

Chlamydial infection among young adults in Baltimore, MD: Gender differences across the last decade

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Aims: To examine: 1) population survey estimates of undiagnosed chlamydial infection (CT) among young adults in Baltimore, Md USA in 1997-98 and 2006-09 and 2) counts of diagnosed CT cases reported to the Baltimore City Health Department.

Methods: Weighted survey estimates of undiagnosed chlamydial infection are compared with case counts reported to the BCHD during the same time periods by gender and age.

Results: Survey estimates of CT among young males were over two times higher in 2006-09 (4.0%, 95% CI 2.5, 6.5) than in 1997-98 (1.6%, 95% CI 0.7, 3.4; $p < 0.05$); prevalence among females was lower in 2006-09 (3.1%, 95% CI 2.2, 4.5) than in 1997-98 (4.3%, 95% CI 2.2, 8.4; $p > 0.05$). BCHD counts increased over time, but male infections represented less than one-quarter the number of diagnosed cases among females in each survey period. Among young men, but not women, population estimates of undiagnosed CT exceeded the number of diagnosed cases to the BCHD.

Conclusions: In the U.S., CT screening is recommended among all sexually active women 25 years of age and younger; there are no recommendations for men. Our results suggest that while current chlamydial surveillance aimed at diagnosing infections among young women may have reduced infections within this group over the last decade, a reservoir of undiagnosed infection, particularly among young males 15 to 24 years of age in Baltimore remains. Untreated men may continue to contribute to high rates of STI in some communities.

Keywords: chlamydial infection, STI surveillance, population survey