One in four U.S. women aged 14–19 has a sexually transmitted infection (STI), according to a study released in March 2008 by researchers from the Centers for Disease Control and Prevention (CDC). Prevalence was 40% among those who said they were sexually experienced. The data are drawn from the 2003–2004 National Health and Nutrition Examination Surveys (NHANES), a nationally representative survey that is notable for relying on actual medical testing, rather than self-reported infection—important because many STIs are asymptomatic.

The new figures were trumpeted in newspapers around the country and are in many ways distressing. The STI cases in the study include chlamydia (3.9% of the teens), trichomoniasis (2.5%) and genital herpes (1.9%), all of which can increase one’s vulnerability to HIV infection and impact fertility, maternal and child health, or both. Chlamydia and trichomoniasis are curable; herpes is not, although treatment can suppress outbreaks and reduce the chances of passing it on to a partner. Several even less common STIs were missing from the study, including gonorrhea, syphilis and HIV.

In one key respect, however, the overall STI rates may not be as alarming as they first appear. Roughly two-thirds of the infections were of human papillomavirus (HPV), found among 18.3% of the teens. Yet, although all 25 of the strains studied are deemed “high risk” by medical researchers, the most serious HPV strains are considerably less common. Four strains of HPV account for 70% of cervical cancer cases and 90% of genital warts. Another CDC analysis, from 2007, found that infection with one or more of these four strains is about one-fifth as common as infection with a “high risk” strain overall.

Perhaps more important is the fact that most HPV infections—including the highest-risk strains—are cleared naturally and safely by a woman’s body. A study released in April by researchers from the National Cancer Institute found that more than half of infections clear within six months; other studies have found that nine in 10 infections are fought off within two years. Moreover, the simple and relatively inexpensive Pap test has been proven extremely successful in detecting cervical abnormalities long before they may develop into cancer and while they are easily treated. So, although HPV is so common that it can be seen as virtually a marker for sexual activity, cervical cancer is quite rare in this country: roughly 10,000 cases per year, resulting in 3,700 deaths.

The study’s most important finding, rather, may be its confirmation of severe disparities in STI rates by race and ethnicity. Nearly half of black teens in the study were found to have one or more of the four STIs, compared with only one in five white or Mexican American teens (see chart). This disparity is independent of factors such as income and number of sexual partners.

The new study adds weight to calls for expanded STI screening, treatment and prevention—in which there are also serious racial and economic disparities. More than half of cervical cancer cases, for example, occur among women who have not had a Pap test in the past three years, women who are disproportionately low-income and of color. The combination of increased access to Pap tests and even more sophisticated diagnostic technologies and the rollout of the HPV vaccine—which targets some of the highest-risk strains—hold the potential to virtually eliminate cervical cancer in this country. Similarly, the U.S. government recommends routine screening for chlamydia among sexually active women 25 and younger. If fully funded and paired with treatment for the woman and her partner, this initiative could make substantial headway in reducing disparities in the incidence and impact of that STI as well.

—Adam Sonfield

Note: Includes infection with chlamydia, trichomoniasis, genital herpes or one of 25 strains of human papillomavirus linked to cervical cancer or genital warts. Source: Centers for Disease Control and Prevention, 2008.