## National Health and Nutrition Examination Survey

2015-2016 Data Documentation, Codebook, and Frequencies

Chlamydia - Urine (CHLMDA\_I)

Data File: CHLMDA\_I.xpt

First Published: December 2017

Last Revised: NA

#### Component Description

Sexually transmitted infections caused by Chlamydia trachomatis may lead to pelvic inflammatory disease, ectopic pregnancy, infertility, and chronic pelvic pain in women. They are associated with increased risk of HIV transmission. Pregnant women may transmit infection to their newborn, causing serious medical complications.

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

#### Eligible Sample

Examined participants aged 14-39 years were eligible. This public data file only includes examined participants aged 18-39 years. See Analytic Notes for information on participants aged 14-17 years.

## **Description of Laboratory Methodology**

The BDProbeTec CT Chlamydia trachomatis Amplified DNA Assays are based on the simultaneous amplification and detection of target DNA, using amplification primers and a fluorescent labeled detector probe. The Strand Displacement Amplification (SDA) reagents are dried in two separate disposable microwell strips. The processed sample is added to the Priming Microwell, which contains the amplification primers, fluorescent labeled detector probe, and other reagents necessary for amplification. After incubation, the reaction mixture is transferred to the Amplification Microwell, which contains two enzymes (a DNA polymerase and a restriction endonuclease) necessary for SDA. The Amplification Microwells are sealed to prevent contamination and then incubated in a thermally controlled fluorescent reader, which monitors each reaction for the generation of amplified products.

Refer to the Laboratory Method Files section for a detailed description of the laboratory methods used.

There were no changes to the lab methods, lab equipment, or lab site for this component in the NHANES 2015-2016 cycle.

## Laboratory Method Files

Chlamydia trachomatis in Urine (December 2017)

### Laboratory Quality Assurance and Monitoring

Urine samples were processed, stored, and shipped to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, National Center for HIV/AIDS,

1 of 5 6/12/2019, 3:32 PM

Viral Hepatitis, STD and TB, Centers for Disease Control and Prevention, Atlanta GA for analysis.

Detailed instructions on specimen collection and processing are discussed in the NHANES Laboratory Procedures Manual (LPM). Vials are stored under appropriate frozen (–30°C) conditions until they are shipped to the Division of STD Prevention Laboratory for testing.

The NHANES quality assurance and quality control (QA/QC) protocols meet the 1988 Clinical Laboratory Improvement Act mandates. Detailed QA/QC instructions are discussed in the NHANES LPM.

#### **Mobile Examination Centers (MECs)**

Laboratory team performance is monitored using several techniques. NCHS and contract consultants use a structured competency assessment evaluation during visits to evaluate both the quality of the laboratory work and the quality-control procedures. Each laboratory staff person is observed for equipment operation, specimen collection and preparation; testing procedures and constructive feedback are given to each staff member. Formal retraining sessions are conducted annually to ensure that required skill levels were maintained.

#### **Analytical Laboratories**

NHANES uses several methods to monitor the quality of the analyses performed by the contract laboratories. In the MEC, these methods include performing blind split samples collected on "dry run" sessions. In addition, contract laboratories randomly perform repeat testing on 2.% of all specimens.

NCHS developed and distributed a quality control protocol for all CDC and contract laboratories, which outlined the use of Westgard rules (Westgard, et al. 1981) when running NHANES specimens. Progress reports containing any problems encountered during shipping or receipt of specimens, summary statistics for each control pool, QC graphs, instrument calibration, reagents, and any special considerations are submitted to NCHS quarterly. The reports are reviewed for trends or shifts in the data. The laboratories are required to explain any identified areas of concern.

### Data Processing and Editing

The data were reviewed. Incomplete data or improbable values were sent to the performing laboratory for confirmation.

## **Analytic Notes**

Refer to the 2015 - 2016 Laboratory Data Overview for general information on NHANES laboratory data.

Please refer to the NHANES Analytic Guidelines and the on-line NHANES Tutorial for further details on the use of sample weights and other analytic issues.

#### **Demographic and Other Related Variables**

The analysis of NHANES laboratory data must be conducted using the appropriate survey design and demographic variables. The NHANES 2015-2016 Demographics File contains demographic data, health indicators, and other related information collected during household interviews as well as the sample weight variables. The recommended procedure for variance estimation requires use of stratum and PSU variables (SDMVSTRA and SDMVPSU, respectively) in the demographic data file.

This laboratory data file can be linked to other NHANES data files using the unique survey participant identifier (i.e., SEQN).

The public release data file includes Chlamydia - urine data for participants aged 18–39. Chlamydia - urine data for youth aged 14–17 years are available through the NCHS Research Data Center (RDC).

#### **Detection Limits**

2 of 5 6/12/2019, 3:32 PM

Since this data is reported as qualitative data the use of lower LLODs isn't applicable.

# References

• N/A.

3 of 5

## Codebook and Frequencies

### SEQN - Respondent sequence number

Variable Name: SEQN

**SAS Label:** Respondent sequence number

**English Text:** Respondent sequence number.

**Target:** Both males and females 18 YEARS - 39 YEARS

4 of 5

Binary

## URXUCL - Chlamydia, Urine

Variable Name: URXUCL

SAS Label: Chlamydia, Urine

English Text: Chlamydia, Urine

Target: Both males and females 18 YEARS - 39 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to I tem
1	Positive	44	44	
2	Negative	2025	2069	
3	Indeterminate	0	2069	
	Missing	56	2125	

5 of 5