

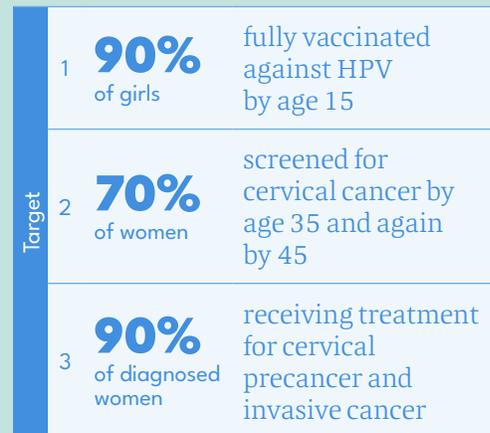
Understanding Priorities and Needs for HPV Vaccine Advocacy

Cervical cancer is the fourth most common cancer among women worldwide and a significant cause of mortality, with approximately 604,000 new cases and 342,000 deaths reported annually. The primary cause of cervical cancer is human papillomavirus (HPV), which accounts for more than 95% of cases. However, low- and middle-income countries (LMICs) are disproportionately affected by HPV infections and cervical cancer, with 90% of cervical cancer-related deaths concentrated in LMICs. Additionally, the WHO estimates a significantly greater increase in cervical cancer mortality in low-income countries compared to high-income countries (HICs) in the coming years, emphasizing the urgent need to prioritize HPV prevention in these settings.

HPV vaccines are highly effective in preventing HPV infection and thereby reducing the incidence of cervical cancer, though low rates of HPV vaccination are a challenge for strapped health care systems across the world. Globally, only 15% of young women and girls have received the first dose of HPV vaccine, with coverage significantly impacted by COVID-19. More high-income countries have introduced HPV vaccination as national policy, and coverage within well-resourced countries remains significantly higher.

Targeted advocacy strategies will be critical for prioritizing the introduction and uptake of HPV vaccines, especially in countries that would benefit most. To understand the needs for HPV vaccine advocacy, the International Vaccine Access Center (IVAC) at the Johns Hopkins Bloomberg School of Public Health led a survey to engage HPV vaccine stakeholders from around the world to explore which tools, data, and approaches may be most important to inform future advocacy initiatives.

In 2020, the WHO published the first global strategy to eliminate cervical cancer, which outlines **three targets** that should be met by **2030** for all countries to make progress toward cervical cancer elimination. Regular screening and early treatment will contribute to eliminating cervical cancer, but increasing access to HPV vaccination in high-burden countries is particularly important, especially given the long-term protection provided by the vaccine.

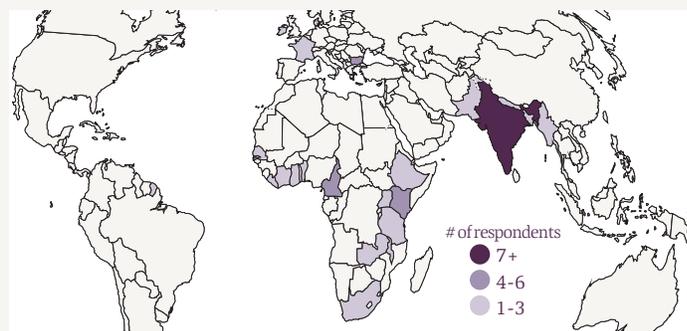


WHO WE SURVEYED

From March-April 2023, an online survey was completed by 88 participants representing a cross-section of stakeholders including academia, non-governmental organizations (NGOs), governmental agencies (e.g., Ministry of Health), international organizations, immunization advocacy groups, professional organizations (i.e., pediatric society), women's or adolescent health advocacy groups, and cancer or patient advocacy groups. Twenty-four countries were represented, with the largest number of responses from India (22%). More than half of respondents (61%) work at the national level while the remaining were evenly split between a focus at the regional or global level. The respondents were relatively experienced mid-career professionals – 83% of those working in a country have worked there for 6+ years.

