

## Current PATH initiatives in cervical cancer prevention

Today, there is broad recognition of the growing and inequitable burden of cervical cancer in low-resource countries, and uptake of new screening and treatment alternatives for adult women and human papillomavirus (HPV) vaccines for young adolescent girls is on the rise. This means that for the first time in history, with sufficient political will and resourcing, the elimination of cervical cancer may be within reach.

PATH has witnessed these dramatic changes firsthand. We began to focus on the problem of cervical cancer in 1991. Over the past 23 years our portfolio has expanded tremendously, to cover the full range of technologies and approaches for the prevention of cervical cancer. This fact sheet summarizes PATH's current work (2014).<sup>1</sup>

### FOCUS: SCREENING FOR CERVICAL CANCER AND PRECANCER

**VIA.** Cervical precancer is highly treatable, yet in most developing countries, and especially in Africa, few women receive the screening needed to detect precancer before it advances to full-blown cervical cancer. Visual inspection with acetic acid (VIA) is a relatively low-cost and simple procedure that—with the right training—has been shown to be highly effective when offered by physicians, nurses, or paramedical staff.

An important aspect of PATH's Cervical Cancer Prevention project is support to increase access to screening by VIA (and precancer treatment by cryotherapy—see below), including dissemination of up-to-date information, the use of decision-modeling to answer critical questions about program design, and targeted technical assistance to countries to develop national strategies and design effective and efficient programs. PATH also is working with the Uganda Cancer Institute to create an African regional training center and to support development of master trainers for Africa.

<sup>1</sup> Our work over the years is documented in the first resource listed at the end of this paper.



*PATH works across the spectrum of cervical cancer prevention approaches, including introducing new molecular technologies such as the careHPV DNA Test. QIAGEN.*

**HPV DNA tests.** A new possibility for increasing the accuracy and cost-effectiveness of screening programs is the use of molecular tests to detect HPV infection. For years HPV DNA testing has been available only in well-resourced settings, but PATH's partnership with QIAGEN, a private company, has brought the *careHPV*<sup>TM</sup> DNA Test to market after several years of development and field testing.

PATH's **Scale-Up** project is fostering uptake of *careHPV* as a primary screening method in Central America by working with the ministries of health of four countries to introduce routine use of HPV testing and to update national policies and guidelines. Scale-Up also is working with the Pan American Health Organization (PAHO) to incorporate HPV tests in their Strategic Fund pooled procurement mechanism.

Additionally, the project is conducting a landscape analysis of the introduction of HPV DNA testing in three East African countries.

Vaginal sampling is only possible with a molecular test like HPV DNA testing. This exciting strategy could radically transform screening programs in low-resource settings and may finally be what is needed to bring universal, population-scale testing to reality.

### FOCUS: TREATMENT OF CERVICAL PRECANCER

Even the best screening programs will have no impact unless women who need treatment receive it in a timely fashion. Fortunately two low-cost and simple treatments are available: cryotherapy (to freeze affected tissue) and cold coagulation. In partnership with the National Cancer Institute of Peru (INEN) and Basic Health International, PATH is comparing the clinical performance of conventional cryotherapy (which requires equipment that costs about \$1500 per set and regular supplies of CO<sub>2</sub> or nitrous oxide gas) with a new cryotherapy device called CryoPen<sup>®</sup> Surgical System (which does not require external gas), and with cold coagulation. We also are evaluating the operational feasibility, ease of use, and cost of CryoPen<sup>®</sup> compared to conventional cryotherapy. In a separate effort, we are analyzing the dynamics of the cryotherapy equipment market.

### FOCUS: HPV VACCINATION

PATH was among the first organizations to assess the acceptability and feasibility of vaccinating young adolescent girls against HPV in the developing world. Data generated in Africa, Asia, and Latin America—and planning and evaluation tools—are freely available to guide program strategies and implementation planning (see resources).

Currently, in collaboration with GAVI and the World Health Organization, PATH offers low- and middle-income countries technical assistance to help ensure that their HPV vaccination programs are successful. Interested governments should contact PATH.

### FOCUS: ANALYSES OF THE COST OF PREVENTION

Costing studies comparing different screening tests and algorithms, or assessing various strategies to vaccinate young adolescents, are a critical part of PATH's work to help decision-makers. To this end we recently published a paper estimating the costs of establishing comprehensive screening and precancer treatment in 23 high-burden African countries using VIA and cryotherapy.

PATH also is collaborating with Cervical Cancer Action coalition (CCA) and the American Cancer Society on a modeling study to estimate the total investment required to offer both vaccination and screening/treatment to all the girls and women who need it in low- and middle-income countries.

### FOCUS: INFORMATION AND ADVOCACY

PATH's RHO Cervical Cancer website ([www.rho.org](http://www.rho.org)), a comprehensive online library, offers a host of documents and tools published by the world's leading HPV experts and organizations. Our Cervical Cancer Prevention Action Planner—built into RHO—is an interactive, online tool that helps decision-makers think through the pros and cons of various options, and links them with helpful resources. PATH also sends "HPVflash" email updates to share timely information around the globe. Users can subscribe to HPVflash at [www.rho.org/subscribe](http://www.rho.org/subscribe).

Finally, as co-chair of CCA, PATH is raising awareness, mobilizing political will, and fostering positive policy change worldwide, in part through our maps showing global uptake of HPV vaccine, VIA, and HPV DNA testing ([cervicalcanceraction.org](http://cervicalcanceraction.org)).

### PATH'S CONTINUING COMMITMENT TO ACTION

The time for action on cervical cancer prevention is now! PATH will continue working to ensure that every woman can realize her right to screening and treatment, and every girl her right to HPV vaccination.

#### IMPORTANT CERVICAL CANCER PREVENTION RESOURCES

(available from [www.rho.org](http://www.rho.org)—search for each title)

- *Cervical Cancer Prevention at PATH: Two Decades of Progress Toward a World Free of HPV-Related Cancers*
- *Outlook. Preventing Cervical Cancer: Unprecedented Opportunities for Improving Women's Health*
- *Cervical Cancer Prevention: Practical Experience Series, documenting lessons learned in the field about HPV vaccination and screening and treatment programs*
- *Cervical Cancer Prevention Action Planner*
- *BBC documentary on cervical cancer in Uganda ("Kill or Cure: The Real Lady Killer")*
- *Recent Evidence on Cervical Cancer Screening in Low-Resource Settings*

#### FOR MORE INFORMATION

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PATH is an international organization that drives transformative innovation to save lives and improve health, especially among women and children. We accelerate innovation across five platforms—vaccines, drugs, diagnostics, devices, and system and service innovations—that harness our entrepreneurial insight, scientific and public health expertise, and passion for health equity. By mobilizing partners around the world, we take innovation to scale, working alongside countries primarily in Africa and Asia to tackle their greatest health needs. Together, we deliver measurable results that disrupt the cycle of poor health.

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