Human Papillomavirus (HPV) Vaccine



HPV Vaccine Benefits

Protects against infections caused by *human papillomavirus* (*HPV*). HPV is the most common sexually transmitted infection. It causes cervical cancer in women. The vaccine also protects against genital warts and cancers of the anus, vagina and vulva.

Saves lives: Approximately 12,000 new cases of HPV-associated cervical cancer are diagnosed every year in the US. From 2001 to 2010, incidence and rates of death from cervical cancer have decreased by nearly 2% *each year*.

Who should receive this vaccine?

The vaccine is recommended for women and men ages 9-26 years old. In men and women, the vaccine prevents genital warts and anal cancer. In addition, it protects against cervical cancer in women. It is especially important for high risk groups and for people with a compromised immune system to be vaccinated. When given to males, the vaccine protects their future sexual partners from all of the above complications of HPV infection.

Is the HPV Vaccine safe?

A study looking for adverse vaccine events in 1 million girls found no association between vaccination and neurological, autoimmune or venous thromboembolic events. HPV vaccine does not cause Guillain-Barre syndrome. Ongoing safety investigations are being completed by several groups.

Are there any side effects?

Some recipients will experience pain at injection site, fainting, headache or nausea. Mild fever (100 ° F) occurs in about 10% of people. These resolve quickly and do not cause any long term problems. People who have had a severe allergic reaction to other vaccines should not receive the vaccine.

Can I wait to vaccinate my child?

Vaccination is preventative and should be given before a person is exposed to the virus. However, it is not dangerous for those who have already been exposed. The vaccine has been approved for 6 years now, and has shown to last at least that long. After a series of three shots, protection may last a lifetime, therefore, it is most effective if given long before a person may be exposed.

Where does it come from?

The HPV vaccine is made in a lab using particles from the virus. It is not capable of causing an infection and is safe for people with immune deficiencies.

Do any of these sources have ties to pharmaceutical companies?

The sources used for this handout are the Center for Disease Control (CDC), Children's Hospital of Philadelphia (CHoP) and articles from well-regarded medical journals. While some employees at these organizations have ties to pharmaceutical companies, they are upfront about these connections.

References:

<u>A Look at Each Vaccine: Human papillomavirus vaccine.</u> *Children's Hospital of Philadelphia.* 2014. http://www.chop.edu/service/vaccine-education-center/a-look-at-each-vaccine/hpv-vaccine.html

Autoimmune, neurological, and enous thromboembolic adverse events after immunization of adolescent girls with quadrivalent human papillomavirus vaccine in Denmark and Sweden. Arnheim-Dahlstrom et al. BMJ. 2013.

<u>No association of HPV vaccination with serious adverse events.</u> Caskey, R. **The Journal of Pediatrics.** 2014. 164(5):1239. <u>Vaccine Information Statements (VIS).</u> **Center for Disease Control.** 2014. http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hpv-gardasil.html