

## Immunization Update

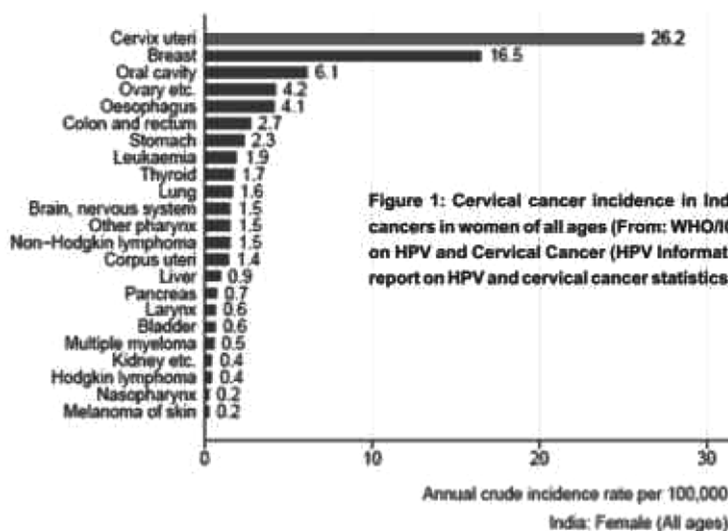
### Prevention of Cervical cancer - HPV Vaccines

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Cervical cancer is second most common cancer among women worldwide<sup>1</sup>. Despite the success of screening programs to detect cervical intraepithelial neoplasia (CIN) and cervical carcinoma in developed world, challenge persists in developing world where resources and health infrastructure for screening and treatment are limited. It is the only cancer where etiological agent is very clearly identified. Findings from case-control studies and cohort studies together with laboratory evidence of HPV oncogenic expression, have established that persistent infection with high-risk HPV types is the necessary cause of cervical cancer<sup>2,3,4</sup>. On the basis of epidemiological and virological studies, HPV is estimated to cause 100% of cases of cervical cancer<sup>5</sup>.

In India, every year 132,082 women are diagnosed with cervical cancer (figure 1), accounting for

26.7% of the worldwide incidence of cervical cancer<sup>6</sup> and 74,118 deaths occur due to cervical cancer, accounting for 27% of deaths worldwide (>200 deaths every day).<sup>3</sup> The cumulative risk of developing cervical cancer by a woman in India (age 0-64yrs) is 2.5% compared to 1.3% for the world<sup>6</sup> and cumulative risk of mortality due to cervical cancer is 1.4% & 0.7% worldwide (Age period 0-64 years).<sup>6</sup> The crude mortality rate (per 1 lac women) of cervical cancer in India is 14.7 as compared to 8.9 in the world.<sup>6</sup> HPV 16 and 18 are responsible for approximately 70% cervical cancer cases worldwide and 77% cases of cervical cancer in India.<sup>6</sup> The deaths of women who are in their most productive years have a devastating effect on the well-being of their families, resulting, for example, in decreases in school attendance and nutritional status among their children.



Data source: IARC, GLOBOCAN 2002

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