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Predictors of Chlamydia Infection in New York State Sentinel Sites

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Introduction: In 1995, the Bureau of Sexually Transmitted Disease (STD) Control implemented *Chlamydia* sentinel surveillance in two public health clinics in an urban city with the second highest rate of gonorrhea statewide. The County STD and Family Planning (FP) clinics were sentinel sites.

Objective: To identify factors predictive of *Chlamydia* infection in each clinic population.

Data and Methods: All women screened for *Chlamydia* between January 1, 1997 and December 31, 2001 were included. Routinely collected demographic and clinical information was recorded on a standardized questionnaire. Endocervical specimens were tested using an enzyme immunoassay (prior to August 1, 2000) or nucleic acid amplification test. Stepwise logistic regression was used to identify variables predictive of infection.

Results: 14,204 women were included, 9,090 FP and 5,114 STD clients. Overall prevalence was 4.8% among FP and 10.3% among STD clients. Prevalence was highest among persons aged <20. Multivariate analysis identified age as the strongest predictor of infection. National screening criteria for FP (women under age 25) identified 82% of FP infections with 54% screened. Applying national criteria for STD (women under age 30) to both clinic populations identified over 90% of infections with 69% - 76% screened.

Conclusion and Significance: Our data indicate that age is the most powerful predictor of genital chlamydial infection. Furthermore, screening all women under age 30 in our cohort, regardless of clinic, would capture the highest proportion of infections. This adjustment to national recommendations demonstrates the public health importance of local program evaluation.