The human papillomavirus (HPV) is a sexually transmitted infection (STI) which most women acquire at some point in their lives. It is the most common STI in the United States. Some strains of HPV can cause cervical cancer, which is the number one cause of cancer-related deaths among women in low-income countries. In 2005, there were more than 270,000 deaths from cervical cancer worldwide, 85% of which were in the developing world. Highest incidence and mortality rates occur in sub-Saharan Africa, Southeast Asia, and Latin America. The majority of women with cervical cancer in the developing world are diagnosed at young ages and in late stages of the disease, giving them a low likelihood of long-term survival.

In June 2006, the United States Food and Drug Administration (FDA) approved Gardasil, Merck’s HPV vaccine, for sales and marketing to girls and women ages 9 to 26. The vaccine is currently approved for sale in 85 countries. Another HPV vaccine produced by Glaxo-Smith Kline, Cervarix, has been approved in the European Union, Australia, and Kenya, with applications pending elsewhere.

The vaccine is most effective if administered in pre-adolescence prior to sexual activity. The U.S. Centers for Disease Control and Prevention (CDC) recommends that girls ages 11 and 12 receive the HPV vaccine. Both Cervarix and Gardasil have been proven at least 95% effective in preventing infection with HPV types 16 and 18, when administered prior to sexual debut. These two types of HPV are responsible for about 70% of cervical cancer deaths. The vaccines do not protect against all types of HPV. The U.S. cost for the vaccine is $360 for the complete series of three injections, plus any administration charges.

THE HPV VACCINE IS A POSITIVE DEVELOPMENT FOR WOMEN

The vaccine is not just a new tool for preventing a common STI. Cervical cancer is a serious and prevalent disease. Screening and treatment options are uncommon in the developing world. The vaccine may also reduce vulval and vaginal cancers for which no primary screening programs exist, as well as anal cancer and certain head and neck cancers.

VACCINES SHOULD BE PART OF A COMPREHENSIVE APPROACH

HPV vaccination programs and funds must be linked with improved screening; comprehensive sexuality education; and provision of information and tools which protect against all STIs—including HIV—and pregnancy. Funds for vaccines must not, by contrast, be diverted from these related and equally pressing priorities.

THE VACCINE WILL NOT PROMOTE UNSAFE SEXUAL BEHAVIOR

Evidence shows that withholding information and services from young people only increases the likelihood that if and when sexual initiation occurs, it will be unprotected. Vaccination programs provide an opportunity for parents, teachers, and health care providers to talk with young people about how to stay safe once sexual activity is initiated.
MORE RESEARCH IS NEEDED
Little is known about the vaccine’s protective effects beyond the first six years after administration, and the long-term effects of the vaccine for women have not yet been extensively studied. There is no evidence that vaccinating males will reduce risk of HPV transmission to female partners, and the cost-effectiveness of doing so remains unclear.

ADOLESCENTS SHOULD HAVE THE OPTION TO CONSENT TO HPV VACCINATION
Policies on adolescent consent to be vaccinated should take into account their evolving capacities to make decisions about their health, in accordance with internationally agreed human rights statutes such as the United Nations Convention on the Rights of the Child. Vaccination programs should be voluntary.

AS THE VACCINE BECOMES WIDELY AVAILABLE, EQUAL ACCESS MUST BE A PRIORITY
Cervical cancer rates are highest among the poor, yet the current cost of the vaccine is prohibitive for many people and all but the wealthiest countries. International donors and the pharmaceutical industry have a key role to play in ensuring that low-income countries can obtain and distribute the vaccine through comprehensive programs, linked with screening, especially in the public sector.

INTRODUCING A NEW PUBLIC HEALTH TECHNOLOGY REQUIRES THOUGHTFUL PLANNING
All countries, in addition to affordability, will have to address challenges of acceptability, delivery, consent, confidentiality, and ignorance about the link between HPV and cervical cancer—and will need to continue screening programs for cervical cancer. Sustained advocacy for youth health and rights, including by young people themselves, is needed to educate and engage with policymakers, health care providers, educators, parents, and communities, among others.

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Additional Resources
RHO Cervical Cancer
www.rho.org

PATH cervical cancer prevention
www.path.org/cervicalcancer

Alliance for Cervical Cancer Prevention
www.alliance-cxca.org

International Agency for Research on Cancer Screening Group
www.iarc.fr/cervicalindex.php

World Health Organization—Technical information on Human Papillomavirus and HPV vaccines
http://whqlibdoc.who.int/hq/2007/WHO_IVB_07.05_eng.pdf

United Nations Convention on the Rights of the Child
http://www.ohchr.org/english/law/crc.htm

Overlooked & Uninformed: Young Adolescents’ Sexual and Reproductive Health and Rights
http://www.iwhc.org/resources/overlooked.cfm

“A Long and Winding Road: Getting the HPV Vaccine to Women in the Developing World”