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 amplification 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 oligonucleotides 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 amplification. The product of the LCR reaction is detected on the Abbott LCx analyzer.

**Urinary gonorrhea**
The Neisseria gonorrhoeae assay uses LCR™ (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 amplification 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 oligonucleotides 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 amplification. 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).