
Documentation, Codebook, and Frequencies

**Periodontal Pathogens: Serum
Actinobacillus actinomycetem-
comitans antibody and
Porphyromonas gingivalis
antibodies**

**Survey Years:
1991 to 1994**

**SAS Export File:
DEPP.XPT**



NHANES III Data Documentation

Laboratory Assessment: Periodontal Pathogens: Serum Actinobacillus actinomycetemcomitans antibody and Porphyromonas gingivalis antibodies, NHANES III, phase 2, ages 12 +years.

Years of Coverage: 1991–1994

First Published: December 2005

Last Revised: N/A

Component Description	Serum Actinobacillus actinomycetemcomitans (Aa) antibody and Porphyromonas gingivalis (Pg) antibody
Eligible Sample	Participants age 12 years and above who were examined in phase 2 of NHANES III (1991-1994) and had a dental exam. Sample sizes tested are 9,372 for Aa and 9371 for Pg.
Description of Laboratory Methodology	<p>Periodontal pathogens were grown by Stanley C. Holt of San Antonio Texas. The strains of Aa were serotype a (ATCC 29523), serotype b (ATCC 43718[Y4], and serotype c (ATCC 33384). The strains of Pg were ATCC 33277 [381], ATCC 53978 [W50], and ATCC 53977[A7A-28]. The three strains of each bacteria were pooled for preparation of plates for the screening assays. The serum standards were provided by Dr. Ebersol (1) of the University of Texas, San Antonio. The detection of antibodies to Aa and Pg was by ELISA. The Aa and Pg standards were diluted 1:200 and then two fold for a total of five standard concentrations. The assigned arbitrary value for starting the dilution was 1000.</p> <p>Results are reported in Elisa Units (EU).</p>
Laboratory Quality Control and Monitoring	A standard curve was run with each plate. The standard ODs were compared with the average standard curve ODs. A plate correction factor was developed which adjusts for an over or under color development. The average of the reagent blank was subtracted from the average OD of the replicates. This was the specific OD and was multiplied by the plate correction factor to produce the normalized OD.
Data Processing and Editing	<p>Data was received after all the testing was complete. The data were not edited.</p> <p>Data Access: All data are publicly available.</p>

**Analytic
Notes**

Aa and Pg EU levels may be considered elevated with cut points of 156 EU for Aa and 168 EU for Pg. The elevated cut points were determined by selecting a level at 90% or higher in those without periodontal disease (defined by having at least one periodontal site with 3 mm or more of attachment loss and 4 mm or more of pocket depth) after excluding participants in the upper and lower 1% of the Aa and Pg distribution (2).

References

1. Ebersol JL, Frey DE, Taubman MA, Smith DJ. An ELISA for measuring serum antibodies to Actinobacillus actinomycetemcomitans. Journal of Periodontal research. 1980;15:621-632.
2. Dye BA, Choudhary K, Shea S, Papapanou PN. Serum antibodies to periodontal pathogens and markers of systemic inflammation. Journal of Clinical Periodontology 2005; 32: 1189-1199.

Locator Fields

Title: Periodontal Pathogens

Contact Number: 1-866-441-NCHS

Years of Content: 1991-1994

First Published: December 2005

Revised: N/A

Access Constraints: None

Use Constraints: None

Geographic Coverage: National

Subject: Actinobacillus actinomycetemcomitans (Aa) antibody and Porphyromonas gingivalis (Pg) antibody

Record Source: NHANES III (1991-1994)

Survey Methodology: NHANES III, phase 2 (1991-1994) 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 (1991-1994)
(NHANES III)**

**Periodontal Pathogens: Serum Actinobacillus
actinomycetemcomitans antibody and Porphyromonas
gingivalis antibodies
Person Level Data**

Last Modified: November 2005



SEQN	Target
	B(12 Yrs. to 150 Yrs.)
Hard Edits	SAS Label
	Respondent sequence number
English Text: Respondent sequence number.	
English Instructions:	

DEPAA	Target		
	B(12 Yrs. to 150 Yrs.)		
Hard Edits	SAS Label		
	A. Actinomycetemcomitans (Aa) antibody		
English Text: A. Actinomycetemcomitans (Aa) antibody level			
English Instructions:			
Code or Value	Description	Count	Skip to Item
46 to 1994	Range of Values	9372	
.	Missing	13	

DEPPG	Target		
	B(12 Yrs. to 150 Yrs.)		
Hard Edits	SAS Label		
	P. Gingivalis (Pg) antibody		
English Text: P. Gingivalis (Pg) antibody level			
English Instructions:			
Code or Value	Description	Count	Skip to Item
40 to 22885	Range of Values	9371	
.	Missing	14	