

Questions – Answers HPV Vaccine

What is HPV?

- Human papilloma virus (HPV) is one of the most widespread viruses in the world. Between 70% to 80% of the population will be infected by HPV through their lifetime. There are almost a hundred types of HPV that can infect different parts of the body.
- You can be infected with more than one type of HPV at a time, and more than once during your lifetime.
- **HPV is the cause of almost 100% of cervical cancers** and can also cause anal and genital warts.

How to avoid HPV and its complications?

- **Through vaccination:** to prevent HPV types associated with cervical cancer and genital warts;
- Through screening (Pap test): to detect abnormal cells in the cervix;
- By reducing the number of sex partners: the higher the number of sex partners, the greater the risk of getting HPV;
- Condoms reduce the risk of HPV transmission and should always be used when having sex. However, since they do not cover the skin around the genitals, HPV can still be transmitted.

What is the HPV vaccine?

- The vaccine used in Québec's vaccination program protects against genital warts caused by HPV types 6 and 11, and against cervical lesions caused by types 16 and 18. The role of the vaccine is to produce protective antibodies against these four types of HPV. It cannot cause HPV infection. On the other hand, it does not provide protection against any other STI. There is another vaccine that provides protection against HPV types 16 and 18, but it is not offered at no charge.

Is the vaccine effective?

- If a person is not infected with any of the virus types contained in the vaccine, protection against the types that cause cervical cancers is almost 100%, and protection against the types that cause genital warts is 99%. This is why vaccination is recommended before onset of sexual activity. However, a person can be vaccinated even after becoming sexually active because it is unlikely she will already be infected with all four types of HPV at the same time.

How many doses are needed?

- The vaccination program administered in Quebec schools consists of 2 doses in grade 4 elementary school, and a third dose in Secondary 3;
- Whether the person is an adolescent or an adult, 3 doses of vaccine administered over a period of 6 months is recommended.

How long does protection last?

- Vaccine protection lasts for several years. Studies are underway throughout the world to assess long-term protection. If necessary, a booster dose will be administered later to maintain protection.

Who can get the vaccine for free?

- In Quebec schools, the HPV vaccination program started in 2008. The vaccine is offered free of charge in school to all girls in grade 4 elementary school, and a second dose in Secondary 3 for the next five years. Parents have to sign and return the consent form to their children's school.

Does the vaccine have any side effects?

- HPV vaccine is safe. Administration of the vaccine causes few side effects. A local reaction at injection site (pain, redness, soreness or swelling) is the most common side effect. Other symptoms such as fever, headache, nausea, vomiting, insomnia, and joint pain may appear. Symptoms can be relieved by applying a cold wet compress to the injection site and taking acetaminophen or ibuprofen. Severe allergic reactions are very rare. If a severe allergic reaction were to occur, it would begin within minutes and the person administering the vaccine could treat it. This is why it is recommended to stay on site for at least 15 minutes after the vaccine is administered. Other, rarer reactions have been reported, but have not been proved to be caused by the vaccine.

Does the vaccine replace cervical cancer screening?

- No. The vaccine does not protect against all cervical cancers. Screening (Pap test) is the only means of detecting abnormal cervical cells, which could later evolve into cervical cancer. A Pap test involves an examination of a woman's internal sex organs. This examination is not required before becoming sexually active.

Why should young women get vaccinated?

- The vaccine is very effective at preventing cervical cancer and condylomas;
- Like most women, young women risk being exposed to HPV during their lifetime;
- The vaccine is more efficient when administered before becoming sexually active;
- Young women between the ages of 9 and 14 develop a great immune response to the vaccine.

What are the symptoms of HPV infection?

- Most of the time, someone who is infected with HPV has no symptoms or lesions and can spread the virus without knowing it. Some types of HPV cause anal and genital warts (also called condylomas) that can be rather unpleasant and embarrassing and can require painful treatments and several visits to the doctor. In most people, the infection disappears by itself with time.

What complications can be caused by HPV infection?

- In certain cases, the infection can continue for months or years. This occurs especially with HPV types 16 and 18, which can infect the cells of the cervix and cause precancerous lesions. In Québec, about 68,000 women must be treated by specialists every year due to anomalies detected by a cervical cancer test (Pap test). When they go undetected, pre-cancerous lesions can become cancerous over a number of years. HPV types 16 and 18 cause 70% of cervical cancers. Each year in Québec, some 325 women learn they have cervical cancer and 80 women die of it. Other forms of cancer are connected to HPV, but they are rare in Québec.

Content adapted from *Vaccination against human papilloma virus (HPV), What is HPV?, Quebec Health and Social Services Agency.*