Documentation, Codebook, and Frequencies

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

Survey Years: 1999 to 2000

SAS Export File: SSCMV_A.XPT



First Published: March 2008

Last revised: N/A

NHANES 1999-2000 Data Documentation

Laboratory Assessment: Antibody to Cytomegalovirus IgG (NHANES Surplus

Sera) (SSCMV_A)

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 Microbiology, 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: 1999-2000 First Published: March 2008

Revised: N/A

Access Constraints: None
Use Constraints: None

Geographic Coverage: National
Subject: Cytomegalovirus (CMV)
Record Source: NHANES 1999-2000

Survey Methodology: Continuous NHANES (including 1999-2000 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 (1999-2000)

Antibody to Cytomegalovirus (CMV) IgG (SSCMV_A) 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	I	Description	Count	Cumulative	Skip to Item		
0.078 to 3.001	Ra	nge of Values	4656	4656			
		Missing	0	4656			

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	2791	2791	
2	Negative	1865	4656	
3	Equivocal	0	4656	
	Missing	0	4656	