

## Country review and roadmap for action

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Photo: UNFPA Viet Nam

### Viet Nam

Cervical cancer is one of the most preventable cancers. However, in 2018, an estimated 311,000 women died from cervical cancer globally.<sup>1</sup> The annual number of new cases of cervical cancer has been projected to increase from 570,000 to 700,000 between 2018 and 2030, with the annual number of deaths projected to increase from 311,000 to 400,000<sup>2</sup>. Most of these deaths occurred in low- and lower-middle income countries (LMICs), due to inadequate access to cervical cancer prevention, screening and treatment.

In November 2020, the World Health Organization launched a Global Strategy to accelerate the elimination of cervical cancer as a public health problem. The Strategy proposes an elimination threshold of 4 cervical cancer cases per 100,000 women, achieved by implementing the triple intervention targets by 2030:

- 90% of girls fully vaccinated with the Human Papillomavirus (HPV) vaccine by age 15.
- 70% of women screened with a high-performance test (such as the HPV test) by 35, and again by 45 years.
- 90% of women identified with cervical pre-cancer or invasive cancer receive adequate treatment and care.<sup>2</sup>

If this Strategy is implemented globally, **a total of 74 million cervical cancer cases could be prevented and 62 million women's lives could be saved over the next century.**<sup>3,4</sup> This Strategy also represents the most cost-effective approach across 95% of countries analyzed, and is expected to offer immense economic and societal benefits, with **an estimated**

**US \$3.20 returned to the economy, rising to US \$26.00 when societal benefits are incorporated, for every dollar invested through 2050** due to increases in women's participation in the workforce.<sup>2</sup>

In Viet Nam, cervical cancer is the sixth most common cancer in women, with 4,177 new cases (7.1 per 100,000 women) and 2,420 deaths (4 deaths per 100,000 women) in 2018.<sup>1</sup> The burden of cervical cancer varies among regions in Viet Nam, with higher rates in southern regions, and there is limited data on the burden of the disease in rural regions.<sup>5</sup> Cervical cancer is also the most common cancer among women living with HIV. Compared with women who are HIV-negative, women living with HIV have a risk several times higher of persistent HPV infection, are six times as likely to develop cervical cancer and are more likely to develop it at a younger age<sup>2</sup>. Prevalence of HIV among women aged 15-49 years in Viet Nam is 0.2%, and an estimated 77% of women living with HIV are on treatment.<sup>6</sup> It has been predicted that without any intervention, **a total of 218,907 women in Viet Nam will die from cervical cancer by 2070, and 449,656 by 2120.**<sup>3</sup>

Pilot studies for both screening and HPV vaccination<sup>7</sup> have been conducted in the country over the past few decades, demonstrating that integrating HPV vaccine into the national EPI programme is feasible and highly acceptable. However, no decision has been made to introduce HPV into the national EPI programme. To reach the elimination targets, organized national programmes for both HPV vaccination and cervical cancer screening and treatment need to be implemented. Competencies of the health workforce will also need to be strengthened across all three pillars (HPV vaccination, cervical cancer screening and cancer treatment) for long-term success on the path towards elimination.

### Pillar 1: HPV Vaccination

The introduction of HPV vaccines into the national immunization programme is a crucial first step to be able to achieve a high coverage of HPV vaccination. Scale-up of HPV vaccination coverage could be facilitated by considering multisectoral delivery platforms, including a school-based strategy targeting adolescent girls aged 9-14 years, and innovative community-based strategies. It is not cost-effective to vaccinate both boys and girls. It is also important to secure sufficient and affordable HPV vaccines, through

a concerted effort to negotiate with private suppliers for reasonable prices. Improving monitoring systems and implementing vaccination registers are critical for ensuring that high coverage is met. Educating the community on the importance of HPV vaccination to prevent cervical cancer and having strategies to deal with misinformation are also important for maintaining confidence in the programme.

