

Human Papillomavirus (HPV) Vaccine: A Position Statement of the Society for Adolescent Medicine

HPV is the most common sexually transmitted infection (STI) worldwide causing genital warts and nearly all cases of cervical cancer. On June 8, 2006, the FDA approved a three-dose HPV vaccine for use in females 9 to 26 years of age. The vaccine has been shown to be safe and effective in preventing infection with HPV types 16 and 18 (which cause approximately 70% of cervical cancers) as well as types 6 and 11 (which cause >90% of genital warts). As a prophylactic vaccine, it is most effective when administered prior to the onset of sexual activity. Although this is the first vaccine designated as pregnancy category B, vaccination is not recommended during pregnancy.

On June 29, 2006, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention recommended that the three-dose HPV vaccine be administered routinely to all females 11 to 12 years of age as well as 13-26 year olds who have not previously received the vaccine. Females 9-10 years of age may be vaccinated at the discretion of the provider. Vaccination is recommended regardless of a previous history of HPV infection or abnormal Pap test result. The Society for Adolescent Medicine fully endorses the ACIP recommendations for the three-dose HPV vaccine, and supports coverage of vaccination costs by third-party payors as well as federal and state programs that finance vaccination for low-income children.

The Society for Adolescent Medicine 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: an estimated 30% of cervical carcinomas are caused by HPV types not contained in the vaccine, vaccine recipients may not complete the full series or receive doses in a timely fashion, vaccine recipients may have been infected prior to vaccination and immunity may wane over time.

The Society for Adolescent Medicine also supports the current vaccine efficacy trials among males. Although vaccine safety and immunogenicity for males age 9-15 years have been established, no recommendation for males can be made at this time due to a lack of efficacy data. In association with HPV vaccination, adolescent health providers must continue to educate male and female adolescent patients and their parents, as appropriate, about the need for continued STI prevention and surveillance.

For guidelines regarding implementation of adolescent immunizations, please see "Adolescent Immunizations: A Position Paper of the Society for Adolescent Medicine" (http://www.adolescenthealth.org/PositionPaper_Immunization.pdf).

Author Disclosures

Lawrence S. Friedman, M.D., Speaker's Bureau for Merck and Speaker at a GlaxoSmithKline sponsored course; Jessica Kahn, M.D., Speaker at a Merck sponsored symposium; Amy B. Middleman, M.D., Speaker's Bureau for Merck, sanofi-pasteur, and GlaxoSmithKline; Susan L. Rosenthal, Ph.D., Grant recipient and member advisory board for GlaxoSmithKline, grant recipient (pending), member advisory board, and Speaker's Bureau for Merck, and consulting fees recipient from sanofi pasteur; and Gregory D. Zimet, Ph.D. has been a consultant and speaker for SciMed (a medical education company recipient of a grant from Merck) and a consultant and speaker for M2Communications (a medical education company recipient of a grant from GlaxoSmithKline).

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Position statement

School-Entry Vaccination Requirements: A Position Statement of the Society for Adolescent Medicine*

Vaccination is considered one of the greatest public health achievements in the U.S. and the world, leading to the virtual eradication of poliomyelitis in North and South America, and of smallpox worldwide [1]. To a large extent, the success of vaccination in this country is due to compulsory school vaccination laws, which have ensured widespread coverage and minimized vaccine-related health disparities [2–4]. Although these laws frequently have been challenged, U.S. courts have consistently upheld states' authority to require vaccination [5]. At the same time, in recognition of the need to balance public health concerns with the interests of parents, all states have mechanisms for parents to seek exemption for their children from vaccine requirements [6,7]. These provisions vary markedly from state to state. Some states allow only medical or religious exemptions, whereas others allow for relatively ill-defined philosophical exemptions. Similarly, although some states require parents to complete very little paperwork to exempt their children from vaccination, other states have complex procedures and require notarized letters. Research studies have demonstrated that when the grounds for exemption are liberalized, vaccine coverage drops and outbreaks of vaccine-preventable illness occur [6,8,9].

The original impetus for compulsory vaccination laws in the 19th century was to prevent the spread of smallpox among groups of children [2]. Most, but not all, vaccines required at school entry today also are for the prevention of contagious infections that can be easily transmitted from child to child. Current exceptions to this rule include tetanus and hepatitis B virus vaccines.

In 2006, the Association of Immunization Managers (AIM) released a position statement on school and child care immunization requirements that addressed several important issues [10]. AIM is a national organization that represents state, territorial and local immunization programs that receive direct federal grants from the Center for Disease Control and Prevention's (CDC) National Immunization Program. The AIM statement advocates a systematic, measured approach for the consideration of adding a vaccine to existing school-entry requirements and provides a basis for

this position statement from the Society for Adolescent Medicine.

The Society for Adolescent Medicine recognizes that school entry vaccination requirements have proven to be a successful public health strategy, and supports the following positions:

1. For any vaccine required for school entry there should be an adequate supply to vaccinate all children and adolescents who are subject to the requirement and a means to ensure that those children and adolescents without adequate health insurance coverage can receive the vaccine.
2. Exemption options should not be modified on a vaccine-by-vaccine basis. That is, exemption policies, which are determined on a state-by-state basis, should not be uniquely modified for any specific vaccine, but should be applied uniformly across all required vaccines.
3. Legislation to enact additional school-entry requirements for vaccines should proceed systematically with open discussion among health experts, school administrators, and legislators. Consideration should be given to how the new vaccine requirement fits into established compulsory vaccination policy.
4. Except in emergency situations (e.g., pandemic flu), sufficient time should be given after a new vaccine becomes available before school-entry requirements are enacted in order to: a) allow medical providers and the general public an opportunity to become comfortable with the new vaccine; b) enable health insurance companies and public funding mechanisms to develop vaccine coverage policies; and c) establish the infrastructure required at a state and local level to implement both vaccine delivery and the monitoring of compliance with the school-entry requirement.
5. Vaccines chosen to be part of mandatory vaccination for school entry must be: a) approved by the CDC Advisory Committee on Immunization Practices (ACIP); b) safe and effective against an infection that has significant morbidity and mortality, and c) shown

either to reduce person-to-person transmission of disease or reduce the overall burden of disease in the community or both.

6. Policy decisions regarding new school-entry vaccination requirements and the timetables for implementing such requirements should be based on careful consideration of the issues noted in this statement. These decisions should not be influenced by monetary support or other pressures exerted by private industry or any other groups with a financial stake in the promotion of, or opposition to, the vaccine.

*Policy statement approved by the Society for Adolescent Medicine Board of Directors, September 2007.

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