Affiliation	# of respondents
Non-governmental organization	28
Governmental agency - national or subnational	24
Academia	16
International organization	10
Professional organization	4
Immunization advocacy	4
Women's or adolescent health advocacy	1
Cancer or patient advocacy	1

Location



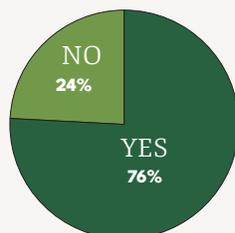
Immunization focus

% of respondents		% of respondents	
HPV vaccine advocacy	48	Immunization advocacy	31
HPV vaccine policymaking	45	HPV vaccine pilot or demonstration phase	16
HPV vaccine service delivery	34	HPV vaccine financing	9
HPV vaccine evaluation or implementation research	33	Other	6

STATUS OF HPV VACCINATION PROGRAMS

National-level stakeholders were asked about the current status of HPV vaccine introduction and implementation in their respective countries. The majority (71%) reported that HPV vaccine was included as part of the country's Expanded Programme in Immunization (EPI) recommended schedule.

Has the HPV vaccine been introduced/is it available for use in your country?



How is the HPV vaccine delivered in your country?



Who is recommended to receive the HPV vaccine in your country?



ADVOCACY FOR HPV VACCINES

Country-level stakeholders were asked to rate potential factors that could impact HPV vaccine introduction, delivery, and coverage on a scale ranging from 1 (small impact) to 5 (large impact). They were also asked about which types of information are needed, which stakeholders should be targeted by advocacy efforts, and which types of advocacy approaches would be most successful.

Rate the impact of each of the factors below on HPV vaccination uptake, delivery, and coverage in your country or region (scale from 1 to 5).

↑ Drivers

Improved communication to reach key groups	4.7
Accurate info from reputable sources	4.6
Efforts to address mis- and disinformation	4.6
Sustained supply of HPV vaccine	4.5
Affordable pricing	4.4
Vaccination campaigns	4.4
Improved logistics or supply chain support	4.1
Targeted strategies for under-immunized	4.1

↓ Barriers

Inadequate financing	4.5
Misinformation or disinformation about vaccines	4.3
Underperforming health system/vaccine program	4.3
Competing priorities	4.1
Human resource gaps	4.0
Low level of user or community demand	4.0
Lack of high-quality immunization data	3.8
Inequities related to existing policies	3.7

When respondents were asked about any additional influencing factors, they mentioned the following:

Drivers

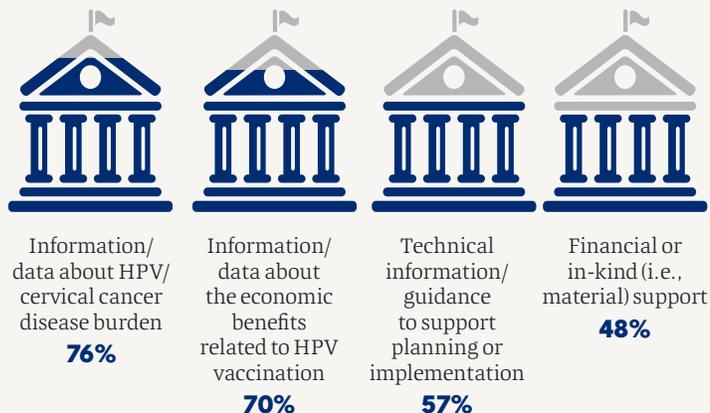
- » Engaging with community leaders (e.g., faith leaders)
- » Media coverage/campaigns from prominent figures
- » Exploring various delivery platforms (e.g., schools, churches, door-to-door, facility-based)
- » Funding considerations (e.g., increasing health care budget)
- » Engaging teachers and collaborating with schools
- » Including boys in HPV immunization programs
- » Sharing lessons learned from HPV vaccine introduction in other countries
- » Engagement with CSOs, NGOs, and professional organizations

