FAQ on HPV Vaccines

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1) Are HPV vaccines safe and effective?

All vaccines have to undergo thorough clinical trials and monitoring before being approved for prescription. FDA has licensed the vaccines as safe and effective. Both vaccines were tested in thousands of people around the world. These studies showed no serious side effects. Common mild side effects include pain where the shot was given, fever, headache, and nausea. There have been recent reports about girls who have died after being vaccinated. Subsequent analysis has shown that the deaths were coincidental and are not linked to the vaccine. Brief fainting spells and related symptoms (such as jerking movements) can happen after any medical procedure, including vaccination. Sitting or lying down for about 15 minutes after a vaccination can help prevent fainting and injuries caused by falls. As with all vaccines, CDC and FDA continue to monitor the safety of these vaccines very carefully.

2) How are HPV vaccines administered?

The vaccines Cervarix and Gardasil are given as intramuscular injections, 3 doses over a 6 month period. For Cervarix, the 2nd dose is given a month after the first dose and for Gardasil, the 2nd dose is given 2 months after the first dose. The 3rd dose for both vaccines are given 6 months after the first dose. Women are advised to take precautions to avoid pregnancy until the 3 doses are completed.

3) Should pregnant women be vaccinated against HPV?

The vaccines are not recommended for pregnant women although studies show no difference in pregnancy outcome and in babies born to women who got the HPV vaccine while they were pregnant. Getting the HPV vaccine when pregnant is not a reason to consider ending a pregnancy. Women who are found to be pregnant before completion of the three dose regime are advised to defer completion of the regimen until pregnancy is over. It is not known whether the antigens or antibodies are excreted in human milk. Hence caution should be exercised when the vaccine is administered to nursing women.

4) Who should receive the HPV vaccine?

Anyone who is allergic to any of the ingredients in the vaccine or develops an allergic reaction after receiving the first dose of the vaccine should not receive the vaccine. Any women who is pregnant should not be given the vaccine.

5) If a woman is sexually active, would the HPV vaccine still be effective?

Yes, the vaccine is still effective. Thousands of women in the clinical trials for vaccination were already sexually active and the vaccine prevented all the precancerous lesions caused by new infections with HPV 16/18. However, vaccination does not protect against any HPV infection you may already have. The vaccines are prophylactic and not therapeutic vaccines.

6) Can a woman with a previously abnormal Pap smear receive HPV vaccination?

Yes, she can still be vaccinated. There are a number of reasons for an abnormal smear test result - which may or may not be a result of an HPV infection. Even if a patient has had an abnormal smear in the past caused by an HPV infection, this does not mean that she won't benefit from the protection a vaccine may offer. However, the previous abnormal pap smear needs to be followed up appropriately.

7) If a woman is sexually active, does she need HPV DNA testing before vaccination?

No, it is not necessary to test for the high risk HPV subtypes before getting the vaccine. Current HPV testing methods are not type-specific, so a woman will not know which HPV type she is infected with. It is also rare for a woman to be infected with both HPV 16 and HPV 18. Therefore, if she has an HPV 16 infection, she will still benefit from protection against HPV 18. Once her HPV 16 infection clears, the vaccine will protect against future HPV 16 infections. Vaccination will not treat the existing infection, but will prevent future infections.

8) For how long will HPV vaccines be effective in protecting? Is a booster vaccine required?

Current studies have shown that the vaccines are still effective after 10 years of evaluation and mathematical modelling data has predicted the vaccine to last for at least 20 years. Current recommendations do not show a need for booster doses but results from future studies will provide more data.

Do women still need regular Pap smear screen after they receive the HPV vaccine?

Yes, it is very important to continue with pap screening after vaccination. The current vaccines do not include all oncogenic types although they would reduce 80% of the disease burden. Screening and vaccination are complementary strategies. Neglecting screening because vaccination programmes are in place could paradoxically lead to an increase in cervical cancer.

10) Can the use of condoms reduce the risk of HPV transmission?

Condoms can reduce the risk of transmission of HPV between partners but are not fully effective. Condoms also cannot reduce transmission in areas of exposed skin not covered by the condom, for example in the vulva, perineum and scrotum, hence these areas can still be a source of infection.

11) Is the HPV vaccine recommended in men and boys?

One of the available vaccines is licensed to be safe and effective for males ages 9 through 26 years. Boys and young men may choose to get this vaccine to prevent genital warts. Men and boys are generally not included in immunisation programmes because it has been shown not to be cost effective to immunize men. Vaccinating women alone could reduce the prevalence of infection by 30% and that the additional vaccination of men would only further reduce the prevalence by 44% and the cost of immunising men would need to be justified. However, parents of boys and young men interested should speak to their doctor if they are keen to have the vaccine.