

# HPV Vaccination

The two leading cancer-causing infections are Hepatitis B (HBV) and the Human Papillomavirus (HPV), which are both vaccine preventable.

## Target 4



Universal coverage of HPV and HBV vaccination



The [Global Action Plan for the Prevention and Control of NCDs](#) calls for **vaccination against human papillomavirus**, as appropriate if cost-effective and affordable, according to national programmes and policies.

Worldwide, infectious agents are responsible for an estimated 2.2 million cancer deaths annually. The burden of infection-related cancers is much higher in less developed regions; estimates suggest that up to 50% of cancers in sub-Saharan Africa are attributable to infections<sup>7</sup>.



*"Very high-coverage programmes have been demonstrated to be achievable in less developed countries like Rwanda and Bhutan. However greater efforts are necessary to improve coverage and bring cheaper HPV vaccines to less developed countries especially in Sub-Saharan Africa and Asia."*

**Silvia Franceschi, Head Infections and Cancer Epidemiology Group, International Agency for Research on Cancer (IARC)**



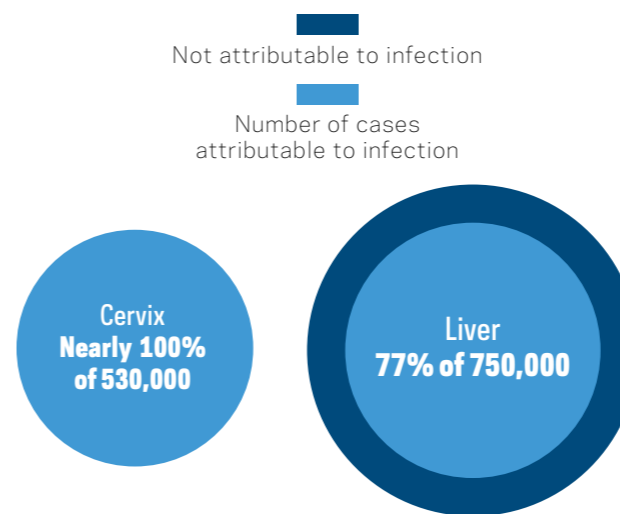
By 2016, **65 countries had introduced HPV vaccines**, although these were predominantly high-income countries.

Across countries, **coverage rates vary from less than 30% to more than 80%**, highlighting serious barriers for adolescents to access the HPV vaccine<sup>10</sup>.

## Percentage of Cancer Cases Attributable to Infection

**Many of the most common cancers are at least partly attributable to infection.**

PERCENTAGE OF NEW CANCER CASES CAUSED BY INFECTION AND TOTAL NUMBER OF NEW CASES



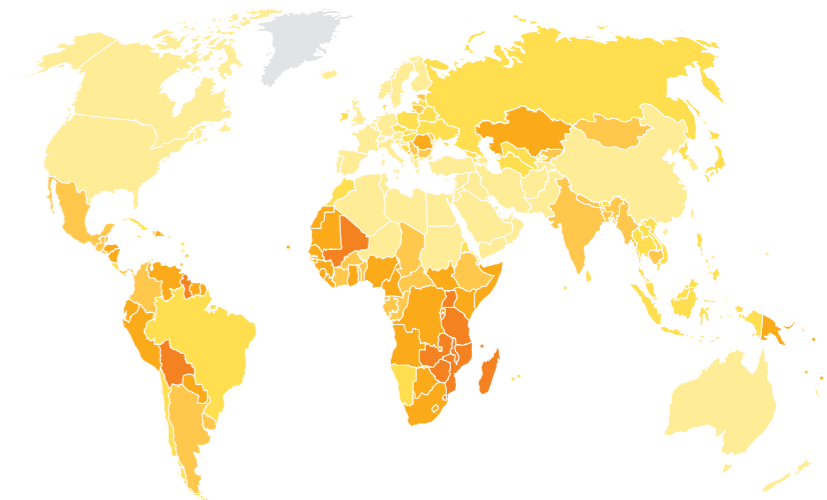
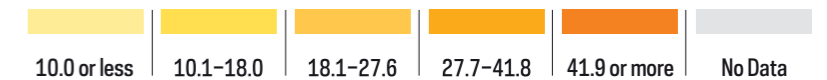
HPV infection is responsible for approximately 630,000 cancer cases per year, with a disproportionate burden in low- and middle-income countries<sup>8</sup>. Given that 70% of cervical cancers and precancerous lesions are attributed to infection by two strands of HPV<sup>9</sup>, the immunisation of adolescent girls has the potential to significantly reduce national cancer burdens and mitigate the devastating impact on patients and their families.

## Estimated Incidence of Cervical Cancer (Age Standardised Rate [World] Per 100,000) In Females, 2012



**Resource: RHO Cervical Cancer**

[PATH's RHO Cervical Cancer](#) website is designed to provide easy access to science-based information for health programme managers and decision-makers seeking to prevent cervical cancer in low-resource settings. The site includes an action planner and a library of key cervical cancer resources.



<sup>7</sup> Plummer et al. (2016) Global burden of cancers attributable to infections in 2012: a synthetic analysis [http://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)30143-7/abstract](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)30143-7/abstract) [Accessed 19.08.16]

<sup>8</sup> Plummer et al. (2016) Global burden of cancers attributable to infections in 2012: a synthetic analysis [http://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)30143-7/abstract](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)30143-7/abstract) [Accessed 19.08.16]

<sup>9</sup> WHO, HPV and cervical cancer <http://www.who.int/mediacentre/factsheets/fs380/en/>

<sup>10</sup> Plummer et al. (2016) Global burden of cancers attributable to infections in 2012: a synthetic analysis [http://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)30143-7/abstract](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)30143-7/abstract) [Accessed 19.08.16]