Highly effective and safe vaccines are available to prevent HBV and HPV infections and associated cancers.

An estimated 257 million people are living with hepatitis B virus (HBV) infection globally. HBV is responsible for nearly 900,000 deaths annually, including more than 300,000 deaths from hepatocellular carcinoma (HCC). HCC results from chronic HBV infection, and the risk of chronic infection is greater if transmission occurs during birth or early childhood. The vaccines for HBV have been available since 1982 as a three-dose series, and can prevent chronic HBV infection, and the risk of chronic infection is greatest if transmission occurs during birth or early childhood. The first dose should be given within 24 hours after birth; however, only 60% of infants reach the recommended age of 6 months due to delays in vaccination.

Human papillomavirus (HPV) is the cause of about 311,000 cancers annually, 84% of which are cervical cancers, 10% other anogenital, and 6% oropharyngeal cancers. FIGURE 29.3 Two HPV vaccines, a bivalent and a quadrivalent vaccine, have been available since 2006. A third vaccine, a nonavalent vaccine, has been available since 2015. These vaccines, combined with screening, have the potential to avert millions of cervical cancer deaths over the coming decades. FIGURE 29.4 They are given as a three-dose or a two-dose series, are highly effective and safe, and target HPV types 16 and 18 (which cause over 70% of all cervical cancers) and most other cancers that are caused by HPVs. The nonavalent vaccine targets HPV types 16 and 18 as well as five additional cancer-causing HPV types; these seven types cause over 90% of cervical cancers. In most countries, the target group for HPV vaccination is young adolescent girls; some countries also recommend vaccination for boys. The first countries to introduce HPV vaccine were high-income countries, due to the cost of vaccines. Middle- and low-income countries started to introduce vaccine three to six years later. By 2019, over 90 countries had introduced HPV vaccination.

VACCINES

Through a scale-up of HPV vaccination and screening, millions of cervical cancer cases could be avoided in the coming decades, particularly in lower-HDI countries.

HPV is responsible for nearly all cervical cancers and a substantial proportion of other anogenital and oropharyngeal cancers.

HPV-associated cancers and a substantial proportion of other anogenital and oropharyngeal cancers.

CERVIX UTERI 100%
ANUS 88%
VAGINA 80%
PENIS 50%
EROFAVYNA 30%
WULA 25%

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