## Pillar 2: Cervical Cancer Screening

Cervical cancer screening programmes represent the second pillar of the three-pronged Strategy. These screening programmes could be integrated with existing services such as primary care services, both from public and private sectors, by offering HPV testing at sexual and reproductive health clinics, antenatal care consultations, family planning consultations or well-women clinics. Integrating cervical cancer screening with facilities that offer services for HIV control should be considered, to ensure HIV-positive women at high risk of cervical cancer have access to cervical cancer screening. This would minimize unnecessary referrals and reduce transport costs and waiting time for women. Understanding social and cultural barriers will help create an environment where women feel comfortable attending screening visits.

Additionally, it is essential to provide information and education for women on the importance of cervical cancer screening, and potentially offering self-collection for HPV testing, or point-of-care HPV testing, so that women who need pre-cancer treatment can be treated in the same visit.

Screening scale-up should utilize clinically validated high sensitivity tests, and strengthening of laboratory services and quality assurance programmes will ensure the programme is effective. Implementing surveillance and monitoring systems are also critical for ensuring women are not lost to follow-up and for monitoring programme success nationally.

## Pillar 3: Cervical Cancer Treatment

Lastly, developing and implementing national cervical cancer management guidelines is essential to providing women with high quality cancer treatment and care. Despite the existence of the National Guideline for Screening and Treatment of Cervical Cancer, cervical cancer screening is only delivered in some provinces in Viet Nam and under the support of donors-funded projects, rather than through a full-scale national-level programme. The establishment of strong referral networks between all aspects of the cancer care spectrum are needed to ensure the timely management of patients and reduce loss-to-follow-up. Diagnosis, treatment, and monitoring of invasive cervical cancer will require high-quality pathology services and oncology services. Safe, effective, and timely surgery accompanied by supportive services such as anesthetic services and intensive care units are important for the treatment of early stage cancers. Furthermore, expanding access to radiotherapy units and access to chemotherapy services, as well as palliative care services, are crucial.

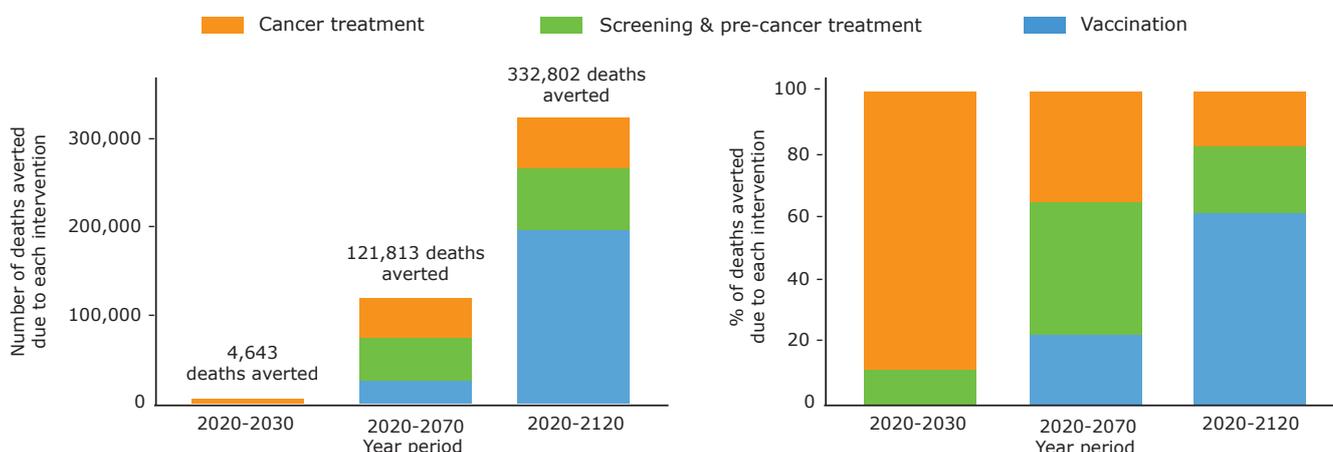
**The Elimination Implementation Checklist on the final page summarizes the steps that countries should take to ensure the three pillars for elimination are**

**successfully implemented and maintained over the longer term.**

***If the three pillars of elimination are established, Viet Nam could avert over 330,000 deaths due to cervical cancer over the next century, and cervical cancer could be eliminated by 2044.***

**Figure 1:**

Estimated deaths that could be prevented by implementing each elimination pillar in Viet Nam.



