Oral Abstract A1d: Missed Gonorrhea Infections by Anatomic Site among Asymptomatic Men Who Have Sex with Men Attending U.S. STD Clinics, 2002-2006

Gonorrhea Infections in Asymptomatic MSM Missed Due to Lack of Testing at All Exposed Anatomic Sites

New data from several STD clinics suggest that more than one-third of rectal gonorrhea infections and more than a quarter of pharyngeal (throat) gonorrhea infections among asymptomatic men who have sex with men (MSM) are missed and not treated because many are not tested at all sites of reported exposure.

Led by CDC's Kristen C. Mahle, researchers evaluated asymptomatic MSM tested for gonorrhea and estimated the proportion of asymptomatic infections that were missed as a result of incomplete testing in STD clinics in eight cities between 2002 and 2006. CDC guidelines recommend that MSM be tested for gonorrhea at all exposed anatomic sites (pharyngeal, urethral, and rectal) on an annual basis, and more frequently if they engage in high-risk behaviors.

The researchers collected data on the care received during 36,926 patient visits at 10 STD clinics in eight cities (Chicago, Denver, Houston, New York City, Philadelphia, San Francisco, Seattle, and Washington, D.C.). Among asymptomatic patients, gonorrhea testing at the urethral site took place in 91 percent of patient visits in which urethral exposure was reported; pharyngeal testing took place at 74 percent of patient visits in which pharyngeal exposure was reported, and rectal testing in 64 percent of patient visits in which rectal exposure was reported. The analysis also found that asymptomatic MSM were tested for gonorrhea at *all* exposed anatomic sites in 52 percent of patient visits.

Based upon the percent of positive tests among those men, researchers estimated that 35 percent of rectal infections, 25 percent of pharyngeal infections, and 9 percent of urethral infections went undiagnosed, with large variations occurring across clinics.

In considering possible reasons that providers do not screen at all exposed anatomic sites, the researchers noted that nucleic acid amplification tests (NAATs) are only FDA-approved for use on specimens from the urethra but not for use on specimens from the pharynx or the rectum. NAATs are frequently the only tests available to diagnose gonorrhea. They are not constrained by strict specimen transport conditions required for bacterial culture tests, which must be used for testing non-genital sites. Furthermore, the urethra may be the only site that is typically associated with symptoms when infection is present. The researchers said that rectal and pharyngeal testing rates may also be lower because the tests require a specimen that is more difficult to collect, the culture tests needed may not be available, and a patient who has no symptoms may be less willing to undergo an uncomfortable test.

Researchers emphasize that these data point to the need for providers to screen for gonorrhea based on reported exposure, rather than symptoms only, since the majority of gonorrhea infections at non-genital sites are asymptomatic. They encourage increased education to ensure that providers are aware of the STD Treatment Guidelines and the prevalence of asymptomatic rectal and pharyngeal gonoccocal infection. Providers must also consult with local laboratory directors to determine if gonorrhea culture is available or if the laboratory has taken the necessary regulatory steps to use NAATs for off-label specimen testing.