Facts About HPV

The infection

- HPV is an infection caused by a virus with over 100 different variations or subtypes
- A virus is an organism which must enter a living cell and "hijack" the cell's machinery in order to make more virus
- 30 out of the 100 HPV subtypes are sexually transmitted by direct genital contact during vaginal or anal intercourse
- "Low risk" subtypes of sexually transmitted HPV (such as HPV-6, HPV-11) cause 90% of genital warts
- HPV infection is currently the most prevalent sexually transmitted disease; likely as common in men as in women
- Sexually transmitted HPV infection usually has no signs or symptoms
- HP virus infects cells of the cervix, vagina, anus, vulva, head of penis, mouth and throat
- 70% of those with sexually transmitted HPV infection will clear the virus from the body through the immune system spontaneously after 18 months and 90% after two years
- The younger the person with sexually transmitted HPV infection the shorter the time the body takes to clear the virus and the higher the likelihood of complete clearance
- HPV DNA testing is available but reliable only for identifying CURRENT INFECTION not past HPV exposure

HPV and cervical cancer

- "High risk" subtypes of sexually transmitted HPV (such as HPV-16,HPV-18) cause 70% of cervical cancer in women, genital and anal cancers in men
- Most genital HPV infections do not cause cervical cancer
- Persistent infection with "high risk" subtypes of HPV and infection with multiple HPV subtypes are the main risk for cervical cancer
- Cervical cancer causes approximately 1% of all cancer deaths in America
- A Pap test is the primary screening tool for cervical cancer
- The time required from sexually transmitted HPV infection of "high risk" subtype to development of cervical cancer is 10 years or greater
- In Pennsylvania in 2003, there were 510 cases of cervical cancer and according to 2004 data, 154 deaths due to cervical cancer

Prevention

- the only way you can prevent getting an HPV infection is to avoid direct contact with the virus
- research studies have not confirmed that male latex condoms prevent transmission of HPV
- most people who don't have symptoms don't know that they have HPV and spread the virus to uninfected partners

The vaccine

- Cervarix (Glaxo-pending) and Gardasil (Merck) protect from high risk subtypes HPV-16 and HPV-18 for 4 years; duration of immunity is **NOT KNOWN**
- Vaccines offer NO PROTECTION for other "high risk" HPV subtypes (currently screening for 15 subtypes) which cause 30% of cervical cancers
- The vaccine will **NOT PROTECT** against or **TREAT** infections in people who have already had an infection with HPV-16, HPV-18, HPV-6 or HPV-11
- Vaccines ONLY EFFECTIVE if administered before people are exposed to HPV
- When researching the effectiveness of the vaccine Merck utilized adult data to "predict" the immune response in children which does not meet scientific research standards. No evidence the vaccine prevents anything when given to children ages 9-12.

- Maximum median follow up in **ANY** of the studies was 4 years. Sexually transmitted HPV requires 10 or more years from time of infection to development of cervical cancer.
- Vaccine is **first and only** for sexually transmitted disease under consideration for school mandate. Unlike measles and all other communicable diseases requiring vaccination for school you become infected with HPV **only** through vaginal or anal intercourse.

Scenerios

1.Elaine Jones is 11 years old when she receives her 3 series of Gardasil costing \$360+. Mom believes this protects Elaine from HPV. At 17 six years after receiving Gardasil, Elaine becomes sexually active with not just one partner but four. At age 22 following a routine Pap smear she is told she has changes due to HPV. How can it be? **Duration of vaccine immunity is unknown**.

2.12 year old Brenda Bringard lives in a state which mandates HPV vaccine for all girls entering 6th grade. She went to her family physician with her mother for counsel regarding the vaccine. After reading the literature that discussed the advantage of "life saving protection against cervical cancer" the mother agreed that Brenda should receive the vaccine. At the time, Brenda did not reveal to her mother or the physician that she was sexually active. Believing she was "covered" she was shocked at age 27 when her physician informed her that pre-cancerous cells were evident in her Pap testing. Vaccine only effective if administered before exposure to HPV.

References

"CDC doctor opposes law for vaccine", Gregory Lopes, The Washington Times, February 27, 2007.

"High risk for cancer seen among women infected with multiple HPV types", *American Journal of Clinical Pathology*, July 10, 2006.

"OBGYN Questions HPV Vaccine Gardasil", Clayton Young, M.D., F.A.C.O.G., letter to the editor in response to Opinion 344 published in September 2006, *Obstetrics and Gynecology.*

"Human Papillomavirus and Genital Warts", National Institute of Allergy and Infectious Disease, National Institute of Health, August, 2006.

"Genital HPV Infection-CDC Fact Sheet", U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

"Frequently Asked Questions About Human Papilloma Virus (HPV) Vaccines", American Cancer Society, Inc., 2007.

"Human Papillomavirus Vaccines: Questions and Answers", National Cancer Institute (NCI) resources.

We support 1. teaching abstinence to PREVENT HPV, 2. parental consent not government mandate for possible protection with the vaccine and 3. available, accessible, affordable Pap testing for the detection of HPV.

Diane Gramley President American Family Association of Pennsylvania

Nancy Staible State Director Concerned Women for America of Pennsylvania

Fran Bevan President Pennsylvania Eagle Forum