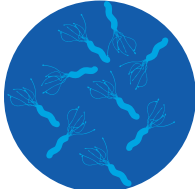

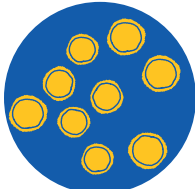
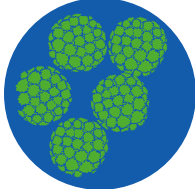


PREVENTING OR ELIMINATING INFECTION WITH THE FOUR MAIN CANCER-CAUSING PATHOGENS

Pathogen	Ways to Prevent Infection	Ways to Eliminate or Treat Infection	U.S. Recommendations
<i>Helicobacter pylori</i> 	Avoid exposure through good hygiene and sanitation	Treatment with a combination of antibiotics and a proton-pump inhibitor can eliminate infection	CDC recommends testing and treatment for people with active or a documented history of gastric or duodenal ulcers, low-grade gastric MALT lymphoma, or early-stage gastric cancer that has been surgically treated
Hepatitis B virus (HBV) 	<ul style="list-style-type: none"> • HBV vaccination • Avoid behaviors that can transmit infection (e.g., injection drug use and unsafe sex) 	Treatment of those chronically infected with antiviral drugs rarely eliminates infection but does slow virus multiplication; this slows the pace at which liver damage occurs and thereby reduces risk for liver cancer	<ul style="list-style-type: none"> • Vaccination part of childhood immunization schedule since 1991 • CDC and USPSTF recommend screening high-risk individuals—those from countries with high rates of HBV infection, HIV-positive persons, injection drug users, household contacts of HBV-infected individuals, and men who have sex with men—for HBV infection
Hepatitis C virus (HCV) 	Avoid behaviors that can transmit infection (e.g., injection drug use and unsafe sex)	Treatment with any of several antiviral drugs can eliminate infection	CDC and USPSTF recommend screening those born from 1945 to 1965 for HCV infection
Human papillomavirus (HPV) 	<ul style="list-style-type: none"> • Three FDA-approved vaccines • Practice safe sex, although this may not fully protect against infection 	None available	CDC recommends HPV vaccination for boys and girls age 11 or 12; recommendations for other groups can be found in the sidebar on HPV Vaccination Recommendations , see p. 38)

CDC, Centers for Disease Control and Prevention; MALT, mucosa-associated lymphoid tissue; USPSTF, U.S. Preventive Services Task Force.
Adapted from (109)