HPV and cervical cancer: What you need to know

Cervical cancer is the fourth most common cancer among women globally. Almost all cervical cancer cases are caused by human papillomavirus (HPV) infection, which can be prevented through vaccination.

To protect women from the devastating effects of cervical cancer, WHO calls for:

- HPV vaccination of adolescents
- Regular screening tests for cervical cancer and quality treatment

What is HPV?

HPV is the most common viral infection of the reproductive tract in women and men. Most people will have an HPV infection at some point during their lifetime, though they may not know it and may not experience any signs or symptoms of infection. HPV can infect both women and men. HPV infection usually clears on its own, but sometimes it can persist over time and eventually lead to cancer.

Cervical cancer is the most common cancer linked to HPV, but the virus is also responsible for some cancers of the vulva, vagina, penis, anus and back of the throat, including the base of the tongue and tonsils. HPV can also cause genital warts.
Screening

Especially in women older than 30 years of age, HPV infection may persist over time, and lead to changes in the cervix that can develop into cervical cancer. It normally takes 15–20 years for cervical cancer to develop in women with normal immune systems, and can take as few as 5 years in women with diseases that cause weakened immune systems.

Early detection and treatment of precancerous lesions prevents the development of cervical cancer. Cervical cancer detected at an early stage can be treated effectively.

WHO therefore recommends screening for vaccinated and unvaccinated women, beginning at 30 years of age and again every 5–10 years when using HPV DNA detection as the primary screening test, or every three years when using visual inspection or cytology as the primary screening test, until 49 years of age. For HIV-positive individuals, screening should start at age 25 and be repeated every 3–5 years.

If cervical precancerous cells are found during testing, treatment involves a minimally invasive procedure to destroy the abnormal cells in the cervix. Cervical cancer is treated with surgery, radiation therapy and chemotherapy. If treatment is not provided, cervical cancer can be fatal.

Vaccination

HPV vaccination can prevent more than 90% of HPV-related cancers. HPV vaccines are most effective in preventing cervical cancer later in life if administered to girls between the ages of 9 and 14. The HPV vaccine is given to this age group in 1–2 doses (depending on the country guideline). The HPV vaccine is effective and safe and does not have any known long-term side effects. At the time of vaccination, a person may experience pain in the injection site, but it usually resolves shortly after the vaccine is given.

HPV vaccination is given as a priority to girls but is also available to boys in many countries to prevent spread of the virus, thereby reducing the risk for cervical cancer in women, and reducing the risk of other HPV-related cancers and genital warts in the whole population. As of March 2023, 45 (of 53) countries in the WHO European Region offer HPV vaccination to girls, and in 20 countries also to boys.