

Is there a vaccine to prevent cancer?

Human papillomavirus and hepatitis B vaccines lower the risk of developing cancer.

April 21, 2023 By [Liz Highleyman](#)

You can take several steps to lower your risk for cancer, including smoking cessation, limiting alcohol and eating a healthy diet. But for some cancers, vaccines are the best prevention.

Human papillomavirus (HPV) causes cervical, anal, penile, mouth, throat and other cancers, but [many people are unaware](#) of this link. HPV is among the most common sexually transmitted infections, and most people acquire one or more types soon after they become sexually active.

The Gardasil 9 vaccine protects against nine types of HPV that cause cancer or genital warts. Studies show that HPV vaccines are safe and effective, and they lower infection rates and prevent precancerous cell changes and invasive cancer.

The Centers for Disease Control and Prevention [recommends HPV vaccination](#) for boys and girls at age 11 or 12, with catch-up vaccines for those up to age 26. The vaccine is approved for people up to age 45, but it doesn't work as well for individuals who have already been exposed to more types of HPV. People ages 27 to 45 can talk with their health care provider about whether vaccination still makes sense for them.

There is also an effective vaccine to prevent acquisition of [hepatitis B virus \(HBV\)](#). Over years or decades, chronic HBV infection can lead to serious liver complications, including cirrhosis and liver cancer.

The HBV vaccine is included in the routine immunization schedule for infants, with the first dose given soon after birth. Children, adolescents and teens should receive the vaccine if they were not vaccinated as babies. The [CDC now recommends](#) that all adults ages 19 to 59 should be vaccinated against hepatitis B, not only those considered to be at higher risk.

[Hepatitis C virus \(HCV\)](#) can also cause cirrhosis and liver cancer. There is currently no HCV vaccine, but well-tolerated antiviral medications can cure hepatitis C in just eight to 12 weeks.