The contribution of vaccination is calculated by comparing model outputs for vaccination versus status quo. The contribution of screening is calculated by comparing modelled outputs for vaccination and screening versus vaccination. The contribution of cancer treatment is calculated by comparing modelled outputs for vaccination, screening and cancer treatment versus vaccination and screening. Contributions of the pillars may not sum to total due to rounding.

**Table 1:**

Estimated deaths that could be prevented, attributable to each pillar of the elimination strategy.

Year	Vaccination	Screening & pre-cancer treatment	Cancer treatment	Total
<b>2020-2030</b>	36	470	4,136	4,643
<b>2020-2070</b>	28,848	48,821	44,144	121,813
<b>2020-2120</b>	205,106	68,783	58,912	332,802

## Prospects for Cervical Cancer Elimination in Viet Nam

**Concerted action now across all three elimination pillars is critical. The timing of impacts will vary, but action now will have substantial long-term impacts.**

If all three elimination pillars are reached by 2030 in Viet Nam, a total of 4,643 cervical cancer deaths will be prevented by 2030, 121,813 deaths prevented by 2070 and 332,802 cervical cancer deaths by 2120 (Table 1).

**Viet Nam could eliminate cervical cancer as a public health problem by 2044.**

**The effects of HPV vaccination** will be seen after a few decades (Figure 1). HPV vaccination would have limited impact before 2030, but the results will be seen in subsequent decades: HPV vaccination could prevent nearly 28,848 cervical cancer deaths by 2070, and 205,106 cervical cancer deaths by 2120 (Table 1).

**The effects of cervical cancer screening and pre-cancer treatment** will be seen mainly in the mid-term, after 2030 (Figure 1). Cervical screening would prevent an additional 470 cervical cancer deaths by 2030, 48,821 deaths by 2070 and 68,783 cervical cancer deaths by 2120 (Table 1).

**Cervical cancer treatment scale-up** will have immediate impacts on deaths averted (Figure 1). Scale-up of cancer treatment would prevent an additional 4,136 cervical cancer deaths by 2030, 44,144 deaths by 2070 and 58,912 cervical cancer deaths by 2120 (Table 1).

Viet Nam is at a crucial stage in its efforts to prevent and treat cervical cancer, and a concerted strategic plan to accelerate the elimination of cervical cancer needs to be developed and implemented. There will be many issues to be addressed along the way, including vaccine and screening test supply and delivery challenges, human resource capacity and the infrastructure challenges associated with scale-up of invasive cancer diagnostics, treatment, and supportive and palliative care services. In addition, the COVID-19 pandemic has posed additional challenges globally, with health services and resources being prioritised for COVID-19 response. However, the tools and technology are now available; research has shown that elimination strategies are cost-effective and will prevent over 330,000 deaths over the next century. Both HPV vaccination and cervical cancer screening and treatment have been identified by WHO as best buys and are included in the list of national health plan recommendations by WHO. The elimination agenda is a component of the United Nations Global Strategy for Women's, Children's and Adolescent's Health.

Achieving cervical cancer elimination in Viet Nam will support several sustainable development goals (SDGs) and targets, including SDG 3 (good health and well-being), SDG 5 (gender equity) and SDG 10 (reducing inequalities). The implementation of HPV vaccination, cervical cancer screening and cancer treatment access will be facilitated by the full realization of universal health care in Viet Nam, and collaboration with other sectors for sharing knowledge, financial resources and expertise in achieving the SDG goals will be crucial. Cervical cancer elimination is within our reach and we urge all stakeholders to support this effort by investing in the comprehensive approach as a national priority.

