NHANES 1999-2000 Second Public Release Dataset

Laboratory 5 – Urinary Chlamydia and Urinary Gonorrhea

Description

Urinary chlamydia and Urinary Gonorrhea

Sexually transmitted infections caused by Chlamydia trachomatis and Neisseria gonorrhoeae may lead to pelvic inflammatory disease, ectopic pregnancy, infertility, and chronic pelvic pain in women. They are also associated with increased risk of HIV transmission. Pregnant women may transmit infection to their newborn causing serious medical complications. At present there are no reliable estimates on the prevalence of chlamydial and gonococcal infections in the general population of the United States.

NHANES offers an opportunity to assess the prevalence of chlamydial and gonococcal infection in the general population and to monitor trends in prevalence as prevention programs are established and expanded.

Eligible Sample

Participants aged 14 to 39 years are tested. Public data file includes data for persons 18-39 years of age. Please see notes about the availability of data for adolescents 14-17 years of age.

Data Collection Methods

Urine specimens are processed, stored, and shipped to the National Centers for Infectious Diseases for testing.

Examination Protocol

Detailed specimen collection and processing instructions are discussed in the NHANES Laboratory/Medical Technologists Procedures Manual (LPM). Vials were stored under appropriate frozen (minus 20 degrees Centigrade) conditions until they were shipped to the National Center for Infectious Diseases for testing.

Analytic Methodology

Urinary chlamydia

The Chlamydia trachomatis assay uses LCR ™ (ligase chain reaction) amplification technology in the LCx Probe System for the direct, qualitative detection of plasmid DNA of Chlamydia trachomatis.

The LCx Chlamydia trachomatis assay uses the nucleic acid amplication method LCR to detect the presence of C. trachomatis plasmid DNA directly in clinical specimens. The four oligonucleotide probes in the LCx assay recognize and hybridize to a specific target sequence within the C. trachomatis plasmid DNA. The oligonuleotides are

designed to be complementary to the target sequence so that in the presence of target, the probes will bind adjacent to one another. They can then be enzymatically joined to form the amplification product, which subsequently serves as an additional target sequence during further rounds of amplication. The product of the LCR reaction is detected on the Abbott LCx analyzer.

Urinary gonorrhea
The Neisseria gonorrhoeae assay uses LCR ^{TM} (ligase chain reaction) amplification technology in the LCx Probe System for the direct, qualitative detection of a specific target nucleic acid sequence in the Opa gene of Neisseria gonorrhoeae.

The LCx Neisseria gonorrhoeae assay uses the nucleic acid amplication method LCR to detect the presence of Neisseria gonorrhoeae. The four oligonucleotide probes in the LCx assay recognize and hybridize to a specific target sequence within the Opa gene of Neisseria gonorrhoeae DNA. The oligonuleotides are designed to be complementary to the target sequence so that in the presence of target, the probes will bind adjacent to one another. They can then be enzymatically joined to form the amplification product which subsequently serves as an additional target sequence during further rounds of amplication. The product of the LCR reaction is detected on the Abbott LCx analyzer.

Analytic Notes

Urinary chlamydia and gonorrhea data for youth 14-17 years of age will be available in the NCHS Research Data Center (RDC).