



# Fact Sheet

## Eliminating Death from Cervical Cancer

**ACS CAN's Vision -- With modest, focused resources, death from cervical cancer can be eliminated worldwide,** through human papillomaviruses (HPV) vaccination combined with simple, inexpensive, evidence-based screening and treatment. Cervical cancer is largely preventable and treatable. We know what to do. We know how to do it. And the world can afford it. With nearly 90 percent of deaths from cervical cancer occurring in low-and middle-income countries (LMICs), cervical cancer deaths can be dramatically reduced by providing HPV vaccination and cervical cancer screening and treatment services to girls and young women.

### Prevention by Vaccination

- Virtually all cervical cancers are caused by HPV. By protecting individuals and building population-immunity, HPV vaccination can prevent most cervical cancers before women and girls become infected with the HPV virus.
- The HPV vaccine is safe. Available since 2006, more than 200 million doses have been administered worldwide with no serious vaccine-attributable adverse impacts.
- The HPV vaccine is effective and life-saving. Extensive studies demonstrate that the two most common vaccines are 90 percent effective against 70 percent of cervical cancer-causing HPV types.<sup>1</sup>
- HPV vaccines are affordable and cost-effective. At \$4.50 per dose in many LMICs, HPV vaccination is one of the most cost-effective cancer prevention methods according to the World Health Organization (WHO), the leading global authority on health, and other global health experts who characterize it as a "best buy" in virtually all LMICs, including those with high incidence of cervical cancer.<sup>2</sup>

### Preventive Screening and Treatment

While the primary objective of HPV vaccination is to prevent cervical cancer in the first place, we must have effective and affordable screening and treatment options for women who are already infected with the HPV virus.

Even invasive cervical cancer can often be successfully treated if detected at an early stage. With access to screening and treatment options, the estimated five-year net survival from cervical cancer is now between 60 and 70 percent in many high-income countries. Therefore, women, regardless of vaccination status, should receive screening and treatment of precancerous lesions.

<sup>1</sup> [http://www.who.int/vaccine\\_safety/committee/GACVS HPV\\_statement\\_17Dec2015.pdf](http://www.who.int/vaccine_safety/committee/GACVS HPV_statement_17Dec2015.pdf)

<sup>2</sup> <https://openknowledge.worldbank.org/bitstream/handle/10986/22552/9781464803499.pdf?>

The lab-based Pap test, central to reducing incidence and mortality in higher-income countries, is not easily implemented in LMICs that lack the necessary laboratory capacity and supporting logistics. Therefore, the WHO recommends alternative but very effective screening and treatment methods specifically for LMICs. These include:

- **Visual Inspection with Acetic Acid (VIA)** – WHO recommends this screening strategy in LMICs where resources are limited. It can be successfully performed by non-physician providers. The VIA test is based on application of diluted acetic acid (vinegar) to the cervix during examination. Abnormal cervical tissue appears white after application. The advantage of this method is that it is inexpensive and abnormal tissue can be found and treated in a single visit to the clinic.
- **Pre-cancer treatment** – Abnormal precancerous cervical changes discovered during screening can be treated by means of one of several low-cost methods including:
  - Cryotherapy, which destroys cells with extreme cold. According to WHO guidelines, cryotherapy is the treatment of choice in LMICs, because of its ease of use and lower price. However, a reliable supply of gas (generally nitrous oxide) can be difficult, especially in rural areas.
  - Thermo-coagulation, by contrast, destroys cells with heat and uses electricity to generate temperatures of 100–120 °C. It is also safe, low-cost, has high client acceptance levels and can be used in low-resource clinical settings.
  - Loop electrosurgical excision procedure (LEEP), which removes abnormal tissue with a wire loop heated by electric current.

