New Screening Method for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*

Amy Armbrust, MT(ASCP)

Beginning January 22, a new test for the detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* was implemented. The test uses amplified DNA technology to improve sensitivity and allow detection of these organisms from urine as well as swab specimens. Because the collection of urine sample does not require special examination facilities it is expected that more screening can be performed in the population at highest risk, including sexually active males and females under the age of twenty. The establishment of a urine screening program at any clinic requires approval by Phil Medina, the STD Program Coordinator. Clinical studies have shown the value of using an amplified procedure to detect *Chlamydia trachomatis* and *Neisseria gonorrhoeae.* The performance characteristics of the Becton Dickinson Probetec assay were abstracted from published studies. (**Table 1**) The amplified test is more sensitive and specific than either culture or the previous GenProbe assay, but the positive predictive value of the test will vary depending on the prevalence of the organism in the patient population, whether the patient is male or female and the type of specimen collected. Large amounts of blood and mucus may interfere with the assay as well as medications that color the urine orange. Specimens can be submitted from either males or females using the swab collection kit or a voided urine sample in a sterile container. The Chlamydia/Gonorrhea Amplified Probe test will be performed Monday through Friday with results available the same day on specimens received by 6 AM. Specimen requirements are as follows: swabs must be collected with the Probetec, gender specific collection kit. The swab must be labeled with patient identification, date and time of collection. The eyes, throat and rectum are not approved sites and require culture methods for organism recovery. If a legal or criminal action is anticipated, culture is the appropriate method. Swabs can be maintained at room temperature for up to five days after collection. Urine must be refrigerated and not frozen and also received within five days by the laboratory.

The company that provides the Probetec assay is planning on introducing a liquid transport media similar to that used by the GenProbe assay. This change is expected to occur in September and more information will be available in the future.

Table 1. Chamydia/Gonorrhea Performance Values

Chlamydia	Sensitivity	Specificity
Male urine	93%	95%
Male swab	92.5%	95%
Female urine	80.5%	96%
Female swab	92.8%	96%

Gonorrhea	Sensitivity	Specificity
Male urine	97%	96%
Male swab	98.5%	96%
Female urine	84.9%	98%
Female swab	96.6%	98%