### References

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# Elimination Implementation Checklist\*

## Strategic actions to achieve elimination targets

	Completed
<b>1 Develop a comprehensive costed National Cervical Cancer Elimination Strategy which clearly outlines appropriate mechanism to finance cervical cancer related interventions and activities, and seek endorsement among government, country leaders, policymakers, and communities</b>	<input type="checkbox"/>
<b>2 Communication and public outreach</b>	
2.1 Develop a comprehensive communications strategy to ensure community mobilization and strong engagement of local authorities, public and private sectors and relevant stakeholders, including MOET and the school system for vaccination programme, health workers, community leaders, parents, teachers, and young people to maintain confidence in the programme and address misconceptions.	<input type="checkbox"/>
<b>3 National HPV vaccination programme</b>	
3.1 Introduce the HPV vaccine for girls aged 9-14 years into national immunization programme.	<input type="checkbox"/>
3.2 Secure sufficient and affordable HPV vaccine and ensure an adequate cold-chain system for vaccine storage and delivery is in place.	<input type="checkbox"/>
3.3 Achieve and maintain high coverage of HPV vaccination by identifying appropriate multi-sectoral vaccination delivery platforms.	<input type="checkbox"/>
3.4 Establish or improve monitoring systems or vaccination registers to enable measurement of coverage and vaccine schedule adherence.	<input type="checkbox"/>
<b>4 National cervical cancer screening and pre-cancerous treatment programme</b>	
4.1 Develop a national cervical cancer screening programme with clinical protocols which improve the quality and scale-up of available cervical cancer screening services, including HPV testing, and pre-cancer treatment, involving relevant stakeholders when appropriate.	<input type="checkbox"/>
4.2 Integrate screening and pre-cancer treatment into existing primary care and Universal Health Care (UHC) packages, including sexual and reproductive health services, HIV clinics, antenatal care.	<input type="checkbox"/>
4.3 Establish continuing professional development in-service programmes to build capacity of providers in cervical cancer screening and pre-cancer treatment.	<input type="checkbox"/>
4.4 Understand social, financial, cultural, societal, and structural barriers to accessing services and create an enabling environment for cervical cancer screening and pre-cancer treatment.	<input type="checkbox"/>
4.5 Strengthen laboratory capacity and quality assurance (QA) programmes and develop data systems that link laboratory information, screening registry data and other data systems (such as medical records and cancer registries).	<input type="checkbox"/>
<b>5 Invasive cancer treatment and palliative care</b>	
5.1 Develop and implement cervical cancer management guidelines and clinical protocols.	<input type="checkbox"/>
5.2 Establish effective referral pathways for women at all stages of care.	<input type="checkbox"/>
5.3 Strengthen pathology services, particularly at regional pathology centres and, if appropriate, make use of telepathology platforms to improve the capacity to interpret samples.	<input type="checkbox"/>
5.4 Expand surgical capacity through training programmes, and expand access to radiotherapy and chemotherapy services and strengthen oncology services.	<input type="checkbox"/>
5.5 Strengthen and integrate palliative care services by developing treatment plans that incorporate not only end-of-life care and pain relief, but also psychological and family support.	<input type="checkbox"/>
5.6 Optimize health workforce competencies throughout the continuum of care by establishing a long-term continuous training and education strategy for a multidisciplinary workforce.	<input type="checkbox"/>
5.7 Reduce cancer stigma by providing comprehensive support to enhance quality of life and address mental and sexual and reproductive health challenges faced by cancer survivors.	<input type="checkbox"/>
<b>6 Monitoring and evaluation</b>	
6.1 Strengthen governance and accountability of cervical cancer related programmes (HPV vaccination, cervical cancer screening, cancer treatment) and conduct regular reviews to ensure that national strategies, plans, and resource allocations reflect actual country needs.	<input type="checkbox"/>
6.2 Set country-specific targets, milestones, and indicators for monitoring and evaluating implementation of the National Cervical Cancer Elimination Strategy.	<input type="checkbox"/>
6.3 Improve current population-based cancer registries and develop new population-based cancer registries as needed to track the progress of the elimination targets.	<input type="checkbox"/>
6.4 Track and monitor patients throughout the continuum of services (prevention, screening, diagnosis and treatment).	<input type="checkbox"/>

\*This checklist was developed based on the WHO strategy for cervical cancer elimination<sup>2</sup>. For more guidance on the implementation of cervical cancer screening and treatment, see the WHO guide to strengthening cervical cancer prevention<sup>8</sup> and the WHO guidelines for pre-cancer treatment.<sup>9</sup>