Documentation, Codebook, and Frequencies

Surplus Specimen Laboratory Component: Antibody to Cytomegalovirus IgG (NHANES Surplus Sera) (SSCMV_C)

Survey Years:
2003 to 2004

SAS Export File:
SSCMV _C.XPT

nhanes

NHANES 2003-2004 Data Documentation

Laboratory Assessment: Antibody to Cytomegalovirus IgG (NHANES Surplus Sera) (SSCMV_C)

First Published: March 2008   **Last Revised:** N/A

Component Description

Cytomegalovirus (CMV) antibody testing of stored sera specimens from NHANES 1999-2004 was conducted to estimate the seroprevalence of CMV infection (CMV IgG) in participants aged 6 to 49 years. An optical density measure for IgG is also included in this data release as an estimate of antibody titer.

Eligible Sample

Participants aged 6 to 49 years from NHANES 1999-2004 with stored sera (N = 15,336).

Description of Laboratory Methodology

CMV specific IgG was measured with an ELISA by Quest International, Inc., Miami FL. Sera with values near the ELISA cutoff (approx 5.2% of total) were confirmed with a second ELISA assay by bioMerieux, Inc., Durham, NC. When the results from these 2 tests disagreed (approx. 2.7% of total), an IFA from Bion International, Inc., was used and the result of the IFA was given as the final result.

Optical Density for the IgG test is reported. Optical density was measured with the ELISA assay by Quest International, Inc. and approximately corresponds to antibody titer; a low and positive optical density indicates low antibody titer and a high optical density indicates high antibody titer.

Laboratory Quality Control and Monitoring

Commercial reagents were used for all CMV testing. All QC procedures recommended by the manufacturers were followed.

Data Processing and Editing

Data were received after all the antibody testing was complete. The data were not edited.

Data Access: All data are publicly available.

**Analytic
Notes**
There are two variables:

SSCMV: CMV specific IgG results (1=Positive, 2=Negative,
3= Equivocal)

SSCMVOD: CMV IgG Optical Density from the ELISA by Quest
International, Inc., Miami FL. Measured in AU/ml which stands
for Arbitrary units/ml. Continuous variable - Values range from
0.048 to 3.001. Values reported as "out of range" (i.e. over the
detectable range, > 3.00) were assigned values of 3.001

References
1. Starr, S.E., and Friedman, H.M. "Human Cytomegalovirus", Chapter
65 in Manual of Clinical Microbiology, fourth edition, edited by E.H.
Lennette, A. Balows, W.J. Hausler, Jr., and H.J. Shadomy, American
Society for Microbilolgy, pp 711-719. 1985.

2. Peckham, C.S. "Cytomegalovirus in the neonate". Journal of
Antimicrobial Chemotherapy. 23:17-21. 1989.

3. Joassin, L., and Reginster, M. "Elimination of nonspecific
cytomegalovirus immunoglobulin M activities in the enzyme-linked
immunosorbent assay by using anti-human immunoglobulin G".
Journal of Clinical Microbiology. 23:576-581. 1986.

Locator Fields

Title: Antibody to Cytomegalovirus (CMV)

Contact Number: 1-866-441-NCHS

Years of Content: 2003-2004

First Published: March 2008

Revised: N/A

Access Constraints: None

Use Constraints: None

Geographic Coverage: National

Subject: Cytomegalovirus (CMV)

Record Source: NHANES 2003-2004

Survey Methodology: Continuous NHANES (including 2003-2004 data) is a stratified multistage probability sample of the civilian non-institutionalized population of the U.S.

Medium: NHANES Web site; SAS transport files

National Health and Nutrition Examination Survey
Codebook for Data Production (2003-2004)

Antibody to Cytomegalovirus (CMV) IgG (SSCMV_C)
Person Level Data

March 2008

SEQN	Target
	B(6 Yrs. to 49 Yrs.)
Hard Edits	**SAS Label**
	Respondent sequence number

English Text: Respondent sequence number.

English Instructions:

SSCMVOD	Target
	B(6 Yrs. to 49 Yrs.)
Hard Edits	**SAS Label**
	CMV optical density from ELISA

English Text: CMV optical density from ELISA

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0.048 to 3.001	Range of Values	5126	5126	
.	Missing	0	5126	

SSCMV	Target
	B(6 Yrs. to 49 Yrs.)
Hard Edits	**SAS Label**
	CMV specific IgG results

English Text: CMV specific IgG results

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Positive	2801	2801	
2	Negative	2323	5124	
3	Equivocal	2	5126	
.	Missing	0	5126	