Barriers

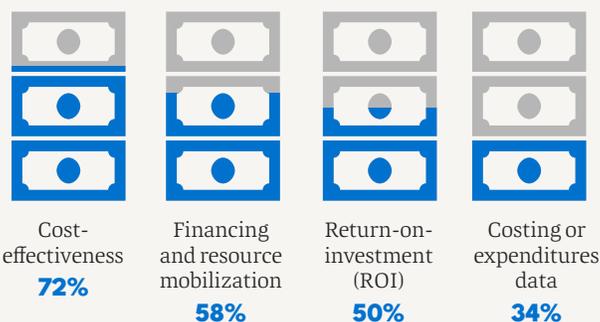
- » Lack of HPV vaccine knowledge
- » Weak political will/not following through with commitment
- » Vaccine resistance/hesitancy from influential stakeholders (e.g., physicians, faith leaders)
- » Impact of COVID-19
- » Stigma around HPV vaccine
- » Weak health system/inefficient delivery system
- » Resource constraints (e.g., supply shortages, lack of funding)
- » Hard-to-reach populations (e.g., out-of-school girls)

ADVOCACY FOR HPV VACCINES (continued)

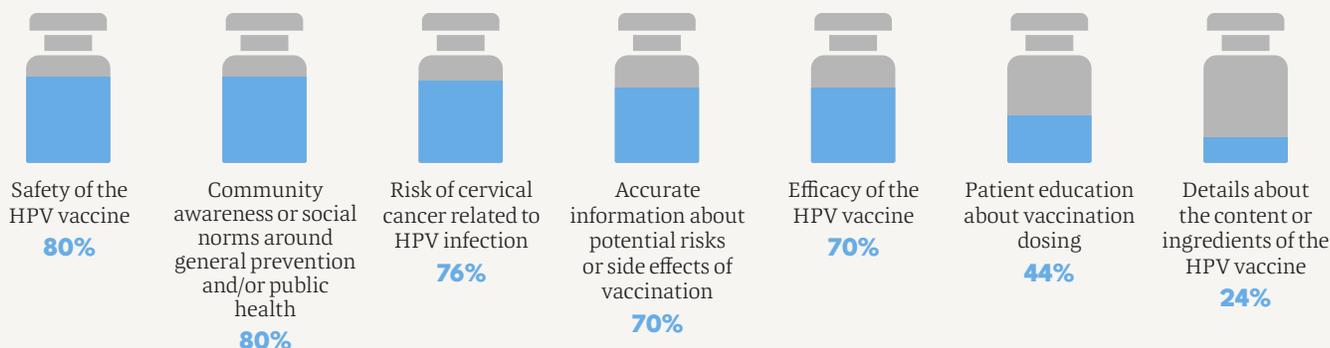
What would be helpful to increase political will for HPV vaccine implementation in your country?



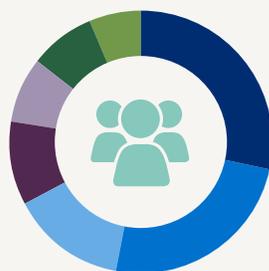
Which areas related to financial or economic considerations would be important for HPV advocacy efforts in your country?



What kind of information about the HPV vaccine would be important to reduce or combat misinformation or disinformation?

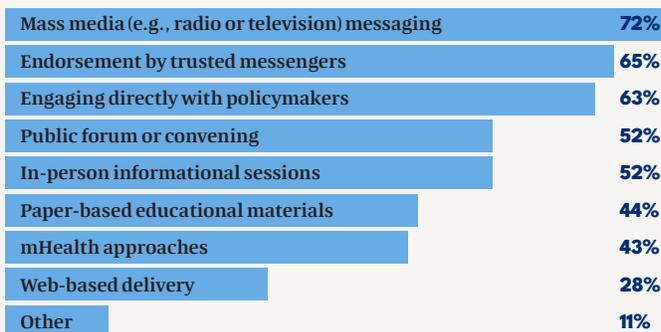


In your country, which group of stakeholders would benefit most from materials or resources for HPV vaccine advocacy?



- Heads of household/parents/caregivers
- Youth/adolescent women
- Doctors or clinical providers
- Religious or community leaders
- Educational administrators or teachers
- Policymakers at the national or subnational level
- Implementing NGO partners

Which types of tactics or approaches would be most helpful in your country to support HPV vaccine introduction or uptake?



