



# National Health & Nutrition Examination Survey

1999-2008  
Survey Content



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Center for Health Statistics





## ACRONYMS AND ABBREVIATIONS USED IN THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES)

ACASI	Audio computer-assisted self interview
ADHD	Attention deficit hyperactivity disorder
BV	Bacterial vaginosis
CAPI	Computer-assisted personal interview
CD4	T lymphocyte helper cells
CDISC	National Institute for Mental Health's Computerized Diagnostic Interview Schedule for Children
CIDI	World Health Organization's Composite International Diagnostic Interview
CV Fitness	Cardiovascular fitness
FCBS	The Flexible Consumer Behavior Survey module
FSH/LH	Follicle stimulating hormone/Luteinizing hormone
HDL	High density lipoprotein
HPV	Human papillomavirus
LDL	Low density lipoprotein
MEC	Mobile examination center
MRSA	Methicillin resistant staphylococcus aureus
NTX	N-telopeptides of bone type I collagen
PAH	Polyaromatic hydrocarbons
PSA	Prostate specific antigen
Qx	Questions
RBC	Red blood cell
SP	Survey Participant
TH	Thyroxin
TIBC	Total iron binding capacity
TSH	Thyroid stimulating hormone
VOC	Volatile organic compounds
WBC/DNA	White Blood Cells/Deoxyribonucleic acid



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## EXAMINATION COMPONENT MATRIX OF THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES) 1999–2008

Component	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Audiometry	1/2 sample 20–69 years*							Age 12–19 & 70+ years		Age 12–19 only		
Balance	1/2 sample 40–69 years*				Note A							
Bioelectrical Impedance Analysis	8–49 years											
Body Measurements	All ages											
CV Fitness	12–49 years							P.M. participants only				
Dermatology	20–59 years											
Dietary	All ages				Note B							
Dual Energy X-Ray Absorptiometry:												
Body Composition	8 years and older*	Note C						Age 8–69 years				
Bone Density—Hip and Spine	8 years and older											
FCBS Phone Follow-up Module	1 year and older											
Food Frequency	2 years and older											
Hair Collection	1–5 years, females 16–49											
Lower Extremity Disease:												
Peripheral Neuropathy	40 years and older											
Peripheral Vascular Disease	40 years and older											
Mental Health	8–39 years											
CIDI	1/2 sample 20–39 years											
Generalized Anxiety	1/2 sample 20–39 years											
Depression	1/2 sample 20–39 years											
Panic Disorder	1/2 sample 20–39 years											
CDISC	8–19 years											
Eating Disorders	8–19 years											
Depression	8–19 years											
Panic	8–19 years											
Anxiety	8–19 years											

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Component	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Parent CDISC:											
ADHD	Parent of 8–15 years										
Conduct Disorders	Parent of 8–15 years										
Depression	Parent of 8–15 years										
Eating Disorders	Parent of 8–15 years										
Elimination Disorders	Parent of 8–11 years										
Ophthalmology:											
Retinal Photo	40 years and older										
Visual Fields	40 years and older										
Oral Health:										Note D	
Basic Screening Exam	5 years and older										
Coronal Caries	2 years and older					Note E					
Dental Sealants	2–34 years										
Denture Questionnaire	25 years and older										
Exclusion qx	13 years and older										
Fluorosis	6–49 years										
Incisal Trauma	10–29 years										
Orofacial Pain qx	10–69 years										
Orofacial Pain Exam	13–69 years										
Periodontitis:											
Loss of Attachment	18 years and older*					Note F					
Gingival Bleeding	12–49 years										
Periodontal Bleeding	13 years and older										
Referral/Follow-up	2 years and older*					Note G			5 years and older		
Root Caries	18 years and older										
Saliva	40 years and older		Note H								
Tooth Count	2 years and older*					Note I			5 years and older		

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Component	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Physical Activity Monitor	6 years and older										
Physical Functioning:											
Isokinetic	50 years and older										
20 ft. timed walk	50 years and older										
8 ft. timed walk	50 years and older										
Physician Exam	All ages										
Blood pressure	8 years and older										
Respiratory Health:											
Exhaled Nitric Oxide	6–79 years										
Spirometry	6–79 years										
Tuberculosis	1 year and older										
Vision	12 years and older										

\*Except where noted otherwise.

