

## Introducing a vaccine to prevent cervical cancer in Vietnam

Cervical cancer is a preventable disease, affecting an estimated 490,000 women worldwide each year and leading to more than 270,000 deaths. Women in the developing world are dying from cervical cancer at higher rates than those in the developed world—mainly because effective screening and treatment are not available.

Human papillomavirus (HPV)—a common infection that most women acquire during their lives—causes more than 99 percent of cervical cancer cases. Two HPV types account for the majority of cervical cancer cases. New vaccines against these two types are at least 95 percent effective in preventing persistent HPV infection.

PATH, the World Health Organization, the International Agency for Research on Cancer, and Harvard University are helping developing countries understand HPV disease burden and determine the best manner of vaccine introduction.

### Providing evidence for impact

PATH is assessing various strategies for reaching girls with this life-saving vaccine—action that could sharply reduce cervical cancer rates during the next several decades. The goal of this five-year project is to generate clear and accurate information for decision-making related to public-sector introduction of HPV vaccines.

PATH is working to strengthen the capacity of developing countries to prevent cervical cancer by:

- Generating critical data for evidence-based decision-making at the country level.
- Leveraging country-level introduction activities to inform global advocacy efforts.
- Developing and disseminating strategic forecasts and decision-making tools to inform industry production, pricing decisions, and global financing initiatives.

Vietnam is one of the four countries (including India, Peru, and Uganda) to implement focused in-country programs supporting these goals. In March 2007, PATH began collaborating with key partners in Vietnam to design and implement a series of activities to pave the way for vaccine introduction.

### Formative research

PATH and the Vietnam National Institute of Hygiene and Epidemiology (NIHE) are conducting research to inform the development of the next phase—demonstrating HPV vaccination in selected regions. Formative research efforts are focused on understanding sociocultural norms, reviewing existing country policy, and assessing current health delivery systems.



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***HPV vaccine programs could reduce developing-country cervical cancer rates to the very low levels observed in developed countries, especially when combined with simple, evidence-based screening and treatment approaches.***

Exploring sociocultural issues is helping guide the development of communication strategies and materials most appropriate for different target groups. Building a supportive environment through the use of culturally appropriate materials will improve vaccine awareness among these groups.

A review of existing policy—based on a thorough understanding of stakeholders' concerns related to providing HPV vaccines—will inform recommendations for an advocacy strategy and improve awareness of cervical cancer prevention among high-level policymakers.

Assessing the needs and capacity of existing service delivery systems (for example, school- or health facility-based programs) will determine the best vaccine delivery strategy in the demonstration phase.

### Screening and treatment

Continued screening is important for women who are already infected with HPV and for women who might contract HPV types that the vaccine does not protect against. In collaboration with the Ministry of Health and other partners, PATH will implement activities to



strengthen secondary cervical cancer prevention through screening and treatment. Examples of simple and affordable screening methods that may be piloted include visual inspection with acetic acid or with Lugol's iodine.

### Clinical study

PATH, in collaboration with NIHE, will conduct a clinical study to evaluate different schedules for administering the three required HPV vaccine doses. The clinical study will evaluate immunogenicity and reactogenicity of alternative schedules for HPV vaccination. These findings will influence the future design of the delivery strategy to meet the existing sociocultural and economic conditions in Vietnam and other countries.

### Demonstration phase

Beginning in 2008, the demonstration phase will evaluate and compare the feasibility, coverage, cost, and acceptability of various HPV vaccine delivery strategies for young adolescent girls aged 11 to 14 years. The likely design will be the comparison of a school-based vaccine delivery strategy, a health facility-based vaccine delivery strategy, and a combined strategy.

### Advocacy

During the course of these activities, PATH will provide key stakeholders and policymakers with technical information on cervical cancer and HPV vaccines, as well as findings from formative research and demonstration activities.

This information will enhance understanding about HPV vaccines and cervical cancer prevention tools and provide data to inform policies and decisions for introducing HPV vaccines and expanding secondary prevention activities.

These efforts will help improve the lives of women not only in Vietnam, but in other countries around the world.

### More information

For more information, please contact [vietnam@path.org](mailto:vietnam@path.org) or [info@path.org](mailto:info@path.org).

### Cervical Cancer Facts

- Cervical cancer affects 490,000 new women each year and leads to more than 270,000 deaths.
- About 85 percent of women who die from cervical cancer reside in developing countries.
- In Vietnam, the age-standardized incidence rate of cervical cancer is 20 per 100,000 women per year, with a mortality rate of 11 per 100,000 women.
- If current trends continue, by the year 2050 there will be more than one million new cases annually worldwide.
- Cervical cancer can be prevented if precancerous lesions are identified and treated early on, but most women in the developing world do not have access to screening and treatment programs.
- HPV is the primary cause of cervical cancer.
- New vaccines are safe and effective in preventing HPV and type-specific cervical lesions.