CHICAGO — Cancer- and genital wart–associated human papillomavirus was the most prevalent sexually transmitted disease among teenage girls, affecting 18% of participants in the first large study of STDs in this population.

Overall, 26% of 14- to 19-year-olds were infected with at least one STD. Chlamydia was found in 4%, trichomoniasis in 2.5%, and herpes simplex virus type 2 in 2%, reported Dr. Sara Forhan, lead author of the population-based study sponsored by the Centers for Disease Control and Prevention.

These infections occur quickly after sexual debut, Dr. Forhan noted. "Of particular importance is how fast these infections appear," she said. Among those who reported just 1 year of sexual activity, the prevalence already was 20%. Increased sexual activity leads to increased risk of infection: 50% of teens who reported three or more partners had at least one of the STDs.

The results underscore the importance of HPV vaccination, as well as chlamydia screening, said Dr. Kevin Fenton, director of CDC’s National Center for HIV / AIDS, Viral Hepatitis, STD, and Tuberculosis Prevention.

"Today's data demonstrate the significant health risk that STDs pose to millions of young women in this country every year. Given that the health effects of STDs for women—from infertility to cervical cancer—are particularly severe, STD screening, vaccination, and other prevention strategies for sexually active women are among our highest public health priorities, he said."

The survey highlighted sharp racial differences in STD prevalence, with black teens more than twice as likely as whites to have at least one STD.