

HPV VACCINATION – offering a wider protection for cervical cancer

Two vaccine brands are available to protect females against the types of HPV that cause most cervical cancers. One of these vaccines also protects against most genital warts and is also used in boys. Both vaccines are recommended from the age of 9 years and for older females who did not get any or all the shots when they were younger. The vaccine has been shown to work better when given at a young age especially before becoming sexually active, compared to when it is given in adults. It is important to note that the HPV vaccine does not completely protect against all HPV infection and it is not a treatment for HPV or cervical cancer. Smear tests should still be carried out in sexually active vaccinated women.

HPV vaccine is part of the National Immunisation Schedule and is given free of charge to girls born from 2000 onwards on reaching their 12th birthday. As from this year, the vaccine which is being offered on the national schedule covers for 9 HPV antigens - HPV 6/11/16/18/31/33/45/52/58 and hence can offer direct and durable protection against the HPV types that are most prevalent globally but also in Malta. This offers a wider protection than the previously offered vaccine which covered for 16 and 18 HPV antigens only.

Malta enjoys one of the best coverage rates for HPV vaccination in Europe with almost 90% coverage rate. This is attributed to the way that the vaccination programme is run. Just before their 12th birthday, parents of young girls are sent an invitation letter for them and their daughter to attend their Health Centre with an appointed date and time for the vaccination. HPV vaccination takes place at Mosta, Paola and Floriana Health Centres in the afternoon (2 and 7pm) and on Saturday mornings (8am to noon) so that it does not interfere with school times. During the consultation, parents and the child herself are given the opportunity to ask questions about the vaccine and nurses also give related sexual health advice. This model gives an excellent opportunity for sexual health promotion involving the parents.

Q. What is HPV?

A. Human papillomavirus (HPV) is the name of a group of viruses that includes more than 100 different types. More than 40 of these viruses infect the genital area.

Some of these viruses are called "high-risk" types. They can lead to pre-cancerous lesions and cancer of the cervix. HPV infections are transmitted through skin-to-skin contact. Genital HPV infections are common and are transmitted through sexual contact. The viruses that cause genital HPV infections may be present on the genitals and the surrounding area, including around the anus. In most cases, contact with the virus does not cause any harm because the immune system usually gets rid of the infection. It is also possible to be infected with more than one type of HPV.

HPV can be spread through sexual contact. Having sex just once could also lead to a genital HPV infection. Therefore, infection with HPV does not necessarily mean that a person

has many sexual partners. However, many sexual partners will increase the risk of becoming infected, as will starting to have sex at a young age.

Most infected people have no symptoms and are unaware that they are infected. They can then unintentionally transmit the virus to a sex partner. Rarely, a pregnant woman passes HPV to her baby during vaginal delivery. About 10% of women infected with HPV develop persistent HPV infection and are at greatest risk for developing cervical cancer. Persistent infection with high-risk types of HPV is associated with almost all cervical cancers. There is no cure for HPV infection, and it is possible that the virus remains in a "sleeping" state and could be reactivated years later.

Q. How can one reduce risk of HPV infection?

A. The surest way to eliminate risk for HPV infection is to refrain from any genital contact with another individual. For people who are sexually active, a long-term, mutually monogamous relationship with an uninfected partner is the strategy most likely to prevent future genital HPV infections. However, it is difficult to determine whether a partner who has been sexually active with another partner in the past is currently infected.

Risk of HPV infection can also be reduced by HPV vaccination.

Q. Why is HPV vaccination important?

A. HPV is the main cause of cervical cancer in women. HPV is a common virus that is easily spread by skin-to-skin contact during sexual activity with another person. It is possible to have HPV without knowing it, so it is possible to unknowingly spread HPV to another person. HPV vaccine is a strong and useful weapon in prevention from becoming infected with this virus. This safe, effective vaccine is available to protect against some of the most common HPV types and the health problems that the virus can cause.

Q. Who should get the HPV vaccine?

A. To optimise the effect of a HPV vaccination programme, a high proportion of the invited girls need to get vaccinated before the start of any sexual activity. The vaccine is most effective in young people who have not yet acquired any of the HPV types covered by the vaccine. Also, the vaccine produces higher levels of antibody that fight infection when given at this age compared to older ages.

Q. How effective is the HPV vaccine?

A. The HPV vaccine is highly effective in preventing infection with the types of HPV it targets. Studies have shown that it can prevent nearly 100 percent of the precancerous cervical cell changes caused by the types of HPV targeted by the vaccine.

Q. How long does the vaccine last? Will there be need for a booster shot?

A. To date, there is not sufficient evidence that determine the length of time for which the vaccine remains effective after vaccination or to show the need for booster doses.

Q. Does the HPV vaccine protect against all types of HPV?

A. No. Although there are more than 100 types of human papillomaviruses, only a few are covered in the HPV vaccine. However, the types covered by the vaccine are responsible for at least 90% of cervical cancers. Regular screening of the cervix using smear test will remain necessary even in women who have been vaccinated with the HPV vaccine.

Q. Do women still need to do a smear test if they've been vaccinated against HPV?

Yes. Women should continue to perform regular cervical cancer screening since the vaccine does not provide protection against all the types of HPV that cause cervical cancer. Furthermore, women may not receive the full benefits of the vaccine if they receive the vaccine **after** they have already acquired a HPV infection.

Q. Is the HPV vaccine safe?

A. The vaccine has been tested in thousands of people around the world. These studies showed no major serious side effects. Mild side effects may include pain at the injection site, redness or swelling at injection site, mild or moderate fever, and itching at the injection site. These problems do not last long and usually subside on their own.

Q. Can HPV vaccine cause HPV infection?

A. No. HPV vaccine contains the inactivated virus so it cannot cause disease-like symptoms or HPV disease.

Q. Can the HPV vaccine be given with other vaccines?

A. Yes, the vaccine is made from the inactivated virus, so it can be given safely in combination with other vaccines and there is no need to leave a time interval between vaccines. Preferably different vaccines should be administered to different body sites.

Q. Who should not get HPV vaccine?

A. Persons who are allergic to any component of the vaccine or have suffered a severe allergic reaction following a dose of the vaccine should not be vaccinated or continue the vaccination programme. The vaccine should be postponed in case of an acute febrile illness.

Q. What does the HPV vaccine not cover?

A. The HPV vaccine does not:

- protect against all cases of cervical cancer or replace the need for regular cervical screening
- treat existing cervical cancer
- treat an HPV infection that is already present
- protect against illnesses or conditions, including cancers, that are caused by types of HPV other than those that the vaccine was produced to offer protection against.