine

What is the human papillomavirus (HPV) vaccine?

HPV vaccine prevents cervical cancer and genital warts. It is much safer for your child to get this vaccine than it is for them to become infected with HPV.

HPV is the name of a family of viruses with over 100 different types that can skin warts, genital warts and certain types of cancer, most commonly cervical cancer. HPV causes about 99% of cervical cancers. HPV infection is very common and is spread through sexual contact. Seven out of ten Canadians can expect to be infected with HPV over their lifetime.

The HPV vaccine provides protection against four types of HPV virus:
- Types 16 and 18 cause about 70% of cervical cancers
- Types 6 and 11 cause about 90% of genital warts

Some HPV infections can lead to changes in the cells of the cervix and cervical cancer. Each year in Alberta, 180 cases of cervical cancer are diagnosed and about 40 women with the disease die.

What are the symptoms of HPV?

Most HPV infections do not cause symptoms and usually go away by themselves. It may take one to two years for the infection to disappear. However, some HPV infections do not go away and can lead to cervical cancer. Cervical cancer is detected by cervical cancer screening with a Pap test.

Who should be immunized with this vaccine?

HPV immunization is offered free of charge to all girls in grade five. The vaccine is given at school as a series of three doses over a six month period. It is administered at the same time as hepatitis B vaccine that is routinely offered to all grade five students in Alberta. Parental or guardian consent is required before the vaccine can be administered to your child at school.

The HPV vaccine is very effective in preventing four types of HPV infection. In studies, highest immune responses were seen in younger girls between nine and 14 years of age. Recent studies have indicated that the HPV vaccine provides good protection for at least five years after immunization. Studies are ongoing to determine if protection will be lifetime or if booster doses will be needed in the future to ensure long-term protection.

Who should [not] be immunized with this vaccine?
- Anyone who has had a severe allergic reaction (anaphylaxis) to a previous dose, or an ingredient of, the HPV vaccine in the past.

Talk to a public health nurse before getting this vaccine if your child:
- Has any severe allergies.
- Is sick with something more serious than a cold or a fever.
- Has a weakened immune system.
Is this vaccine safe?

Yes, this vaccine is safe. Your child cannot get HPV infection from the vaccine. In Canada, vaccines must undergo laboratory and field-testing and pass a rigorous licensing procedure with the federal government before they are introduced. Once a vaccine is approved, every lot is tested for safety and quality. Also, side effects are continuously monitored.

What are the side effects of this vaccine?
Some people may have mild side effects such as pain, redness, itchiness and swelling at the place where the needle was given. Less commonly, a slight fever, nausea, dizziness, headache or vomiting may occur. Side effects are usually mild to moderate and only last for a day or two.

Fainting has infrequently been reported following HPV immunization. Fainting also occurs infrequently with other vaccines particularly when they are given to adolescents.

Severe allergic reactions (anaphylaxis) are rare, occurring at an estimated rate of approximately one report per 1,000,000 doses of vaccines distributed in Canada.

What should you do if your child has a reaction to this vaccine?

- For pain or swelling where the needle was given, apply a cool moist towel to the area for about 15 minutes. Repeat as needed.
- Use acetaminophen (e.g., Tylenol® or Tempra®) as directed on the bottle if your child has pain or a fever (temperature over 38 C or 100.4 F).

Aspirin® (ASA) is not recommended for persons under 18 years of age because of the increased risk of Reye’s syndrome.

As with any vaccine, unexpected or unusual reactions can occur. If your child has an unusual reaction, speak with your local public health nurse or call Health Link Alberta:

- Calgary: 403-943-5465
- Edmonton: 780-408-5465
- Toll free 1-866-408-5465 elsewhere in Alberta

This phone is answered 24 hours a day, 365 days a year.

Will the vaccine replace cervical cancer screening (Pap tests) in the future?

No, cervical cancer screening is still recommended for women including those who have received the HPV vaccine. Not all types of cervical cancer are caused by HPV types represented in the vaccine. Cervical cancer screening will continue to be important in the early detection of pre-cancerous and cancerous changes to the cervix.

For more immunization information:

- Talk to your local public health nurse
- Or visit the Alberta Health website at www.health.alberta.ca

The World Health Organization estimates that immunization prevents between 2–3 million deaths per year worldwide.

Protect your children, yourself and others – immunize!