

# Third National Health and Nutrition Examination Survey 1988–1994

## Documentation, Codebook, and Frequencies

Surplus Sera Laboratory Component:  
Cystatin C (Surplus Sera)

Survey Years:  
1988 to 1994

SAS Export File:  
SSCYSTAT.XPT



First Published: May 2007  
Last revised: N/A

# NHANES III Data Documentation

## Laboratory Assessment: Cystatin C (NHANES III Surplus Sera)

Years of Coverage: 1988–1994

First Published: May 2007

Last Revised: N/A

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**Component Description** Cystatin C assayed from stored serum samples from NHANES III (1988-1994)

**Eligible Sample** All participants aged 60+ with available specimen and a 25% random sample of participants aged 12-59 years. This younger group is supplemented with all individuals with high serum creatinine (1.2 mg/dl in men and >1.0 mg/dl in women) after calibration.

**Description of Laboratory Methodology** All assays were conducted using the Dade Behring N Latex Cystatin C assay which is an automated particle-enhanced nephelometric assay (PENIA) run on the Dade Behring Nephelometer II (BNII) (1).

**Laboratory Quality Control and Monitoring** This assay has an intra-assay imprecision of 2.0 - 3.0% coefficient of variation and an inter-assay imprecision of 3.2 - 4.4% coefficient of variation. The assay range is 0.23 - 7.25 mg/dL. A thorough review of different assay methodologies by Newman (2) concluded that it is the most precise automated assay across the clinical concentration range and performed slightly better than the other automated assays in terms of sensitivity and lack of analytical interference.

**Data Processing and Editing** All data will be made publicly available.

**Analytic Notes** The sub-sample of participants aged 12-59 requires modification of original sampling weights. Weights will be provided by investigators to NCHS and will be adjusted by age, sex, race, and serum creatinine strata to match the original NHANES III design.

### References

(1) Finney H, Newman DJ, Gruber W, Merle P, Price CP. Initial evaluation of cystatin C measurement by particle-enhanced

immunonephelometry on the Behring nephelometer systems (BNA, BN II). Clin Chem 1997; 43(6 Pt 1):1016-1022.

(2) Newman DJ. Cystatin C. Ann Clin Biochem 2002; 39(Pt 2):89-104.

## Locator Fields

**Title:** Cystatin C

**Contact Number:**

**Years of Content:** 1988-1994

**First Published:** May 2007

**Revised:** N/A

**Access Constraints:** None

**Use Constraints:** None

**Geographic Coverage:** National

**Subject:** Serum Cystatin C

**Record Source:** NHANES III (1988-1994)

**Survey Methodology:** NHANES III 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 (1988-1994)  
(NHANES III)**

**Cystatin C (Surplus Sera) (SSCYSTAT)  
Person Level Data**

First Published: May 2007

Last Revised: N/A



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

<b>SSCYSTAT</b>	<b>Target</b>
	B(12 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Surplus sera Cystatin C (mg/L)
<b>English Text:</b> Surplus sera Cystatin C (mg/L)	
<b>English Instructions:</b>	

Code or Value	Description	Count	Cumulative	Skip to Item
0.05 to 8.5	Range of Values	7670	7670	
.	Missing	51	7721	

<b>WTCYPEX6</b>	<b>Target</b>
	B(12 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Serum Cystatin MEC sample weight
<b>English Text:</b> Serum Cystatin MEC sample weight	
<b>English Instructions:</b>	

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 557278.42094	Range of Values	7647	7647	
.	Missing	74	7721	

<b>WTCYPHX6</b>	<b>Target</b>			
	B(12 Yrs. to 150 Yrs.)			
<b>Hard Edits</b>	<b>SAS Label</b>			
	Serum Cystatin MEC+Home sample weight			
<b>English Text:</b> Serum Cystatin MEC+Home sample weight				
<b>English Instructions:</b>				
<b>Code or Value</b>	<b>Description</b>	<b>Count</b>	<b>Cumulative</b>	<b>Skip to Item</b>
0 to 555987.69015	Range of Values	7721	7721	
.	Missing	0	7721	

<b>WTSCREX6</b>	<b>Target</b>			
	B(12 Yrs. to 150 Yrs.)			
<b>Hard Edits</b>	<b>SAS Label</b>			
	Serum Creatinine MEC sample weight			
<b>English Text:</b> Serum Creatinine MEC sample weight				
<b>English Instructions:</b>				
<b>Code or Value</b>	<b>Description</b>	<b>Count</b>	<b>Cumulative</b>	<b>Skip to Item</b>
231.90933542 to 149994.33431	Range of Values	7647	7647	
.	Missing	74	7721	

<b>WTSCRHX6</b>	<b>Target</b>			
	B(12 Yrs. to 150 Yrs.)			
<b>Hard Edits</b>	<b>SAS Label</b>			
	Serum Creatine MEC+Home sample weight			
<b>English Text:</b> Serum Creatine MEC+Home sample weight				
<b>English Instructions:</b>				
<b>Code or Value</b>	<b>Description</b>	<b>Count</b>	<b>Cumulative</b>	<b>Skip to Item</b>
230.64285023 to 149245.02088	Range of Values	7721	7721	
.	Missing	0	7721	