

Oral Abstract D4a – Prevalence of Sexually Transmitted Infections and Bacterial Vaginosis among Female Adolescents in the United States: Data from the National Health and Nutritional Examination Survey (NHANES) 2003-2004

One in Four Female Adolescents Is Infected with At Least One Sexually Transmitted Infection, New CDC Study Finds

A new CDC study indicates that one in four (26%) female adolescents in the United States has at least one of the most common sexually transmitted infections (STIs). Led by CDC's Sara Forhan, the study is the first to examine the combined national prevalence of common STIs among adolescent women in the United States.

The authors analyzed data on 838 female adolescents (aged 14-19) who participated in the 2003-2004 National Health and Nutrition Examination Survey (NHANES), a continuous annual study that examines a nationally representative sample of the U.S. household population to assess a broad range of health issues. For this analysis, the teens were tested for human papillomavirus (HPV) infection, chlamydia, herpes simplex virus type 2 (HSV-2) infection, and trichomoniasis. The authors examined high-risk HPV types, including 23 types of the virus that are known to cause cancer, and the two types that cause most genital warts.

Based on the overall STI prevalence of 26 percent, the authors estimate that about 3.2 million adolescent females in the United States are infected with one of these STIs. They note that the total prevalence might be slightly higher than these estimates indicate, because some STIs – including syphilis, HIV and gonorrhea – were not included in the analysis; however, the prevalence of these STIs is low in this age group.

In addition to overall STI prevalence, key findings of the new study include the following:

- The most common STI was cancer- and genital wart-associated HPV (18.3%), followed by chlamydia (3.9%), trichomoniasis (2.5%), and HSV-2 (1.9%). Among the teenage girls who had an STI, 15 percent had more than one.
- By race, African American teenage girls had the highest prevalence, with an overall STI prevalence of 48 percent compared to 20 percent among both whites and Mexican Americans. (Other Hispanics and race/ethnic populations were captured in the survey, but there were insufficient numbers in any one group to permit valid prevalence estimates for any group except Mexican Americans.)
- Overall, approximately half of all the teens in the study reported ever having had sex. Among these girls, the STI prevalence was 40 percent.
- Even among girls reporting only one lifetime partner, one in five (20.4%) had at least one STI. Girls with three or more partners had a prevalence of over 50 percent. The predominant STI was HPV.

According to the authors, the high prevalence of HPV indicates that teenage girls are at high risk for this infection, even those with few lifetime sexual partners. It is important to realize that most HPV infections clear on their own; however some infections persist over time, placing women at risk for cervical cancer. A vaccine against HPV types 16 and 18, responsible for 70

percent of cervical cancer, and types 6 and 11, responsible for nearly all genital warts, is now recommended routinely for 11 and 12 year-old girls.

These data also underscore the importance of chlamydia screening to ensure prompt diagnosis and treatment, and to avoid the serious long-term consequences of the disease, which include pelvic inflammatory disease (PID) and infertility. CDC recommends annual chlamydia screening of all sexually active women aged 25 and under.

CDC supports a comprehensive approach to STD prevention that includes the promotion of abstinence as the surest way to prevent getting an STD, being in a mutually monogamous relationship with a partner known to be uninfected, and the consistent and correct use of condoms for sexually active people to reduce the risk of acquiring many infections. Condoms (used all the time and the right way) may lower your chances of passing HPV to a partner or developing HPV-related diseases.