Note A: Increased to full sample, 40 years and older.

Note B: New interview system implemented in 2002. All participants asked to complete a second recall by phone.

Note C: The age range for females in 1999 was 18 years and older.

Note D: Oral health component changed from comprehensive dentist based exam to a simplified oral health screening on ages 5 years and older.

Note E: Added identifying caries status on residual dental roots.

Note F: Age range changed to 13 years and older; LOA measurement positions modified, a third site added.

Note G: Added recommendations to seek care for removable dental prosthetics.

Note H: Discontinued in mid-year of 2000.

Note I: Added counting residual dental roots.



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## LABORATORY COMPONENT MATRIX OF THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES) 1999–2008

Lab Test	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Acrylamide	3 years and older*										Age 6 years and older
Albumin (urine)	6 years and older										
Apolipoprotein (B)	1/2 subsample 12 years and older									A.M. participants only	
Arsenic (urine)	1/3 sample 6 years and older										
Bone Alkaline Phosphatase	8 years and older*										Age 8–49 years old
BV/Trichomonas	Females 14–49 years										
Cadmium (blood)	1 year and older										
CD4/CD8	18–49 years/ HIV+ & controls										
Chemistry Panel	12 years and older										
Chlamydia (urine)	14–39 years										
Total Cholesterol	3 years and older*										Age 6 years and older
HDL Cholesterol	3 years and older*										Age 6 years and older
LDL Cholesterol	Subsample 3 years and older*										Age 12 years and older a.m. only
Complete Blood Count	1 year and older										
Cotinine	3 years and older										
C-reactive Protein	3 years and older*										Age 1 year and older
Creatinine (urine)	6 years and older										Age 3 years and older
Cryptosporidium	6–49 years										
Dust Allergens	1 year and older										
Environmental Phenols	1/3 sample 6 years and older										
Erythrocyte Protoporphyrin	1 year and older*										Age 3–5 years and females 12–49 years
Fatty Acids	3–11 years, 12 and older, a.m. only										
Ferritin	1 year and older*										Age 1–5 years and females 12–49 years
Fibrinogen	40 years and older										
Folate, RBC	3 years and older*										Age 1 year and older
Folate, Serum	3 years and older*										Age 1 year and older

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Lab Test	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
FSH/LH	Females 35–60 years											
Fungicides	1/3 sample 6 years and older*	Note A										
Glucose, Plasma	Subsample 12 years and older											
Glucose Tolerance Test (OGTT)	Subsample 12 years and older								A.M. participants only			
Glycohemoglobin	12 years and older											
Gonorrhea (urine)	14–39 years											
Halogenated Phenolic Compounds	1/3 sample 6 years and older*	Note A										
Helicobacter Pylori	3 years and older											
Hepatitis antiHBs	2–5 years											
Hepatitis A, B, C, D	6 years and older											
Hepatitis C Follow-up	All SPs with Hep C											
Herbicides: Substituted Ureas & other Herbicides	1/3 sample 6 years and older*	Note A										
Herpes 1 and 2 Antibody	14–49 years											
HIV Antibody	18–49 years											
Homocysteine	3 years and older*								Age 20 years and older			
Human Papillomavirus (HPV)	Females 14–59 years											
HPV Swab	Females 14–59 years											
Hydroxylated Polychlorinated Biphenyls	1/3 sample 12 years and older											
Immunoglobulin E- Allergens	1 year and older											
Insulin/C-Peptide	Subsample 12 years and older								Insulin only			
Iodine (urine)	1/3 sample 6 years and older											
Iron	1 year and older*						Note B					
Latex	12–59 years											
Lipoprotein (a) (Lp(a))	Subsample 12 years and older											
Lead (blood)	1 year and older											
Lead dust	Households with 1–5 year olds											