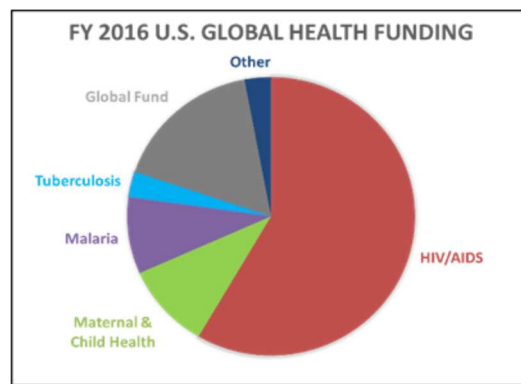
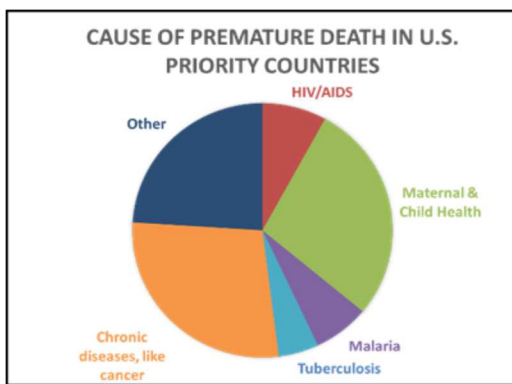
Promising alternative tests also exist for future use in LMICs. For example, the HPV DNA test requires a machine to analyze samples from the cervix and test for the presence of HPV infection. By enabling women to collect their own cervical samples, the test can facilitate screening in women who would not have otherwise been screened because of culturally conservative customs. The cost of the test and follow-up care following a positive test remain issues to be addressed with the use of this test.

## Broadening Success

HPV vaccination as well as screening and treatment programs in Africa, Asia, and Latin America have shown that these procedures work in low-resource settings and have the potential to significantly reduce mortality. For instance, an assessment of VIA screening by primary health workers in India showed a 31 percent reduction in cervical cancer mortality.<sup>4</sup> Forty-four LMICs (including many high-prevalence countries in Africa and Asia) have introduced the HPV vaccine on a national or pilot basis, and 53 have introduced new screening and preventive treatment programs on a pilot or early nationwide basis. However, few LMICs have achieved high rates of coverage. A study of HPV immunization programs in 64 countries found that coverage of females averaged only 2.7 percent in less developed regions.<sup>5</sup> HPV vaccination and cervical cancer screening and treatment programs can be effectively integrated into existing in-country health and education programs.

## The Challenge

U.S. Government (USG) supports health programs in many LMICs, in part, to save lives, promote economic development and advance U.S. interests. Unfortunately, the current funding is not well aligned with the actual causes of death in those countries that the USG supports. As evidenced in the charts, while more than a quarter of deaths in those priority LMICs is from chronic diseases, such as cancer, virtually no funding is provided to prevent those deaths. As stated earlier, HPV vaccination and cervical cancer screening are proven effective strategies to eliminate deaths from cervical cancer. USG assistance to help end cervical cancer deaths would begin to address this disparity between the causes of death and the focus on global health funding.



## The Strategy Going Forward

ACS CAN calls on Congress to direct U.S. global health appropriations to support a campaign to eliminate death from cervical cancer. Funds should be used to:

- Scale-up vaccination, screening and treatment services for girls and women, beginning in high-prevalence, lower-income countries.
- Continue innovation and sharing of lessons learned to strengthen and expand current programs, especially in high-prevalence, lower-income countries.
- Track progress and encourage accountability with agreed-upon progress indicators, monitoring and evaluation.

<sup>3</sup> [http://apps.who.int/iris/bitstream/10665/94830/1/9789241548694\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/94830/1/9789241548694_eng.pdf?ua=1)

<sup>4</sup> <https://www.ncbi.nlm.nih.gov/pubmed/24563518>

<sup>5</sup> [http://thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)30099-7/fulltext](http://thelancet.com/journals/langlo/article/PIIS2214-109X(16)30099-7/fulltext)