

Society for Adolescent Health and Medicine Position Statement

Human Papillomavirus (HPV) Vaccine: An Updated Position Statement of the Society for Adolescent Health and Medicine

HPV is the most common sexually transmitted infection (STI) worldwide, causing almost all cases of genital warts and cervical cancer.

Recommendation for Females

In June 2006, the FDA approved a three-dose quadrivalent HPV vaccine for use in females, and in October 2009, the FDA approved a three-dose bivalent HPV vaccine for females. The quadrivalent vaccine is indicated for the prevention of disease caused by HPV types 6, 11, 16 and 18 including cervical, vulvar and vaginal cancers and their precursors, as well as genital warts. The bivalent vaccine is indicated for prevention of disease caused by HPV 16 and 18 including cervical cancer and its precursors. Both vaccines are prophylactic and will be most effective when administered prior to HPV exposure. The updated recommendation for immunization of females is as follows.

On May 28, 2010, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention recommended that a three-dose HPV vaccine be administered routinely to all females 11 to 12 years of age, as well as 13- to 26-year-olds who were not previously vaccinated. Females as young as nine years of age may be vaccinated. The ACIP recommends vaccination with either the bivalent HPV vaccine or the quadrivalent vaccine for prevention of cervical cancers and precancers in 9- to 26-year-old females, and notes that both vaccines might provide protection against other HPV-related cancers in addition to cervical cancer, although there are currently only data sufficient to recommend the quadrivalent vaccine for protection against vulvar and vaginal cancers and precancers. The quadrivalent vaccine is recommended also for prevention of genital warts. Vaccination is recommended regardless of a previous history of HPV infection or abnormal Pap test result. Although use is not recommended in pregnancy, a pregnancy test is not necessary prior to administration of the vaccine. The Society for Adolescent Health and Medicine fully endorses the ACIP's universal recommendations for a three-dose HPV vaccine among females. If both vaccines are available, clinicians should discuss the options regarding the prevention of precancerous lesions and genital warts with their patients when deciding which vaccine to administer. Despite minor differences in dosing schedule, the ACIP has also recommended harmonization of the recommended dosing schedule with a 0, 1- to 2-month, and 6-month dosing schedule. The minimum interval between the first and second doses of vaccine is four weeks. The minimum interval between the second and third dose of vaccine is 12 weeks. The minimum interval between the first and third dose is 24 weeks. When starting the series with one product, that product should be used to complete the series when possible. If initial vaccine product is unknown or unavailable, available HPV vaccine may be administered; however, the bivalent product will not protect against infection with HPV types 6 and 11.

The Society for Adolescent Health and Medicine (SAHM) also supports the ACIP recommendation for continued Pap testing after vaccination. Routine Pap screening to detect cervical dysplasia is important after vaccination for the following reasons: despite some evidence for both bivalent and quadrivalent vaccines of cross-protection against several nonvaccine oncogenic HPV genotypes, an estimated 30% of cervical carcinomas are caused by HPV types not contained in either vaccine; vaccine recipients may not complete the full series prior to HPV

exposure; vaccine recipients may have been infected with one or more vaccine genotypes prior to immunization; vaccine failures may occur with any vaccine depending upon host factors including immunocompromise.

Recommendation for Males

On October 16, 2009 the FDA approved the quadrivalent vaccine for males between the ages of 9-26 years old for the prevention of genital warts caused by HPV types 6 and 11. On May 28, 2010, the ACIP recommended use of the quadrivalent HPV vaccine for males on a permissive basis, allowing but not universally recommending vaccination of males. The recommendation states that the quadrivalent HPV vaccine “may be given to males aged 9 through 26 years to reduce their likelihood of acquiring genital warts.” The ACIP also voted to have vaccine for males covered under the Vaccines For Children (VFC) Program, providing the vaccine free of cost through the age of 18 years for those who are uninsured, have Medicaid, or are underinsured and attend a federally qualified health center or a rural health center. The Society for Adolescent Health and Medicine recommends that clinicians consider the potential benefit of routine vaccination for all age-appropriate patients, regardless of gender, and further recommends routine use of HPV vaccination in males. There is a strong association between HPV infection and penile, anal and oropharyngeal cancers among males, and studies have demonstrated that the quadrivalent HPV vaccine is effective in preventing HPV infection and HPV-related precancers in males. Males may therefore benefit directly from HPV vaccination; in addition, their partners may derive indirect benefits from vaccination because of a decreased risk of exposure to HPV. The Society acknowledges that vaccination of males is not as cost-effective as vaccination of females as a means of preventing HPV-related cancer. However, mathematical modeling has shown that vaccination of males is more cost-effective when the rate of immunization among females is less than 80%. At this time, coverage rates among females are sufficiently low (less than 25% for the complete vaccine series) that vaccination of males may be cost-effective.

Recommendations for Education and Funding

In association with HPV vaccination, health providers must continue to educate male and female adolescent patients and their parents, as developmentally appropriate, about the need for continued STI prevention and surveillance, including the importance of consistent condom use among those who are sexually active. The Society for Adolescent Health and Medicine strongly supports the ACIP decision that male, as well as female, vaccination be covered by the VFC program, thus ensuring that cost need not be a barrier to HPV vaccination for uninsured and underinsured adolescents. The Society strongly encourages third party payors to cover the cost of HPV vaccination for both genders in order to avoid potential gender or socioeconomic disparities in immunization coverage.

For guidelines regarding implementation of adolescent immunizations please see [Adolescent Immunizations: A Position Paper of the Society for Adolescent Medicine](#) (PDF)

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