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Lab Test	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Measles/Varicella/Rubella	6–49 years	[Blue bar]											
Metals (urine)	1/3 sample 6 years and older	[Blue bar]											
Mercury (hair)	1–5 years, females 16–49 years	[Blue bar]											
Mercury (blood)	1–5 years, females 16–49 years*	[Blue bar]					Age 1 year and older						
Mercury (urine)	Females 16–49 years*	[Blue bar]					1/3 sample 6 years and older						
Methylmalonic acid	3 years and older	[Blue bar]											
MRSA	1 year and older		[Blue bar]										
Non-dioxin-like Polychlorinated Biphenyls	1/3 sample 12 years and older	[Blue bar]											
N-Telopeptides (NTX)	8 years and older	[Blue bar]											
Omega Fatty Acids	3–11, 12 and older a.m. only									[Blue bar]			
Organochlorine Pesticides	1/3 sample 12 years and older	[Blue bar]											
Organophosphate Insecticides	1/3 sample 6 years and older*	Note A			[Blue bar]								
Parathyroid Hormone (PTH)	6 years and older				[Blue bar]								
Perchlorate (urine)	6 years and older*			Note C				[Blue bar]					
Perchlorate (water)	1/2 subsample 12 years and older							[Blue bar]					
Perfluorinated Compounds	1/3 subsample 12 years and older*	Note D		[Blue bar]									
Phthalates	1/3 sample 6 years and older	[Blue bar]											
Phytoestrogens	1/3 sample 6 years and older	[Blue bar]											
Polybrominated Diphenyl Ethers	1/3 subsample 12 years and older					[Blue bar]							
Polychlorinated Naphthalene	1/3 sample 12 years and older									[Blue bar]			
Polychlorinated and Polybrominated Dibenzo-p-dioxins, Dibenzofurans, Coplanar and Mono-Ortho-Substituted Biphenyls	1/3 sample 12 years and older	[Blue bar]											
Polycyclic Aromatic Hydrocarbons (PAH)	1/3 sample 6 years and older	[Blue bar]											
Prostate Specific Antigen (PSA)	Males 40 years and older			[Blue bar]									
PSA Follow Up	Males 40 and older with high results									[Blue bar]			
Pyrethroid Pesticides	1/3 sample 6 years and older*			Note E		[Blue bar]							
Other Pesticides	1/3 sample 6 years and older*	Note A				[Blue bar]							

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Lab Test	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Selenium	3–11 years*						Age 40 years+					
Surplus Sera	6 years and older					Reduced # of vials						
Syphilis	18–49 years											
Thyroid Function Testing	1/3 sample 12 years and older									Age 12 years +		
TIBC	1 year and older*					Note B						
Toxaphenes	1/3 sample 12 years and older											
Toxoplasma	6–49 years	Note D										
Transferrin Receptor	1–5 years, females 12–49 years											
Triglycerides	Subsample 3 years and older*							Age 12 years and older, A.M. only				
Vitamin A/E/Carotenoids	3 years and older*					Age 6 years and older						
Vitamin B6	1 year and older											
Vitamin B12	3 years and older*					Age 1 year and older						
Vitamin C	6 years and older											
Vitamin D	6 years and older*							Age 1 year and older				
VOC (blood)	Subsample 20–59 years*							1/2 sample age 12 years and older				
VOC (water)	Subsample 20–59 years*							1/2 sample age 12 years and older				
VOC Exposure Monitor	Subsample 20–59 years											
White Blood Cell/ DNA	20 years and older											

\*Except where noted otherwise.

Note A: In 1999, the subsample was ¼ for those aged 12–59 years. In 1999–2002, the subsample was ½ for those aged 6–11 years.

Note B: Age range changed to 3–5 years and females 12–59 years.

Note C: Analyzed retrospectively from Surplus Sera 2001–2004.

Note D: Analyzed retrospectively from Surplus Sera 1999–2000.

Note E: In 2001–2002, the subsample was ½ for those aged 6–11 years.



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## QUESTIONNAIRE COMPONENT MATRIX OF THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES) 1999–2008

Component	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<b>Survey Participant (SP) Questionnaire</b>												
Acculturation (ACQ)	12 years and older											
Allergy (ARQ)	1 year and older											
Audiometry ( AUQ)	20 years and older*							Age 1 year and older				
Balance (BAQ)	40 years and older											
Blood Pressure (BPQ)	16 years and older											
Cardiovascular Disease (CDQ)	40 years and older											
Demographics (DMQ)	0 years and older											
Dermatology (DEQ)	6 years and older*								Age 20–59 years			
Diabetes (DIQ)	1 year and older											
Diet Behavior and Nutrition (DBQ)	0 years and older											
Dietary Supplements & Medications (DSQ)	0 years and older											
Digit Symbol Substitution Test (CFQ)	60 years and older											
Early Childhood (ECQ)	0–15 years											
Health Insurance (HIQ)	0 years and older	Found in Family Questionnaire										
Hospital Utilization & Access to Care (HUQ)	0 years and older											
Immunization (IMQ)	0 years and older											
Introduction & Verification (IVQ)	0 years and older											
Kidney Conditions (KIQ)	20 years and older											
Medical Conditions (MCQ)	1 year and older											
Miscellaneous Pain (MPQ)	20 years and older											

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Component	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Occupation (OCQ)	12 years and older*								Age 16 years and older			
Oral Health (OHQ)	2 years and older*								Age 18 years and older			
Osteoporosis (OSQ)	20 years and older											
Physical Activity & Physical Fitness (PAQ)	2 years and older											
Physical Functioning (PFQ)	1 year and older											
Respiratory Health & Disease (RDQ)	1 year and older											
Sleep Disorders (SLQ)	16 years and older											
Smoking and Tobacco Use (SMQ)	20 years and older											
Social Support (SSQ)	60 years and older*								Age 40 years and older			
Tuberculosis (TBQ)	1 year and older											
Vision (VIQ)	20 years and older*								Age 12 years and older			
Weight History (WHQ)	16 years and older											
<b>Family Questionnaire</b>												
Consumer Behavior (CBQ)	0 years and older											
Demographic Background/Occupation (DMQ)	0 years and older											
Food Security (FSQ)**	0 years and older											
Health Insurance (HIQ)	0 years and older								Found in SP Quest			
Housing Characteristics (HOQ)	0 years and older											
Income (INQ)	0 years and older											
Pesticide Use (PUQ)	0 years and older								Found in MEC Interview			
Smoking (SMQ)	0 years and older											

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\*\*Adult and Child person-level food security data collected after the dietary recall.



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Component	Age Range	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Mobile Exam Center (MEC) Questionnaire</b>		[Blue bar]									
CAPI	12 years and older	[Blue bar]									
Alcohol Use	20 years and older	[Blue bar]									
Bowel Health	20 years and older	[Blue bar]									
Current Health Status	12 years and older	[Blue bar]									
Depression Screener	12 years and older	[Blue bar]									
Kidney Conditions—Urology	20 years and older	[Blue bar]									
Pesticide Exposure	8 years and older	[Blue bar]									
Physical Activity	12–15 years	[Blue bar]									
Prostate Conditions	Males 20 and older	[Blue bar]									
Reproductive Health	Females 12 years and older	[Blue bar]									
Tobacco Use	20 years and older	[Blue bar]									
Volatile Toxicants	1/3 sample 12+ years	[Blue bar]									
Weight History	8–15 years	[Blue bar]									
<b>ACASI</b>	12 years and older	[Blue bar]									
Alcohol Use	12–19 years	[Blue bar]									
Conduct Disorders	12–19 years	[Blue bar]									
Food Security	12–15 years	[Blue bar]									
Drug Use	12–59 years*	[Blue bar]									
Sexual Behavior	14–59 years	[Blue bar]									
Tobacco Use	12–19 years	[Blue bar]									
Prostate Conditions	Males 20 and older	[Blue bar]									
										Moved to CAPI	

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