Respondents thought the following approaches would also be needed to support HPV vaccination advocacy:

- » Social media campaigns
- » Sharing successes (e.g., progress since HPV vaccine introduction)
- » Technical support
- » Improved coordination within government
- » Partnering with professional bodies
- » Community dialogue
- » Developing local ownership of immunization programs

SINGLE-DOSE HPV VACCINATION

In December 2022, the WHO updated its guidance for HPV vaccine dosing to include the option of a single-dose schedule, based on recent evidence from several studies that a single-dose can provide a level of protection comparable to multi-dose schedules. The option to introduce a single-dose regimen for HPV vaccine will hopefully increase access, require fewer resources, and enhance feasibility and sustainability. Most survey respondents were aware of the WHO dosing update (93%), and most (94%) indicated that the option to implement a single-dose schedule would be a positive enabling factor for HPV vaccination in their country or region.

Which topics or considerations related to a one-dose HPV vaccine schedule would be helpful for HPV vaccine advocacy in your country/region?



Operational or programmatic advantages **75%**



Evidence about comparability of immune response between one-dose and multi-dose schedule **72%**



Ease of integrating with other immunizations or health interventions **72%**

ADDITIONAL CONSIDERATIONS TO SUPPORT HPV VACCINE ADVOCACY

When asked about additional resources that would be valuable to strengthen advocacy for HPV vaccine introduction and uptake, respondents mentioned the following:

- » Awareness campaigns/patient education materials, particularly in local languages
- » Tailored materials for each stakeholder group (e.g., policymakers, teachers, parents, adolescents)
- » A unified voice advocating for a single-dose schedule (even in HICs), including financial benefits
- » Information on cost-effectiveness of HPV vaccines and sustainable financing models
- » Funds to procure adequate vaccine supplies/affordable vaccines
- » Improved record systems (e.g., EHRs) to capture local evidence

Key Takeaways

Acknowledging that advocacy needs for HPV vaccination may be shaped by determinants or conditions that are context-dependent, several drivers and barriers for establishing a successful HPV vaccine program are shared across countries and regions:

- » Efforts to strengthen HPV vaccine programs should focus on drivers such as: (1) **improved strategies for communicating** to key groups, (2) **national political will** or commitment, (3) **accurate information** about HPV immunization, and (4) **efforts to combat mis- and disinformation**. Barriers to progress hampering HPV vaccine introduction and uptake that must be addressed include: (1) **inadequate financing**, (2) **mis- and disinformation**, and (3) **struggling health care or vaccine delivery systems**.
- » Advocacy materials should include emphasize the following topics: information or data about HPV/cervical cancer **disease burden**, **economic benefits** of vaccination, **safety** of the vaccine, **cervical cancer risk**, **vaccine risks/side effects**, and **vaccine efficacy**.
- » HPV vaccine advocacy resources should target **key decision-makers** including heads of household, parents/caregivers, and youth or adolescent women themselves. Additional audiences to consider are doctors/clinical providers and religious or community leaders.
- » Strategies to support HPV vaccine delivery should rely on **mass media campaigns**, **endorsement by trusted messengers**, and **direct engagement with policymakers**.

Sources

Bruni L, Saura-Lázaro A, Montoliu A, et al. HPV vaccination introduction worldwide and WHO and UNICEF estimates of national HPV immunization coverage 2010-2019 [published correction appears in *Prev Med*. 2022 Feb;155:106925]. *Prev Med*. 2021;144:106399. doi:10.1016/j.ypmed.2020.106399

Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: World Health Organization; 2020. License: CC BY-NC-SA 3.0 IGO.

Krivacsy S, Bayingana A, Binagwaho A. Affordable human papillomavirus screening needed to eradicate cervical cancer for all. *Lancet Glob Health*. 2019;7(12):e1605-e1606. doi:10.1016/S2214-109X(19)30423-1

World Health Organization, 2022. Immunization Coverage. Updated July 14, 2022. <https://www.who.int/news-room/fact-sheets/detail/immunization-coverage>

World Health Organization, 2022. Cervical Cancer Fact Sheet. Updated February 22, 2022. <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>

FOR MORE INFORMATION

www.jhsph.edu/ivac



INTERNATIONAL
VACCINE ACCESS
CENTER



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH