Attachment 1

Attachment 1 - Applicable Laws or Regulations (Excerpts)

A. Excerpts from the Public Health Service Act

National Center for Health Statistics

Sec. 306 [242k]
(a) There is established in the Department of Health and Human Services the National Center for Health Statistics (hereinafter in this section referred to as the "Center") which shall be under the direction of a Director who shall be appointed by the Secretary. The Secretary, acting through the Center, shall conduct and support statistical and epidemiological activities for the purpose of improving the effectiveness, efficiency, and quality of health services in the United States.

(b) In carrying out subsection (a), the Secretary, acting through the Center-

(1) shall collect statistics on-
(A) the extent and nature of illness and disability of the population of the United States (or of any groupings of the people included in the population), including life expectancy, the incidence of various acute and chronic illnesses, and infant and maternal morbidity and mortality,
(B) the impact of illness and disability of the population on the economy of the United States and on other aspects of the well-being of its population (or of such groupings),
(C) environmental, social, and other health hazards,
(D) determinants of health,
(E) health resources, including physicians, dentists, nurses, and other health professionals by specialty and type of practice and the supply of services by hospitals, extended care facilities, home health agencies, and other health institutions,
(F) utilization of health care, including utilization of (i) ambulatory health services by specialties and types of practice of the health professionals providing such services, and (ii) services of hospitals, extended care facilities, home health agencies, and other institutions,
(G) health care costs and financing, including the trends in health care prices and cost, the sources of payments for health care services, and Federal, State, and local governmental expenditures for health care services, and
(H) family formation, growth, and dissolution;

B. Excerpts from P.L. 101-445-OCT. 22,1990

SEC. 103. DEVELOPMENT OF THE COMPREHENSIVE PLAN FOR THE NATIONAL NUTRITION MONITORING AND RELATED RESEARCH PROGRAM.

(a) COMPREHENSIVE PLAN.-The Secretaries, with the advice of the Board, shall prepare and implement a comprehensive plan for the coordinated program which shall be designed to-

(1) assess, collate data with respect to, analyze, and report, on a continuous basis, the dietary and nutritional status of the people of the United States, and the trends with respect to such status (dealing with such status and trends separately in the case of preschool and school-age children, pregnant and lactating women, elderly individuals,

low-income populations, blacks, Hispanics, and other groups, at the discretion of the Secretaries), the state of the art with respect to nutrition monitoring and related research, future monitoring and related research priorities, and relevant policy implications of findings with respect to such status, trends, and research;
(2) sample representative subsets of identifiable low-income populations (such as Native Americans, Hispanics, or the homeless), and assess, analyze, and report, on a continuous basis, for a representative sample of the low-income population, food and household expenditures, participation in food assistance programs, and periods experienced when nutrition benefits are not sufficient to provide an adequate diet;
(3) sponsor or conduct research necessary to develop uniform indicators, standards, methodologies, technologies, and procedures for conducting and reporting nutrition monitoring and surveillance;
(4) develop and keep updated a national dietary and nutritional status data bank, a nutrient data bank, and other data resources as required;
(5) assist State and local government agencies in developing procedures and networks for nutrition monitoring and surveillance; and
(6) focus the nutrition monitoring activities of Federal agencies.

(b) COMPONENTS OF PLAN.-The comprehensive plan, at a minimum, shall include components to-

(1) maintain and coordinate the National Health and Nutrition Examination Survey (NHANES) and the Nationwide Food Consumption Survey (NFCS);
(2) provide, by 1991, for the continuous collection, processing, and analysis of nutritional and dietary status data through stratified probability samples of the people of the United States designed to permit statistically reliable estimates of high-risk groups and geographic areas, and to permit accelerated data analysis (including annual analysis, as appropriate);
(3) maintain and enhance other Federal nutrition monitoring efforts such as the Centers for Disease Control Nutrition Surveillance Program and the Food and Drug Administration Total Diet Study, and, to the extent possible, coordinate such efforts with the surveys described in paragraphs (1) and (2);
(4) incorporate, in survey design, military and (where appropriate) institutionalized populations;
(5) complete the analysis and interpretation of the data sets from the surveys described in paragraph (1) collected prior to 1984 within the first year of the comprehensive plan;
(6) improve the methodologies and technologies, including those suitable for use by States and localities, available for the assessment of nutritional and dietary status and trends;
(7) develop uniform standards and indicators for the assessment and monitoring of nutritional and dietary status, for relating food consumption patterns to nutritional and health status, and for use in the evaluation of Federal food and nutrition intervention programs;
(8) establish national baseline data and procedures for nutrition monitoring;
(9) provide scientific and technical assistance, training, and consultation to State and local governments for the purpose of-

(A) obtaining dietary and nutrition status data;

(B) developing related data bases; and
(C) promoting the development of regional, State, and local data collection services to become an integral component of a national nutritional status network;

(10) establish mechanisms to identify the needs of users of nutrition monitoring data and to encourage the private sector and the academic community to participate in the development and implementation of the comprehensive plan and contribute relevant data from non-Federal sources to promote the development of a national nutritional status network;
(11) compile an inventory of Federal, State, and nongovernment activities related to nutrition monitoring and related research;
(12) focus on national nutrition monitoring needs while building on the responsibilities and expertise of the individual membership of the Board;
(13) administer the coordinated program, define program objectives, priorities, oversight, responsibilities, and resources, and define the organization and management of the Board and the Council; and
(14) provide a mechanism for periodically evaluating and refining the coordinated program and the comprehensive plan that facilitates cooperation and interaction by State and local governments, the private sector, scientific communities, and health care professionals, and that facilitates coordination with non-Federal activities.

C. Excerpts from the Food Quality Protection Act of 1996 (P.L. 104-170)

TITLE III--DATA COLLECTION ACTIVITIES TO ASSURE THE HEALTH OF INFANTS AND CHILDREN AND OTHER MEASURES

SEC. 301. DATA COLLECTION ACTIVITIES TO ASSURE THE HEALTH OF INFANTS AND CHILDREN.

(a) In General.--The Secretary of Agriculture, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Health and Human Services, shall coordinate the development and implementation of survey procedures to ensure that adequate data on food consumption patterns of infants and children are collected.
(b) Procedures.--To the extent practicable, the procedures referred to in subsection (a) shall include the collection of data on food consumption patterns of a statistically valid sample of infants and children.
(c) Residue Data Collection.--The Secretary of Agriculture shall ensure that the residue data collection activities conducted by the Department of Agriculture in cooperation with the Environmental Protection Agency and the Department of Health and Human Services, provide for the improved data collection of pesticide residues, including guidelines for the use of comparable analytical and standardized reporting methods, and the increased sampling of foods most

likely consumed by infants and children.

D. Excerpts from the Federal Food, Drug, and Cosmetic Act (21 USC 393)

TITLE 21 - FOOD AND DRUGS, CHAPTER 9 - FEDERAL FOOD, DRUG, AND COSMETIC ACT - SUBCHAPTER IX – MISCELLANEOUS - SEC. 393. FOOD AND DRUG ADMINISTRATION (21 USC 393)

US Code as of: 01/23/00

Sec. 393. Food and Drug Administration

- (a) In general

There is established in the Department of Health and Human Services the Food and Drug Administration (hereinafter in this section referred to as the "Administration").

- (b) Mission

The Administration shall -

- (1) promote the public health by promptly and efficiently reviewing clinical research and taking appropriate action on the marketing of regulated products in a timely manner;
- (2) with respect to such products, protect the public health by ensuring that -
- (A) foods are safe, wholesome, sanitary, and properly labeled;
- (B) human and veterinary drugs are safe and effective;
- (C) there is reasonable assurance of the safety and effectiveness of devices intended for human use;
- (D) cosmetics are safe and properly labeled; and (E) public health and safety are protected from electronic product radiation;
- (3) participate through appropriate processes with representatives of other countries to reduce the burden of regulation, harmonize regulatory requirements, and achieve appropriate reciprocal arrangements; and
  (4) as determined to be appropriate by the Secretary, carry out paragraphs (1) through (3) in consultation with experts in science, medicine, and public health, and in cooperation with consumers, users, manufacturers, importers, packers, distributors, and retailers of regulated products.
- (c) Interagency collaboration

The Secretary shall implement programs and policies that will foster collaboration between the Administration, the National Institutes of Health, and other science-based Federal agencies, to enhance the scientific and technical expertise available to the Secretary in the conduct of the duties of the Secretary with respect to the development, clinical investigation, evaluation, and postmarket monitoring of emerging medical therapies, including complementary therapies, and advances in nutrition and food science.

- (d) Commissioner
- (1) Appointment
  There shall be in the Administration a Commissioner of Food and Drugs (hereinafter in this section referred to as the "Commissioner") who shall be appointed by the President by and with the advice and consent of the Senate.
- (2) General powers

The Secretary, through the Commissioner, shall be responsible for executing this chapter and for -

- (A) providing overall direction to the Food and Drug Administration and establishing and implementing general policies respecting the management and operation of programs and activities of the Food and Drug Administration;
- (B) coordinating and overseeing the operation of all administrative entities within the Administration;
- (C) research relating to foods, drugs, cosmetics, and devices in carrying out this chapter;
- (D) conducting educational and public information programs relating to the responsibilities of the Food and Drug Administration; and
  (E) performing such other functions as the Secretary may prescribe.
- (e) Technical and scientific review groups
  The Secretary through the Commissioner of Food and Drugs may, without regard to the provisions of title 5 governing appointments in the competitive service and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, establish such technical and scientific review groups as are needed to carry out the functions of the Administration, including functions under this chapter, and appoint and pay the members of such groups, except that officers and employees of the United States shall not receive additional compensation for service as members of such groups.
- (f) Agency plan for statutory compliance
- (1) In general
  Not later than 1 year after November 21, 1997, the Secretary, after consultation with appropriate scientific and academic experts, health care professionals, representatives of patient and consumer advocacy groups, and the regulated industry, shall develop and publish in the Federal Register a plan bringing the Secretary into compliance with each of the obligations of the Secretary under this chapter. The Secretary shall review the plan biannually and shall revise the plan as necessary, in consultation with such persons.
- (2) Objectives of agency plan
  The plan required by paragraph (1) shall establish objectives and mechanisms to achieve such objectives, including objectives related to -
- (A) maximizing the availability and clarity of information about the process for review of applications and submissions (including petitions, notifications, and any other similar forms of request) made under this chapter;
- (B) maximizing the availability and clarity of information for consumers and patients concerning new products;
- (C) implementing inspection and postmarket monitoring provisions of this chapter;
- (D) ensuring access to the scientific and technical expertise needed by the Secretary to meet obligations described in paragraph (1);
- (E) establishing mechanisms, by July 1, 1999, for meeting the time periods specified in this chapter for the review of all applications and submissions described in subparagraph (A) and submitted after November 21, 1997; and
  (F) eliminating backlogs in the review of applications and submissions described in subparagraph (A), by January 1, 2000.
- (g) Annual report

The Secretary shall annually prepare and publish in the Federal Register and solicit public comment on a report that -

- (1) provides detailed statistical information on the performance of the Secretary under the plan described in subsection (f) of this section;
- (2) compares such performance of the Secretary with the objectives of the plan and with the statutory obligations of the Secretary; and
  (3) identifies any regulatory policy that has a significant negative impact on compliance with any objective of the plan or any statutory obligation and sets forth any proposed revision to any such regulatory policy.

Attachment 2

Attachment 2 - A History of the NHANES and NHES Programs

History: The current, continuous National Health and Nutrition Examination Survey (NHANES) is one of a series of national examination studies conducted in the United States beginning in 1960. Three of these studies, the National Health Examination Surveys (NHES) were conducted in the 1960s. A large nutrition component was added to the basic design in 1970 and the name of the survey was changed to the National Health and Nutrition Examination Survey. The first National Health and Nutrition Examination Survey (NHANES I), (OMB No. 68-R1184) started in April 1971 and was completed in October 1975; NHANES II (OMB No. 68-R1502) began in February 1976 and was completed in February 1980. A special study of Hispanic populations in the United States (HHANES) was conducted in 1982-84 (OMB No. 0937-0078). HHANES began in July 1982 and was completed in December 1984. NHANES III (OMB No. 0920-0237) began in October 1988 and was completed in October 1994. Data collection for the continuous NHANES began in 1999 (OMB No. 0920-0237).

Purpose: The NHES and NHANES were designed to collect data which can best or only be obtained by direct physical examination, clinical and laboratory tests, and related measurement procedures. This information, which cannot easily be reported by sample persons themselves or by their health care providers, is used to estimate either the prevalence of some disease or disorder or to estimate the normative distribution of the characteristic in the total population.

Sample Design: The NHES and NHANES used probability samples of the U.S. population to provide representative national data. The HHANES was an exception to this approach in that sampling was only carried out in the five southwestern U.S. states (Texas, New Mexico, Colorado, Arizona, and California), Dade County, FL, and the areas in and around New York City, NY. Successive surveys in the NHES and NHANES programs have targeted different U.S. population subgroups and different health conditions. During the NHES Cycle I, for example, a sample of adults was selected and the focus was primarily on selected chronic diseases. NHES Cycles II and III were directed toward children 6-11 years and youth 12-17 years, respectively; both surveys emphasized growth and development data and sensory defects. The nutrition component of NHANES I was directed at a national probability sample ages 1-74 years, while the detailed health examination component focused on the population 25-74 years of age. NHANES II and the HHANES were directed to the U.S. population aged 6 months to 74 years; the nutrition data were used to monitor changes in nutritional status over time. NHANES III was the first survey to include infants as young as 2 months of age and adults over 74 years; a home examination was designed to assess the health status of persons who were unable or unwilling to come to the mobile examination center. The 1999-2006 NHANES over sampled of pregnant women, Mexican Americans, African Americans, youth 12-19 years of age and persons 60+ years. In 2000 NHANES began oversampling the low income population. Beginning in 2007 the total Hispanic population will be oversampled. Additionally, the following populations will continue to be oversampled: African Americans, persons 60+ years and the low income non black non Hispanic populatioin.

Implementation: NHANES data collection includes detailed examinations, laboratory tests on blood, urine, and environmental specimens, and interview questionnaires that are administered in the household, at the Mobile Examination Center (MEC) as guided by an interviewer, at the MEC via self-administered computer-assisted mean, and at home using telephone,.

The NHANES survey teams are comprised of highly trained interviewers and examiners, including physicians, nurses, dentists (comment: dentists are not currently on the survey – we are using oral health technicians), dieticians, laboratory technologists, and radiologic technicians. The examinations are conducted in mobile examination centers (MECs), each consisting of four tractor-trailer units. The trailers are interconnected and provide a standardized environment for the health examination component of the survey. Standardized equipment is required for all survey components; for example audiometry, which requires hearing chambers whose ambient noise level conforms to the American Speech Association standards for acoustical measurements must be identical in all MECs.

The time required for the examination varies with the content of the examination and the age of the examinee. For infants, the average examination time is expected to be 24 minutes. Seventeen of the 24 minutes are the Dietary Recall, which is done by a proxy respondent. For adult SPs, the time constraint included among planning factors has been that the total examination time not exceed 3 1/2 hours, excluding waiting time between examination rooms. Much attention is paid during the planning process to the operational flow of survey participants through the MEC. Every effort is made to streamline the examination to minimize respondent burden. Additional respondent burden arises from the household interview, from the completion of forms and questionnaires in the household, and from travel time to reach the MEC.

The data collection forms used in NHES I, II, and III, NHANES I, the NHANES I Augmentation Survey, NHANES II, HHANES, and NHANES III are reproduced in Vital and Health Statistics, Series 1 reports numbered 4, 5, 8, 10b, 14, 15, 19, and 32 respectively. The reports and all NHANES III and NHANES 1999+ field manuals and forms are posted on the NHANES website (URL: http://www.cdc.gov/nchs/nhanes.htm).

Data processing]: Several data processing methods are used to prepare the NHANES analytic data files. State-of-the-art equipment is used to collect and process the data to minimize the need for human data entry, editing, and coding. Many devices used in NHANES feed their digital data directly into the main NHANES computer system. Contract laboratories will use specially designed software and hardware to facilitate rapid and accurate communication of findings between the labs and the NHANES computer system. Staff assistance and review is required to review much of the data produced. For example, biologic specimens must be processed, shipped, and analyzed. Other data such as X-rays, ultrasound scans, bone scans, and electrocardiogram tracings must be recorded, transmitted, and interpreted by experts. Examination record forms and interview and questionnaires must be coded, reviewed, and transferred to a data storage medium. Tremendous effort is required to review and edit the raw data, and prepare final

versions of all NHANES analytic files. Expert consultants frequently collaborate in the validation, analysis, and reporting of the NHANES data.

Data Release: Over the years data are released via scientific journals, separate monographs, special reports (including the NCHS Vital and Health Statistics, Series 11), data tapes, and at professional meetings. Currently, all data from NHES and NHANES that have been released for public use are available free of charge on the NHANES website. Since 1999, in most instances, data are not presented publicly or submitted for publication or presentation until the data are available for public use.

Previous uses of NHANES data: The NHANES data user community is diverse. A search of scientific publications listed in online databases revealed thousands of NHANES references published over the years, including text and reference materials used in medical schools and by public health professionals. The data have been widely used by policy makers and planners in Federal, State, and local health agencies.

When early NHANES surveys showed low iron levels, particularly for women of childbearing age, preschool children and the elderly, the government moved to fortify grain and cereal products with sufficient iron to correct this deficiency. In addition, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) established participant selection criteria using NHANES cut-off values. Now NHANES monitors the iron level in blood, diet and supplements to monitor iron deficiency and ensure that iron overload isn't a problem, particularly for older Americans. Folate is another example of food fortification to meet a deficiency and, in this case, prevent certain serious birth defects. Again NHANES provides vital information on the safety and adequacy of this decision and allows trend measures to evaluate whether higher levels have potentially harmful consequences in some population groups.

The NHANES program has been the cornerstone of the Department of Health and Human Services' efforts to meet the requirements of the National Nutrition Monitoring and Related Research Act of 1990 and the Surgeon General's Report on Nutrition and Health makes liberal use of the data from the NHANES. NHANES data were used for establishing the recommended dietary allowances for vitamins and minerals which form the basis of the food labeling now seen on virtually all processed foods in grocery stores. NHANES III calcium intake data were used by the NIH Consensus Development Conference when considering "optimal calcium intakes".

The NHANES data on overweight prevalence for children and adolescents have been critical in the development of Federal nutrition recommendations, dietary guidance and policy. Examples include the U.S. Department of Agriculture National School Lunch and Breakfast programs; eligibility for participation in WIC; the 1995, 2000 and 2005 Dietary Guidelines for Americans and the Obesity Education Initiative of the National Heart Lung and Blood Institute. In public-private partnerships, the data were used by Shape Up America! and the American Health Foundation to promote their campaigns for healthy weight and physical fitness. In academic research, the data have been used to

justify further research on the etiology and treatment of overweight and obesity. NHANES
overweight data are pervasive throughout the popular media, in prevention programs, in connection with most chronic diseases, and so on. They are cited in numerous government reports, and used to set Federal health goals and guidelines.

Standardized methods of obtaining body measurements are demonstrated in an NHANES Anthropometry Training Video produced by a former NHANES staff member, Dr. Robert Kuczmarski. Copies of the videotape have been disseminated at conferences and mailed to individual researchers, health providers, and state and local health departments and WIC clinics. Data on body measurements have also been used by many industrial groups, including automobile and safety equipment manufacturers. Over 100 million NCHS growth charts, based on NHANES data, have been distributed worldwide and are used by nearly every pediatrician. Growth charts are used and cited heavily in anything from assistance program eligibility to growth hormone therapy, and in various international uses.

The NHANES infectious disease component has been used extensively and grown in the last two decades. Hepatitis B seroprevalence data from NHANES II were used as the basis for the Immunization Practices Advisory committee (ACIP) recommendation for universal childhood vaccination against hepatitis B virus. Testing for antibody to Herpes simplex type 2 has been conducted in NHANES as an index of sexually transmitted diseases in the population. These data linked to the STD risk behaviors provide evidence for an upward trend in STD that has helped redirect prevention efforts. Tetanus immunity data from NHANES III were used by the ACIP to change the recommendations for a tetanus booster from age 14-16 years to age 11-12 years. Data from NHANES III have been used to develop the national HIV estimates produced by CDC. In addition, the first national estimates of the extent of hepatitis C, a newly discovered virus at the time, were produced. Often, this infection produces a sub acute chronic infection which means that NHANES is the only national surveillance mechanism available. The information on hepatitis B and C have important implications for monitoring the national blood supply and donors, as well as the medical care system in general. In addition, serologic markers of immunization status (tetanus, rubella, measles, and diphtheria) are assisting the National Immunization Program with providing information on vaccination coverage.

NHANES III provided the first national estimates of the prevalence of osteoporosis among women 50 years and older. These results have stimulated discussion among public and private health professionals concerning prevention strategies. This data is used as the femur reference data for all the DXA densitometers in North America.

NHANES measurements have been, and are being used to identify persons exposed to environmental tobacco smoke (ETS). The second *National Report on Human Exposure to Environmental Chemicals (Second Report)* used data from NHANES III *(*1988-91) and the 1999-2000 NHANES to show that the median cotinine level in 1999-2000 has decreased more than 70%. Data on blood lead from the NHANES II (1976-80) were

instrumental in persuading policy makers to eliminate lead from gasoline. Data from NHANES III, showing a 78% drop in mean blood lead levels indicated the success of this public health effort. The *Second Report* showed further reductions in blood lead levels.

NIOSH must include in its lung function medical screening recommendations to OSHA and MSHA, appropriate reference values. NHANES III provided critical information and a large population base but reference values need to be continually updated as the population ages. The information generated is also used in medical care practice by physicians to directly assess the status of their patients. EPA uses the NHANES III spirometry reference data in community studies.

The National High Blood Pressure and High Cholesterol Education Programs use NHANES data to track trends and evaluate progress in cardiovascular disease risk factors. NHANES data provide reference distributions of serum lipids and lipoproteins used to evaluate progress in reducing serum cholesterol levels in the population. Data from ECGs have provided reference data for studies of cardiovascular disease in older adults. Photographs of the eye fundus in NHANES provided data on retinal disease, one of the earliest complications of diabetes. These data provide baseline information and help to quantify risk factors for the complications of diabetes. The photographs were also used to study the prevalence of macular degeneration.

NHANES data indicated that undiagnosed diabetes was a significant problem in the U.S. and were cited in efforts to intensify research and educational efforts by NIDDK, the American Diabetes Association and others to evaluate dietary and medical recommendations and increase public awareness, especially among minority populations.

HHANES data were used to provide baseline data on prevalence of many serious health conditions in the Mexican-American, Cuban, and Puerto Rican populations in the U.S. where no such data were previously available from any other source.

NHANES offers the unique opportunity to assess the genetic contributions to disease or health condition risk in the population; this information can guide preventive strategies and programs. The information can be a major tool available for medical research and public health initiatives. Genetic material collected from the NHANES III participants is available for researchers. Proposals have been submitted to use this resource and some have been approved. Additional proposal submissions are expected in the future.

Attachment 3

Attachment 3 - NHANES Examination Components and Age Groups

Component	Age Group
Physician's examination	All ages
PSA counseling	30 years and older
Blood pressure measurement	8 and older (subsample)
Vaginal swab (HPV*)	14-59 years
Body measurements (anthropometry)	All ages
Dual X-ray absorptiometry	
Bone density hip and spine	8 years and older
Dietary interview	All ages
24 hour dietary recall	
24 hour recall of dietary supplements	
Health interview	
MEC ACASI**	12 – 69 years
MEC CAPI**	8 years and older
Growth and development	8-19 years
Venipuncture	1 year and older
Second venipuncture***	12 and older, morning session
Oral health examination	5 years and older
Urine collection	6 years and older
Vision	12 years and older
Ophthalmologic examination	
Visual fields testing	40 and older
Fundus photography	40 and older
Audiometry and tympanometry	12-19, 70 and older
Blood pressure measurement(methods study)	16 and older (subsample)
Spirometry / ENO examination	6-79 years

*Human papilloma virus
**Questionnaires included in attachment 16

Attachment 4

Attachment 4 - Planning NHANES

Content Planning Activities for NHANES 1999+

NCHS solicits new content biannually. Broad oversight for the survey planning and content is provided through consultation with stakeholders, collaborating agencies, and other groups. Other mechanisms have been used to gain broad input on NHANES priorities and future surveillance needs. On September 11-12, 2003, the NCHS Director held an NHANES Forum to identify priorities for the National Health and Nutrition Examination Surveys (NHANES) in 2005 and beyond. The meeting format utilized "Open Space Technology," a participatory process that is conducive to the exchange of information on diverse topics among groups of interested individuals. NCHS staff attended the Forum and interacted with participants to gain insight into the information needs of NHANES stakeholders. Attendees identified the challenges, strengths, and limitations of NHANES, and provided extensive feedback on ways to improve the utility of NHANES to the public health community. The report on all 27 sessions held at this meeting is at: http://www.cdc.gov/nchs/about/major/nhanes/dhanes_forum.htm.

The actual process for submitting NHANES 2007-2008 research proposals was conducted in two parts. Current NHANES collaborators partners received a memorandum in May 2004 informing them of deadlines and guidelines for proposals for the 2007-2008 NHANES. The submission deadlines and proposal preparation guidelines were posted on the NHANES website, and major scientific publications and conferences carried announcements of the proposal solicitation process.

The final date for letters of intent to be received at NCHS was October 15, 2004. NCHS notified proposers by December 15, 2004 as to whether a proposal would be given further review. The proposers had until February 28, 2005 to submit a final research proposal. The interest in adding content to NHANES was greater than the volume of changes the program was able to implement. Some of the proposals for NHANES 2007-2008 will be considered for the 2009-2010 NHANES.

The deadlines for NHANES 2009-20010 have been disseminated in the same fashion. Because of the long timeline to plan NHANES, earlier deadlines will be implemented than those used for NHANES 2007-2008. The final date for letters of intent for the 2009-2010 NHANES is September 15, 2006. NCHS will notify proposers by December 1, 2006 as to whether a proposal will be given further review. The proposer will have until February 28, 2007 to submit the final research proposal.

The notification of the deadlines was sent to all NHANES collaborators, an extensive E-mail list of other individuals interested in NHANES, the attendees of the NHANES September 2003 Forum meeting and the NHANES listserv. The deadlines and guidelines are on the NHANES website at:
http://www.cdc.gov/nchs/data/nhanes/proposal_guidelines_2009-2010.pdf. The cover E-mail for the first three groups is on the next page.

Sample E-mail to collaborators and others

To: Agodoa, Lawrence (NIH);
'Allen.Ruth@epamail.epa.gov'; Alter, Miriam; Applebaum-Bowden, Deborah (NIH); Arbes, Samuel (NIH); Ballard-Barbash, Rachel (NIH); Bang, Ki Moon; Beltran, Eugenio D.; 'bkuhn@ers.usda.gov'; Bourdon, Karen (NIH); Briggs, Josephine (NIH); Bruce, Carol; Cahn, Marjorie (NIH); Calvo, Mona S. (FDA); Caraballo, Ralph S.; Castro, Kenneth G; Coates, Paul (NIH); Collins, Bradley (NIH); Colpe, Lisa (NIH); Cotch, Mary (NIH); Cowie, Catherine (NIH); Crane, Nancy T. (FDA); Croft, Janet B.; Damstra, Terri (NIH); Dunne, Eileen; Dwyer, Johanna (NIH); Eberhardt, Mark S. (HYAT); Eggers, Paul (NIH); Engelgau, Michael; Erickson, Dave; Everhart, James (NIH); Fine, Lawrence (NIH); Finkelstein, Judy (NIH); Franks, John R.; Fridkin, Scott MD; Geiss, Linda S.; Gergen, Peter (NIH); Gill, Michael (NIH); Gillum, Richard F.; Gregg, Edward; Gunter, Elaine; Harris, Tamara (NIH); Haynes, Suzanne G. (OS); Hiller, Rita (NIH); Hitchcock, Dale (OS); Hoffman, Howard (NIH); Hoppin, Jane (NIH); O'Connor, Anne E.; Hudgings, Carole (NIH); Hyman, Jeffrey (NIH); James, Regina (NIH); Jelen, Janet (NIH); Jones, Jeffrey L.; Jones, Robert L.; Jordan, Elke (NIH); 'joseph.catherine@epa.gov'; Kaufman, Steven (NIH); Kettel-Khan, Laura; Kimmel, Paul (NIH); Kington, Raynard (NIH); Klein, Richard J.; Kleinman, Dushanka (NIH); Kopstein, Andrea (SAMHSA); Krebs-Smith, Susan (NIH); Kuczmarski, Robert (NIH); Kuehnert, Matthew; Kusek, John (NIH); Lammie, Patrick J.; Lasky, Tamar (NIH); Lawrence, Reva (NIH); LeBaron, Charles; Lindberg, Donald (NIH); Livengood, John; Long, Rodney (NIH); Loria, Catherine (NIH); 'mahaffey.kate@epa.gov'; Manolio, Teri (NIH); Markowitz, Lauri; Masten, Scott (NIH); Mcgowan, Joan (NIH); Miller, Frederick (NIH); Milner, John (NIH); Moriarty, David; Mulinare, Joe; Murphy, Paulette; Nahin, Richard (NIH); Nakamura, Richard (NIH); Nourjah, Parivash (FDA); Papania, Mark; Pearson, Michele L. MD; Pennington, Jean (NIH); O'Connor, Anne E.; Petsonk, Lee; Pfeiffer, Christine; Picciano, Mary (NIH); Portnoy, Barry (NIH); Raiten, Daniel (NIH); Rigoni, Gianna C. (FDA); Saltzman, Lori; Saraiya, Mona; Seifried, Harold (NIH); Seligman, Paul J. (FDA); Sorlie, Paul (NIH); Stallings, Fred; Starke-Reed, Pamela (NIH); Steinberg, Karen; Stubbs, Jack; Sutton, Madeline; Themann, Christa L.; Thoma, George (NIH); Thurn, Anne (NIH); Troiano, Richard (NIH); Trontell, Anne E. (FDA); Trosclair, Angela; Tucker, Margaret (NIH); Turner, Maria (NIH); Turner, Patricia (NIH); Vogel, Martina (NIH); Wolz, Michael (NIH); Yetley, Elizabeth (NIH); Zeldin, Darryl (NIH); 'Andrews, Margaret'; 'Ashley, Peter (HUD)'; 'Basiotis, Peter'; 'Byrne, Dianne'; 'Alanna Moshfegh'; 'Heil, Mark'; 'hubbard, van'; 'Inkster, Sandy'; 'Kause, Janell R.'; 'Lang, Carol'; 'Lasky, Tamar'; 'McKinney, Pat'; 'Miller, David'; 'Perlin, Susan (EPA)'; 'Selevan, Sherry'; 'Smallwood, David'; 'Webster, John'; Ellwood, Kathleen (FDA); Schneeman, Barbara O. (FDA); 'Patricia.Guenther@cnpp.usda.gov'; 'maalbert@partners.org';

'Jennifer@advocatesforyouth.org'; Bowman, Barbara;
'rbriefel@mathematica.org'; 'nancy@nchapman.com';
'scochran@leadershipResults.org'; 'jcoresh@jhsph.edu'; 'bfd@cdc.gov';
'afford@cmh.pitt.edu'; 'wh870h@nih.gov'; 'sharris@ilsi.org';
Johnson-Taylor, Wendy (NIH); Kavanaugh, Claudine J. (FDA); Kleinman,
Dushanka (NIH); 'kknolhoff@dhmh.state.md.us'; 'laplante@itsa.ucsf.edu';
'dll1@cdc.gov'; 'blin@ers.usda.gov'; 'klochne@rwjf.org'; Maas, William;
'lmancino@ers.usda.gov'; 'maysv@nicco.sscnet.ucla.edu';
'melton.j@mayo.edu'; 'lmeyers@nas.edu'; 'mnichaman@cooperinst.org';
'abno@cdc.gov'; 'dporter@crs.loc.gov'; 'grish@cdc.gov';
'esaltos@csrees.usda.gov'; 'msraiya@cdc.gov'; 'sschlick@ascn.faseb.org';
'songco@mail.nih.gu'; 'lthorpe@health.nyc.gov'; 'ntran@exponent.com';
'mark.tremblay@usask.co'; 'martinav@nih.gov'; 'janew@itsa.ucsf.edu';
'swelsh@csrees.usda.gov'; 'zenick.hal@epa.gov'
Cc: Johnson, Clifford L.; Sondik, Edward J. Dr.; Madans, Jennifer H.;
Anderson, Jack R.; Weinzimer, Robert J.; Makuc, Diane M.; McLemore,
Tommy; Hunter, Edward L.; Gentleman, Jane F.; Berman, Lewis E.; Zipf,
George; Hirsch, Rosemarie (HYAT); Rothwell, Charles J.
Subject: Deadlines and guidelines for 2007-8 NHANES proposalsS

The final date for letters of intent (LOI) to be received is October 15, 2004. NCHS will notify proposers by December 15, 2004 as to whether a proposal will be given further review. The proposer will have until February 28, 2005 to submit the final research proposal.

The content proposal process for 2005 revealed that NCHS needed a longer time to evaluate the LOIs and that the proposers needed more time to prepare the full proposal. During the 2005 process there was only a month for DHANES to respond to LOIs and only a month for potential collaborators to complete their proposal. The intervals are now 2 and 2.5 months, respectively. NCHS also determined that pilot testing and other content development needed to occur earlier. Therefore the final proposal is due to NCHS 5 months earlier than it was for the 2005 round.

Please read the attached document for details.

Thank you for your past interest in and support of NHANES.

Vicki L. Burt, ScM RN
Chief, Planning Branch
National Health and Nutrition Examination Survey
National Center for Health Statistics/CDC
3311 Toledo Road, Room 4211
Hyattsville, MD 20782
Telephone: 301-458-4127
FAX: 301-458-4028
E-mail: vburt@cdc.gov

Attachment 5-1

Attachment 5-1. Federal agencies consulted in planning NHANES 2007-08

Department of Health and Human Services

Centers for Disease Control and Prevention

- National Center for Birth Defects and Developmental Disabilities
- National Center for Chronic Disease Prevention and Health Promotion
- National Center for Environmental Health
- National Center for Infectious Diseases
- National Center for HIV, STD, and TB Prevention
- National Immunization Program
- National Institute for Occupational Safety and Health

Food and Drug Administration

- Center for Drug Evaluation
- Center for Food Safety and Applied Nutrition

National Institutes of Health

- National Institute of Aging
- National Institute on Alcoholism and Alcohol Abuse
- National Institute of Allergy and Infectious Disease
- National Institute of Arthritis and Musculoskeletal and Skin Disease
- National Cancer Institute
- National Institute of Child Health and Human Development
- National Heart, Lung, and Blood Institute
- National Institute of Diabetes and Digestive and Kidney Diseases
- National Institute on Deafness and other Communication Disorders
- National Institute of Dental and Craniofacial Research
- National Institute on Drug Abuse
- National Institute of Environmental Health Sciences
- National Eye Institute
- National Institute of Mental Health

Environmental Protection Agency

- Office of Pesticide Programs

Department of Agriculture

- Agricultural Research Service
- Center for Nutrition Policy and Promotion
- Economic Research Service

Department of Housing and Urban Development

Attachment 5-2. NHANES Interagency Agreements Expected for 2007-08
Agency/Center/Division: NHANES Component

CDC/NCCDPHP: Diabetes Component

Linda Geiss
Chief, Surveillance Section
Division of Diabetes Translation
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Hwy, Mailstop K10
Atlanta, GA 30341
Tel: 770-488-1056; Fax: 770-488-1148

CDC/NCBDDD: Folate

Joe Mulinare, Medical Epidemiologist
Division of Birth Defects and Developmental Disabilities
National Center on Birth Defects and Developmental Disabilities
Centers for Disease Control and Prevention
4770 Buford Highway, NE, MS F-45
Atlanta, Georgia 30341-3724
Phone: 404-498-3841

CDC/NCCDPHP: Nutrition

Paulette Murphy
Division of Nutrition and Physical Activity
National Center for Chronic Disease Prevention & Health Promotion
3005 Chamblee-Tucker Road, MS-K25
Atlanta, Georgia 30341
Phone: 770-488-5849
Fax: 770-488-5369

CDC/NCCDPHP: Ophthalmologic Component

Jinan Saaddine, MD, MPH
Epidemiologist
Division of Diabetes Translation
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Hwy, Mailstop K10
Atlanta, GA 30341
Tel: 770-488-1274; Fax: 770-488-1148
Email: zna2@cdc.gov

CDC/NCCDPHP/DOH: Oral Health Component

Eugenio Beltran, DMD, Dr.PH
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion

Division of Oral Health
4770 Buford Hgwy., Mailstop-F10
Chamblee, Georgia 30341
Phone: 770.488.6069

CDC/NCHSTP: Sexual Behavior

Lauri Markowitz, M.D.
Centers for Disease Control and Prevention
Division of Sexually Transmitted Diseases Prevention
1600 Clifton Road, NE, Mailstop-E02
Atlanta, Georgia 30333
Phone: 404.639.8359
Fax: 404.639.8610

CDC/NCID: Hepatitis

Annemarie Wasley, Sc.D.
Epidemiologist
Division of Viral and Rickettsial Diseases, Hepatitis Branch
Center for Disease Control and Prevention
1600 Clifton Road, MSC G37
Atlanta, GA 30333
(404) 371-5910
(404) 371-5221

NIH/NEI: Vision Component

Mary Frances-Cotch, Ph.D.
Chief, Epidemiology Branch
National Institutes of Health
National Eye Institute
5635 Fishers Lane, Suite 1100
Bethesda, Maryland 20892-2510
Courier address : Rockville, MD 20852
Phone: 301.496.1311
FAX 301.496-2297

NIH/NHLBI: Spirometry, Sleep, Weight History and CVD Component

Michael Wolz
National Institutes of Health
National Heart, Lung, and Blood Institute
Rockledge Building II, (RKL 2)
6701 Rockledge Drive, MSC 7934
Bethesda, Maryland 20892-7934
Phone: 301.435.1295

NIH/NIAMS: Osteoporosis

Joan A. McGowan, Ph.D.
Director, Musculoskeletal Diseases Program
National Institutes of Health
National Institute of Arthritis and Musculoskeletal and Skin Diseases
Building 45, Room 5ANS-43E, MCD 6500
Bethesda, Maryland 20892-6500
Phone: 301.594.5055

NIH/NIDCD: Hearing

Howard Hoffman, M.A.
Chief, Epidemiology, Statistics and Data Systems Branch
National Institutes of Health
National Institute on Deafness and Other Communication Disorders
Executive Plaza South, Suite 432
6120 Executive Blvd., MSC 7180
Bethesda, Maryland 20892-7180
Phone: 301.402.1843

NIH/NIDDK: Diabetes

Catherine C. Cowie, Ph.D.
National Institute of Diabetes & Digestive & Kidney Diseases
National Institutes of Health
6707 Democracy Blvd., Suite 691
Bethesda, MD 20892-5460
Phone: 301.594.8804
Fax: 301.480.3503
E-mail: cowiec@extra.niddk.nih.gov

NIH/NIDDK – Kidney

Paul Eggers, Ph.D.
Division of Kidney, Urologic, and Hematologic Diseases
National Institute of Diabetes and Digestive and Kidney Diseases
2 Democracy Plaza, Room 615
Bethesda, MD 20892
(301) 594-8305
email: eggersp@mail.nih.gov

NIH/NIA: Osteoposoris

Judy Hannah
Neuroscience and Neuropsychology of Aging Programs
National Institute on Aging
National Institutes of Health
Gateway Building, Suite 3C307
7201 Wisconsin Avenue
Bethesda, Maryland 20892-9205
Phone: 301.496.6761
Fax: 301.496.1494

EMAIL: jh63e@nih.gov

USDA/ERS: Dietary Component (Food Sec Quest)

Margaret Andrews, Ph.D.
Economic Research Service
United States Department of Agriculture
1800 M Street, NW, Room 2060
Washington, DC 20036-5831
Phone: 202.694.5441

USDA/ERS: Dietary Component (Dietary Knowledge/Behavior Quest)

Nicole Ballenger
Economic Research Service
United States Department of Agriculture
1800 M Street, NW
Washington, DC 20036-5831
Phone: 202.694.5460

USDA/CNPP: Dietary Component (Food Pyramid/Healthy Eating Index)

Patricia Guenther, Ph.D, RD.
Center for Nutrition Policy and Promotion
United States Department of Agriculture
1800 M Street, NW
Washington, DC 20036-5831
Phone: 703.605.0253
Email: PatriciaGuenther@cnpp.usda.gov

USDA/ARS: Nutrition Monitoring

Alanna Moshfegh, Research Leader
Food Surveys Research Group
Beltsville Human Nutrition Research Center
Agricultural Research Service, USDA
10300 Baltimore Ave.
Building 005, Room 102, BARC-West
Beltsville, Maryland 20705
Phone: 301-504-0170

NIH/NIDDK: DXA

James Everhart, M.D., MPH
National Institutes of Diabetes and Digestive
and Kidney Diseases
Division of Digestive Disease and Nutrition
2 Democracy Plaza, Room 655
6707 Democracy Boulevard, MSC 5450
Bethesda, Maryland 20892-5450
Phone: 301.594.8878
Fax: 301.480.8300

FDA: Nutrition Assessment

Mary Brandt
Director, Office of Special Nutritionals
Food and Drug Administration
Center for Food Safety and Applied Nutrition
5100 Paint Branch Parkway, Room 4C096
College Park, MD 20740
Phone: 202-205-4561

CDC/NCCDPHP: Quality of Life

David Moriarty, Program Analyst
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention
and Health Promotion
4770 Buford Highway, Mailstop K45
Atlanta, Georgia 30341
Phone: 770.488.5455

CDC/NCCDPHP: Smoking/Tobacco Use

Ralph Caraballo, Ph.D.
Epidemiologist
Office on Smoking and Health
4770 Buford Highway, N.E.,MS-K50
Atlanta, Georgia 30333
Phone: (770) 488-5732
Fax: (770) 488-5848
Email: rfc8@cdc.gov

CDC/NCCDPHP: PSA Testing

Mona Saraiya, MD, MPH
Division of Cancer Prevention and Control
National Center for Chronic Disease Prevention & Health Promotion
Centers for Disease Control and Prevention
4700 Buford Highway, NE, MS-K55
Atlanta, GA 30341
Tel: (770) 488-4293

NIH/NCI: Weight History

Susan Krebs-Smith, Ph.D., MPH
National Institutes of Health
National Cancer Institute
Division of Cancer Control and Population Sciences
EPN, Room 4005
6130 Executive Blvd., MSC 7344
Bethesda, Maryland 20892-7344

Phone: 301.496-4766
Fax: 301.435.3710

NIH/ODS: Dietary Supplements and Nutritional Biochemistries

Paul M. Coates
National Institutes of Health
Office of Dietary Supplements
Building 31, Room 1B29
31 Center Drive MSC 2086
Bethesda, Maryland 20892-2086
Phone: 301.435-2920
Fax: 301.480.1845

CDC/NCEH: Lab., Nutrit., Hemat., & Environ. Hlth Assess.

John Osterloh
Deputy Director for Management and Operations
Division of Laboratory Sciences
National Center for Environmental Health
Centers for Disease Control and Prevention
4770 Buford Highway, NE, Mailstop F-20
Atlanta, Georgia 30341-3724
Phone: 770.488.7938
Fax: 770.488.4839

CDC/NIOSH: Audiometry

Dr. John Franks
Division of Applied Research and Technology
National Institute for Occupational Safety and Health
Robert A. Taft Laboratories, Room 321
4676 Columbia Parkway
Cincinnati, Ohio 45226
Tel: 513.533.8281

EPA: Dietary and Biomonitoring (763)

Ruth H. Allen, Phd, M.P.H
NHANES Analysis Team Leader
Crystal Mall-2 Rm 816H
US EPA 7509-C
1200 Pennsylvania Ave. NW
Washington DC 204600
Tel: 703.305.7191

Attachment 6

Acrobat Document

Attachment 7

Attachment 7 - Letters and Scripts

NOTE: All letters will be available in both Spanish and English versions.

Pre-advance letter postcard

The United States Department of Health and Human Services is conducting the National Health and Nutrition Examination Survey (NHANES) in your neighborhood. For more than 40 years, information from this survey has been used to solve health problems, develop health programs and improve the quality of health care in the United States. You may have the opportunity to participate in NHANES when a representative of the Centers for Disease Control and Prevention calls at your home. Thank you.

For more information visit the NHANES web site at http://www.cdc.gov/nhanes.

Please watch for your letter to arrive soon. Please participate if you are contacted.

Advance Letter

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road
Hyattsville, Maryland 20782

You or a member of your family may have a chance to take part in an important national health survey.

The National Center for Health Statistics, a part of the Centers for Disease Control and Prevention, is responsible for this survey—the National Health and Nutrition Examination Survey. This survey teaches us about the health and diet of people in the United States. Over the years, this survey has led to changes in the foods we eat and the health care we receive.

In the next few weeks, one of our health representatives will visit your home. She or he will show you official U.S. Public Health Service identification (shown below) and ask some short, easy questions about you and other family members. This interview will take only a few minutes of your time. The purpose of these questions is to see if you or a member of your family will be asked to participate in the survey. Answering the questions is completely voluntary, and you may choose not to answer any questions. I assure you there will be no penalties or loss of benefits of any kind from refusing to answer.

If you or other household members are chosen, we hope you will participate in the survey. You will be among the many people in towns and cities across the country who help us increase our knowledge about the health of people in the United States.

This survey is a Federal program authorized by the Public Health Service Act. All of your answers will be kept in strict confidence. We will use this information only for statistical research and reports. Your answers will be added to others, so no one can identify which are yours.

Thank you in advance for helping.

Sincerely,

Example of identification card will go here.

Edward J. Sondik, Ph.D.
Director

P.S. If you have questions call Dr. Kathryn Porter of my staff at 1-800-452-6115.
The call is free, and we would be happy to answer your questions.

SCHOOL EXCUSE LETTER

DEPARTMENT OF HEALTH & HUMAN SERVICES
National Center for Health Statistics
3311 Toledo Road
Hyattsville, Maryland 20782

Dear Principal:

Please excuse the below named student from class to participate in a national health survey conducted by the Centers for Disease Control and Prevention. The date and arrangements we have made for transportation are indicated below.

NAME _____

DATE _____

Parent will pick up.
Taxi will pick up.
One of our representatives will pick up.
Student will leave from home.

Thank you for your cooperation and your appreciation of the valuable contribution this student is making to our study. If you need to contact us, please call _____.

Sincerely,

_____
Stand Manager

As parent/guardian of the above named child, I consent to the arrangements indicated.

_____
Signed (Parent/Guardian)

NATIONAL HEALTH SURVEY
AUTHORIZATION FOR TRANSPORTATION ARRANGEMENTS FOR
PERSONS UNDER 16 YEARS OF AGE

NAME OF CHILD: _____ AGE: _____

- I consent to transportation of my child to and from the Mobile Exam Center/Field Office by members of the CDC health survey staff.

- I consent to transportation of my child to and from the Mobile Exam Center/Field Office in a taxi arranged and paid for by the CDC health survey.

- I will drive.

Children under 12 must come to the Mobile Exam Center accompanied by someone aged 12 and over. Please complete the subsequent section with this in mind. Children under 12 who arrive alone will not be examined.

- Mother will accompany.

- Father will accompany.

- Other person 12 and over will accompany _____
  Specify

- Will come alone (only for children ages 12 - 16).

_____ _____
(Date) (Signature of Parent or Guardian)

_____
(Witness)

SP ID _ _ _ _ _ _

FOLLOWUP LETTER

NOTE: This follow-up letter is a model that will be adapted for different non-response situations

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road
Hyattsville, Maryland 20782

Dear Ms.:

We were sorry to learn you are not interested in taking part in our health survey. We would like to explain just how important your help can be. -- And, it's easy to take part.

Our major goal is to learn how we can improve health and better meet health care needs of all persons living in the United States. The more facts we can gather, the better job we can do.

We selected you and your household in a carefully designed sample of people living in the U.S. We cannot choose someone in your place because no one has the same health characteristics as you. By helping us, you will also be helping yourself and your family. You will each receive a free health examination. The exam is not painful, and all results are kept confidential.

We will also pay you to drive yourself to the exam center -- or, if you wish, arrange free taxi service. At the end of the exam, you will each receive a cash payment. This is our way of saying, "Thanks for your help."

In hope that you will help, one of our representatives will call on you to arrange a good time to talk with you about this important survey. I have enclosed some material that will give you a better idea of what we are all about. Please take a few minutes to look at this material.

Please call our office if you have any questions or to set up a time for our representative to come talk with you. Our office number is (000) 000-0000 or 1-800-452-6115 if long distance.

Sincerely,

Kathryn S. Porter, M.D.
Medical Officer
Survey Operations Branch
Division of Health and Nutrition Examination Studies

Screener Brochure

What is the National Health and Nutrition Examination Survey?

The National Health and Nutrition Examination Surveys (NHANES) is a study conducted by the National Center for Health Statistics -- a Federal agency that gathers health data for the United States.

For more than 40 years, we have had short interviews around the country in homes like yours. We use these short interviews to choose some households to take part in the survey. The survey includes more detailed interviews and physical exams for some people in each household. The exams are conducted in mobile centers that are located in the communities selected for the survey.

From NHANES, we learn about the health of people in the United States. We find out about dental health, hearing and vision, and the kind of nutrition each person has. We take body measurements, such as height and weight, and look for certain diseases and health conditions.

We use the data to solve health problems, to develop health programs, and to improve the quality of health care.

The current NHANES survey began in 1999. It will now be an on-going program and will go to locations in all parts of the United States.

How will I recognize the survey interviewer?

The person who comes to your home will have an official identification card from the National Health and Nutrition Examination Survey, Centers for Disease Control and Prevention. His or her photo will be on the card.

How was I chosen for the interview?

Because we cannot talk to everyone in the country, we choose certain households to represent many others. To do this scientifically, we begin by selecting certain counties or cities. Then in these areas, we choose smaller areas such as blocks. Finally, we select a few houses within the small areas.

The people who live in these houses make up a “sample” of the people in the counties and cities chosen. We do not know who lives in any of the houses before we arrive to conduct the interview.

Your home has been chosen to take part in the short interview that we use to decide who will take part in this NHANES.

How do I know that information about me will be kept confidential?

We respect your privacy. Public laws keep all information you give confidential.

We will hold all data we collect in the strictest confidence. We gather and protect all information according to requirements of Federal Laws: The Public Health Service Act (42 USC 242k) authorizes collection and Section 308(d) of that law (42 USC 242m) and the Privacy Act of 1974 (5 USC 552A) prohibit us from giving out information that identifies you or your family without your consent. This means that we cannot release any fact about you without your consent, even if a court of law asks for it. We will keep

all survey data safe and secure. When we allow researchers to use survey data, we protect your privacy. We assign code numbers to replace names or other facts that could identify you.

We combine your answers with those from thousands of other people. We report survey findings in percentages and totals to protect the privacy of those who took part in the survey.

We appreciate your talking with our survey interviewer. By taking part in this survey, you will help add to our information about the health of people living in the United States.

For more information about the survey, you may visit our web site at:
www.cdc.gov/nhanes/

Attachment 8

Attachment 8 - Informed Consent Brochures

A summary of the 2007 planned consent forms follows:

1. Consent Form for Household Interview(s). If an adult household member does proxy interview for one or more children and answers the household/family questionnaire that individual signs one interview consent form that lists all the interviews they are consenting to.

2. Consent brochure and form for the examination.

    a. For participants ages 7-11 there is an assent brochure (child version) and form.
    b. For participants ages 12-17 there is an assent brochure (adult version) and form
    c. There is a separate consent form for stored specimens. (As of November 20 the ERB made suggested changes that are reflected in the attached document. They have not responded to DHANES as to whether these are the final changes.)
    d. For participants 6-79 with obstructive changes on spirometry there is a special consent form.

3. NHANES has guests participate in the examination on a regular basis during the 'dry-run' set up day of each location and at other times for a variety of reasons. Formerly, there were numerous variations of the consent form to cover these situations. Since 2006, there is only one consent form and health measurement list to describe the examination.

4. Forms signed by parents for children to get off school and/or be transported to the examination center are also in this section.

#1 FORM APPROVED:
OMB # 0920-0237

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY
HOUSEHOLD INTERVIEW CONSENT

Print name of respondent _____ _____
_____
First Middle Last

You have been chosen to take part in the National Health and Nutrition Examination Survey (NHANES), held by the Centers for Disease Control and Prevention (CDC). This research tells us about the health and nutrition of people in the United States. It combines an interview with a health exam. Our interviewer will ask questions about you and your family. Some questions are about your work and general health. Others are about health problems and other health topics. Also, we will ask for your Social Security and Medicare numbers to link to vital statistics, health, nutrition and other related records so we can do research on health, nutrition and food programs. The questions today will take about one hour. We may contact you to check the work of your interviewer. We may contact you again for further studies.

We use data gathered in this survey to study many health issues. All data gathered will be kept strictly confidential. We gather and protect all data in keeping with the requirements of Federal Laws (see box below). These laws do not allow us to give out data that identifies you or your family without your permission.

You may take part in this survey or not. The choice is yours. You will not lose any benefits if you say no. If you choose to take part, you don't have to answer every question.

Do you have more questions about the survey? You can make a toll-free call to Dr. Kathryn Porter at the U.S. Public Health Service office at 1-800-452-6115, Monday-Friday, 8:30 AM-6 PM EST. If you have questions about your rights about being in the survey, call the Research Ethics Review Board at the National Center for Health Statistics, toll free, at 1-800-223-8118. Please leave a brief message with your name and phone number. Say that you are calling about Protocol # 2005-06. Your call will be returned as soon as possible.

I have read the information above. I freely choose to be in the NHANES household survey.

I agree to have my survey audiotaped.
I decline to have my survey audiotaped.

_____ _____
Signature of person answering household questionnaire(s) Date

IF PERSON ABOVE IS 16 OR 17 YEARS OLD, A, PARENT/GUARDIAN MUST ALSO SIGN BELOW:
(Unless participant is an emancipated minor)

_____ _____
Signature of parent/guardian Date

I observed the interviewer read this form to the person named above and he/she agreed to participate by signing or marking this form.

_____ _____
Witness (if required) Date

Name of staff member present when this form was signed:
_____

HOUSEHOLD ID ___ ___ ___ ___ ___ ___ ___ ___ ___ FAMILY # ___ ___

Which questionnaire(s) did person respond to?

FAMILY SP (IF CHECKED, PRINT BELOW)

SP NAME	SP ID
_____	_ _ _ _ _ _
_____	_ _ _ _ _ _
_____	_ _ _ _ _ _
_____	_ _ _ _ _ _
_____	_ _ _ _ _ _

Public reporting burden of this collection of information is estimated to average 6.7 hours per response for total participation, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road, MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0237).

The Public Health Service Act (42 USC 242k) authorizes collection and Section 308(d) of that law (42 USC 242m), as well as the Privacy Act of 1974 (5 USC 552A), and the Confidential Information Protection and Statistical Efficiency Act (PL 107-347), prohibit us from giving out information that identifies you or your family without your consent. Any NHANES employee who violates the law may be convicted of a class E felony and imprisoned for up to 5 years, or fined as much as $250,000.

The Public Health Service Act (42 USC 242k) authorizes collection and Section 308(d) of that law (42 USC 242m), as well as the Privacy Act of 1974 (5 USC 552A), and the Confidential Information Protection and Statistical Efficiency Act (PL 107-347), prohibit us from giving out information that identifies you or your family without your consent. Any NHANES employee who violates the law may be convicted of a class E felony and imprisoned for up to 5 years, or fined as much as $250,000.

Brochure on NHANES Examination and Form for Consent/Assent/Parental Permission

Overview

National Health and Nutrition Examination Survey

The National Health and Nutrition Examination Survey **(**NHANES) is a survey conducted by the Centers for Disease Control and Prevention. We have designed the survey to learn about the health and diet of people in the United States.
Our survey is unique. It combines a home interview with health measurements, which we do in mobile units. These special mobile centers travel across the country with a highly trained medical team. Our team looks at special health topics. They use the most up-to-date methods and equipment for medical and dental exams and other lab tests.

Why is this health survey important?
We will use the data gathered in this survey to find out the number of people with certain health problems — for example, diabetes and high blood pressure. We will look at diet and other habits that affect health, such as smoking and exercise.
NHANES data will tell us the health and nutrition of people of all ages. It will also help design health programs and services, and expand our knowledge about the health of people in the United States.

What do I gain by taking part in the exam?
• Free health test results
• The chance to help learn more about the health of the Nation
• A token of thanks for your time and effort
You may choose to be in the survey and you may allow your child to be in it, too. That is your choice. There is no penalty if you refuse. You may refuse any part of the exam and are free to drop out anytime. Also, during the interviews you may choose not to answer every question.

What will I be asked to do at the mobile center?
Our health representative will ask you to make an appointment for the exam at the mobile center.

Also, we may need to contact you in the future. To do this we will ask public or private agencies, such as the Post Office, to give us changes to your address. In the past, we have had the chance to call or revisit people who took part in this survey. We may contact you in the future to ask you to be part of other research projects. Your participation in future studies is voluntary.

More questions?
Our survey representative can discuss other questions or concerns you might have or give you printed material that can help you. She or he can give you a phone number in your area that you can call for more facts about the survey.

Also, you can make a free call to Dr. KathrynPorter of the U.S. Public Health Service to discuss any aspect of the survey.
She can be reached at 1-800-452-6115, Monday-Friday, 8:30AM-6:00PM EST. You may also contact her regarding any harm to you resulting from this survey. You can also get answers to your questions by mail (Room 4322, 3311 Toledo Rd., Hyattsville, MD 20782).

You may have questions about your rights as a participant in this research study. If so, please call the Research Ethics Review Board at the National Center for Health Statistics, toll-free, at 1-800-223-8118. Please leave a brief message with your name and phone number. Say that you are calling about Protocol # 2005-06. Your call will be returned as soon as possible.

Teeth Bones

We will also collect blood And ask you questions about and urine samples. what you eat.
If your appointment is scheduled in the morning, we will ask you not to eat or drink anything overnight. The health tests may take from 2 ½ to 4 hours for those 12 and older and 1-3 hours for younger children. The time spent in the mobile center and the tests you receive will be based on your age and current medical condition. (For a full list of exams you may receive, see the Health Measurements List.)

Are the tests safe?

The tests are safe. Some tests may cause you slight discomfort. Examples are taking a blood sample or not eating for 9 hours. For the blood sample, a person will have a small amount of blood drawn from a vein in his/her arm with a needle. People 12 years and older that have a morning exam will be asked to drink a sugar drink and have blood taken a second time. Although rare, the sugar drink can cause nausea, vomiting, bloating, or headache. We will not ask you to have any test that is wrong for you because of a health problem you have.

We will give bone density tests that involve low-dosage x-rays to persons 8-years-old and older. Radiation exposure during this test is equal to a cross-country airline flight or a few days of natural background radiation. But because the bone density scan involves x-rays, no one who is pregnant should get this exam. We will get information about periods from girls and women, and those who have started their periods will have a urine pregnancy test. Those with a positive test will not have the bone density scan.

Will you ask personal questions?

At the mobile center you will be asked some personal questions. A trained interviewer will ask some of these questions. Other questions, like those about sexual behaviors and drug use, will be asked in complete privacy. The interviewer will leave the room. The questions will be on a computer screen. You answer by touching an answer on the screen.

Like all of the other data we collect, the answers you give us are kept strictly private. If you are under 18 years of age, we may notify your parents if we have reason to believe you may harm yourself because of sad feelings.

Will I get my results?
Yes, you will get a report of your results. If the exam shows urgent health problems, we will notify you at once and refer you for treatment. If some urgent problem is found through your lab tests, we will immediately send that information in a letter to your home address. If you wish, we will mail the routine results to you about 3-4 months after the exam. In general, we give results only to the person examined or to the parents/guardians of children.

Some results, like those for sexually transmitted disease (STD) tests and pregnancy tests, are not put in writing. We report positive pregnancy test results only to the person tested if she is 14 years or older and doesn't already know she is pregnant. If a girl is younger than 14 and has a positive pregnancy test, we will inform both her and her parent/guardian. How we report STD test results is explained in the next section.

Some tests are not reported because they will be used only for research and are not used for medical care. Better ways to look at some of the tests may be developed in the future. Some of the tests may be read again. We will not report the results of future tests to you.
NHANES does not cover the cost of any health care you may decide to get after the exam.

Will you test for sexually transmitted diseases (STDs)?
Teenagers (14 years and older) and some adults will have tests for STDs. We will not put these results in writing, but you can get STD test results a few weeks after the exam. Before you leave the mobile center, you will be given a toll-free number, a password, and the dates to call for your results. Only you will get your test results by calling in and telling us your password. Parents will not be told their child's STD test results. If your test results show that you have a current health problem, we will talk with you about the results and tell you how to get treatment. We will keep all STD test results completely private, just like all other test results. If you do not want to be tested, you can tell a staff member. For details on the tests, please see the Health Measurements List.

Will my information be kept private?
We respect your privacy. Public laws keep all information you give private.
These laws do not allow us to give out data that identifies you or your family without your permission. This means that we cannot give out any facts about you, even if a court of law asks for it. However, if we find signs of child abuse during an exam, we will report it to the local department of social services or the police.

We will keep all survey data safe and secure. When we share data with our partners, we do so in a way that protects your privacy as required and guaranteed by law. Our interviewer can provide you a list of our partners if you wish to learn more.

How are NHANES data used?

What you tell us, your exam results, and samples you give are a good resource for health science. Many Federal agencies, universities, and other public and private groups use NHANES data. They use it to help find new cures and treatments for diseases and disabilities. The aim is to make the health of all people better. Results of this survey may be reported in journals, at major scientific meetings, or through other news media. None of these reports will ever name or use data that can point to any person who took part in the survey.

NHANES has been used in important national reports. One of these highlights the food we eat. Another tells us about the exposures we have to chemicals in the environment. The survey has also been used to track the number of people who are overweight or obese. Research using NHANES can be found on our Web site, listed on the back of this brochure.

Health research using NHANES can be enhanced by combining your survey records with other data sources. An example is linking your survey results with vital statistics and Medicare claims. To do this, we will ask your permission to collect your Social Security and Medicare numbers. As we told you before, we keep this information safe and secure.

Upon arriving at the mobile center, you will be asked to change into a two-piece examination outfit. Our medical team will then guide you to private rooms where we will check your:

Height and weight (image goes here)	Blood pressure (image goes here)
Eyes (image goes here)	Ears (image goes here)

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

2007 NHANES Health Measurements

Below is a list of tests you will receive on the day of your examination.
You will only have the test if your age falls within the ages shown in parenthesis.
You will receive the results of health measures shown with a black diamond (♦). Two diamonds (♦♦) means you will receive the test result only if high or abnormal.

Health Measurements

You will be weighed and measured (all) ♦
We will measure your body fat (8-69) ♦
The doctor will take your blood pressure (8+) ♦
We will look at the condition of your teeth (5+) ♦
You will have bone density tests that involve low-dosage x-rays
- Hip and spine scans (8+) ♦
- (*Pregnant women will not have bone density tests*)

You will have a hearing test (12-19) ♦
You will have an eye test.
- Visual acuity testing (12+) ♦
- Visual field testing (40+) ♦
- Digital photographs of retina (40+) ♦
- (*Eyes will **not** be dilated with eye drops*)

You will have breathing tests (6-79)
- Exhaled nitric oxide test using the NIOX-MINO™ device
  - (The Food and Drug Administration (FDA) is currently considering the device for use in the U.S., but has not yet approved it. The FDA could review your personal survey data since the agency is responsible for monitoring the safety of medical devices.)
- Lung function test measuring the volume of air you can breathe out after taking a deep breath in ♦
  - If the test shows abnormal results, you will be asked to visit our doctor and give permission to do another breathing test

- The doctor will talk to you about breathing a medication that opens up your breathing tubes before doing the test again

Private Interviews

You will be asked questions about your
eating habits (all)
You will be asked to answer questions
about drug, alcohol, and tobacco use,
reproductive and sexual history (12+)
(*You will do this by yourself and using a private touch-screen computer*)

Lab Tests on Urine (6+)

You will be given a clean empty cup when you arrive at the exam center. When you change into the exam clothes in a private rest room, you will provide a urine sample. The urine will be tested for:

Exposure to environmental chemicals (all) ♦ [arsenic ♦♦]
Kidney function tests (all)
Sexually transmitted diseases:
Chlamydia and gonorrhea (14-39) ♦
(*Urine is not tested for drug use*)

Lab Tests on Blood (1+)

You will have your blood drawn. The blood will be tested for:

Anemia (all) ♦
Nutrition status (all) ♦
Exposures to environmental metals: lead, cadmium, and mercury (all) ♦
Infectious diseases (2+) ♦♦
Cholesterol, triglycerides and other lipids (6+) ♦
Exposure to environmental chemicals (selected participants 6+)♦
Kidney and liver function (12+) ♦
Sexually transmitted diseases (STD):
Genital herpes (14-49) ♦
Human immunodeficiency virus (HIV) (18-49)♦
Human Papillomavirus (HPV) (14-59)
Glucose (12+) ♦
Persons examined in the morning will have their blood drawn a second time to check for prediabetes

Women and girls only:

You will be asked to self-administer a vaginal swab in complete privacy. The swab will be tested for the presence of Human Papillomavirus (14-59) ♦

Females 12 years and older will have a urine
pregnancy test, as well as girls 8-11 who have started their periods. Our physician will tell you if you are pregnant if you did not already know it. Parents of girls younger than 14 years of age who are pregnant will also be informed of the test result ♦♦

Men only:

Your blood will be checked for your level of prostate specific antigen (PSA) (40+) ♦

Lab Tests on Water:
The interviewer will collect a sample of your household tap water, which we will test for environmental chemicals. Only half of the households will have their water sample tested for environmental chemicals
(12+) ♦♦

After your visit to the NHANES mobile center:

If you had a dietary interview as part of your exam, you will get a phone call 3-10 days after the exam to be asked similar questions. Then you or an adult in your family, if you are between 1-15 years old, will be asked about food shopping habits

People who test positive for hepatitis C will be called and asked to be in a brief phone interview 6 months after the exam.

Taking part in these interviews and health measures after your visit to the mobile center is voluntary.

If you agree to take part in NHANES, we ask you to sign the attached consent form to show that you know the nature and purpose of the survey. Please be sure you understand the facts we have given you and that all questions are answered.

FORM APPROVED: OMB # 0920-0237

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY
CONSENT/ASSENT AND PARENTAL PERMISSION FOR EXAMINATION AT THE MOBILE EXAMINATION CENTER

Print name of participant _____ _____
First Middle Last

PARENT OR GUARDIAN OF SURVEY PARTICIPANT WHO IS UNDER 18 YEARS OLD:
For the Parent or Guardian of the Survey Participant who is a minor (unless the participant is an emancipated minor):

I have read the Examination Brochure and the Health Measurements List which explain the nature and purpose of the survey. I freely choose to let my child take part in the survey.

_____ _____
Signature of parent/guardian Date

If you do not want a written report of your child's exam results, check here

---

SURVEY PARTICIPANT WHO IS 12 YEARS OLD OR OLDER:

I have read the Examination Brochure and the Health Measurements List which explain the nature and purpose of the survey. I freely choose to take part in the survey.

_____ _____
Signature of participant Date

If you do not want a written report of your exam results, check here

I observed the interviewer read this form to the person named above and he/she agreed to participate by signing or marking this form.

_____ _____
Witness (if required) Date

Name of staff member present when this form was signed:

_____

___ ___ ___ ___ ___ ___
SP ID

Brochure on NHANES Examination and Form for Assent for Participants 7-11 Years Old

Text for Informational Brochure for Participants 7-11 Years of Age

The National Health and Nutrition Examination Survey (NHANES) studies the health and diet of people in this country.

The survey will look at how young people grow and develop. We will look at special health problems that may affect kids.

We go all over the United States in these vans.

Our survey wants you to come to this exam center. The exam is like going to the doctor. Your exam will help us find out more about the health of children your age.

We will ask questions about what you eat and drink.

You will change into special exam clothes at the exam center.

Our doctor will take your pulse.

We will take your blood pressure.

We will see how much you weigh and how tall you are.

We will look at your teeth.

We will test your breathing.

We will check your blood and urine in our lab.

We will send you and your parents a report on your exam.

We will give you money to thank you for helping us with our survey.

Our staff will answer any questions you have.

We would like you to go to our mobile exam center vans for an exam. You will help us learn more about all children in the United States.

National Health and Nutrition Examination Survey (NHANES)

Your parents say that you can take part in this special survey. You have just read about the survey in this book. The survey tells us about the health of people. We will ask you to have an exam at our vans that are here in your town. This exam is a little like going to the doctor. Other kids and their families will be at the center. You do not have to do this if you do not want to. If you take part, you will learn some things about yourself. You will help us learn a lot about other kids in the United States.

If you want to take part in the survey, write your name below.

_____
Signature of participant 7-11 years old

_____
Print name of participant

I observed the interviewer read this form to the person named above and he/she agreed to participate by signing or marking this form.

_____ _____
Witness (if required) Date

Name of staff member present when this form was signed:

_____

___ ___ ___ ___ ___ ___
SP ID

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES)

Consent/Assent and Parental Permission for Specimen Storage and Continuing Studies

Print name of participant _____ _____ _____
First Middle Last

Q **Why will a sample of blood and urine be kept for future health studies?**

A We would like to store some of the blood and urine from persons who are examined in NHANES for future health studies. These samples will be frozen and kept in a specimen bank for as long as they last. Your participation is voluntary and no loss of benefits will result if you refuse.

Q **What studies will be done with the samples?**

A At this time, no specific studies are planned besides the tests included in the NHANES exam. As scientists learn more about health and diseases, other studies will be conducted that may include stored samples. There can be many additional studies on these samples. People conducting these studies will not contact NHANES participants for any additional information.

We will keep strictly confidential all health data and samples that we collect in NHANES. By confidential we mean that the information that we release to the public can not be used to identify you. Our staff is not allowed to discuss that any person is part of this survey under penalty of Federal laws: Section 308(d) of the Public Health Service Act (42 USC 242m) and the Privacy Act of 1974 (5 USC 552A).

Q **Who can use the stored samples for further study?**

A Researchers from Federal agencies, universities, and other scientific centers can submit proposals to use the stored specimens. These proposals will be reviewed for scientific merit
and then by a separate board that determines if the study proposed is ethical. The NHANES program will always know which samples belong to you or your child, but we will not give other researchers any information that could identify you or your child.

Q **Will I receive results from any future testing of my specimens?**

A Most studies will simply add to our knowledge of health and disease. Therefore, we do not plan to contact you or your family with individual results from these studies. Periodically we will announce on our web site results from the studies being conducted (http://www.cdc.gov/nchs/nhanes.htm). To get more general information about a particular study, you can call our toll-free number, 1-800 452-6115.

Q **How can I remove blood or urine samples from the specimen bank?**

A In the future, if you want samples removed from the specimen bank, call us toll-free at 1-800-452-6115.

The results of continuing studies of your stored specimens may help find new ways to prevent, treat, and cure many diseases.

For **persons ages 7 and over,** check a box
I agree that my blood and urine (if applicable) may be kept for future health studies
I disagree
For **parent/guardian of a child under the age of 18**, check a box
I agree that my child's blood and urine may be kept for future health studies
I disagree

_____ _____
Signature of participant age 7 or over Date

_____ _____
Signature of parent/guardian of participant under 18 Date
(Unless the participant is an emancipated minor)

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES)

Consent and Parental Permission for Specimen Storage and Continuing Studies Using DNA

Print name of participant _____ _____ _____
First Middle Last

Q **Why will a sample of my DNA be kept for future health studies?**

A We will like to store part of the blood sample that we collect in the exam center for future genetic studies. These samples will be frozen and kept in a specimen bank for as long as they last. Your participation is voluntary and no loss of benefits will result if you refuse.

Q **What genetic studies will be done with the samples?**

A Genes are the "instruction book" for people. Genes are made out of DNA. The DNA of a person is about 99.9% the same as the DNA of another person, but no two people have the same DNA except identical twins. Differences in DNA are called genetic variations and explain differences such as eye color and partly explain why some people get certain diseases. To look at these variations many genetic tests may be done on your blood sample. We will keep the DNA for an unlimited time. Studies of human genes are helping us learn about many diseases and health conditions. The information from people who are part of NHANES could help that effort.

People conducting these studies will not contact NHANES participants for any additional information.

We will keep strictly confidential all health data and samples that we collect in NHANES. By confidential we mean that the information that we release to the public can not be used to identify you. Our staff is not allowed to discuss that any person is part of this survey under penalty of Federal laws: Section 308(d) of the Public Health Service Act (42 USC 242m) and the Privacy Act of 1974 (5 USC 552A).

Q **Who can use the stored DNA samples for further study?**

A Researchers from Federal agencies, universities, and other scientific centers can submit proposals to use the stored specimens. These proposals will be reviewed for scientific merit
and then by a separate board that determines if the study proposed is ethical. The NHANES program will always know which samples belong to you, but we will not give other researchers any information that could identify you.

Q **Will I receive results from any future testing of my specimens?**

A Most studies using DNA samples will simply add to our knowledge of health and disease. Therefore, we do not plan to contact you with individual results from these studies. Periodically we will announce on our web site results from the studies being conducted, (http://www.cdc.gov/nchs/nhanes.htm). To get more general information about a particular study, you can call our toll-free number, 1-800 452-6115.

Q **How can I remove my DNA samples from the specimen bank?**

A In the future, if you want samples removed from the specimen bank, call us toll-free at 1-800-452-6115.

The results of continuing studies of your stored specimens may help find new ways to prevent, treat, and cure many diseases.

Only for **persons ages 20 and over**, check a box

☐ I agree that my blood may be kept for future studies using my genes to help understand genetic links to medical conditions.

I disagree

_____ _____
Signature of participant age 20 or over Date

Bronchodilator and Repeat Spirometry Informed Consent
National Health and Nutrition Examination Survey
Lung Function Testing with Medication

Your lung function test results were outside the normal range. The amount of air you breathed out in one second was less than expected for someone your age and sex. One reason could be narrowing of the small breathing tubes leading to your lungs.

The NHANES survey is asking you to take a medicine and do another breathing test. The results will show if you have a reversible breathing problem like asthma.

- You will be given medicine called albuterol to inhale that works to open your lungs.
- Although rare, the medication can briefly cause a fast heart beat, chest pain, nervousness or tremor; very rarely, an allergic reaction can occur.
- The Food and Drug Administration (FDA) could review your personal survey data since they monitor the safety of all medications. The FDA has approved the use of this medication for people aged 4 years and older.
- You will be asked to do another breathing test.
- The doctor will ask you questions about your health. The breathing medicine will not be given to people with certain types of health problems. If you have any of these health problems, you will not be asked to take the medicine or have another breathing test.
- Participation is voluntary.

I have read the information above. I freely choose /permit my child/ to have the medication and another lung function test.

_____ _____
Signature of the participant (ages 6 years and over) Date

_____
_____
Signature of the parent or guardian Date
(Required if the participant is a minor)

Print the name
of the participant _____ _____
_____
First Middle Last

Name of staff member present when this form was signed:
_____

DEPARTMENT OF HEALTH & HUMAN SERVICES
National Center for Health Statistics
3311 Toledo Road
Hyattsville, Maryland 20782

Dear Principal:

Please excuse the below named student from class to participate in a national health survey conducted by the Centers for Disease Control and Prevention. The date and arrangements we have made for transportation are indicated below.

NAME _____

DATE _____

Parent will pick up.
Taxi will pick up.
One of our representatives will pick up.
Student will leave from home.

Thank you for your cooperation and your appreciation of the valuable contribution this student is making to our study. If you need to contact us, please call _____.

Sincerely,

_____
Stand Manager

As parent/guardian of the above named child, I consent to the arrangements indicated.

_____
Signed (Parent/Guardian)

NATIONAL HEALTH SURVEY
AUTHORIZATION FOR TRANSPORTATION ARRANGEMENTS FOR
PERSONS UNDER 16 YEARS OF AGE

NAME OF CHILD: _____ AGE: _____

☐ I consent to transportation of my child to and from the Mobile Exam Center/Field Office by members of the CDC health survey staff.

☐ I consent to transportation of my child to and from the Mobile Exam Center/Field Office in a taxi arranged and paid for by the CDC health survey.

☐ I will drive.

Children under 12 must come to the Mobile Exam Center accompanied by someone aged 12 and over. Please complete the subsequent section with this in mind. Children under 12 who arrive alone will not be examined.

☐ Mother will accompany.

☐ Father will accompany.

☐ Other person 12 and over will accompany _____
Specify

☐ Will come alone (only for children ages 12 - 16).

_____ _____
(Date) (Signature of Parent or Guardian)

_____
(Witness)

Attachment 9

Attachment 9 - NCHS Non-disclosure Statement

Each employee of NCHS is responsible for maintaining and protecting at all times the confidential records that are in the employee's presence or under the employee's control. In addition, each employee must at all times follow the principles and obey the laws, rules, and relations that are cited or referenced in this manual.

To assure that the employee is fully aware of his responsibilities, each person, on entering employment in NCHS, is given the following statement and the full text of penalty sections of indicated laws to read and sign:

Nondisclosure Affidavit

The National Center for Health Statistics collects, compiles, and publishes general purpose vital and health statistics which serve the needs of all segments of the health and health related professions. The success of the Center's operations depends upon the voluntary cooperation of States, of establishments, and of individuals who provide the information required by Center programs under an assurance that such information will be kept confidential and be used only for statistical purposes.

NCHS operates under the authority and restrictions of **Section 308(d)** of the **Public Health Service Act** which provides in summary that no information obtained in the course of its activities may be used for any purpose other than the purpose for which it was supplied, and that such information may not be published or released in a manner in which the establishment or person supplying the information or described in it is identifiable unless such establishment or person has consented.

Three specific laws excerpted below provide penalties for unauthorized disclosure of confidential information.

Section 513 of PL 107-347: Whoever, being an officer, employee, or agent of an agency acquiring information for exclusively statistical purposes, having taken and subscribed the oath of office, or having sworn to observe the limitations imposed by section 512, comes into possession of such information by reason of his or her being an officer, employee, or agent and, knowing that the disclosure of the specific information is prohibited under the provisions of this title, willfully discloses the information in any manner to a person or agency not entitled to receive it, shall be guilty of a **class E felony** and **imprisoned for not more than 5 years**, or fined not more than **$250,000**, or both.

18 U.S.C. section 1905: "Whoever, being an officer or employee of the United States or of any department or agency thereof, publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties...which information concerns or relates to the trade secrets...confidential statistical data...except as provided by law; shall be **fined** under this title**, or imprisoned not more than one year, or both;** and shall be **removed from office or employment."**

Privacy Act of 1974, **5 U.S.C. section 552a(i)(l)**: "Any officer or employee of an agency, who by virtue of his employment or official position, has possession of, or access to, agency records which contain individually identifiable information the disclosure of which is prohibited by this section or by rules or regulations established thereunder, and who knowing that disclosure of the specific material is so prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, **shall be guilty of a misdemeanor and fined not more than $5,000."**

Your signature below indicates that you have carefully read and agreed to follow all NCHS policies and procedures to protect the confidentiality of data collected under these statutes. You also agree not to link NCHS files with any other file that would permit the identification of an NCHS respondent unless the linkage is conducted under an approved project.

_____ _____

Type or Print Name Date

_____ _____

Signature NCHS Division/Program (type or print)

(Ex: ORM, DHES, DVS, OPBL,)

_____

Type of Appt/Length of Appointment

*Receipt of attachments ____(Please initial)

_____

Full Text of Penalty Sections of Indicated Laws.

E-GOVT. ACT of 2002: Sec. 512. Limitations on Use and Disclosure of Data and Information

(a) USE OF STATISTICAL DATA OR INFORMATION- Data or information acquired by an agency under a pledge of confidentiality and for exclusively statistical purposes shall be used by officers, employees, or agents of the agency exclusively for statistical purposes.

(b) DISCLOSURE OF STATISTICAL DATA OR INFORMATION-

(1) Data or information acquired by an agency under a pledge of confidentiality for exclusively statistical purposes shall not be disclosed by an agency in identifiable form, for any use other than an exclusively statistical purpose, except with the informed consent of the respondent.

(2) A disclosure pursuant to paragraph (1) is authorized only when the head of the agency approves such disclosure and the disclosure is not prohibited by any other law.

(3) This section does not restrict or diminish any confidentiality protections in law that otherwise apply to data or information acquired by an agency under a pledge of confidentiality for exclusively statistical purposes.

(c) RULE FOR USE OF DATA OR INFORMATION FOR NONSTATISTICAL PURPOSES- A statistical agency or unit shall clearly distinguish any data or information it collects for nonstatistical purposes (as authorized by law) and provide notice to the public, before the data or information is collected, that the data or information could be used for nonstatistical purposes.

(d) DESIGNATION OF AGENTS- A statistical agency or unit may designate agents, by contract or by entering into a special agreement containing the provisions required under section 502(2) for treatment as an agent under that section, who may perform exclusively statistical activities, subject to the limitations and penalties described in this title.

Sec. 513. Fines and Penalties.

Whoever, being an officer, employee, or agent of an agency acquiring information for exclusively statistical purposes, having taken and subscribed the oath of office, or having sworn to observe the limitations imposed by section 512, comes into possession of such information by reason of his or her being an officer, employee, or agent and, knowing that the disclosure of the specific information is prohibited under the provisions of this title, willfully discloses the information in any manner to a person or agency not entitled to receive it, shall be guilty of a class E felony and imprisoned for not more than 5 years, or fined not more than $250,000, or both.

TITLE 18, SECTION 1905 of the U.S. CODE**,**

"Whoever, being an officer or employee of the United States or of any department or agency thereof, publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with such department or agency or officer or employee thereof, which information concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association, or permits any income return, or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person except as provided by law; **shall be fined not more than $ 1,000, or imprisoned not more than one year, or both; and shall be removed from office or employment."**

The PRIVACY ACT of 1974, Subsection 552a(i)(l)

"Any officer or employee of an agency, who by virtue of his employment or official position, has possession of, or access to, agency records which contain individually identifiable information the disclosure of which is prohibited by this section or by rules or regulations established thereunder, and who knowing that disclosure of the specific

material is so prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, **shall be guilty of a misdemeanor and fined not more than $5,00**

Attachment 10

Attachment 10 Westat, Inc. Form for Assurance of Confidentiality

WESTAT
DATA COLLECTOR CODE OF CONDUCT
AND
ASSURANCE OF CONFIDENTIALITY

Westat is committed to the collection of high quality, independent, and unbiased data. These Performance Standards and Assurance of Confidentiality define the principles that are at the foundation of our data collection. By following these principles, we assure clients, researchers, educators, business leaders, and policymakers that they can have confidence in the data we collect.

The basic principles guiding Westat data collection are:

I. Ethics

- Data collectors have an obligation to the public, respondents, clients, and Westat to collect data according to study procedures.
- Respondents, who are individuals or institutions that participate in our studies, are to be provided with the information about the basic elements of a study as set forth in survey materials.
- Respondents are to be treated with respect and their concerns are to be addressed promptly, openly, and courteously.
- Data collectors are to maintain high standards of personal conduct and perform their job in a manner that will not harm, humiliate, or mislead respondents.
- Data collectors have an obligation to submit time and expense information that accurately reflects the work performed.

II. Technical Performance

- Data collectors are to follow the study protocol and procedures as specified in the study manual, at training, and in post training memos.
- Data collectors are to complete data collection and administrative activities accurately and on schedule.
- Data collectors are to return **all** study materials and equipment (in good condition) to Westat at the end of the study.
- Data collectors are to submit work that is valid and conforms to the quality requirements for the study.

III. Work Style

- Data collectors are to perform their work as effectively as possible and in such a way as to meet the goals set for the study.
- Data collectors are to accept responsibility for the quality of the data they collect and the work they complete.
- Data collectors are to demonstrate commitment, initiative, consistency, and organization in their approach to work.
- Data collectors are to display a professional attitude and appearance during the conduct of their work.
- Data collectors are to communicate professionally and effectively with clients, respondents, and other employees.
- Data collectors are to work effectively with the project team.

IV. Confidentiality

A. Policy on Confidentiality of Survey Data

Westat is firmly committed to the principle that the privacy of respondents and the confidentiality of individual data obtained through Westat surveys must be protected. This principle holds whether or not any specific guarantee of confidentiality was given at time of data collection, or whether or not there are specific contractual obligations to the client. When guarantees have been given or contractual obligations regarding confidentiality have been entered into, they may impose additional requirements, which are to be adhered to strictly.

B. Protecting the Privacy and Rights of Survey Participants

Successful survey research depends upon the cooperation of respondents. Data collectors are expected to gain cooperation using the methods described at training sessions or by their supervisor. For example, data collectors should explain the survey carefully and accommodate respondent time preferences wherever practical.

Data collectors are also to respect the privacy and property of respondents. They must not engage in any selling or promotion of products or services or in any other activity unrelated to the survey. If the data collector or the respondent suffers damage or injury to person or property in the course of the data collector’s activities, Westat must be notified promptly.

C. Procedures for Maintaining Confidentiality

All Westat employees and data collectors shall sign this agreement of confidentiality. This agreement may be superseded by another agreement for a particular project.

Data collectors shall keep completely confidential the names and addresses of respondents, all information or opinions collected in the course of interviews, and any information learned incidentally about individual respondents, responding organizations, or the places and organization where respondents work and live. Data collectors shall exercise care to prevent access by others to survey data in their possession.

Unless specifically instructed otherwise for a particular project, an employee or data collector, upon encountering a respondent or information pertaining to a respondent that s/he knows personally, shall immediately terminate the activity and contact her/his supervisor for instructions.

As a data collector on *[project name]*, I agree to follow the principles and guidelines listed above. I understand that my performance will be evaluated using these criteria, as well as project-specific requirements detailed in the study manual, at training, in post training memos or as otherwise directed by my supervisor or Westat generally.

I give my personal pledge that I shall abide by all policies on privacy and confidentiality. I will keep completely confidential all information arising from surveys concerning individual respondents to which I gain access. I will not discuss, disclose, disseminate, or provide access to survey data and identifiers except as authorized by Westat for a particular contract. I will devote my best efforts to ensure that there is compliance with the required procedures by personnel whom I supervise.

I understand that violation of this pledge will result in disciplinary action, up to and including dismissal. I also understand that violation of the privacy rights of individuals through unauthorized discussion, disclosure, dissemination, or access may make me subject to criminal or civil penalties. A copy of this document has been provided to me.

Signature _____ Date _____

Attachment 11

Attachment 11 – Most recent IRB Review and Approval September 20, 2006

September 20, 2006

From: Stephen Blumberg, Ph.D.
Chair, NCHS Research ERB
Anjani Chandra, Ph.D.
Vice Chair, NCHS Research ERB

Continuation of Protocol #2005-06 National Health and Nutrition Examination Survey (NHANES)

To: George Zipf, MS
Clifford Johnson, MSPS
Vicki Burt, RN, ScM
Kathryn Porter, MD, MS

The NCHS Research ERB reviewed the request for approval of Continuation of Protocol #2005-06 National Health and Nutrition Examination Survey (NHANES) on September 20, 2006. Continuation of Protocol #2005-06 is approved for the maximum allowable period of one year.

IRB approval of protocol # will expire on **09/30/2007**.

If it is necessary to continue the study beyond the expiration date, **a request for continuation approval should be submitted about 6 weeks prior to 09/30/2007.**

There is no grace period beyond one year from the last approval date. In order to avoid lapses in approval of your research and the possible suspension of subject enrollment, please submit your continuation request at least six (6) weeks before the protocol's expiration date of 09/30/2007. It is your responsibility to submit your research protocol for continuing review.

Any problems of a serious nature should be brought to the immediate attention of the Research ERB, and any proposed changes should be submitted for Research ERB approval before they are implemented.

Please submit "clean" copies of the revised protocol or consents and any other revised forms to this office for the official protocol file.

Please call or e-mail me or Dewey LaRochelle if you have any questions.

Stephen Blumberg, Ph.D.
Chair, NCHS Research ERB

Anjani Chandra, Ph.D.
Vice Chair, NCHS Research ERB

Attachment 12

Attachment 12 – NHANES Laboratory Component
Attachment 12a - Laboratory Analytes by Age Group

Test Name	Sample	Matrix
Ages 1-2		
Complete Blood Count	Full	whole blood
Erythrocyte Folate	Full	whole blood
Ferritin	Full	serum
Folate	Full	serum
Hepatitis B Surface Antibody (Anti-HBs)	Full	serum
Transferrin Receptor	Full	serum
Vitamin B_6	Full	serum
Vitamin D[1]	Full	serum
Ages 3-5		
Complete Blood Count	Full	whole blood
Cotinine	Full	serum
Erythrocyte Folate	Full	whole blood
Ferritin	Full	serum
Folate	Full	serum
Hepatitis B Surface Antibody (Anti-HBs)	Full	serum
Polyunsaturated Fatty Acids	Full	plasma
Trans Fatty Acids	Full	plasma
Transferrin Receptor	Full	serum
Vitamin B_6	Full	plasma
Vitamin D[1]	Full	serum
Ages 6-11		
Albumin	Full	urine
Complete Blood Count	Full	whole blood
Cotinine	Full	serum
Creatinine	Full	urine
Erythrocyte Folate	Full	whole blood
Folate	Full	serum
Hepatitis A antibody	Full	serum
Hepatitis B core antibody (Anti-HBc)	Full	serum
Hepatitis B Surface Antibody (Anti-HBs)	Full	serum
Hepatitis B Surface Antigen (HbsAg)	Full	serum
Hepatitis C Antibody (Anti-HCV)	Full	serum
Hepatitis C Ribonucleic Acid (HCV-RNA)	Full	serum
Hepatitis C supplement	Full	serum
Hepatitis D antibody (anti-HDV)	Full	serum
High Density Lipoprotein Cholesterol	Full	serum
Parathyroid Hormone[1]	Full	serum
Polyunsaturated Fatty Acids	Full	plasma
Total Cholesterol	Full	serum
Trans Fatty Acids	Full	plasma

Vitamin B_6	Full	serum
Vitamin D[1]	Full	serum
Ages 12-19		
Albumin	Full	urine
Apolipoprotein (B)	One-Half Fasting	serum
Biochemistry Profile*	Full	serum
Chlamydia trachomatis(14-19 years)	Full	urine
Complete Blood Count	Full	whole blood
Cotinine	Full	serum
Creatinine	Full	urine
Erythrocyte Folate	Full	whole blood
Ferritin (Females 12-19 years))	Full	serum
Folate	Full	serum
Glucose (Oral Glucose Tolerance Test)	One-Half Fasting	plasma
Glucose, fasting	One-Half Fasting	plasma
Glycohemoglobin	Full	whole blood
Hepatitis A antibody	Full	serum
Hepatitis B core antibody (Anti-HBc)	Full	serum
Hepatitis B Surface Antibody (Anti-HBs)	Full	serum
Hepatitis B Surface Antigen (HbsAg)	Full	serum
Hepatitis C Antibody (Anti-HCV)	Full	serum
Hepatitis C Ribonucleic Acid (HCV-RNA)	Full	serum
Hepatitis C supplement	Full	serum
Hepatitis D antibody (anti-HDV)	Full	serum
Herpes Simplex Virus (HSV) (14-19 years)	Full	serum
High Density Lipoprotein Cholesterol	Full	serum
Human Immunodeficiency Virus (18-19 years)	Full	serum
Human Papilloma Virus (14-19 years)	Full	serum
Human Papilloma Virus (Females 14-19 years)	Full	swab
Insulin	One-Half Fasting	serum
Low Density Lipoprotein Cholesterol	One-Half Fasting	serum
Neisseria gonorrhoeae (14-19 years)	Full	urine
Parathyroid Hormone[1]	Full	serum
Polyunsaturated Fatty Acids	Full	plasma
Total Cholesterol	Full	serum
Trans Fatty Acids	Full	plasma
Transferrin Receptor (Females 12-19 years))	Full	serum
Triglycerides	One-Half Fasting	serum
Vitamin B_6	Full	serum
Vitamin D[1]	Full	serum
Ages 20 and older		
Albumin	Full	urine
Apolipoprotein (B)	One-Half Fasting	serum
Biochemistry Profile*	Full	serum
Chlamydia trachomatis(20-39 years)	Full	urine
Complete Blood Count	Full	whole blood

Cotinine	Full	serum
C-reactive Protein	Full	serum
Creatinine	Full	urine
Erythrocyte Folate	Full	whole blood
Ferritin (Females 20-49 years)	Full	serum
Folate	Full	serum
Glucose (Oral Glucose Tolerance Test)	One-Half Fasting	plasma
Glucose, fasting	One-Half Fasting	plasma
Glycohemoglobin	Full	whole blood
Hepatitis A antibody	Full	serum
Hepatitis B core antibody (Anti-HBc)	Full	serum
Hepatitis B Surface Antibody (Anti-HBs)	Full	serum
Hepatitis B Surface Antigen (HbsAg)	Full	serum
Hepatitis C Antibody (Anti-HCV)	Full	serum
Hepatitis C Ribonucleic Acid (HCV-RNA)	Full	serum
Hepatitis C supplement	Full	serum
Hepatitis D antibody (anti-HDV)	Full	serum
Herpes Simples Virus (HSV) (20-49 years)	Full	serum
High Density Lipoprotein Cholesterol	Full	serum
Human Immunodeficiency Virus (20-49 years)	Full	serum
Human Papilloma Virus (20-59 years)	Full	serum
Human Pappilloma Virus (Females 20-59 years)	Full	swab
Insulin	One-Half Fasting	serum
Low Density Lipoprotein Cholesterol	One-Half Fasting	serum
Neisseria gonorrhoeae (20-39 years)	Full	urine
Parathyroid Hormone[1]	Full	serum
Polyunsaturated Fatty Acids	Full	plasma
Prostate Specific Antigen (Males 40+ years)	Full	serum
Total Cholesterol	Full	serum
Trans Fatty Acids	Full	plasma
Transferrin Receptor (Females 20-49 years)	Full	serum
Triglycerides	One-Half Fasting	serum
Vitamin B_6	Full	serum
Vitamin D[1]	Full	serum

[1]Vitamin D and Parathyroid hormone. A specimen is being stored for each of these analytes until a the new Standard Reference Material is available from NIST for Vitamin D.

***Biochemistry Profile**

Albumin
Alkaline phosphatase
Aspartate aminotransferase (AST)
Alanine aminotransferase (ALT)
Blood urea nitrogen (BUN)
Bicarbonate (HCO_3)
Total calcium
Total cholesterol
Chloride
Creatinine

Globulin
Glucose
v-glutamyltransferase (GGT)
Iron
Potassium
Lactate dehydrogenase (LDH)
Sodium
Osmolality
Phosphorus
Total Bilirubin
Total protein
Triglycerides
Uric acid 7

Attachment 12 – NHANES Laboratory Component
Attachment 12B - Environmental Analytes by survey year

Chemical / Metabolite Name	Matrix	4th 03-04	5th 05-06	6th 07-08
Tobacco Smoke				
Cotinine	serum	●	●	●
4-(Methylnitrosamino)-1-(3-pyridyl)-1-Butanol				●
Metals				
Lead	whole blood	●	●	●
Lead	urine	●	●	●
Cadmium	whole blood	●	●	●
Cadmium	urine	●	●	●
Mercury (total)	whole blood	●	●	●
Mercury (total)	urine	●	●	●
Cobalt	urine	●	●	●
Uranium	urine	●	●	●
Antimony	urine	●	●	●
Barium	urine	●	●	●
Beryllium	urine	●	●	●
Cesium	urine	●	●	●
Molybdenum	urine	●	●	●
Platinum	urine	●	●	●
Thallium	urine	●	●	●
Tungsten	urine	●	●	●
Arsenic (total)	urine	●	●	●
Arsenous (III) acid	urine	●	●	●
Arsenic (V) acid	urine	●	●	●
Monomethylarsonic acid	urine	●	●	●
Dimethylarsinic acid	urine	●	●	●
Arsenobetaine	urine	●	●	●
Arsenocholine	urine	●	●	●
Trimethylarsine oxide	urine	●	●	●
Inorganic Mercury	whole blood	●	●	●
Methyl Mercury	whole blood			●
Ethyl Mercury	whole blood			●
Phthalates				
Mono-methyl phthalate	urine	●	●	●
Mono-ethyl phthalate	urine	●	●	●
Mono-n-butyl phthalate	urine	●	●	●
Mono-iso-butyl phthalate	urine	●	●	●
Mono-benzyl phthalate	urine	●	●	●
Mono-cyclohexyl phthalate	urine	●	●	●

Mono-2-ethylhexyl phthalate	urine	●	●	●
Mono-(2-ethyl-5-oxohexyl) phthalate	urine	●	●	●
Mono-(2-ethyl-5-hydroxyhexyl) phthalate	urine	●	●	●
Mono-(3-carboxypropyl) phthalate	urine	●	●	●
Mono-n-octyl phthalate	urine	●	●	●
Mono-isononyl phthalate	urine	●	●	●
Mono-(2-ethyl-5-carboxypentyl) phthalate	urine	●	●	●
Mono-(7-carboxy-n-heptyl) phthalate	urine		●	●
Mono-(4-methyl-7-hydroxyoctyl) phthalate	urine		●	●
Mono-(4-methyl-7-oxoyoctyl) phthalate	urine		●	●
Mono-(2,6-dimethyl-6-carboxyhexyl) phthalate	urine		●	●
Mono-(2,7-dimethyl-7-carboxyheptyl) phthalate	urine		●	●
Phytoestrogens				
Daidzein	urine	●	●	●
Enterodiol	urine	●	●	●
Enterolactone	urine	●	●	●
Equol	urine	●	●	●
Genistein	urine	●	●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
O-Desmethylangolensin	urine	●	●	●
Polycyclic Aromatic Hydrocarbons				
1-Hydroxybenz[a]anthracene	urine	●	●	●
3-Hydroxybenz[a]anthracene and 9-Hydroxybenz[a]anthracene	urine	●	●	●
1-Hydroxybenzo[c]phenanthrene	urine	●	●	●
2-Hydroxybenzo[c]phenanthrene	urine	●	●	●
3-Hydroxybenzo[c]phenanthrene	urine	●	●	●
1-Hydroxychrysene	urine	●	●	●
2-Hydroxychrysene	urine	●	●	●
3-Hydroxychrysene	urine	●	●	●
4-Hydroxychrysene	urine	●	●	●
6-Hydroxychrysene	urine	●	●	●
3-Hydroxyfluoranthene	urine		●	●
2-Hydroxyfluorene	urine	●	●	●
3-Hydroxyfluorene	urine	●	●	●
9-Hydroxyfluorene	urine	●	●	●
1-Hydroxyphenanthrene	urine	●	●	●
2-Hydroxyphenanthrene	urine	●	●	●
3-Hydroxyphenanthrene	urine	●	●	●
4-Hydroxyphenanthrene	urine	●	●	●
9-Hydroxyphenanthrene	urine	●	●	●
1-Hydroxypyrene	urine	●	●	●
3-Hydroxybenzo[a]pyrene	urine	●	●	●

1-Hydroxynapthalene (1-Naphthol)	urine	●	●	●
2-Hydroxynapthalene (2-Naphthol)	urine	●	●	●
1-Aminonaphthalene	urine		●	●
2-Aminobiphenyl	urine		●	●
2-Aminonaphthalene	urine		●	●
4-Aminobiphenyl	urine		●	●
1-Aminofluorene	urine		●	●
2-Aminofluorene	urine		●	●
9-Aminophenanthrene	urine		●	●
1-Aminoanthracene	urine		●	●
2-Aminoanthracene	urine		●	●
3-Aminofluoranthene	urine		●	●
1-Aminopyrene	urine		●	●
6-Aminochrysene	urine		●	●
3-Aminobenzanthrone	urine		●	●
8-Hydroxybenzo(b)fluoranthene	urine		●	●
7-Hydroxybenzo(b)fluoranthene	urine		●	●
1-Hydroxybenzo(b)fluoranthene	urine		●	●
9-Hydroxybenzo(b)fluoranthene	urine		●	●
2-Hydroxybenzo(b)fluoranthene	urine		●	●
12-Hydroxybenzo(b)fluoranthene	urine		●	●
8-Hydroxybenzo(b)fluoranthene	urine		●	●
9-Hydroxybenzo(e)pyrene	urine		●	●
3-Hydroxybenzo(b)fluoranthene	urine		●	●
12-Hydroxybenzo(a)pyrene	urine		●	●
5-Hydroxybenzo(a)pyrene	urine		●	●
11-Hydroxybenzo(b)fluoranthene	urine		●	●
6-Hydroxybenzo(b)fluoranthene	urine		●	●
3-Hydroxybenzo(k)fluoranthene	urine		●	●
4-Hydroxybenzo(e)pyrene	urine		●	●
10-Hydroxybenzo(b)fluoranthene	urine		●	●
9-Hydroxybenzo(k)fluoranthene	urine		●	●
7-Hydroxybenzo(a)pyrene	urine		●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
10-Hydroxybenzo(e)pyrene	urine		●	●
3-Hydroxybenzo(e)pyrene	urine		●	●
2-Hydroxybenzo(e)pyrene	urine		●	●
1-Hydroxyindeno-[1,2,3-c,d]-pyrene	urine		●	●
2-Hydroxyindeno-[1,2,3-c,d]-pyrene	urine		●	●
6-Hydroxyindeno-[1,2,3-c,d]-pyrene	urine		●	●
8-Hydroxyindeno-[1,2,3-c,d]-pyrene	urine		●	●

3-Hydroxydibenzo[a,h]anthracene	urine		●	●
Organophosphate Insecticides: Dialkyl Phosphate Metabolites				
Dimethylphosphate	urine	●	●	●
Dimethylthiophosphate	urine	●	●	●
Dimethyldithiophosphate	urine	●	●	●
Diethylphosphate	urine	●	●	●
Diethylthiophosphate	urine	●	●	●
Diethyldithiophosphate	urine	●	●	●
Organophosphate Insecticides: Specific Pesticides and Metabolites				
Malathion	plasma			●
Malathion dicarboxylic acid	urine	●	●	●
Chlorpyrifos	plasma			●
3,5,6-Trichloro-2-pyridinol	urine	●	●	●
Diazinon	plasma			●
2-Isopropyl-4-methyl-6-hydroxypyrimidine	urine	●	●	●
Methyl parathion	plasma			●
Parathion	plasma			●
para-Nitrophenol	urine	●	●	●
2-(diethylamino)-6-methylpyrimidin-4-ol/one	urine	●	●	●
3-Chloro-7-hydroxy-4-methyl-2H-chromen-2-one/ol	urine	●	●	●
5-Chloro-1,2-dihydro-1-isopropyl-[3H]-1,2,4-triazol-3-one	urine	●	●	●
Dichlorovos	plasma			●
Fonophos	plasma			●
Phorate	plasma			●
Terbufos	plasma			●
Acephate	urine	●	●	●
Methamidaphos	urine	●	●	●
Pyrethroid Pesticides				
trans -Permethrin	plasma			●
cis -Permethrin	plasma			●
cis -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid	urine	●	●	●
trans -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid	urine	●	●	●
3-Phenoxybenzoic acid	urine	●	●	●
4-Fluoro-3-phenoxybenzoic acid	urine	●	●	●
cis/trans -Dimethylvinylcyclopropane carboxylic diacid	urine	●	●	●
cis -3-(2,2-Dibromovinyl)-2,2-dimethylcyclopropane carboxylic acid	urine	●	●	●
Allethrin	plasma			●
Cyfluthrin	plasma			●
Cyhalothrin	plasma			●
Cypermethrin	plasma			●
Deltamethrin	plasma			●
Fenoxycarb	plasma			●
Fenvalerate	plasma			●

Imidacloprid	plasma			●
Imiprothrin	plasma			●
Prallethrin	plasma			●
Resmethrin	plasma			●
Sumithrin	plasma			●
Tetramethrin	plasma			●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
Tralomethrin	plasma			●
Pyrethrin I	plasma			●
Organochlorine Pesticides				
Hexachlorobenzene	serum	●	●	●
Beta-hexachlorocyclohexane	serum	●	●	●
Gamma-hexachlorocyclohexane	serum	●	●	●
p,p'-DDT	serum	●	●	●
p,p' -DDE	serum	●	●	●
o,p' -DDT	serum	●	●	●
Oxychlordane	serum	●	●	●
trans -Nonachlor	serum	●	●	●
Heptachlor Epoxide	serum	●	●	●
Mirex	serum	●	●	●
Aldrin	serum	●	●	●
Dieldrin	serum	●	●	●
Endrin	serum	●	●	●
alpha-Hexachlorocyclohexane (HCCH)	serum		●	●
cis -Chlordane (or alpha)	serum		●	●
trans -Chlordane (or gamma)	serum		●	●
cis -Nonachlor	serum		●	●
o,p '-DDE	serum		●	●
p,p '-Methoxychlor	serum		●	●
Isodrin	serum		●	●
Octachlorosytrene	serum		●	●
Pentachloroanisole	serum		●	●
Monohydroxy methoxychlor	urine	●	●	●
Dihydroxy methoxychlor	urine	●	●	●
Endosulfan-ether	urine	●	●	●
Endosulfan-lactone	urine	●	●	●
Endosulfan-sulfate	urine	●	●	●
Other Pesticides				
Propoxur	plasma			●
2-Isopropoxyphenol	serum	●	●	●
2-Isopropoxyphenol	urine	●	●	●
Carbofuran	plasma			●

Carbofuranphenol	serum	●	●	●
Carbofuranphenol	urine	●	●	●
N,N-diethyl-3-methylbenzamide (DEET)	serum	●	●	●
N,N-diethyl-3-methylbenzamide (DEET)	urine	●	●	●
DEET acid	urine		●	●
Desethyl DEET	urine		●	●
Desethyl DEET acid	urine		●	●
Desethyl hydroxy DEET	urine		●	●
2,5-Dichlorophenol	urine	●	●	●
Aldicarb-SO	urine			●
Aldicarb-SO2	urine			●
Aldicarb	plasma			●
Bendiocarb	plasma			●
Piperonyl butoxide	plasma			●
Fungicides				
ortho -Phenylphenol	urine	●	●	●
Chlorothalonil	serum	●	●	●
Metalaxyl	serum	●	●	●
Dichloran	serum	●	●	●
Ethylenethio urea (ETU)	urine	●	●	●
Propylenethio urea (PTU)	urine	●	●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
Phthalimide	serum	●	●	●
Tetrahydrophthalimide	serum	●	●	●
Herbicides: Substituted Ureas				
Diuron	urine	●	●	●
Linuron	urine	●	●	●
Amidosulfuron	urine	●	●	●
Azimsulfuron	urine	●	●	●
Bensulfuron-methyl	urine	●	●	●
Chloroimuron ethyl	urine	●	●	●
Flazasulfuron	urine	●	●	●
Flupyrsulfruon methyl	urine	●	●	●
Foramsulfuron	urine	●	●	●
Halosulfuron	urine	●	●	●
Halosulfuron-methyl	urine	●	●	●
Imazosulfuron	urine	●	●	●
Nicosulfuron	urine	●	●	●
Primisulfuron-methyl	urine	●	●	●
Pyrazosulfuron ethyl	urine	●	●	●
Rimsulfuron	urine	●	●	●
Sulfometuron-methyl	urine	●	●	●

Sulfosulfuron	urine	●	●	●
Chlorsulfuron	urine	●	●	●
Cinosulfuron	urine	●	●	●
Ethametsulfuron	urine	●	●	●
Metsulfuron-methyl	urine	●	●	●
Prosulfuron	urine	●	●	●
Thifensulfuron-methyl	urine	●	●	●
Thiofensulfuron	urine	●	●	●
Triasulfuron	urine	●	●	●
Tribenuron	urine	●	●	●
Tribenuron-methyl	urine	●	●	●
Triflusulfuron-methyl	urine	●	●	●
Dimethoxy pyrimidine	urine	●	●	●
Dimethyl pyrimidine	urine	●	●	●
Dichlorophenyl methyl urea	urine		●	●
Dichlorophenyl urea	urine		●	●
Other Herbicides				
2,4,5-Trichlorophenoxyacetic acid	urine	●	●	●
2,4-Dichlorophenoxyacetic acid	urine	●	●	●
2,4-Dichlorophenol	urine	●	●	●
Acetochlor	serum	●	●	●
Acetochlor mercapturate	urine	●	●	●
Alachlor	serum	●	●	●
Alachlor mercapturate	urine	●	●	●
Atrazine	serum	●	●	●
Atrazine mercapturate	urine	●	●	●
Methyl methoxytriazine	urine	●	●	●
Diaminochlorotriazine	urine	●	●	●
Desethylatrazine	urine	●	●	●
Desisopropylatrazine	urine	●	●	●
Hydroxyatrazine	urine	●	●	●
Metolachlor	serum	●	●	●
Metolachlor mercapturate	urine	●	●	●
Glyphosate	urine		●	●
Dacthal	serum	●	●	●
Trifluralin	serum	●	●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
Aminomethyl phosphonic acid	urine		●	●
Halogenated Phenolic Compounds				
2,4,5-Trichlorophenol	urine	●	●	●
2,4,6-Trichlorophenol	urine	●	●	●
2,4,6-Tribromophenol	serum		●	●

2,6-Dibromophenol	serum		●	●
2,4-Dibromophenol	serum		●	●
Pentachlorophenol	serum		●	●
Pentachlorophenol	urine	●	●	●
Pentachloroanisole	serum		●	●
5-Chloro-2-(2,4-dichlorophenoxy)-phenol	serum		●	●
Hexachlorophene	serum		●	●
Pentabromphenol	serum		●	●
Tetrachlorobisphenol A	serum		●	●
Tetrabromobisphenol A	serum		●	●
Perfluorinated Compounds				
Perfluorooctanoic acid	serum	●	●	●
Perfluorooctane sulfonic acid	serum	●	●	●
Perfluorohexane sulfonic acid	serum	●	●	●
2-(N-Ethyl- Perfluorooctane sulfonamido) acetic acid	serum	●	●	●
2-(N-Methyl-perfluorooctane sulfonamido) acetic acid	serum	●	●	●
Pefluorodecanoic acid	serum	●	●	●
Perfluorobutane sulfonic acid	urine		●	●
Perfluorobutane sulfonic acid	serum	●		
Perfluoroheptanoic acid	serum	●	●	●
Perfluorononanoic acid	serum	●	●	●
Perfluorooctane sulfonamide	serum	●	●	●
Perfluoroundecanoic acid	serum	●	●	●
Perflurododecanoic acid	serum	●	●	●
Environmental Phenols				
Bisphenol A	urine	●	●	●
2-Hydroxy-4-metoxybenzophenone (Benzophenone-3)	urine	●	●	●
4-*tert*-Octyl phenol	urine	●	●	●
2,4,4'-Trichloro-2'-hydroxyphenyl ether (Triclosan)	urine	●	●	●
n-nonyl phenol	urine		●	●
n-octyl phenol	urine		●	●
Methyl paraben	urine		●	●
Ethyl paraben	urine		●	●
Propyl paraben	urine		●	●
Butyl paraben	urine		●	●
Polychlorinated and Polybrominated Dibenzo-p-dioxins and Dibenzofurans, Coplanar and Mono-Ortho				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	serum	●	●	●
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	serum	●	●	●
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	serum	●	●	●
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	serum	●	●	●
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	serum	●	●	●
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	serum	●	●	●
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	serum	●	●	●

1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	serum	●	●	●
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	serum	●	●	●
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	serum	●	●	●
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	serum	●	●	●
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	serum	●	●	●
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	serum	●	●	●
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	serum	●	●	●
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	serum	●	●	●
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	serum	●	●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	serum	●	●	●
2,3,7,8-Tetrabromorodienzo-p-dioxin (TBDD)	serum		●	●
1,2,3,7,8-Pentabromodibenzo-p-dioxin (PeDD)	serum		●	●
1,2,3,4,7,8-Hexabromorodibenzo-p-dioxin (HxBDD)	serum		●	●
1,2,3,6,7,8-Hexabromodibenzo-p-dioxin (HxBDD)	serum		●	●
1,2,3,7,8,9-Hexabromodibenzo-p-dioxin (HxBDD)	serum		●	●
1,2,3,4,6,7,8-Heptabromoodibenzo-p-dioxin (HpBDD)	serum		●	●
1,2,3,4,6,7,8,9-Octabromodibenzo-p-dioxin (OBDD)	serum		●	●
2,3,7,8,-Tetrabromodibenzofuran (TBDF)	serum		●	●
1,2,3,7,8-Pentabromodibenzofuran (PeBDF)	serum		●	●
2,3,4,7,8-Pentabromodibenzofuran (PeBDF)	serum		●	●
1,2,3,4,7,8-Hexabromodibenzofuran (HxBDF)	serum		●	●
1,2,3,6,7,8-Hexabromodibenzofuran (HxBDF)	serum		●	●
1,2,3,7,8,9-Hexabromodibenzofuran (HxBDF)	serum		●	●
2,3,4,6,7,8,-Hexabromodibenzofuran (HxBDF)	serum		●	●
1,2,3,4,6,7,8-Heptabromodibenzofuran (HpBDF)	serum		●	●
1,2,3,4,7,8,9-Heptabromodibenzofuran (HpBDF)	serum		●	●
1,2,3,4,6,7,8,9-Octabromodibenzofuran (OBDF)	serum		●	●
2,Bromo-3,7,8-Trichlorodibenzo-p-Dioxin	serum		●	●
2,3-Dibromo-7,8-Dichlorodibenzo-p-Dioxin	serum		●	●
1-Bromo-2,3,7,8-Tetrachlorodibenzo-p-Dioxin	serum		●	●
2-Bromo-3,6,7,8,9-Pentachlorodibenzo-p-Dioxin	serum		●	●
1-Bromo-2,3,6,7,8,9-Hexachlorodibenzo-p-Dioxin	serum		●	●
1-Bromo-2,3,4,6,7,8,9-Hepatachlorodibenzo-p-Dioxin	serum		●	●
3-Bromo-2,7,8-Trichlorodibenzofuran	serum		●	●
1-Bromo-2,3,7,8-Tetrachlorodibenozofuran	serum		●	●
2,4,4'-Trichlorobiphenyl (PCB 28)	serum	●	●	●
2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	serum	●	●	●
2,4,4',5-Tetrachlorobiphenyl (PCB 74)	serum	●	●	●
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	serum		●	●
3,4,4',5-Tetrachlorobiphenyl (PCB 81)	serum	●	●	●

2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	serum	●	●	●
2,3,3’,4’,6-Pentachlorobiphenyl (PCB 110)	serum	●	●	●
2,3,3',4,4'-Pentachlorobiphenyl (PCB 114)	serum		●	●
2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	serum	●	●	●
2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	serum		●	●
3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	serum	●	●	●
2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	serum	●	●	●
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	serum	●	●	●
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	serum	●	●	●
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	serum	●	●	●
2,3,3’,4,4’,5,5’-Heptachlorobiphenyl (PCB 189)	serum	●	●	●
Non-dioxin-like Polychlorinated Biphenyls				
2,2',5-Trichloro biphenyl (PCB 18)	serum	●	●	●
2,2'3,5'-Tetrachloro biphenyl (PCB 44)	serum	●	●	●
2,2',4,5'-Tetrachloro biphenyl (PCB 49)	serum	●	●	●
2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	serum	●	●	●
2,2’,3,4,5’-Pentachlorobiphenyl (PCB 87)	serum	●	●	●
2,2',4,4',5-Pentachlorobiphenyl (PCB 99)	serum	●	●	●
2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	serum	●	●	●
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB 128)	serum	●	●	●
2,2',3,4,4',5' and 2,3,3’,4,4’,6-Hexachlorobiphenyl (PCB 138 & 158)	serum	●	●	●
2,2',3,4',5,5'-Hexachlorobiphenyl (PCB 146)	serum	●	●	●
2,2’,3,4’,5’,6-Hexachlorobiphenyl (PCB 149)	serum	●	●	●
2,2’,3,5,5’,6-Hexachlorobiphenyl (PCB 151)	serum	●	●	●
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153)	serum	●	●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)	serum	●	●	●
2,2',3,3',4,5,5'-Heptachlorobiphenyl (PCB 172)	serum	●	●	●
2,2',3,3',4,5',6'-Heptachlorobiphenyl (PCB 177)	serum	●	●	●
2,2',3,3',5,5',6-Heptachlorobiphenyl (PCB 178)	serum	●	●	●
2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)	serum	●	●	●
2,2',3,4,4',5',6-Heptachlorobiphenyl (PCB 183)	serum	●	●	●
2,2',3,4',5,5',6-Heptachlorobiphenyl (PCB 187)	serum	●	●	●
2,2’,3,3’,4,4’,5,5’-Octachlorobiphenyl (PCB 194)	serum	●	●	●
2,2’,3,3’,4,4’,5,6-Octachlorobiphenyl (PCB 195)	serum	●	●	●
2,2’,3,3’,4,4’,5,6’ and 2,2’,3,4,4’,5,5’,6-Octachlorobiphenyl (PCB 196 & 203)	serum	●	●	●
2,2’,3,3’,4,5,5’,6-Octachlorobiphenyl (PCB 199)	serum	●	●	●
2,2’,3,3’,4,4’,5,5’,6-Nonachlorobiphenyl (PCB 206)	serum	●	●	●
2,2',3,3',4,4',5,5',6,6'-Decachloro biphenyl (PCB 209)	serum	●	●	●
Hydroxylated Polychlorinated Biphenyls				
2,3,3',4',5-pentachloro-4-biphenylol (4-HO-CB107)	serum		●	●
2,2',4,4',5,5'-hexachloro-3-biphenylol (3-HO-CB153)	serum		●	●

2,2',3,4',5,5'-hexachloro-4-biphenylol (4-HO-CB146)	serum		●	●
2,2',3,4',5,5,6'-heptachloro-4-biphenylol (4-HO-CB187)	serum		●	●
Polybrominated Diphenyl Ethers				
2,2',4'-Tribromodiphenyl ether (BDE 17)	serum	●	●	●
2,4,4'-Tribromodiphenyl ether (BDE 28)	serum	●	●	●
2,2',4,4'-Tetrabromodiphenyl ether (BDE 47)	serum	●	●	●
2,3',4,4'-Tetrabromodiphenyl ether (BDE 66)	serum	●	●	●
2,2',3,4,4'-Pentabromodiphenyl ether (BDE 85)	serum	●	●	●
2,2',4,4',5-Pentabromodiphenyl ether (BDE 99)	serum	●	●	●
2,2',4,4',6-Pentabromodiphenyl ether (BDE 100)	serum	●	●	●
2,2',4,4',5,5'-Hexabromobiphenyl (BB 153)	serum	●	●	●
2,2',4,4',5,6'-Hexabromodiphenyl ether (BDE 154)	serum	●	●	●
2,2',4,4',5,5'-Hexabromodiphenyl ether (BDE 153)	serum	●	●	●
Hexabromocyclododecane (HBCDD)	serum		●	●
2,2',3,4,4',5',6-Heptabromodiphenyl ether (BDE 183)	serum	●	●	●
2,2',3,3',4,4',5,6'-Octabromodiphenyl ether (BDE 196)	serum		●	●
2,2',3,3',4,4',6,6'-Octabromodiphenyl ether (BDE 197)	serum		●	●
2,2',3,4,4',5,5',6-Octabromodiphenyl ether (BDE 203)	serum		●	●
2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether (BDE 206)	serum		●	●
2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether (BDE 207)	serum		●	●
2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether (BDE 208)	serum		●	●
Decabromodiphenyl ether (BDE 209)	serum		●	●
1,2-bis(2,4,6-tribromophenoxy) ethane (BTBPE)	serum		●	●
Hexabromobenzene (HBB)	serum		●	●
Decabromodiphenyl ethane (DBDEthane)	serum		●	●
2,3-Dibromopropanol	urine		●	●
Polychlorinated Naphthalenes				
1,2,3,4-Tetrachlorinated naphthalene (PCN 27)	serum			●
1,2,3,5,7- and 1,2,4,6,7-Pentachlorinated naphthalene (PNC 52 & 60)	serum			●
1,2,3,4,5,7- and 1,2,3,5,6,8-Hexachlorinated naphthalene (PNC 64 & 68)	serum			●
1,2,3,4,6,7- and 1,2,3,5,6,7-Hexachlorinated naphthalene (PNC 66 & 67)	serum			●
1,2,3,5,7,8-Hexachlorinated naphthalene (PCN 69)	serum			●
1,2,3,4,5,6,7-Heptachlorinated naphthalene (PCN 73)	serum			●
Toxaphenes				
Parlar 26 2-Endo,3-exo,5-endo,6-exo,8b,8c,10a,10c-octachlorobornane	serum		●	●
Parlar 50 2-Endo,3-exo,5-endo,6-exo,8b,8c,9c,10a,10c-nonachlorobornane	serum		●	●
Parlar 62 2,2,5,5,8c,9b,9c,10a,10b-nonachlorobornane	serum		●	●
Parlar 40 2-Endo,3-exo,5-endo,6-exo,8b,9c,10a,10c-octachlorobornane	serum		●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**

Parlar 41 2-Exo,3-endo,5-exo,8c,9b,9c,10a,10b-octachlorobornane	serum		●	●
Parlar 44 2-Exo,5,5,8c,9b,9c,10a,10b-octachlorobornane	serum		●	●
Volatile Organic Compounds (VOCs)				
1,1,1-Trichloroethane	whole blood	●	●	●
1,1,2,2-Tetrachloroethane	whole blood	●	●	●
1,1,2-Trichloroethane	whole blood	●	●	●
1,1-Dichloroethane	whole blood	●	●	●
1,1-Dichloroethene	whole blood	●	●	●
1,2-dibromo-3-chloropropane	whole blood	●	●	●
1,2-Dichlorobenzene	whole blood	●	●	●
1,2-Dichloroethane	whole blood	●	●	●
1,2-Dichloropropane	whole blood	●	●	●
1,3-Dichlorobenzene	whole blood	●	●	●
1,4-Dichlorobenzene	whole blood	●	●	●
2,5-Dimethylfuran	whole blood	●	●	●
Acrylonitrile	whole blood			●
Benzene	whole blood	●	●	●
Bromodichloromethane	whole blood	●	●	●
Bromoform	whole blood	●	●	●
Carbon Tetrachloride	whole blood	●	●	●
Chlorobenzene	whole blood	●	●	●
Chloroform	whole blood	●	●	●
cis -1,2-Dichloroethene	whole blood	●	●	●
Dibromochloromethane	whole blood	●	●	●
Dibromomethane	whole blood	●	●	●
Ethylbenzene	whole blood	●	●	●
Furan	whole blood			●
Hexachloroethane	whole blood	●	●	●
m-/p-Xylene	whole blood	●	●	●
Methylene Chloride	whole blood	●	●	●
Methyl-tert-Butyl Ether (MTBE)	whole blood	●	●	●
Nitrobenzene	whole blood	●	●	●
o-Xylene	whole blood	●	●	●
Styrene	whole blood	●	●	●
Tetrachloroethene	whole blood	●	●	●
Toluene	whole blood	●	●	●
trans -1,2-Dichloroethene	whole blood	●	●	●

Trichloroethene	whole blood	●	●	●
1,2-Dibromoethane	whole blood			●
Hexane	whole blood			●
Nitromethane	whole blood			●
1,1,1,2-Tetrachloroethane	whole blood			●
Cumene	whole blood			●
1,2,3-Trichloropropane	whole blood			●
Bromochloroiodomethane	whole blood			●
Dichloroiodomethane	whole blood			●
Trans Fatty Acids				
Hexadecanoic acid	serum		●	●
cis -9-Hexadecenoic acid	serum		●	●
trans -9-Hexadecenoic acid	serum		●	●
Octadecanoic acid	serum		●	●
cis -9-Octadecenoic acid	serum		●	●
trans -9-Octadecenoic acid	serum		●	●
cis,cis -9,12-Octadecadienoic acid	serum		●	●

Chemical / Metabolite Name	**Matrix**	**4th 03-04**	**5th 05-06**	**6th 07-08**
trans,trans -9,12-Octadecadienoic acid	serum		●	●
trans-6-Octadecanoic acid	serum			●
trans-11-Octadecanoic acid	serum			●
Other				
Perchlorate	urine	S	S	●
Acrylamide	whole blood	●	●	●
Glycidamide	whole blood	●	●	●

S Testing done using the NHANES surplus specimens process.

Attachment 13

Attachment 13 - Sampling Information

A. Sampling Information Tables

Table 1: Sampling domains and target yearly examination sample sizes for NHANES 2007-2010

Race/ethnicity-sex-age-income sampling domain			Target number of examined SPs
Black, non-Hispanic	M&F	0-11 mos.	50
Black, non-Hispanic	M&F	1-2 yrs.	85
Black, non-Hispanic	M&F	3-5 yrs.	85
Black, non-Hispanic	M	6-11 yrs.	85
Black, non-Hispanic	M	12-19 yrs.	92
Black, non-Hispanic	M	20-39 yrs.	105
Black, non-Hispanic	M	40-49 yrs.	53
Black, non-Hispanic	M	50-59 yrs.	53
Black, non-Hispanic	M	60+ yrs.	105
Black, non-Hispanic	F	6-11 yrs.	85
Black, non-Hispanic	F	12-19 yrs.	85
Black, non-Hispanic	F	20-39 yrs.	105
Black, non-Hispanic	F	40-49 yrs.	53
Black, non-Hispanic	F	50-59 yrs.	53
Black, non-Hispanic	F	60+ yrs.	105
Black, non-Hispanic —Overall			1,197
Hispanic	M&F	0-11 mos.	90
Hispanic	M&F	1-2 yrs.	100
Hispanic	M&F	3-5 yrs.	100
Hispanic	M	6-11 yrs.	100
Hispanic	M	12-19 yrs.	102
Hispanic	M	20-39 yrs.	140
Hispanic	M	40-49 yrs.	70
Hispanic	M	50-59 yrs.	70
Hispanic	M	60+ yrs.	123
Hispanic	F	6-11 yrs.	100
Hispanic	F	12-19 yrs.	102
Hispanic	F	20-39 yrs.	140
Hispanic	F	40-49 yrs.	70
Hispanic	F	50-59 yrs.	70
Hispanic	F	60+ yrs.	147
Hispanic--Overall			1,565
Low Income White/Other	M&F	0-11 mos.	43
Low Income White/Other	M&F	1-2 yrs.	54
Low Income White/Other	M&F	3-5 yrs.	54
Low Income White/Other	M	6-11 yrs.	27
Low Income White/Other	M	12-19 yrs.	27
Low Income White/Other	M	20-29 yrs.	31
Low Income White/Other	M	30-39 yrs.	31
Low Income White/Other	M	40-49 yrs.	31
Low Income White/Other	M	50-59 yrs.	31
Low Income White/Other	M	60-69 yrs.	31
Low Income White/Other	M	70-79 yrs.	31
Low Income White/Other	M	80+ yrs.	20
Low Income White/Other	F	6-11 yrs.	27
Low Income White/Other	F	12-19 yrs.	27

Low Income White/Other	F	20-29 yrs.	31
Low Income White/Other	F	30-39 yrs.	31
Low Income White/Other	F	40-49 yrs.	31
Low Income White/Other	F	50-59 yrs.	31
Low Income White/Other	F	60-69 yrs.	31
Low Income White/Other	F	70-79 yrs.	31
Low Income White/Other	F	80+ yrs.	31
Non-Low Income White/Other	M&F	0-11 mos.	70
Non-Low Income White/Other	M&F	1-2 yrs.	70
Non-Low Income White/Other	M&F	3-5 yrs.	70
Non-Low Income White/Other	M	6-11 yrs.	70
Non-Low Income White/Other	M	12-19 yrs.	71
Non-Low Income White/Other	M	20-29 yrs.	79
Non-Low Income White/Other	M	30-39 yrs.	81
Non-Low Income White/Other	M	40-49 yrs.	82
Non-Low Income White/Other	M	50-59 yrs.	79
Non-Low Income White/Other	M	60-69 yrs.	80
Non-Low Income White/Other	M	70-79 yrs.	79
Non-Low Income White/Other	M	80+ yrs.	70
Non-Low Income White/Other	F	6-11 yrs.	70
Non-Low Income White/Other	F	12-19 yrs.	68
Non-Low Income White/Other	F	20-29 yrs.	75
Non-Low Income White/Other	F	30-39 yrs.	79
Non-Low Income White/Other	F	40-49 yrs.	79
Non-Low Income White/Other	F	50-59 yrs.	75
Non-Low Income White/Other	F	60-69 yrs.	72
Non-Low Income White/Other	F	70-79 yrs.	67
Non-Low Income White/Other	F	80+ yrs.	68
White/Other--Overall			2,238
Overall Total			5,000

Table 2. Expected NHANES 1-year, 2-year, 3-year, and 4-year sample sizes by sampling domain with 15 PSUs per year

Race/ethnicity-sex-age-income sampling domain			1 year	2 year	3 year	4 year
Black, non-Hispanic	M&F	0-11 mos.*	50	100	150	200
Black, non-Hispanic	M&F	1-2 yrs.	85	170	255	340
Black, non-Hispanic	M&F	3-5 yrs.	85	170	255	340
Black, non-Hispanic	M	6-11 yrs.	85	170	255	340
Black, non-Hispanic	M	12-19 yrs.	92	184	276	368
Black, non-Hispanic	M	20-39 yrs.	105	210	315	420
Black, non-Hispanic	M	40-49 yrs.	53	105	158	210
Black, non-Hispanic	M	50-59 yrs.	53	105	158	210
Black, non-Hispanic	M	60+ yrs.	105	210	315	420
Black, non-Hispanic	F	6-11 yrs.	85	170	255	340
Black, non-Hispanic	F	12-19 yrs.	85	170	255	340
Black, non-Hispanic	F	20-39 yrs.	105	210	315	420
Black, non-Hispanic	F	40-49 yrs.	53	105	158	210
Black, non-Hispanic	F	50-59 yrs.	53	105	158	210
Black, non-Hispanic	F	60+ yrs.	105	210	315	420
Black, non-Hispanic--Overall			1,197	2,394	3,591	4,788
Hispanic	M&F	0-11 mos.*	104	208	312	416
Hispanic	M&F	1-2 yrs.	100	200	300	400
Hispanic	M&F	3-5 yrs.	100	200	300	400
Hispanic	M	6-11 yrs.	100	200	300	400
Hispanic	M	12-19 yrs.	102	204	306	408
Hispanic	M	20-39 yrs.	140	280	420	560
Hispanic	M	40-49 yrs.	70	140	210	280
Hispanic	M	50-59 yrs.	70	140	210	280
Hispanic	M	60+ yrs.	150	300	450	600
Hispanic	F	6-11 yrs.	100	200	300	400
Hispanic	F	12-19 yrs.	102	204	306	408
Hispanic	F	20-39 yrs.	140	280	420	560
Hispanic	F	40-49 yrs.	70	140	210	280
Hispanic	F	50-59 yrs.	70	140	210	280
Hispanic	F	60+ yrs.	147	294	441	588
Hispanic--Overall			1,565	3,130	4,695	6,260
Low Income White/Other	M&F	0-11 mos.*	45	90	135	180
Low Income White/Other	M&F	1-2 yrs.	54	108	162	216
Low Income White/Other	M&F	3-5 yrs.	54	108	162	216
Low Income White/Other	M	6-11 yrs.	27	54	81	108
Low Income White/Other	M	12-19 yrs.	27	54	81	108
Low Income White/Other	M	20-29 yrs.	31	62	93	124
Low Income White/Other	M	30-39 yrs.	31	62	93	124
Low Income White/Other	M	40-49 yrs.	31	62	93	124
Low Income White/Other	M	50-59 yrs.	31	62	93	124
Low Income White/Other	M	60-69 yrs.	31	62	93	124
Low Income White/Other	M	70-79 yrs.	31	62	93	124
Low Income White/Other	M	80+ yrs.	20	40	60	80

Low Income White/Other	F	6-11 yrs.	27	54	81	108
Low Income White/Other	F	12-19 yrs.	27	54	81	108
Low Income White/Other	F	20-29 yrs.	31	62	93	124
Low Income White/Other	F	30-39 yrs.	31	62	93	124
Low Income White/Other	F	40-49 yrs.	31	62	93	124
Low Income White/Other	F	50-59 yrs.	31	62	93	124
Low Income White/Other	F	60-69 yrs.	31	62	93	124
Low Income White/Other	F	70-79 yrs.	31	62	93	124
Low Income White/Other	F	80+ yrs.	31	62	93	124
Non-Low Income White/Other	M&F	0-11 mos.*	70	140	210	280
Non-Low Income White/Other	M&F	1-2 yrs.	70	140	210	280
Non-Low Income White/Other	M&F	3-5 yrs.	70	140	210	280
Non-Low Income White/Other	M	6-11 yrs.	70	140	210	280
Non-Low Income White/Other	M	12-19 yrs.	71	142	213	284
Non-Low Income White/Other	M	20-29 yrs.	79	158	237	316
Non-Low Income White/Other	M	30-39 yrs.	81	162	243	324
Non-Low Income White/Other	M	40-49 yrs.	82	164	246	328
Non-Low Income White/Other	M	50-59 yrs.	79	158	237	316
Non-Low Income White/Other	M	60-69 yrs.	80	160	240	320
Non-Low Income White/Other	M	70-79 yrs.	79	158	237	316
Non-Low Income White/Other	M	80+ yrs.	70	140	210	280
Non-Low Income White/Other	F	6-11 yrs.	70	140	210	280
Non-Low Income White/Other	F	12-19 yrs.	68	136	204	272
Non-Low Income White/Other	F	20-29 yrs.	75	150	225	300
Non-Low Income White/Other	F	30-39 yrs.	79	158	237	316
Non-Low Income White/Other	F	40-49 yrs.	79	158	237	316
Non-Low Income White/Other	F	50-59 yrs.	75	150	225	300
Non-Low Income White/Other	F	60-69 yrs.	72	144	216	288
Non-Low Income White/Other	F	70-79 yrs.	67	134	201	268
Non-Low Income White/Other	F	80+ yrs.	68	136	204	272
White/Other--Overall			2,238	4,476	6,714	8,952
Overall Total			5,000	10,000	15,000	20,000

*There are no explicit targets for infants (age <1 yr.). The numbers given here are the expected yield, given the estimated amount of screening.

Table 3. Expected NHANES sample size and response rates after four years (2007-2010) by sampling domains

Race/ethnicity-sex-age-income sampling domain			Projected population in year 2008	Total sample	Expected interview response rate (%)	Expected number of interviewed SPs	Expected exam response rate (%)	Expected number of examined SPs
Black, non-Hispanic	M&F	0-11 mos.	719,185	218	94%	205	92%	200
Black, non-Hispanic	M&F	1-2 yrs.	1,396,763	384	92%	352	88%	340
Black, non-Hispanic	M&F	3-5 yrs.	1,993,139	407	87%	356	84%	340
Black, non-Hispanic	M	6-11 yrs.	1,861,369	397	89%	352	86%	340
Black, non-Hispanic	M	12-15 yrs.	2,639,626	422	89%	375	87%	368
Black, non-Hispanic	M	16-19 yrs.	4,836,058	548	81%	445	77%	420
Black, non-Hispanic	M	20-39 yrs.	2,388,683	292	75%	219	72%	210
Black, non-Hispanic	M	40-59 yrs.	1,993,381	292	75%	219	72%	210
Black, non-Hispanic	M	60+ yrs.	1,833,520	684	67%	456	61%	420
Black, non-Hispanic	F	6-11 yrs.	1,812,239	402	88%	354	85%	340
Black, non-Hispanic	F	12-19 yrs.	2,650,667	388	90%	349	88%	340
Black, non-Hispanic	F	20-39 yrs.	5,771,249	533	81%	433	79%	420
Black, non-Hispanic	F	40-49 yrs.	2,914,677	283	77%	219	74%	210
Black, non-Hispanic	F	50-59 yrs.	2,434,324	283	77%	219	74%	210
Black, non-Hispanic	F	60+ yrs.	2,721,468	687	67%	459	61%	420
Black, non-Hispanic—Overall			37,966,348	6,220	81%	5,010	77%	4,788
Hispanic	M&F	0-11 mos.	956,023	456	95%	432	91%	416
Hispanic	M&F	1-2 yrs.	1,876,390	469	89%	419	85%	400
Hispanic	M&F	3-5 yrs.	2,719,343	461	92%	423	87%	400
Hispanic	M	6-11 yrs.	2,517,646	477	86%	410	84%	400
Hispanic	M	12-19 yrs.	3,239,835	466	90%	418	87%	408
Hispanic	M	20-39 yrs.	7,669,437	689	85%	587	81%	560
Hispanic	M	40-49 yrs.	2,959,450	359	81%	291	78%	280
Hispanic	M	50-59 yrs.	1,831,538	359	81%	291	78%	280
Hispanic	M	60+ yrs.	1,625,133	816	78%	633	74%	600
Hispanic	F	6-11 yrs.	2,422,751	467	87%	406	86%	400
Hispanic	F	12-15 yrs.	3,096,683	457	91%	416	89%	408
Hispanic	F	16-19 yrs.	7,083,806	690	84%	583	81%	560
Hispanic	F	20-39 yrs.	2,862,243	346	83%	286	81%	280
Hispanic	F	40-59 yrs.	1,921,269	346	83%	286	81%	280
Hispanic	F	60+ yrs.	2,083,573	814	75%	612	72%	588
Hispanic--Overall			44,865,120	7,671	85%	6,492	82%	6,260

Race/ethnicity-sex-age-income sampling domain			Projected population in year 2008	Total sample	Expected interview response rate (%)	Expected number of interviewed SPs	Expected exam response rate (%)	Expected number of examined SPs
Low-Income White/Other	M&F	0-11 mos.	456,475	196	93%	182	92%	180
Low-Income White/Other	M&F	1-2 yrs.	853,105	230	96%	220	94%	216
Low-Income White/Other	M&F	3-5 yrs.	1,247,951	235	94%	222	92%	216
Low-Income White/Other	M	6-11 yrs.	1,105,432	126	93%	117	86%	108
Low-Income White/Other	M	12-19 yrs.	1,559,851	125	87%	109	86%	108
Low-Income White/Other	M	20-29 yrs.	1,916,727	149	86%	129	83%	124
Low-Income White/Other	M	30-39 yrs.	1,253,152	171	75%	128	73%	124
Low-Income White/Other	M	40-49 yrs.	1,389,294	147	87%	128	84%	124
Low-Income White/Other	M	50-59 yrs.	1,245,643	161	80%	128	77%	124
Low-Income White/Other	M	60-69 yrs.	1,017,338	155	83%	128	80%	124
Low-Income White/Other	M	70-79 yrs.	642,642	180	74%	133	69%	124
Low-Income White/Other	M	80+ yrs.	436,802	131	75%	99	61%	80
Low-Income White/Other	F	6-11 yrs.	1,100,696	122	92%	112	89%	108
Low-Income White/Other	F	12-19 yrs.	1,537,174	119	91%	109	91%	108
Low-Income White/Other	F	20-29 yrs.	2,749,535	153	84%	128	81%	124
Low-Income White/Other	F	30-39 yrs.	1,705,231	144	88%	127	86%	124
Low-Income White/Other	F	40-49 yrs.	1,526,726	145	87%	127	86%	124
Low-Income White/Other	F	50-59 yrs.	1,485,365	152	88%	134	82%	124
Low-Income White/Other	F	60-69 yrs.	1,525,604	172	80%	138	72%	124
Low-Income White/Other	F	70-79 yrs.	1,339,664	180	71%	129	69%	124
Low-Income White/Other	F	80+ yrs.	1,466,528	227	76%	173	55%	124

Race/ethnicity-sex-age- income sampling domain			Projected population in year 2008	Total sample	Expected interview response rate (%)	Expected number of interviewed SPs	Expected exam response rate (%)	Expected number of examined SPs
Non-Low-Income White/Other	M&F	0-11 mos.	2,130,918	327	89%	292	86%	280
Non-Low-Income White/Other	M&F	1-2 yrs.	4,305,315	354	82%	289	79%	280
Non-Low-Income White/Other	M&F	3-5 yrs.	6,464,103	366	85%	310	76%	280
Non-Low-Income White/Other	M	6-11 yrs.	6,686,619	396	76%	302	71%	280
Non-Low-Income White/Other	M	12-19 yrs.	9,656,681	364	82%	299	78%	284
Non-Low-Income White/Other	M	20-29 yrs.	11,868,349	440	76%	333	72%	316
Non-Low-Income White/Other	M	30-39 yrs.	12,116,185	506	68%	345	64%	324
Non-Low-Income White/Other	M	40-49 yrs.	14,702,605	482	70%	336	68%	328
Non-Low-Income White/Other	M	50-59 yrs.	14,261,362	508	65%	329	62%	316
Non-Low-Income White/Other	M	60-69 yrs.	9,403,249	499	69%	345	64%	320
Non-Low-Income White/Other	M	70-79 yrs.	5,198,607	460	73%	337	69%	316
Non-Low-Income White/Other	M	80+ yrs.	2,813,405	462	69%	321	61%	280
Non-Low-Income White/Other	F	6-11 yrs.	6,314,206	360	82%	294	78%	280
Non-Low-Income White/Other	F	12-19 yrs.	9,186,595	342	81%	278	80%	272
Non-Low-Income White/Other	F	20-29 yrs.	11,181,398	406	78%	315	74%	300
Non-Low-Income White/Other	F	30-39 yrs.	11,997,292	453	73%	332	70%	316
Non-Low-Income White/Other	F	40-49 yrs.	14,954,947	461	72%	332	69%	316
Non-Low-Income White/Other	F	50-59 yrs.	14,638,075	441	71%	315	68%	300
Non-Low-Income White/Other	F	60-69 yrs.	9,840,533	449	68%	303	64%	288
Non-Low-Income White/Other	F	70-79 yrs.	5,931,088	490	61%	298	55%	268
Non-Low-Income White/Other	F	80+ yrs.	4,094,525	501	67%	337	54%	272
White/Other--Overall			215,306,993	12,487	76%	9,542	72%	8,952
TOTAL			298,138,462	26,378	80%	21,044	76%	20,000

Table 4. Expected distribution of NHANES sample for one year of data collection by sampling domains with 15 PSUs

Sex and Age	Total Examined Sample	Black, non-Hispanic	Hispanic	White/Other
Males and Females				
Less than 1 year	269	50	104	115
1-2 years	309	85	100	124
3-5 years	309	85	100	124
Males				
6-11 years	282	85	100	97
12-15 years	292	92	102	98
16-19 years	467	105	140	222
20-39 years	236	53	70	113
40-59 years	233	53	70	110
60-69 years	566	105	150	111
70-79 years				110
80+ years				90
Females				
6-11 years	282	85	100	97
12-15 years	282	85	102	95
16-19 years	461	105	140	216
20-39 years	233	53	70	110
40-59 years	229	53	70	106
60-69 years	552	105	147	103
70-79 years				98
80+ years				99
Overall Total	5,000	1,197	1,565	2,238

Table 5: Minimum sample size* required in an analytic cell to estimate p with a CV of 30 percent by various design effects**

Proportions p or (1-p)	Design effect						
	1	1.25	1.5	1.75	2	2.5	3
0.01	1,100	1,375	1,650	1,925	2,200	2,750	3,300
0.02	544	681	817	953	1,089	1,361	1,633
0.05	211	264	317	369	422	528	633
0.10	100	125	150	175	200	250	300
0.15	63	79	94	110	126	157	189
0.20	44	56	67	78	89	111	133
0.25	33	42	50	58	67	83	100
0.30	30	38	45	53	60	75	90
0.40	30	38	45	53	60	75	90
0.50	30	38	45	53	60	75	90

Sample size n= deff (1-p)/(p* CV**2) for p<=0.25; n= 30 * deff for p>0.25
**deff=1 for SRS

Table 6: Minimum sample size* required in an analytic cell to estimate difference in p with a CV of 30 percent by various design effects**

Estimated proportions		Design Effect						
p1	p2	1	1.25	1.5	1.75	2	2.5	3
0.05	0.10	611	764	917	1,069	1,222	1,528	1,833
0.05	0.15	194	243	292	340	389	486	583
0.05	0.20	102	128	154	179	205	256	307
0.10	0.15	967	1,208	1,450	1,692	1,933	2,417	2,900
0.10	0.20	278	347	417	486	556	694	833
0.10	0.25	137	171	206	240	274	343	411
0.15	0.20	1,278	1,597	1,917	2,236	2,556	3,194	3,833
0.15	0.25	350	438	525	613	700	875	1,050
0.15	0.30	167	208	250	292	333	417	500
0.20	0.25	1,544	1,931	2,317	2,703	3,089	3,861	4,633
0.20	0.30	411	514	617	719	822	1,028	1,233
0.20	0.35	191	239	287	335	383	478	574
0.25	0.30	1,767	2,208	2,650	3,092	3,533	4,417	5,300
0.25	0.35	461	576	692	807	922	1,153	1,383
0.25	0.40	211	264	317	369	422	528	633
0.30	0.35	1,944	2,431	2,917	3,403	3,889	4,861	5,833
0.30	0.40	500	625	750	875	1,000	1,250	1,500
0.30	0.45	226	282	339	395	452	565	678
0.40	0.45	2,167	2,708	3,250	3,792	4,333	5,417	6,500
0.40	0.50	544	681	817	953	1,089	1,361	1,633
0.40	0.55	241	301	361	421	481	602	722
0.50	0.55	2,211	2,764	3,317	3,869	4,422	5,528	6,633
0.50	0.60	544	681	817	953	1,089	1,361	1,633
0.50	0.65	236	295	354	413	472	590	707

n=deff(p1*q1 +p2*q2)/((CV*(p1-p2))**2); q=1-p;
**deff=1 for SRS

Table 7a. NHANES examined sample (n=10,000) after two years. Estimated CVs for a 10-percent statistic, assuming a design effect of 1.5

Sex and Age	Total Examined Sample	Black, non-Hispanic	Hispanic	White/Other
Males and Females				
Less than 1 year	0.158	0.367	0.255	0.242
1-2 years	0.148	0.282	0.260	0.233
3-5 years	0.148	0.282	0.260	0.233
Males				
6-11 years	0.155	0.282	0.260	0.264
12-19 years	0.152	0.271	0.257	0.262
20-39 years	0.120	0.254	0.220	0.174
40-49 years	0.169	0.359	0.311	0.244
50-59 years	0.170	0.359	0.311	0.248
60-69 years	0.109	0.254	0.212	0.247
70-79 years				0.248
80+ years				0.274
Females				
6-11 years	0.155	0.282	0.260	0.264
12-19 years	0.155	0.282	0.257	0.267
20-39 years	0.121	0.254	0.220	0.177
40-49 years	0.170	0.359	0.311	0.248
50-59 years	0.172	0.359	0.311	0.252
60-69 years	0.111	0.254	0.214	0.256
70-79 years				0.262
80+ years				0.261
Overall Total	0.037	0.075	0.066	0.055

Table 8a. NHANES examined sample (n=10,000) after two years. Estimated CVs for a 5-percent statistic, assuming a design effect of 1.5

Sex and Age	Total Examined Sample	Black, non-Hispanic	Hispanic	White/Other
Males and Females				
Less than 1 year	0.230	0.534	0.370	0.352
1-2 years	0.215	0.409	0.377	0.339
3-5 years	0.215	0.409	0.377	0.339
Males				
6-11 years	0.225	0.409	0.377	0.383
12-19 years	0.221	0.394	0.374	0.381
20-39 years	0.175	0.368	0.319	0.253
40-49 years	0.246	0.521	0.451	0.355
50-59 years	0.248	0.521	0.451	0.360
60-69 years	0.159	0.368	0.308	0.358
70-79 years				0.360
80+ years				0.398
Females				
6-11 years	0.225	0.409	0.377	0.383
12-19 years	0.225	0.409	0.374	0.387
20-39 years	0.176	0.368	0.319	0.257
40-49 years	0.248	0.521	0.451	0.360
50-59 years	0.250	0.521	0.451	0.367
60-69 years	0.161	0.368	0.311	0.372
70-79 years				0.381
80+ years				0.379
Overall Total	0.053	0.109	0.095	0.080

Table 7b. NHANES examined sample (n=20,000) after four years. Estimated CVs for a 10-percent statistic, assuming a design effect of 1.5

Sex and Age	Total Examined Sample	Black, non-Hispanic	Hispanic	White/Other
Males and Females				
Less than 1 year	0.112	0.260	0.180	0.171
1-2 years	0.105	0.199	0.184	0.165
3-5 years	0.105	0.199	0.184	0.165
Males				
6-11 years	0.109	0.199	0.184	0.187
12-19 years	0.108	0.192	0.182	0.186
20-39 years	0.085	0.179	0.155	0.123
40-49 years	0.120	0.254	0.220	0.173
50-59 years	0.120	0.254	0.220	0.175
60-69 years	0.077	0.179	0.150	0.174
70-79 years				0.175
80+ years				0.194
Females				
6-11 years	0.109	0.199	0.184	0.187
12-19 years	0.109	0.199	0.182	0.188
20-39 years	0.086	0.179	0.155	0.125
40-49 years	0.120	0.254	0.220	0.175
50-59 years	0.122	0.254	0.220	0.178
60-69 years	0.078	0.179	0.152	0.181
70-79 years				0.186
80+ years				0.185
Overall Total	0.026	0.053	0.046	0.039

Table 8b. NHANES examined sample (n=20,000) after four years. Estimated CVs for a 5-percent statistic, assuming a design effect of 1.5

Sex and Age	Total Examined Sample	Black, non-Hispanic	Hispanic	White/Other
Males and Females				
Less than 1 year	0.163	0.377	0.262	0.249
1-2 years	0.152	0.290	0.267	0.240
3-5 years	0.152	0.290	0.267	0.240
Males				
6-11 years	0.159	0.290	0.267	0.271
12-19 years	0.156	0.278	0.264	0.270
20-39 years	0.124	0.260	0.226	0.179
40-49 years	0.174	0.368	0.319	0.251
50-59 years	0.175	0.368	0.319	0.255
60-69 years	0.112	0.260	0.218	0.253
70-79 years				0.255
80+ years				0.281
Females				
6-11 years	0.159	0.290	0.267	0.271
12-19 years	0.159	0.290	0.264	0.274
20-39 years	0.124	0.260	0.226	0.182
40-49 years	0.175	0.368	0.319	0.255
50-59 years	0.177	0.368	0.319	0.259
60-69 years	0.114	0.260	0.220	0.263
70-79 years				0.270
80+ years				0.268
Overall Total	0.038	0.077	0.067	0.056

B. NHANES Analytic and Reporting Guidelines (available online at http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm)

Last Update: December, 2005

Introduction

This document presents analytic and reporting guidelines that should be used for NHANES data analyses and publications. It represents the latest information from the National Center for Health Statistics on recommended approaches for analysis of all NHANES data, but with a particular focus on data collected in the continuous NHANES (since 1999). Previous versions of NHANES analytic guidelines, the NHANES III Analytic Guidelines (http://www.cdc.gov/nchs/data/nhanes/nhanes3/nh3gui.pdf); the NHANES 1999-2000 Addendum to the NHANES III Analytic Guidelines (http://www.cdc.gov/nchs/data/nhanes/guidelines1.pdf); and the June 2004 Analytic Guidelines (http://www.cdc.gov/nchs/data/nhanes/nhanes_general_guidelines_june_04.pdf) can still be used. These analytic guidelines will be modified and updated on a periodic basis as new information is acquired and as new statistical techniques for analysis of complex sample surveys are introduced. Users should regularly visit the NHANES website to see if a new version of these latest analytic guidelines has been released.

Summary recommendations

Following is the current list of analytic and reporting guidelines for NHANES public release data. Additional guidelines may be included on future updates as well as more detailed information and examples for some of the existing guidelines.

The first and over-riding analytic guideline is that the data user, prior to any analysis of the data, should read all relevant documentation for the survey and for the specific data items to be used in an analysis.

Many analytic problems and misinterpretation of the data can be avoided by reading the documentation, examining the data collection protocols and data collection instruments, and conducting preliminary descriptive evaluation of the data. The documentation will indicate how the data were collected, how the data are coded and the amount of missing data. The documentation will also indicate if a data item was collected on all or a sub-sample of sample persons, if it was collected on a limited age-range, or if exclusion criteria were applied for a specific examination component. Specific information on laboratory tests and quality control for these tests are available. For trend analysis, the current documentation can be compared with documentation from past NHANES surveys to determine if a specific data item is comparable with a similar data item collected in previous surveys.

Data collected in NHANES comes from interviews, examinations, and laboratory tests based on blood and urine samples. There may also be measures taken in the home, such as dust or tap water collection. The source of a data item (interview, MEC, sera) is important for both assessment of quality of information and for determining the appropriate sampling weight to be used for producing statistical estimates.

As with any data set, NHANES data are subject to sampling and non-sampling errors (including measurement error). Interview data are based on self-reports and are therefore subject to non-sampling errors such as recall problems, misunderstanding of the question, and a variety of other factors. Examination data and laboratory data are subject to measurement variation and possible examiner effects. The NHANES program maintains high standards to insure non-sampling and measurement errors are minimized. Prior to data collection, extensive protocols are developed and reviewed by the public health and scientific community. Prior to and during data collection, NHANES field staff participate in comprehensive training and annual refresher training for Interviewers and MEC staff. As data are processed, extensive quality control procedures are applied. Despite the rigorous quality control standards, estimates produced from any data set are subject to sampling and non-sampling variation and interpretation of analysis must proceed accordingly.

Data content and data collection protocols may change over time; this is another reason to read the documentation in order to understand any issues in comparability of data over time. Changes in methods may occur at any time and the user should not assume they have remained the same (especially in the continuous NHANES, conducted since 1999).

NHANES has changed from a periodic survey to a continuous survey and the release of public use data files (and their format) has changed as well.

In the past, NHANES surveys were conducted on a periodic basis and the data were released as single, multiyear data sets. For example, NHANES III covered the 6 calendar years 1988-1994 and is generally analyzed as one, 6-year survey. In addition, previous NHANES public use data files tended to be large and few in number. Since 1999, NHANES has been planned and conducted as a continuous annual survey. For a variety of reasons, including disclosure issues, the continuous NHANES survey data is released on public use data files in two-year increments (e.g. NHANES 1999-2000, NHANES 2001-2002, NHANES 2003-2004, etc.)***.*** Since the inception of the continuous NHANES, public use data files are released on an ongoing basis as many smaller component-specific data files. For a two-year analysis, sample size is smaller and the number of geographic units in the sample is more limited. Sample size and statistical power consideration should be used to determine if a two-year sample is sufficient for a particular analysis or if 4 (or even 6) years of the survey need to be combined to produce statistically reliable analysis. This is addressed more fully later in this document.

Be aware of the complex survey design and sample weighting methodology.

NHANES is a complex sample survey. The overall sample design and weighting methodology has been similar over the history of the survey. The following text gives more specific information focusing on the more recent (and continuous) NHANES. The sample design and weighting methodology for NHANES 2003-2004 is very similar to past NHANES data releases. Primary Sampling Units are generally single counties, although small counties are combined to meet a minimum population size. In the years 1999-2001, NHANES was based on a linked design with the National Health Interview Survey. An independent set of PSU's was selected for 2002-2006. The additional stages of selection in the probability design remain very similar to past NHANES designs. Clusters of households are selected, the households are screened for demographic characteristics, a sample of households is selected, and one or more

persons per household are selected. For NHANES 2003-2004, there were 12,761 persons selected for the sample, 10,122 of those were interviewed, and 9,643 were examined in the MEC.

As with any complex probability sample, the sample design information should be explicitly used when producing statistical estimates or undertaking statistical analysis of the NHANES data. In particular, sample weights and the first stage of the cluster design need to be considered. The sampling weights provided must be used to produce unbiased national estimates. The sample weights for NHANES 2003-2004 reflect the unequal probabilities of selection, non-response adjustments and adjustments to independent population controls. The proper sample weight must be used. If only data from the Interviewed sample is used, then the appropriate SAS variable is WTINT2YR. If data from the MEC examination is used, then the appropriate SAS variable is WTMEC2YR.

Because NHANES is a complex probability sample, analytic approaches based on data from simple random sample are usually not appropriate. Ignoring the complex design can lead to biased estimates and overstated significance levels. ***Sample weights and the stratification and clustering of the design must be incorporated into an analysis to get proper estimates and standard errors of estimates.***

Data are sometimes collected on sub-samples of the full design for any NHANES survey. These data are available but public release of these files may lag behind the main data release for any two-year period due to extra time needed for processing and quality assurance review. In addition, each subsample involves another stage of selection and separate sample weights that account for that stage of selection and additional non-response. For analysis of subsample data, ***appropriate subsample weights must be used and they are included on any data file where relevant.***

Be aware of, and utilize, proper variance estimation procedures.

The procedure for variance estimation (sampling errors) is the same for 2003-2004 as for 2001-2002. This method creates Masked Variance Units (MVU's) which can be used as if they were Pseudo-PSU's to estimate sampling errors (similar to past NHANES). The Pseudo-PSU's on the data file are not the "true" design PSU's. They are a collection of secondary sampling units aggregated into groups (called Masked Variance Units) for the purpose of variance estimation. They produce variance estimates that closely approximate the variances that would have been estimated using the "true" design variance estimates. These MVU's have been created for each two-year cycle of NHANES and have been created in a way that allows them to be used for any combination of data cycles without recoding by the user.

For NHANES 2001-2002 and 2003-2004, the two-year weights and MVU's are provided on the demographic data file. For 1999-2000, the previously released demographic file has been updated to add the MVU's and four-year sample weights. ***Only the period 1999-2002 will have a special four year sample weight.*** (see section on how and when to combine years of data). At this time, the preferred approach for calculating sampling errors is to use the MVU's and to ignore the JK-1 technique that was utilized as an interim approach for the release of the NHANES 1999-2000 data.

The stratum variable is WTMVSTRA and the PSU variable is WTMVPSU. Software such as SUDAAN, STATA and SAS can be used to estimate sampling errors by the Taylor series (linearization) method. Typically, the data set should first be sorted by WTMVSTRA and WTMVPSU. For NHANES 1999-2000, WTMVSTRA is numbered 1-13; for NHANES 2001-2002, WTMVSTRA is numbered 14-28; therefore, these files can be combined without any recoding of this variable. This procedure will also hold for combining NHANES 2001-2002 and 2003-2004 data files, as well as future two-year NHANES files. There are no replicate weights provided for NHANES 2003-2004. Replication techniques can still be used to estimate sampling errors if the software, such as WESVAR, computes its own set of replicate weights based on the nested PSU within stratum design.

Variance estimates for NHANES I, NHANES II, HHANES, and NHANES III utilized the true design PSU's. Pseudo strata and pseudo PSU variables were included on each public use data file for those surveys and the same software can be used to estimate sampling errors for each of those surveys.

In order to produce estimates with greater statistical reliability for demographic sub-domains and rare events, combining two or more 2-year cycles of the continuous NHANES is encouraged and strongly recommended.

For two-year cycles, the sample size may be too small to produce statistically reliable estimates for very detailed demographic sub-domains (e.g. sex-age-race/ethnicity groups) or for relatively rare events. The sample design for NHANES makes it possible to combine two or more "cycles" to increase the sample size and analytic options. Each two-year cycle and any combination of those two years cycles is a nationally representative sample.

When combining cycles of data, it is extremely important that (1) the user verify that data items collected in all combined years were comparable in wording and methods and (2) use a proper sampling weight. Beginning in 2003, the survey content for each two year period is held as constant as possible to be consistent with the data release cycle. In the first four years of the continuous survey, this was not always the case, and some special data release and data access procedures had to be developed and used for selected survey content collected in "other than two-year" intervals (http://www.cdc.gov/nchs/data/nhanes/nhanes_release_policy.pdf) ***.***

The decision on how many years of NHANES data are required for a particular analysis can be summarized by the concept of minimum sample size required.

The minimum sample size is determined by the statistic to be estimated (e.g. mean, total, proportion…), the reliability criteria (e.g. 20 or 30 percent relative standard error), the Design Effect for the statistics (DEFF defined as the variance inflation factor), and the degrees of freedom for the standard error estimate. For example, consider the minimum sample size to estimate a 10 percent prevalence with relative standard error 30 percent or less, a survey DEFF of 1.5, and greater than 16 degrees of freedom for the standard error. The required minimum sample size is 150. Now consider the following simplified example (not real data).

Table 1. Sample Size by Data Cycle and Sub-domain

	1999-2000	2001-2002	2003-2004	Combined 4 years	Combined 6 years
Total	210	210	210	420	630
Males	110	110	110	220	330
age < 40	60	60	60	120	180
age > 40	50	50	50	100	150
Females	100	100	100	200	300

In this example, one could estimate the proportion for the total population in each of the 2-year data cycles but no sub-domain meets the minimum sample size. Combining the data into a 4 year cycle (in this case either 1999-2002 or 2001-2004) allows the proportion to be reliably estimated for both males and females. However, for a more detailed domain such as Males aged less than 40 years, 6 years of data would be required.

Earlier NHANES surveys were conducted for four or more years and, thus, have larger samples than a two-year cycle of the current continuous NHANES. However, in each of those surveys, many sub-domains did not meet minimum sample size requirements and in those cases the above concerns were (and still are) relevant.

When combining two or more two-year cycles of the continuous NHANES, the user should use the following procedure for calculating the appropriate combined sample weights.

When combining two or more 2-year cycles of the continuous NHANES, the user must calculate new sample weights before beginning any analysis of the data. NCHS will not be calculating and including all possible combinations of multiple two-year cycles of the continuous survey because it would be impractical to produce them and include them on all public release files.

Because of a particular issue with Census population estimates, a set of 4 year weights was created for the first four years of the continuous NHANES -- 1999-2002. The sample weights for NHANES 1999-2000 were based on population estimates developed by the Bureau of the Census before the Year 2000 Decennial Census counts became available. The two-year sample weights for NHANES 2001-2002 were based on population estimates that incorporate the year 2000 Census counts. The two population estimates were not comparable. To facilitate analysis for these first four years of the continuous NHANES, appropriate four-year sample weights were calculated and added to the demographic data files for both 1999-2000 and 2001-2002. These sample weights have the same variable name in each file. For example, for the sample persons for whom there are MEC data items, the variable name for the four-year weight is WTMEC4YR. Thus, users of the earlier release of the NHANES 1999-2000 demographic file must use the updated demographic file to appropriately analyze the combined four-year data 1999-2002. Because NHANES 2003-2004 uses the same year 2000 Census counts as were used for NHANES 2001-2002, there is no need to create special four-year weights for 2001-2004.

For a four year estimate for 2001-2004, one can create a four year weight by taking ½ of the 2 year weight for each sampled person in 2001-2002 and ½ of the 2 year weight for each sampled person in 2003-2004. This is possible because the 2 year weights for 2003-2004 are comparable to the 2001-2002 weights (in terms of a population basis). For an estimate for the 6-years 1999-2004, a 6-year weight variable can be created by taking 2/3 of the 4 year weight for each sampled person in 1999-2002 and 1/3 of the 2 year weight for each sampled person in 2003-04. This is possible because the 2003-2004 weights are also comparable (on a population basis) to the combined four-year weights specifically created for 1999-2002.

Summary comments and future additions to these NHANES analytic guidelines.

This document summarizes the most recent analytic and reporting guidelines that should be used for most NHANES analyses and publications. It is important for users to understand the entire document and to become familiar with statistical issues in the analysis of complex survey data.

These suggested guidelines provide a framework to users for producing estimates that conform to the analytic design of the survey. Because statistical methods for analyzing complex survey data are continually evolving, these recommendations may differ slightly from those used by analysts for previous NHANES surveys.

It is important to remember that the statistical guidelines in this document are not absolute. When conducting analyses, the analyst needs to use his/her subject matter knowledge (including methodological issues), as well as information about the survey design. ***The more one deviates from the original analytic categories and original analytic objectives defined in the planning documents, the more important it is to evaluate the results carefully and to interpret the findings cautiously.***

Future versions of this NHANES Analytic and Reporting Guidelines will include additional topics, such as sample sizes and response rates for each NHANES survey, hypothesis testing, multivariate analysis, and a discussion of the concept of statistical versus practical significance.

These are Guidelines not standards. Depending upon the subject matter and statistical efficiency, specific analyses may depart from these guidelines; but the burden of proof for statistical efficiency and for appropriate data interpretation is on the data user/analyst.

Again, NHANES data files from the continuous survey are publicly released on a two-year basis (1999-2000, 2001-2002, 2003-2004, etc.) and as small, content specific files. The data files and associated documentations, as well as these analytic guidelines, may be edited and/or updated to reflect new data release files. ***Users should periodically check*** the NHANES website (http://www.cdc.gov/nchs/nhanes.htm) to determine if any new or revised data files have been released and if these analytic guidelines have been updated.

Attachment 14

Attachment 14 - MEC Data Collection Forms*

Anthropometry (body measurements)
Audiometry
Blood Pressure Measurement
Dual X-ray absorptiometry
    Bone Mineral Density
Dietary Interview
Hearing
Ophthalmology
Oral Health
Physician Examination
Spirometry / Exhaled Nitric Oxide (ENO) Measurement
Venipuncture
    Second venipuncture
Vision

*No data collection forms for urine

NOTE: MEC ACASI and MEC CAPI interviews are in attachment 16.

ANTHROPOMETRY NHANES 2007-2008 (All ages)

Target Age Groups: Anthropometry Measurements and Questions

Birth+	2mo+	2yr+	4yr+	8yr+
Weight	Weight	Weight	Weight	Weight
Recumbent length	Recumbent length	Recumbent length (through 47 mo.)		
Head circumference	Head circumference (through 6 mo.)			
		Standing height	Standing height	Standing height
	Upper arm length	Upper arm length	Upper arm length	Upper arm length
	Mid-upper arm circumference	Mid-upper arm circumference	Mid-upper arm circumference	Mid-upper arm circumference
		Waist circumference	Waist circumference	Waist circumference
				Upper leg length
	Triceps skinfolds	Triceps skinfolds	Triceps skinfolds	Triceps skinfolds
	Subscapular skinfold	Subscapular skinfold	Subscapular skinfold	Subscapular skinfold
Would you like to know your height and weight?	Would you like to know your height and weight?	Would you like to know your height and weight?	Would you like to know your height and weight?	Would you like to know your height and weight?

ANTHROPOMETRY COMPONENT DATA COLLECTION (cont'd)

AMPUTATION QUESTIONS: Information is recorded during the body measurement examination for all ages. Questions may be asked if the information is not obvious to the examiner. The responses are used to interpret body measurement results, particularly the body weight data.

Are there any amputations? Recorder codes YES/NO

IF YES to the amputation question, continue with information on the site(s) of the amputation(s):

Amputation of the Upper Right Extremity? YES/NO/COULD NOT OBTAIN

IF YES: Code if the amputation is ABOVE ELBOW/BELOW ELBOW

Amputation of the Upper Left Extremity? YES/NO/COULD NOT OBTAIN

IF YES: Code if the amputation is ABOVE ELBOW/BELOW ELBOW

Amputation of the Lower Right Extremity? YES/NO/COULD NOT

IF YES: Code if the amputation is ABOVE KNEE/BELOW KNEE

Amputation of the Lower Left Extremity? YES/NO/COULD NOT OBTAIN

IF YES: Code if the amputation is ABOVE KNEE/BELOW KNEE

BONE MINERAL DENSITY (DXA) (Ages 8+ years)

Additional Safety/Exclusion Questions for Proximal Femur (hip) and Lumbar Spine Scans:

1. Do you have a lumbar spine fusion?	1=Yes (Exclude from spine, but not from femur scan) 2=No
2. Have you ever fractured your hip, had a hip replacement, or do you have a pin in your hip?	1=Yes 2=No If yes, ask:
3. Was it your right hip, left hip, or both hips?	1=Right 2=Left 3=Both (Exclude from femur, but not from spine scan)

Bone Mineral Content (BMC) and Bone Mineral Density (BMD):

Proximal Femur:

Area	cm^2
Bone Mineral Content	grams
Bone Mineral Density	$(grams/cm^2)$

Values for each of the variables listed above will be given for the following regions:
Femoral neck
Trochanter
Intertrochanter
Ward's triangle
Total femur

Lumbar spine:

Area	cm^2
Bone Mineral Content	grams
Bone Mineral Density	$grams/cm^2$

Values for each of the variables listed above will be given for lumbar spine vertebrae L1 – L4 and the total spine

DIETARY INTERVIEW (all ages)

24-Hour Dietary Recall Interview

Information will be obtained on all foods and beverages that were consumed during a 24-hour time period (midnight to midnight). The information that is obtained for foods and beverages includes the following:

a. Time of day -Time when the food was eaten

b. Meal name code - The name of the eating occasion is selected from a list of options.

c. Meal place - Whether the meal was eaten at home.

d. Food item name - The name of the food is either typed in or selected from a list of food item names.

e. Food item description - Detailed description of the food including information about commercial product name (if applicable), preparation method, and major recipe ingredients.

f. Fat added in preparation - A preparation fat probe is asked for certain foods. The type of fat used during food preparation is specified as well.

g. Amount of food eaten - The amount of food consumed by the respondent.

h. Food source - The place where the food was obtained is selected from a list of options

<u>24-Hour Dietary Recall Interview Scripts - In-Person Interview:</u>

A. Introduction script

First, we'll make a list of the foods you/SP ate and drank yesterday, *Monday*. It may help you remember what you/SP ate by thinking about where you/he/she were, who you/he/she were with, or what you/he/she were doing, like working, eating out, or watching television.

Please tell me everything you/SP had to eat and drink all day yesterday, Monday, from midnight to midnight. Include everything you/he/she had at home and away, even snacks, coffee, soft drinks, water, and alcoholic beverages. I'll ask you for specific details and amounts of the foods in a few minutes. At this time, just tell me what you/SP had.

B. Forgotten food probes script

Your answers are important, so we'd like this list to be as complete as possible.
In addition to the foods you have/SP has already told me about, did you have any coffee, tea, soft drinks, milk or juice?
Beer, wine, cocktails or other drinks?
Cookies, candy, ice cream or other sweets?
Chips, crackers, popcorn, pretzels, nuts, or other snack foods?
Fruits, vegetables, or cheese?
Bread, rolls or tortillas?
Anything else?

C. Food detail probes script

Now we're going to fill in your list with more detail. When I ask how much *{you/SP}* ate, you can tell me the amount by using the models on the table and in the racks.

You may use the grid for rectangular or square shapes and the circles for circular or round shapes. Use the wedge for wedge shaped foods.

You can use the thickness bars to show me the thickness of a food and the bean bags and mounds to describe the amounts of solid foods.

When you use the cups, bowls, and glasses, please show me which line best describes the portion *{you/SP/he/she}* ate or drank. When you use any of the spoons, please tell me the quantity in LEVEL spoonfuls.

<u>24-Hour Dietary Recall Interview Scripts - Telephone Interview:</u>

A. Greeting script

Hello, Mr./Mrs. *{SP/Proxy}*, my name is *{interviewer's name}*. I am calling for the National Health and Nutrition Examination Survey to conduct *{your/SP's}* second dietary interview over the telephone.

You will need the food measuring guides that we gave you during your MEC visit. I'll wait while you locate them.

Do you have them? *Yes/No/Needs to reschedule*
If yes, go to next question.
If no:

Let's go ahead with the interview today anyway. Do you have a ruler or some measuring cups and measuring spoons in your home that you can use for this interview?
If SP needs to reschedule:
We can schedule another appointment for the interview. Is there a time that will be convenient? *Enter date/ Enter time/ Verify contact phone*

If SP is not willing to reschedule:

We cannot ask everyone in the country to be in our study. You are special because you have been chosen to participate. No one else can take your place. We hope that you will help us with this interview. It will only take about 20 minutes, you will receive $30 for participating, and it is such an important part of the health survey.

If SP still says no:
Thank you for your time.

B. Introduction script

First, we'll make a list of the foods you/SP ate and drank yesterday, *Monday*. It may help you remember what you/SP ate by thinking about where you/he/she were, who you/he/she were with, or what you/he/she were doing, like working, eating out, or watching television.

Please tell me everything you/SP had to eat and drink all day yesterday, Monday, from midnight to midnight. Include everything you/he/she had at home and away, even snacks, coffee, soft drinks, water, and alcoholic beverages. I'll ask you for specific details and amounts of the foods in a few minutes. At this time, just tell me what you/SP had.

C. Follow-up probing script

Your answers are important, so we'd like this list to be as complete as possible. Here are some foods people often forget.

In addition to the foods you have/SP has already told me about, did you have any
coffee, tea, soft drinks, milk or juice?
Beer, wine, cocktails or other drinks?
Cookies, candy, ice cream or other sweets?
Chips, crackers, popcorn, pretzels, nuts, or other snack foods?
Fruits, vegetables, or cheese?
Bread, rolls or tortillas?
Anything else?

D. Food detail probes script

When I ask how much *{you/SP}* ate, you can tell me the amount by using the drawings in the Food Model Booklet, the measuring cups and spoons, the ruler, and any of your own dishes and glasses. Feel free to check the labels on any food packages during the interview.

Post-dietary Recall Questions

NHANES III

REC.155 Was the amount of food that {you/NAME} ate yesterday much more than usual, usual, or much less than usual?

MUCH MORE THAN USUAL.....1
USUAL.....2
MUCH LESS THAN USUAL.....3
REFUSED.....7
DON'T KNOW.....9

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REC.265 When you drink tap water, what is the main source of the tap water? Is the city water supply (community water supply); a well or rain cistern; a spring; or something else?

COMMUNITY WATER.....1
A WELL OR RAIN CISTERN..2
A SPRING.....3
NEVER DRINK TAP WATER.4
REFUSED.....7
DON'T KNOW.....9
OTHER (SPECIFY).....91

[RECORD Drinking fountain AS COMMUNITY WATER SUPPLY.]

NHANES III

REC.325 Now I'll be asking some questions about {your/NAME's} use of table salt.
What type of salt {do you/does NAME} usually add to {your/his/her} food at the table?
Would you say it is ordinary or seasoned salt, lite salt, or a salt substitute?

ORDINARY, SEA, SEASONED, OR OTHER FLAVORED SALT
[includes regular iodized salt,
sea salt and seasoning salts
made with regular salt]..... 1
LITE SALT..... 2
SALT SUBSTITUTE..... 3
NONE..... 4 (REC.335)
REFUSED..... 7 (REC.335)
DON'T KNOW..... 9 (REC.335)

NHANES III

REC.330 How often {do you/does NAME} add {REC325 ANSWER} to {your/his/her} food at the table? Is it rarely, occasionally, or very often?

RARELY,.....1
OCCASIONALLY.....2
VERY OFTEN.....3
REFUSED.....7
DON'T KNOW.....9

CSFII

REC.335 How often is ordinary salt or seasoned salt added in cooking or preparing foods in your household? Is it never, rarely, occasionally, or very often?

NEVER.....1
RARELY.....2
OCCASIONALLY.....3
VERY OFTEN.....4
REFUSED.....7
DON'T KNOW.....9

[THIS QUESTION APPLIES ONLY TO USE OF ORDINARY SALT OR SEASONED SALT AND NOT TO LITE SALT OR SALT SUBSTITUTES.]

CSFII

REC.340 {Are you/Is NAME} currently on any kind of diet, either to lose weight or for some other health-related reason?

YES.....1
NO.....2 (Box 1)
REFUSED.....7 (Box 1)
DON'T KNOW.....9 (Box 1)

CSFII

REC.345 What kind of diet {are you/is NAME} on?

[READ AS NEEDED: Is it a weight loss or low calorie diet; low fat or cholesterol diet; low salt or sodium diet; diabetic diet; or another type of diet?]

WEIGHT LOSS OR LOW CALORIE DIET.....1
LOW FAT OR CHOLESTEROL DIET.....2
LOW SALT OR SODIUM DIET.....3
SUGAR FREE OR LOW SUGAR DIET.....4
LOW FIBER DIET.....5
HIGH FIBER DIET.....6
DIABETIC DIET.....7
LOW CARBOHYDRATE DIET.....8
HIGH PROTEIN DIET.....9
WEIGHT GAIN DIET.....10
OTHER.....91
(SPECIFY) _____
REFUSED.....77
DON'T KNOW.....99

BOX 1

IF SP < 1 YEAR OLD, GO TO BOX 2.
OTHERWISE, CONTINUE.

NHANES 1999

DRQ.361 Please look at this list of fish. During the past 30 days, did you eat any types of fish listed on this card? Include any foods that had fish in them such as sandwiches, soups, or salads.

YES.....1
NO.....2 (DRQ.380)
REFUSED.....7 (DRQ.380)
DON'T KNOW.....9 (DRQ.380)

NHANES 1999

DRQ. 370 During the past 30 days, which types of fish did you eat and how many times did you eat them?

Type listed: breaded fish products, tuna (canned or fresh), bass, catfish, cod, flatfish, haddock, mackerel, perch, pike, pollock, porgy, salmon, sardines, sea bass, shark, swordfish, trout, walleye, other type of fish and unknown type of fish.

Interviewer instruction:
Check each type of shellfish the SP reports eating, and then ask and record the number of times each type was eaten.

NHANES 1999

DRQ.380 Please look at this list of shellfish. During the past 30 days, did you eat any types of shellfish listed on this card? Include any foods that had shellfish in them such as sandwiches, soups, or salads.

YES.....1
NO.....2 (Box 2)
REFUSED.....7 (Box 2)
DON'T KNOW.....9 (Box 2)

NHANES 1999

DRQ. 390 During the past 30 days, which types of shellfish did you eat and how many times did you eat them?

Type listed: clams, crab, crayfish (crawfish), lobster, mussels, oysters, scallops, shrimp, other shellfish (for example, octopus, squid) and unknown type of shellfish.

Interviewer instruction:
Check each type of shellfish the SP reports eating, and then ask and record the number of times each type was eaten.

BOX 2

If the response to FSQ.030 'A', 'B', 'C', 'D' or 'E' is ' often true' (code 1), 'sometimes true' (code 2), ' refuse' (code 7), ‘don’t know' (code 9), continue with Box 3.
Otherwise, go to Box 5.

BOX 3

If SP 16 years or older, continue;
If SP less than 12 years old, go to the second FSQ.421 listed.
Otherwise, go to the end of the section.

USDA-FNS

FSQ.401 The next questions are about whether you were always able to afford enough food in the last 30 days.

In the last 30 days, did you cut the size of your meals because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.411 In the last 30 days, did you skip meals because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.421 In the last 30 days, did you eat less than you felt you should because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.431 In the last 30 days, were you hungry but didn't eat because you couldn't afford enough food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.440 In the last 30 days, did you lose weight because you didn't have enough money for food?

Yes.....1
No.....2
Refused.....7
Don’t Know.....9

BOX A

IF (FSQ401 OR FSQ411 OR FSQ421 OR FSQ431 = 1or 2) OR IF (FSQ440=1), CONTINUE;
OTHERWISE, GO TO THE END OF THE SECTION.

USDA-FNS

FSQ.451 In the last 30 days, did you not eat for a whole day because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

BOX 4

Go to the end of the section.

USDA-FNS

FSQ.421 The next questions are about whether you were always able to afford enough food for (NAME) in the last 30 days.

In the last 30 days, did (NAME) eat less than you felt (he/she) should because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.401 In the last 30 days, did you cut the size of (NAME’s) meals because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.491 In the last 30 days, was (NAME) hungry but you just couldn't afford more food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

USDA-FNS

FSQ.501 In the last 30 days, did (NAME) skip a meal because there wasn't enough money for food?

Often.....1
Sometimes.....2
Never.....3
Refused.....7
Don’t Know.....9

BOX B

IF (FSQ421 OR FSQ401 OR FSQ491 OR FSQ501= 1 OR 2), CONTINUE;
OTHERWISE, GO TO THE END OF THE SECTION.

USDA-FNS

FSQ.521 In the last 30 days, did (NAME) not eat for a whole day because there wasn't enough money for food?

Often.....1
Sometimes.....2

Never.....3
Refused.....7
Don't Know.....9

BOX 5

IF SP 1-11 YEARS OLD, CONTINUE.
OTHERWISE, GO TO THE END OF THE SECTION.

NHIS ACN.350

HSQ.500 The next questions are about {your/SP's} recent health during the 30 days outlined on the calendar.

Did {you/SP} have a head cold or chest cold that started during those 30 days?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

NHIS ACN.360

HSQ.510 Did {you/SP} have a stomach or intestinal illness with vomiting or diarrhea that started during those 30 days?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

NHANES III (M)

HSQ.520 Did {you/SP} have flu, pneumonia, or ear infections that started during those 30 days?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

BOX 6

IF SP 6-7 YEARS OLD, CONTINUE.
OTHERWISE, GO TO THE END OF THE SECTION.

PUQ.100 In the **past 7 days**, were any chemical products used in {your/his/her} home to control fleas, roaches, ants, termites, or other insects?

YES..... 1

NO	2
REFUSED	7
DON'T KNOW	9

PUQ.110 In the **past 7 days**, were any chemical products used in {your/his/her} lawn or garden to kill weeds?

CODE ‘NO’ IF THE RESPONDENT SAYS S/HE DOES NOT HAVE A LAWN OR GARDEN.

YES	1
NO	2
REFUSED	7
DON'T KNOW	9

DIETARY SUPPLEMENTS (all ages)

24-Hour Dietary Supplements Recall Interview

Information will be obtained on all vitamins, minerals, herbals and other dietary supplements that were consumed during a 24-hour time period (midnight to midnight). The information that is obtained for dietary supplements includes the following:

i. Verifying that dietary supplement(s) reported during the Dietary Supplement Section in the Household Interview was also taken during the 24-Hour time period. – Dietary supplement information is collected during the SP Household Interview. The interviewer will first ask if the supplements reported during the Household Interview were also taken during the 24-Hour time period.
j. Dietary supplement Name – The name of any new/additional dietary supplements are typed and selected from a list of dietary supplement names.
k. Amount of dietary supplement taken – The amount of dietary supplement consumed by the respondent during the 24-Hour time period.

<u>24-Hour Dietary Supplement Recall Interview Scripts – In-Person Interview:</u>

1. Script for respondents that <u>reported taking</u> a dietary supplement or antacid during the Dietary Supplements Section in the Household Interview:

   The next questions are about {your/SPs} use of dietary supplements, vitamins, minerals and herbals all day yesterday, {day}, between midnight and midnight. This includes prescription and over the counter dietary supplements.

   During the interview in your home {you/SP reported taking} {supplement}.

   Did {you/SP} take this supplement yesterday {day}. (between midnight and midnight)?

   Was {supplement} a {form}?
   You said {you/SP} took ___, is that correct? Was that a liquid or powder?

   Between midnight and midnight, how much did {you/SP} take?

   It was also reported {you/SP} took {supplement}.

   All day yesterday, {day}, between midnight and midnight, did {you/SP} take any other vitamins, minerals, herbals or other dietary supplements? Include any prescription and over the counter dietary supplements.

   What is the name of the supplement {you/SP} took?

Between midnight and midnight, how much did {you/SP} take?

Any others?

The next questions are about {your/SPs} use of non-prescription antacids.

During the interview in your home {you/SP reported taking} {antacid}.

Did {you/SP} take this antacid yesterday (between midnight and midnight)?

Between midnight and midnight how much did {you/SP} take?

It was also reported {you/SP} took {antacid}.

All day yesterday, {day}, between midnight and midnight did {you/SP} take any other antacids?

What is the name of the antacid {you/SP} took?

Between midnight and midnight how much did {you/SP} take?

Any others?

2. Script for respondents that <u>did not report taking</u> a dietary supplement or antacid during the Dietary Supplement Section in the Household Interview:

   The next questions are about {your/SPs} use of dietary supplements, including prescription and over the counter supplements. All day yesterday, {day}, between midnight and midnight did {you/SP} take any vitamins, minerals, herbals or other dietary supplements?

   What is the name of the supplement {you/SP} took?

   Between midnight and midnight how much did {you/SP} take?

   Any others?

   The next questions are about {your/SPs} use of non-prescription antacids All day yesterday, {day}, between midnight and midnight did {you/SP} take any antacids?

   What is the name of the antacid {you/SP} took?

   Between midnight and midnight how much did {you/SP} take?

   Any others?

24-Hour Dietary Supplement Recall Interview Scripts – Telephone Interview:

Same as above, except respondent is asked to get their dietary supplements and read from the container the name of any new supplements they have taken since the 24-hour dietary supplement recall in-person interview.

1. Script for respondents that reported taking a dietary supplement or antacid during the Dietary Supplements Section in the Household Interview or during the 24-hour dietary supplement recall in-person interview:

   The next questions are about {your/SPs} use of dietary supplements, vitamins, minerals and herbals all day yesterday, {day}, between midnight and midnight. This includes prescription and over the counter dietary supplements.

   During the interview in your home and our exam center {you/SP reported taking} {supplement}.

   Did {you/SP} take this supplement yesterday {day}. (between midnight and midnight)?

   Was {supplement} a {form}?
   You said {you/SP} took ___, is that correct? Was that a liquid or powder?

   Between midnight and midnight, how much did {you/SP} take?

   It was also reported {you/SP} took {supplement}.

   All day yesterday, {day}, between midnight and midnight, did {you/SP} take any other vitamins, minerals, herbals or other dietary supplements? Include any prescription and over the counter dietary supplements.

   Can you please locate the containers for all the dietary supplements {you/SP}took?
   I will wait while you get them.
   Can you please read to me all the words on the front label?

   What is the name of the supplement {you/SP} took?

   Between midnight and midnight, how much did {you/SP} take?

   Any others?

   The next questions are about {your/SPs} use of non-prescription antacids.

   During the interview in your home and our exam center {you/SP reported taking} {antacid}.

Did {you/SP} take this antacid yesterday (between midnight and midnight)?

Between midnight and midnight how much did {you/SP} take?

It was also reported {you/SP} took {antacid}.

All day yesterday, {day}, between midnight and midnight did {you/SP} take any other antacids?

What is the name of the antacid {you/SP} took?

Between midnight and midnight how much did {you/SP} take?
Any others?

2. Script for respondents that <u>did not report taking</u> a dietary supplement or antacid during the Dietary Supplement Section in the Household Interview or the 24-hour dietary supplement recall in-person interview :

   The next questions are about {your/SPs} use of dietary supplements, including prescription and over the counter supplements. All day yesterday, {day}, between midnight and midnight did {you/SP} take any vitamins, minerals, herbals or other dietary supplements?

   Can you please locate the containers for all the dietary supplements {you/SP}took? I will wait while you get them.
   Can you please read to me all the words on the front label?

   What is the name of the supplement {you/SP} took?

   Between midnight and midnight how much did {you/SP} take?

   Any others?

   The next questions are about {your/SPs} use of non-prescription antacids All day yesterday, {day}, between midnight and midnight did {you/SP} take any antacids?

   What is the name of the antacid {you/SP} took?

   Between midnight and midnight how much did {you/SP} take?

   Any others?

<u>Probes</u>

1. Probes for collecting dietary supplement names
   Multivitamin and/or Multimineral:

- **What is the brand name?**
- **Did it also include minerals like iron, zinc, or calcium**?
- **Iron only**
- **Was it a special type?(s**ilver, women's, men's, prenatal, liquid)

Single / double nutrient:

- **What is the brand name?**
- **How much (ingredient name) was in it?(or what was the strength of X)**

Other supplement type:

- **Please describe the label name or type of supplement**
- **What is the brand name?**

2. Probes for collecting antacid names

   What is the brand name? Was it extra strength, regular strength, ultra, maximum strength?

3. Probes for collecting the quantity the respondent took – UNIT
   Was it a tablet, capsule, pill, caplet, softgel, or something else?

HEARING (ages 12-19, 70 years and older)

Tech. No. _____ SP No. _____
Otoscope No. _____ Tympanometer No. _____ Audiometer No. _____

A. CONDITIONS AFFECTING TEST RESULTS

1. Do you now have a tube in your right or left ear? (If yes indicate affected ear(s))	No Yes, Right ear Yes, Left ear Yes, Both ears Refused Don't Know
2. Have you had a cold, sinus problem or earache in the past 24 hours?	Yes (2b) No (3) Refused (3) Don't Know (3)
2b. Which have you had? (mark all that apply)	Cold Sinus problem Earache, right ear Earache, left ear Earache, both Refused Don't Know
3. Have you been exposed to loud noise or listened to music with headphones in the past 24 hours?	Yes (3b) No (4) Refused (4) Don't Know (4)
3b. How many hours ago did the noise or music end?	|__|__| # hours Refused Don't Know
4. Do you hear better in one ear or the other?	Yes, right ear Yes, left ear No/Don't Know Refused

B. OTOSCOPY EXAM

Right Ear	Normal Excessive cerumen* Impacted cerumen* Other abnormality (comment) Collapsing ear canal
Left Ear	Normal Excessive cerumen* Impacted cerumen* Other abnormality (comment) Collapsing ear canal
RESULTS OF OTOSCOPY	Test complete Test partially complete Test not done

REASONS TEST INCOMPLETE OR NOT DONE

Safety exclusion
Physical limitation
SP refusal
SP ill/emergency
Out of time
Equipment failure
Communication problem
Other (specify):
_____

* TYMPANOMETRY will not be done on ears with cerumen blockage. Cerumen blockage does not exclude an SP from audiometry.

C. TYMPANOMETRY**

Right Ear	Obtained Not obtained	
Left Ear	Obtained Not obtained	
RESULTS OF TYMPANOMETRY		Test complete Test partially complete Test not done
REASONS TEST INCOMPLETE OR NOT DONE		Safety exclusion Physical limitation SP refusal SP ill/emergency Out of time Equipment failure Communication problem Other (specify): _____ _____

** Tympanometry will not be done on ears with cerumen blockage found in otoscopy.

D. PURE TONE AUDIOMETRY ***					
START HERE IF SP NUMBER ODD OR SP HEARS BETTER IN LEFT EAR AIR CONDUCTION-LEFT EAR			START HERE IF SP NUMBER EVEN OR SP HEARS BETTER IN RIGHT EAR AIR CONDUCTION-RIGHT EAR		
Hearing Level (dB)	Frequency (Hz)	Hearing Level with Masking on R(dB)	Hearing Level (dB)	Frequency (Hz)	Hearing Level with Masking on L(dB)
	1000			1000	
	2000			2000	
	3000			3000	
	4000			4000	
	6000			6000	
	8000			8000	
	1000			1000	
	500			500	

RESULTS OF AUDIOMETRY	Test complete Test partially complete Test not done
REASONS TEST INCOMPLETE OR NOT DONE	Safety exclusion Physical limitation SP refusal SP ill/emergency Out of time Equipment failure Communication problem Other (specify):_____
*** Audiometry will not be done on SP's with flat tympanogram.	

OPHTHALMOLOGY (ages 40 and older)

Common Exclusion Criteria:
Participants with lack of light perception (as measured by question VIQ010 in the household interview), severe eye infection or those who wear eye patches (Health technician's observation below) will be excluded from the ophthalmic examination.

Health technician's observation:

1. Does SP appear to have a severe eye infection in one or both eyes?
   1=Yes (Exclude) 2=No
   If so, which eye? Left, Right, or both

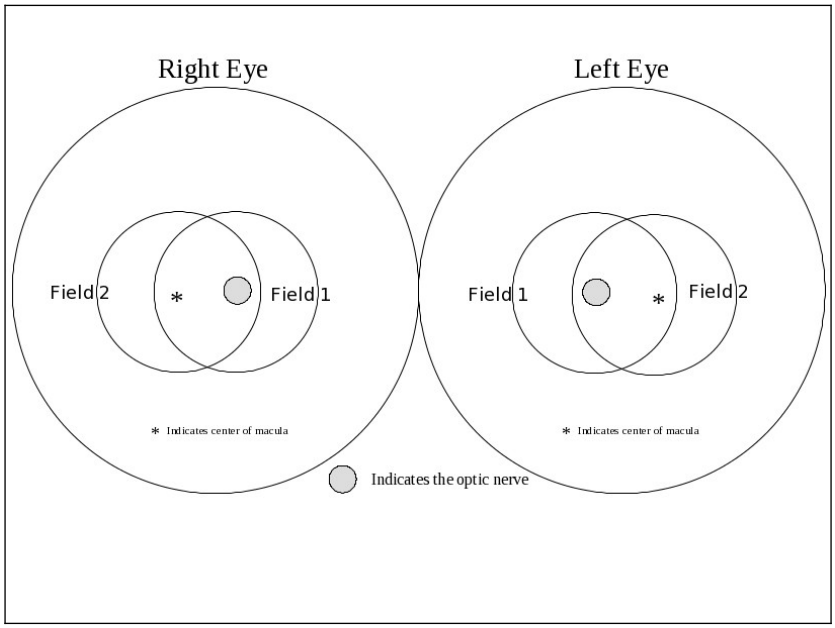
2. Is SP wearing an eye patch?
   1=Yes 2=No
   If Yes, which eye? Left, Right, or both [Exclude affected eye(s)]

I. Visual Fields Testing using the Humphrey Matrix Visual Field Instrument

- The N-30-1 Frequency Doubling Technique (FDT) Visual Field Screening Test for each eye
- To test for eye-specific visual field loss from glaucoma

II. Digital Fundus Photography using the Canon CR6-45NM Digital Imaging System

- Two retinal digital images per eye (total of 4 images). The first image will be centered on the macula (field 2) and the second on the optic nerve (field 1)..



- The digital retinal images will be loaded on to DVDs and sent to a remote reading center for grading. Among the conditions evaluated are retinopathy severity levels and its supporting lesions, age-related maculopathy, and other vascular and retinal changes.
-

Major ophthalmic conditions identified through grading of digital retinal images

Active Proliferative Retinopathy
Clinically Significant Macular Edema (CSME)
Treatable Age-Related Macular Degeneration (signs of neovascularization)
Hollenhorst Plaque
Irregular Nevus
Branch Vein or Central Vein Occlusion
Suspicious Cup/Disc Ratio
Preproliferative Diabetic Retinopathy
Macular Edema (not CSME)
Macular Hole
Surface Wrinkling Reinopathy/Epiretinal Membrane
Branch Vein or Central Vein Occlusion

ORAL HEALTH (ages 5 years and older)

Questions: Q1. Do you have an upper removable partial or full denture?"

Y = Yes (If yes, go to Q2)
N = No
R = Refused
D = Don't Know

Q2. Do you usually wear it during the day?"

Y = Yes
N = No
R = Refused
D = Don't Know

Q3. Do you have a lower removable partial or full denture?

Y = Yes (If yes, go to Q4)
N = No
R = Refused
D = Don't Know

Q4. Do you usually wear it during the day?"

Y = Yes
N = No
R = Refused
D = Don't Know

Examination

5yr+	25yr+
Tooth count	Tooth count
Oral Health Basic Screening Exam (BSE)	Oral Health Basic Screening Exam (BSE)
	Functional Occlusal Contact Index Exam
	Denture Questionnaire
Miscellaneous / Report of Findings	Miscellaneous / Report of Findings

PHYSICIAN EXAMINATION (all ages)

Blood Pressure (ages 8 years and older)*

*Note half sample of blood pressures from participants 16 and older will be taken by a NHANES health technician beginning in 2007. This will result in more observers taking the blood pressure measurements and more time for the physician to add the new Growth and Development module to his/her duties.

Have you had any of the following in the past 30 minutes? (food, coffee, alcohol, cigarettes)

Check all that applies

Arm selected	Right/left/Could not obtain
Cuff size selected	Infant/Child/Adult/Large Arm/Thigh
Heart Rate/Pulse	Beats per minute
Pulse type	
Radial/Brachial	

Maximum Inflation Level	mm Hg
Systolic Blood Pressure (Readings 1,2,3)	mm Hg
Diastolic Blood Pressure (Readings 1,2,3)	mm Hg

(mean of last two measurements will be used for average value)

Average Blood Pressure	mm Hg

Spirometry

MEC EXAMINATION SPIROMETRY EXCLUSIONS QUESTIONNAIRE –SPQ

Target Ages 6-15 years

SPQ.020 Does SURVEY PARTICIPANT now have a painful ear infection?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.030 Has SURVEY PARTICIPANT ever had eye surgery?

YES	1	
NO	2	(SPQ.040)
REFUSED	7	(SPQ.040)
DON'T KNOW	9	(SPQ.040)

SPQ.035 Was the eye surgery in the last three months?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.040 Has SURVEY PARTICIPANT ever had open chest or abdominal surgery?

YES	1	
NO	2	(SPQ.050)
REFUSED	7	(SPQ.050)
DON'T KNOW	9	(SPQ.050)

SPQ.045 Was the open chest or abdominal surgery in the last three months?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.050 Does SURVEY PARTICIPANT or anyone in {his/her} household **now** have tuberculosis?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.065a Has a doctor or other health professional ever told SURVEY PARTICIPANT that SURVEY PARTICIPANT had an aneurysm?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.065b Has a doctor or other health professional ever told SURVEY PARTICIPANT that SURVEY PARTICIPANT had a collapsed lung?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.110 Does SURVEY PARTICIPANT currently have a breathing problem that requires {you/SURVEY PARTICIPANT} to use supplemental oxygen during the day?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.120 Does SURVEY PARTICIPANT now have any pain or physical problem that may prevent {him/her} from taking a deep breath and exhaling forcefully?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.155 In the past month has SURVEY PARTICIPANT coughed up blood?

YES	1	(Exclude)
NO	2	(End)
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

MEC EXAMINATION SPIROMETRY EXCLUSIONS QUESTIONNAIRE –SPQ

Target Ages 16-79 Years

SPQ.030 {Have you/Has SURVEY PARTICIPANT} ever had eye surgery?

YES	1	
NO	2	(SPQ.040)
REFUSED	7	(SPQ.040)
DON'T KNOW	9	(SPQ.040)

SPQ.035 Was this surgery in the last three months?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.040 {Have you/Has SURVEY PARTICIPANT} ever had open chest or abdominal surgery?

YES	1	
NO	2	(SPQ.050)
REFUSED	7	(SPQ.050)
DON'T KNOW	9	(SPQ.050)

SPQ.045 Was this surgery in the last three months?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.050 {Do you/Does SURVEY PARTICIPANT} or anyone in {your/his/her} household **now** have tuberculosis?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ065a Has a doctor or other health professional ever told {you/ SURVEY PARTICIPANT} that {you/SURVEY PARTICIPANT} has an aneurysm?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.065b Has a doctor or other health professional ever told {you/SURVEY PARTICIPANT} that {you/SURVEY PARTICIPANT} had a collapsed lung?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.065c Has a doctor or other health professional ever told {you/ SURVEY PARTICIPANT} that {you/SURVEY PARTICIPANT} had a detached retina?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.065d Has a doctor or other health professional ever told {you/SURVEY PARTICIPANT} that {you/SURVEY PARTICIPANT} had a stroke?

YES	1	(SPQ.075)
NO	2	
REFUSED	7	
DON'T KNOW	9	

SPQ.165e Has a doctor or other health professional ever told {you/ SURVEY PARTICIPANT} that {you/SURVEY PARTICIPANT} had a heart attack?

YES	1	(SPQ.085)
NO	2	(SPQ110)
REFUSED	7	(SPQ110)
DON'T KNOW	9	(SPQ110)

SPQ.075 Did this stroke happen in the last three months?

YES	1	(Exclude)
NO	2	(SPQ165e)
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.085 Did this heart attack happen in the last three months?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.110 {Do you/Does SURVEY PARTICIPANT} currently have a breathing problem that requires {you/SURVEY PARTICIPANT to use supplemental oxygen during the day?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.120 {Do you/Does SURVEY PARTICIPANT} now have any pain or physical problem that may prevent {you/SURVEY PARTICIPANT} from taking a deep breath and exhaling forcefully?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ.155 In the past month {have you/has SURVEY PARTICIPANT} coughed up blood?

YES	1	(Exclude)
NO	2	(End)
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

Spirometry :Bronchodilator Exclusion Criteria

Physician's Exam Post Spirometry

Target Ages 6-79 years

SPABPPLS: Blood pressure and pulse

PHYSICIAN OBSERVATION: VERIFY THAT PULSE, BLOOD PRESSURE AND DROPPED HEART BEATS ARE WITH ACCEPTABLE LIMITS SET BY GUIDELINES. IF NOT, CHECK EXCLUDE, OTHERWISE CHECK REVIEW AND CONTINUE.

EXCLUDE	1	(Exclude)
REVIEWED	2	

SPAPREG: Currently Pregnant

POSITIVE URINARY HCG TEST, OR IF UNABLE TO OBTAIN BASED ON SELF-REPORT OF PREGNANCY. IF EITHER POSITIVE CHECK EXCLUDE, OTHERWISE CHECK REVIEW AND CONTINUE.

EXCLUDE	1	(Exclude)
REVIEWED	2	

RHQ200: (For females 12-59 years) Are you/Is SURVEY PARTICIPANT} now breastfeeding a child?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ195: (For youths 6-15 years): Does your child have a congenital heart defect?).

EXCLUDE	1	(Exclude)
REVIEWED	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ200: Has a doctor now diagnosed or treated {you/your child} for a rapid heart beat?

EXCLUDE	1	(Exclude)
REVIEWED	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQMEDA - - SPQMEAZ: Drug Review : MARK ALL THAT APPLY.

These are the drugs {you reported/you reported your child taking} in the household interview on {_INTERVIEW DATA} [READ LIST BELOW]. Please tell me additional drugs {you are/your child is} now taking. ALLOW UP TO 26 NEW DRUGS.

SPQMEDA - - SPQMEDH: CODES FOR DRUG REVIEW

Codes:

1=Potassium lowering drugs

2=Potassium raising drugs

3=Tricyclic antidepressant

4=Anti-convulsants

5=Bronchodilators

7=Antiarrhythmics

13=MAO Inhibitors

19=No new drugs

SPQ210 {Do you/Does your child} have epilepsy?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ230 {Have you/Has your child} ever had an adverse reaction to albuterol? [Albuterol is inhaled medication used to treat asthma and other breathing problems. Product brand names are Proventil, Ventolin, Combivent and Accunneb].

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ240 Has the survey participant inhaled a long acting beta 2 agonist bronchodilator within the last 12 hours?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

SPQ240 Has the survey participant inhaled a short- acting beta 2 agonist bronchodilator within the last 12 hours?

YES	1	(Exclude)
NO	2	
REFUSED	7	(Exclude)
DON'T KNOW	9	(Exclude)

List of Anti-Arrhythmics That Exclude Participants from Bronchodilator Testing:

Amiodarone (Cordarone)
Bretylium (Bretylol)
Bretylol (Bretylium)
Cardioquin (Quinidine, Quinalan, Quinidex, Quinaglute)
Cordarone (Amiodarone)
Disopyramide (Norpace)
Dofetilide
Enkaid (Encainide)
Ethmozine (Moricizine)
Flecanide (Tambocor)
Ibutilide
Lidocaine (Xylocaine, Xylocard)
Mexiletine (Mexitil) Mexitil (Mexilitine)
Moricizine (Ethmozine)
Norpace (Disopyramide)
Procainamide (Pronestyl, Procan SR)
Procan SP (Procainamide, Pronestyl)
Pronestyl (Procan SP, Procainamide)
Propafenone (Rhythmol)
Rhythmol (Propafenone)
Tambocore (Flecainide)
Tocainide (Tonocard)
Tonocard (Tocainide)
Quinaglute (Cardioquin, Quinidine, Quinora, Quinalan, Quinidex)
Quinidine (Quinora, Quinalan, Cardioquin, Quinidex, Quinaglute)
Quinalan (Quinora, Cardioquin, Quinidex, Quinaglute, Quinidine)
Quinora (Quinidine, Quinalan, Cardioquin, Quinidex, Quinaglute)
Xylocaine (Lidocaine, Xylocard)
Xylocard (Lidocaine, Xylocaine)

List of MAO Inhibitors that Exclude Participants from Bronchodilator Testing:

Isocarboxazid (Marplan)
Phenelzine Sulfate (Nardil)
Tranylcypromine Sulfate (Parnate)
Phenelzine Sulfate
Tranylcypromine Sulfate

MEC EXAMINATION ENO PRECONDITIONS

Target Ages 6 -79 year

BOX 1

CHECK ITEM ENQ.005:
IF SP 6-15 GO TO ENQ.020.

ENQ.010 Within the **last hour** {have you/has SURVEY PARTICIPANT} smoked a cigarette, cigar, pipe , or used any other tobacco product?

YES..... 1
NO..... 2
REFUSED..... 7
DON'T KNOW..... 9

ENQ.020 [Within the last hour}]{have you/Has SURVEY PARTICIPANT} exercised strenuously?

YES..... 1
NO..... 2
REFUSED..... 7
DON'T KNOW..... 9

ENQ.030 [Within the last hour}]{have you/Has SURVEY PARTICIPANT} had anything to eat or drink?

YES..... 1
NO..... 2
REFUSED..... 7
DON'T KNOW..... 9

ENQ.040 Within the last **three** hours {have you/has SURVEY PARTICIPANT} eaten beets, broccoli, cabbage, celery, lettuce, spinach or radishes?

YES..... 1
NO..... 2
REFUSED..... 7
DON'T KNOW..... 9

ENQ.050 Within the last **three** hours {have you/has SURVEY PARTICIPANT} eaten bacon, ham, hot dogs or smoked fish?

YES..... 1
NO..... 2
REFUSED..... 7
DON'T KNOW..... 9

ENQ.060 Within the last **two days** have you/has SURVEY PARTICIPANT} used any of the following oral or inhaled steroids ?
(HANDCARD)

YES	1
NO	2
REFUSED	7
DON'T KNOW	9

ENO results will not be reported to participants. Several factors are known to markedly influence ENO levels. In addition, the ENO level cannot be clinically interpreted in participants who are current smokers or have a history of recent upper respiratory infection. (References are available upon request).

==========

Questions for PSA Analysis (ages 40 and older)

KIQ.01115 {Do you/does SP} have an infection or inflammation of the prostate gland at the present time?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

KIQ.01185 {Have you/Has SP} had a rectal exam in the last 7 days?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

KIQ.01190 {Have you/Has SP} had a prostate biopsy in the last 4 weeks?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

KIQ.01195 {Have you/Has SP} had a cystoscopy in the last 4 weeks? (Cystoscopy is an internal examination of the prostate and bladder using a flexible tube-like instrument with a lens inserted through the penis.)

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

KIQ.01200 {Have you/Has SP} ever been told by a doctor or health professional that {you/he} had prostate cancer?

YES.....1
NO.....2 [end of section]
REFUSED.....7 [end of section]
DON'T KNOW.....9 [end of section]

KIQ.01220 How old {were you/was SP} when {you were/he was} first told that {you/he} had prostate cancer?

AGE _____ (YEARS)

REFUSED.....7
DON'T KNOW.....9

KIQ.01240 {Have you/Has SP} ever had surgery on {your/his} prostate?

YES.....1
NO.....2 [Go to KIQ.01300]
REFUSED.....7 [Go to KIQ.01300]
DON'T KNOW.....9 [Go to KIQ.01300]

KIQ.01280 Was the surgery for cancer of the prostate gland?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

KIQ.01300 {Have you/Has SP} ever had radiation treatments for prostate cancer?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

KIQ.01310 {Have you/Has SP} ever taken prescribed medicines for prostate cancer?

YES.....1
NO.....2
REFUSED.....7
DON'T KNOW.....9

==========

HPV swab collection (ages 14-59 years)

The physician will explain the HPV swab collection after discussing the tests for sexually transmitted diseases and HIV, and getting the password the participant will use to obtain his or her results.

==========

Phlebotomy (venipuncture 1, Trutol administration, venipuncture 2)

VENIPUNCTURE 1 (ages 1 year and older)

SP ID_____ Tech ID_____

Pre venipuncture questions (Q1-Q5 only asked during morning session: Q4-Q5 of those 12 and older)

Q1. When did you last have anything at all to eat or drink other than water?
HH:MM (AM PM NOON) MMDDYY

Q2. Have you had coffee, tea, soda, alcoholic beverages, gum, breath mints, cough drops or vitamins since [TIME/DATE IN Q3]?

YES (probe and edit response in Q3)
NO

Q3. You have not had anything to drink, other than water, since [TIME/DATE IN Q3]. Is this correct?

YES
NO (probe and edit response in Q3)

Q4. Are you now taking insulin?

Yes(OGTT will not be conducted)
No
Refused
Don't know

Q5. Are you now taking diabetic pills to lower your blood sugar?
Yes(OGTT will not be conducted)

No
Refused
Don't know

Q6. Do you have hemophilia?
Yes(Venipuncture and OGTT will not be conducted)

No
Refused
Don't know

Q7. Have you received cancer chemotherapy in the past four weeks?
Yes(Venipuncture and OGTT will not be conducted)
No
Refused
Don't know

Pregnancy Status

Positive (OGTT will not be conducted if SP reports pregnancy at home interview or has a positive pregnancy test prior to first venipuncture)
Negative

RESULTS OF FIRST VENIPUNCTURE
Test complete
Test partially complete
Test not done

REASONS TEST INCOMPLETE OR NOT DONE
Safety exclusion
Pregnancy
Physical limitation
SP refusal
SP ill/emergency
Out of time
Equipment failure
Communication problem

Trutol Administration (12 and older am session only)

SP ID_____ Tech ID_____

Please drink this solution within 10 minutes

Timer 10

Start ____

Stop _____

Total ____

Amount of Trutol drank

All
Some
None

RESULTS OF Trutol Administration

Test complete

Test partially complete
Test not done

REASONS TEST INCOMPLETE OR NOT DONE
Solution not consumed within 10 minutes
Physical limitation
SP refusal
SP ill/emergency
Out of time
Equipment failure???
Communication problem

VENIPUNCTURE 2 (ages 12 year and older if Trutol administered)

SP ID_____ Tech ID_____

OGTT tubes

2 ml grey Obtained all

Phlebotomy tubes not collected

of 3 4 ml lavender Obtained all
of 4 15 ml red
of 2 10 ml red

RESULTS OF SECOND VENIPUNCURE

Test complete
Test partially complete
Test not done

REASONS TEST INCOMPLETE OR NOT DONE

Solution not consumed within 10 minutes
Physical limitation
SP refusal
SP ill/emergency
Out of time
Equipment failure
Communication problem

VISION (ages 12 and older)

E) Near card visual acuity measurement (ages 50 years and older)

Health technician's observation:

Does SP appear to have a severe eye infection in one or both eyes?
If so, which eye? Left, Right, or both

Is SP wearing an eye patch ?
If so, which eye? Left, Right, or both

Have you ever had eye surgery for either of the following:

1) To treat or prevent nearsightedness or myopia?(Y N DK); If so, which eye? Left, Right, or both

2) To treat cataracts?(Y N DK); If so which eye? Left, Right, or both

A.1 Do you wear glasses or contact lenses for reading or near work?

YES	1
NO	2 (GO TO A.3)

A.2 GLASSES/CONTACTS USED FOR TEST

NO	0
YES, GLASSES	1
YES, CONTACTS	2
YES, GLASSES AND CONTACTS	3

VISUAL ACUITY NEAR CARD*

3 4 7 2 1

5 8 9 1 6 _____

4 2 3 5 7

1 2 3 4 5 ----------

3 4 6 8 9
* The numbers on the Visual Acuity Near Card may change slightly

A.3 Near card test only at comfortable or preferred distance.

A.4 VISUAL ACUITY AT SP PREFERRED DISTANCE

LINE NUMBER ___
TESTING DISTANCE ___ IN

B. **Refraction and visual acuity measurement (ages 12 years and older)**

B.1 Have you ever had eye surgery to treat nearsightedness or myopia?

YES	1
NO	2

B.2 Do you wear glasses or contact lenses for distance vision?

YES	1
NO	2 (B.4)

B.3 GLASSES/CONTACT LENSES USED FOR DISTANCE AVAILABLE

NO	0
YES, GLASSES	1 (B.5)
YES, CONTACTS	2 (B.6)

B.4 REFRACTION AND VISUAL ACUITY: NO GLASSES OR CONTACT LENSES

F) UNCORRECTED DISTANCE VISUAL ACUITY

RIGHT EYE	LEFT EYE
20/ __ __ __	20/ __ __ __

G) REFRACTION (OBJECTIVE)

RIGHT EYE	LEFT EYE
SPHERE + - __ __.__ __ D	SPHERE + - __ __.__ __ D

CYLINDER + __.__ __ D
AXIS __ __ __

CYLINDER + __.__ __ D
AXIS __ __ __

STOP *IF VISUAL ACUITY IS 20/25 OR BETTER IN BOTH EYES. OTHERWISE, CONTINUE FOR EYE(S) WITH VISUAL ACUITY WORSE THAN 20/25.*

H) REFRACTION (SUBJECTIVE)

RIGHT EYE
SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D
AXIS __ __ __

LEFT EYE
SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D
AXIS __ __ __

I) BEST CORRECTED VISUAL ACUITY

RIGHT EYE
20/ __ __ __

LEFT EYE
20/ __ __ __

STOP

B.5 REFRACTION AND VISUAL ACUITY: WITH GLASSES

J) GLASS PRESCRIPTION: DISTANCE PORTION

RIGHT EYE
SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D
AXIS __ __ __

LEFT EYE
SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D
AXIS __ __ __

K) VISUAL ACUITY WITH CURRENT CORRECTION

RIGHT EYE
20/ __ __ __

LEFT EYE
20/ __ __ __

L) REFRACTION (OBJECTIVE) WITHOUT CURRENT CORRECTION

RIGHT EYE
SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D
AXIS __ __ __

LEFT EYE
SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D
AXIS __ __ __

STOP *IF VISUAL ACUITY IS 20/25 OR BETTER IN BOTH EYES. OTHERWISE, CONTINUE FOR EYE(S) WITH VISUAL ACUITY WORSE THAN 20/25.*

M) REFRACTION (SUBJECTIVE)

RIGHT EYE	LEFT EYE
SPHERE + - __ __.__ __ D	SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D	CYLINDER + __.__ __ D
AXIS __ __ __	AXIS __ __ __

Due to time constraints and complexities of the procedure, Subjective Refraction(SR) was eliminated on persons with visual acuity worse than 20/25 (Only 8-10 persons had SR during the pretest).

N) BEST CORRECTED VISUAL ACUITY

RIGHT EYE	LEFT EYE
20/ __ __ __	20/ __ __ __

STOP

B.6 REFRACTION AND VISUAL ACUITY: WITH CONTACT LENSES

O) VISUAL ACUITY WITH CURRENT CORRECTION

RIGHT EYE	LEFT EYE
20/ __ __ __	20/ __ __ __

P) REFRACTION (OBJECTIVE) WITHOUT CURRENT CORRECTION

RIGHT EYE	LEFT EYE
SPHERE + - __ __.__ __ D	SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D	CYLINDER + __.__ __ D
AXIS __ __ __	AXIS __ __ __

Q) VISUAL ACUITY WITH OBJECTIVE REFRACTION

RIGHT EYE	LEFT EYE
20/ __ __ __	20/ __ __ __

STOP *IF VISUAL ACUITY IS 20/25 OR BETTER IN BOTH EYES. OTHERWISE, CONTINUE FOR EYE(S) WITH VISUAL ACUITY WORSE THAN 20/25.*

R) REFRACTION (SUBJECTIVE)

RIGHT EYE	LEFT EYE
SPHERE + - __ __.__ __ D	SPHERE + - __ __.__ __ D
CYLINDER + __.__ __ D	CYLINDER + __.__ __ D
AXIS __ __ __	AXIS __ __ __

Due to time constraints and complexities of the procedure, Subjective Refraction(SR) was eliminated on persons with visual acuity worse than 20/25 (Only 8-10 persons had SR during the pretest).

S) BEST CORRECTED VISUAL ACUITY

RIGHT EYE	LEFT EYE
20/ __ __ __	20/ __ __ __

STOP

Attachment 15

Attachment 15 - Reports of Findings

The contractor's advance arrangements team will contact county health officials and other community sources in each area to obtain a list of clinics and/or doctors that are both acceptable and accessible to sample persons with no usual source of care.

There will be three circumstances in which communication between NCHS and a sample person and possibly source of health care will be made, based on the importance of the findings. This discussion refers to each of these circumstances as levels.

LEVEL I

Level I refers to situations in which a medical emergency is discovered by a member of the NHANES exam team and verified by the staff physician, who further determines that the medical findings require immediate attention by a health care provider.

An emergency medical kit will be kept in each MEC so that emergency stabilization can be given when absolutely necessary. However, the preferred manner of handling the medical emergencies will be to contact local rescue squads, ambulance services and hospital emergency rooms, whose telephone numbers will be kept posted in the examination center. A Level I contact with a health care provider on behalf of a sample person will be rare.

To further assist sample persons, an in-house NCHS response team is available to answer calls from NHANES participants regarding the results from the Report of Finding System. The response team effort works both as a triage mechanism and a surveillance system. A receipt and control record is kept on all sample person inquiries. Also available at no cost to sample persons, is an 800 telephone number which can be accessed during regular scheduled business hours. The response team members consist of a physician, a nurse with a Masters degree, and other staff who are trained to answer specific questions. Attachments 15-1 is used for MEC exams where the examinee refuses further medical attention.

LEVEL II

A more frequent occurrence will be a Level II contact. One type of Level II contact will occur when the examination staff determines that there are major medical findings that can be expected to cause adverse effects within two or three weeks. When such a condition is identified, upon review of the exam and questionnaire information, the staff physician will do the following: explain his concern to the examinee, provide the examinee with a written report of the condition, and urge the examinee to make an appointment in the next two weeks with his medical care

provider. If the examinee has no medical care provider, the staff physician will have the examinee choose one from the list of providers obtained earlier for this purpose. The same procedure will be used by the staff dentists.

The other type of Level II contact occurs when abnormal findings are discovered by a contract laboratory or consultant. The consultant/laboratory will immediately contact NCHS staff who send the examinee a letter (see Level II letter - Attachment 15-2) describing the finding and strongly urge him/her to see a medical provider for a complete evaluation. This type of Level II contact with a sample person can occur as early as several days after the exam, but usually within two to three weeks of it. Attachment 15-3 shows another example of a Level II report.

LEVEL III

Level III refers to the routine Report of Findings sent to all examinees whether or not any extremely abnormal findings were present. Although it will not report the results of every test and exam, it will be a complete summary of all those of clinical interest (see Level III Routine Report of Findings - Attachment 15-4). It will also remind the sample person that he or she will have already received some extremely abnormal results and, if so, should already have taken them to a health care provider. The report will contain the height and weight and, depending on the age of the examinee, blood pressure and the results from special studies and laboratory tests. The report packet will also contain the medical referral listing for the specific community and a list of health information resources (Attachment 15-5). See Attachments 12 and 15-6 for the laboratory and examination results which will be given to survey participants.

For examinees under 18 years of age, the reports of findings will be given to their parents or guardians, except for the results of testing for sexually transmitted diseases.

15-1. NHANES MEC RELEASE FORM

Date _____

This is to certify that, against the advice of the medical doctor, I:

am leaving the Mobile Exam Center.

am removing _____ from the Mobile
(Name of Sample Person)

Exam Center.

choose no further medical referral or follow-up.

By so doing, I assume all responsibility for my act.

_____
Signed

_____
Relationship

_____
Witness

SP ID _ _ _ _ _ _

OMB #0920-0237

Attachment 15-2 – Early Reporting Letter – General laboratory

<On official letterhead>

Sample person name
Address

Telephone number
Sample Number:

Dear ,

Recently, you participated in a voluntary health examination at special mobile facilities operated by the U.S. Public Health Service. We reviewed your test results from your examination on <insert date>, and found that some values were abnormal and require your immediate attention.

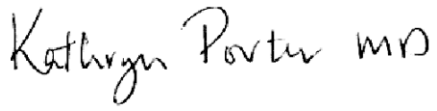
We cannot be sure whether or not these test results represent illness. Only your doctor can determine that. We **strongly recommend** that you talk to your doctor and give him or her your test results on the enclosed sheet. He or she can evaluate your findings and help you understand what they mean for your health. The NHANES program will not pay for further tests or treatment you may require.

The examination was not intended to be a complete physical examination nor a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with examinees.

You will receive a full report of your examination findings in the future, but we thought you should know about these results right away.

If you have any questions, you may call me at our toll-free number, **1-800-452-6115**, between 9 AM and 6 PM Eastern Time, Monday through Friday.

Sincerely yours,



Kathryn S. Porter, M.D., M.S.
Medical Officer

Enclosure

Laboratory

<example>

Laboratory Test	Result	Units	Flag	Reference Range
Out of range				
Glucose	135	mg/dL	high	60 -109
Others				
Glycohemoglobin	6.8	%		0 -6.9
AL T	22	U/L		0 -31
AST	26	U/L		0 -31
Alkaline Phosphotase	41	U/L		39-117
Albumin	4.1	g/dL		3.2 -5.2
Bicarbonate	24	mmol/L		22-29
BUN	8.0	mg/dL		6.0 -19.0
Calcium	9.4	mg/dL		8.4 -10.2
Cholesterol	198	mg/dL		0 -199
Triglycerides	146	mg/dL		0 -149
HDL	^^^	mg/dL		>= 40.0
LDL	^^^	mg/dL		0 -129
Serum Creatinine	0.8	mg/dL		0.4 -1.2
GGT	20	U/L		7-33
LDH	100	U/L		94.0 -250.0
Phosphorus	4.2	mg/dL		2.6 -4.5
Sodium	137	mmol/L		133.0 -145.0
Potassium	3.6	mmol/L		3.3 -5.1
Chloride	103	mmol/L		96.0 -108.0
Total Protein	6.8	g/dL		5.9 -8.4
Uric Acid	4.0	mg/dL		2.4 -5.7
Bilirubin	0.9	mg/dL		0 -1.0
Eryt. Protoporphyrin	^^^	ug/dL RBC		>= 71
Serum Folate	^^^	ng/mL		1.7 -20.6
RBC Folate	^^^	ng/mL RBC		70-424
Iron	^^^	ug/dL		22.0 -163.0
TIBC	^^^	ug/dL		247-455
Serum Ferritin	^^^	ng/ML		15-570
Transferrin Saturation	^^^	%		16-60
Blood Lead	^^^	ug/dL		0 -20.0

*** Test not done on this age group
^^^ Result still pending
--- Test not done
<< Lower than the limit of detection

Number of hours fasted prior to blood draw: **6** hours

Attachment 15-3 – Early Reporting Letter – Example

<On official letterhead>
Sample person name
Address
Sample Number:

Date

Dear <insert name> ,
Recently, you participated in a voluntary health examination at special mobile facilities operated by the U.S. Public Health Service. As part of this examination your blood was tested for hepatitis C virus. Your blood sample collected on <insert exam date> , indicates you were infected with the hepatitis C virus even though you may never have felt sick.

If no one has told you before that you have the virus, we **strongly recommend** you take this letter to your doctor as soon as you can. You will want to talk with your doctor about possible treatment for hepatitis C and how to prevent spreading the disease to other people. Your doctor may want to do more tests to find out if the virus has done any damage to your liver.

Almost four million Americans are infected with hepatitis C virus. Most persons who are infected carry the virus for the rest of their lives. The infection can lead to liver damage, although many people with the virus never feel sick. We have enclosed a fact sheet with information on hepatitis C. You may obtain other information on hepatitis C by calling toll free:

American Liver Foundation 1-800-223-0179
Hepatitis Foundation International 1-800-891-0707
Centers for Disease Control and Prevention 1-888-4HEPCDC
or the CDC web site: http://www.cdc.gov/hepatitis

We want to give you this important information and urge you to see your doctor. The NHANES program will not pay for any follow-up tests or care you may require, but we will be available to talk with you or your physician about this letter and to answer any questions you may have. You can reach me on our toll-free number **1-800-452-6115** between 9 AM and 6 PM Eastern Time, Monday through Friday.

We will be contacting you in 4-5 months to conduct a brief telephone interview about your hepatitis C infection. Your participation is voluntary and refusal to participate will not result in the loss of any benefits that you now receive.

Sincerely yours,

Kathryn Porter MD

Kathryn S. Porter, M.D., M.S.
Medical Officer
Enclosure

If you have HEPATITIS C

ALMOST 4 MILLION AMERICANS ARE INFECTED WITH HEPATITIS C VIRUS

This information will help you to better understand what hepatitis C is, how you may have gotten hepatitis C, and what you can do to prevent passing hepatitis C virus to others.

What is hepatitis C?
Hepatitis C is a liver disease caused by the hepatitis C virus (HCV), which is found in the blood of persons who have this disease. The infection is spread by contact with the blood of an infected person.

How serious is hepatitis C?
Hepatitis C is serious for some persons, but not for others. Most persons who get hepatitis C carry the virus for the rest of their lives. Most of these persons have some liver damage but many do not feel sick from the disease. Some persons with liver damage due to hepatitis C may develop cirrhosis (scarring) of the liver and liver failure which may take many years to develop. Others have no long term effects.

What can I do now that my hepatitis C test is positive?
Contact your doctor. Additional tests may be needed to check your diagnosis and to see if you have liver damage.

What if I don't feel sick?

Many persons with long-term hepatitis C have no symptoms and feel well, but should still see their doctor. For some persons, the most common symptom is extreme tiredness.

How could I have gotten hepatitis C?

HCV is spread primarily by exposure to human blood. You may have gotten hepatitis C if:

- you received a blood transfusion or solid organ transplant (e.g., kidney, liver, heart) before 1992
- you received clotting factor concentrates before 1987
- you ever injected street drugs, **even once**
- you were ever on long-term kidney dialysis
- you were ever a health care worker and had frequent contact with blood in the work place, especially accidental needlesticks
- you ever had sex with a person infected with HCV
- you have had multiple sex partners
- your mother had hepatitis C at the time she gave birth to you
- you lived with someone who was infected with HCV and shared items such as razors or toothbrushes that had blood on them

How can I prevent spreading HCV to others?

- Do not donate your blood, body organs, other tissue, or sperm
- Do not share toothbrushes, razors, or other personal care articles that might have your blood on them
- Cover cuts or open sores in your skin
- If you shoot drugs, stop and get into a treatment program. If you can't stop, use a clean needle and works every time and don't share them

A person who has hepatitis C can still get other types of viral hepatitis, such as hepatitis A or hepatitis B.

- If you have one steady sex partner, there is a very low chance of giving hepatitis C to that partner through sexual activity, and you do not need to change your sexual practices. If you want to lower the small chance of spreading HCV to your partner, you may want to use latex condoms. Ask your doctor about having your sex partner tested

People with liver damage from hepatitis C should get vaccinated against hepatitis A and hepatitis B. See your doctor.

- If you have sex with multiple partners, lower your number of partners, inform them that you have hepatitis C, and always use barrier precautions, such as latex condoms

What if I am pregnant?

Five out of every 100 infants born to HCV infected women become infected. This occurs at the time of birth, and there is no treatment that can prevent this from happening. However, infants infected with HCV at the time of birth seem to do very well in the first few years of life. More studies are needed to find out if these infants will be affected by the infection as they grow older. Breast feeding does not spread HCV.

Hepatitis C is not spread by:

· sneezing
· hugging
· coughing
· sharing eating utensils or drinking glasses
· food or water
· casual contact

There is no vaccine available to prevent hepatitis C.

Is there a treatment for hepatitis C?

A drug called interferon is licensed for the treatment of persons with long-term hepatitis C. About 2 out of every 10 patients who are treated get rid of the virus. You should check with your doctor to see if treatment would help you.

How can I take care of my liver?

· See your doctor regularly
· Do not drink alcohol
- Tell your doctor about all medicines that you are taking, even over the counter and herbal medicines
- Your doctor may want to do additional tests to determine the progress of your disease. The government agency responsible for the NHANES survey **cannot** provide any additional testing for you

For information on viral hepatitis:

call the Hepatitis Hotline at
1-888-4HEPCDC
1-888-443-7232
or access the Internet at
http:/www.cdc.gov/ncidod/diseases/
hepatitis/hepatitis.htm
or write
Hepatitis Branch, Mailstop G37
Division of Viral and Rickettsial Diseases
National Center for Infectious Diseases
Centers for Disease Control and Prevention
Atlanta, GA 30333

Vision

We have done a quick check of your vision today. Our exam is not as precise as an eye exam done by an eye doctor. These values may differ from a vision exam you may have by an ophthalmologist, optometrist or optician.

With glasses:

In your right eye your distance vision is **20/25.**

In your left eye your distance vision is **20/20**.

This is a good level of vision. We have not done a full eye examination, so you should continue your usual schedule of periodic examinations by your eye doctor.

Hearing

The softest sounds you are able to hear are called hearing thresholds. Your thresholds at different frequencies (pitches) are reported in the table below. The lower pitched sounds are towards the left of the table and the higher pitched sounds are toward the right. Values of 25 dB or less are considered normal hearing.

Hearing Levels by Ear and Frequency (Air Conduction)

	Frequency (Hz)						
	500	**1000**	**2000**	**3000**	**4000**	**6000**	**8000**
Right Ear (dB HL)	*0*	*0*	*5*	*5*	*5*	*15*	*30*
Left Ear (dB HL)	*5*	*0*	*10*	*5*	*10*	*25*	*10*

Your hearing was tested by a trained examiner. Results indicate a slight hearing loss (a few thresholds outside normal limits) in your right ear. In your left ear, results indicate that your hearing is entirely within normal limits.

Laboratory

Complete Blood Count	**Result**	**Units**	**Flag**	**Reference Range**
White Blood Count	7.4	($x10^9$/L)		3.9 - 12.1
Lymphocytes	23.5	(%)		17.8 - 52.8
Monocytes	7.2	(%)		0 - 12
Neutrophils	67.4	(%)		39.7 - 77.8
Eosinophils	1.9	(%)		0 - 8
Basophils	0.1	(%)		0 - 2
Red Blood Count	3.8	($x10^{12}$/L)		3.7 - 5.2
Hemoglobin	10.0	(g/dl)	Low	10.4 - 15.2
Hematocrit	35.0	(%)		32 - 45
MCV	78.9	(fL)		73.4 - 98.3
MCH	28.9	(pg)		23.2 - 33.3
MCHC	32.2	(g/dL)		31.4 - 35.1
RDW	12.0	(%)		11.8 - 16.6
Platelet Count	217.0	($x10^9$/L)		172 – 453

Body scan and bone density

The bone density measurement can help spot persons who may be at greater risk for fracture because they have weaker bones. In general, a lower bone density means that the bone is weaker. Yet, not all men or women with low bone density will have fractures.

The results from your hip (left) scan show:
Hip bone density 1.32 g/cm^2
Z-score 1.6
Compared with men your age, your hip bone density is normal.

The results from your spine (lumbar) scan show:
Spine bone density 1.21 g/cm^2
Z-score 1.2
Compared with men your age, your spine bone density is normal

Visual Field Test

We did a visual field test to find out how well you can see things peripherally or out to the side.

Your visual field test was normal in your right eye and outside normal limits in your left eye. This may suggest an eye problem, which should be evaluated by an eye doctor within the next two months.

Eye Conditions

This examination was not a complete eye examination. Only a small portion of the back of your eye, the retina, was photographed. Trained professionals evaluated the images but did not have information about your vision, eye health, or general health status. You may already know the information provided here.

Digital images of the retina

Large cup to disc ratio
The optic nerve (the main nerve going into the eye) in both eyes has changes that suggest glaucoma may be present. If you are not currently being followed by an eye doctor (ophthalmologist), it is recommended that you make an appointment.

Spirometry

NHANES Spirometry Report of Findings

(On official letterhead)
Date

SP Name
SP Address

SP Number

Dear <insert name> ,

Thank you for being part of the National Health and Nutrition Examination Survey conducted by the Centers for Disease Control and Prevention. This letter provides the results of your lung function testing done as part of your health exam on <insert exam date>.

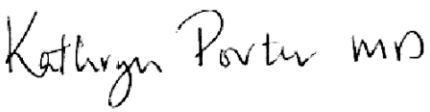
Your baseline lung function tests (insert statement)

(1) were within normal limits.
(2) were outside of normal limits. We encourage you to follow-up with your doctor in the next two months for evaluation. Please take both pages of this letter with you.
(3) were not interpretable.

The actual values from your breathing tests are on the next page. The tests were done for research purposes and do not replace a full medical examination by your doctor. The NHANES program will not pay for further tests or treatment you may require.

Thank you for your participation in the survey. If you have any questions, you may call me at our toll-free number, **1-800-452-6115**, between 8:30 AM and 6 PM Eastern Time, Monday through Friday.

Sincerely yours,



Kathryn S. Porter, M.D., M.S.
Medical Officer

National Health and Nutrition Examination Survey
Lung Function Testing

Name:
Address:
Phone Number:
Examination Date:
Age and gender:
Sample Number:

1) *Persons who have partial exams or poor quality:*

Your lung function tests were not interpretable.

2) *Persons with completed exams:*

The lung function test was done with an Ohio Model 822/827 spirometer. Your results below are an average of your lung function measurements.

	FVC	FEV1	FEV1/FVC%	Peakflow	FEF25-75%
Your best values					
Predicted values					
Lower limits of normal					
Percent predicted					

Interpretation: Compared with other people of your age, sex, race/ethnicity and height, your breathing test results **were <outside or within> normal limits.**

If you were asked to breathe in placebo (air without any medication) and have another lung function test, the results of the second test are not reported.

3) Persons with bronchodilation and second spirometry (print only if it applies)
Your results below are after using a bronchodilation medicine ~~with~~ (2 puffs of albuterol).

	FVC	FEV1	FEV1/FVC%	Peakflow	FEF25-75%
Your best values					
Predicted values					
Lower limits of normal					
Percent predicted					

Interpretation: Compared with other people of your age, sex, race/ethnicity and height, your breathing test results **were <outside or within> normal limits.**

Laboratory

Laboratory Test	Result	Units	Flag	Reference Range
Glucose	96	mg/dL		60 - 109
Glycohemoglobin	5.3	%		< 7.0
2-hour Glucose Tolerance Test	172	mg/dL		60 - 139
AL T	22	U/L		< 40
AST	26	U/L		< 31
Alkaline Phosphatase	41	U/L		39 - 117
Albumin	4.1	g/dL		3.2 - 5.2
Bicarbonate	24	mmol/L		22 - 29
BUN	8	mg/dL		6 - 19
Calcium	9.4	mg/dL		8.4 - 10.2
Cholesterol	246	mg/dL	high	< 200
Triglycerides	129	mg/dL		< 150
HDL	107	mg/dL		> 39
LDL	83	mg/dL		< 130
Serum Creatinine	0.8	mg/dL		0.4 - 1.2
GGT	20	U/L		11 - 51
LDH	100	U/L		94 - 250
Phosphorus	4.2	mg/dL		2.6 - 4.5
Sodium	137	mmol/L		133 -145
Potassium	3.6	mmol/L		3.3 -5.1
Chloride	103	mmol/L		96 - 108
Total Protein	6.8	g/dL		5.9 - 8.4
Uric Acid	4.0	mg/dL		3.4 – 7.0
Bilirubin	0.9	mg/dL		0 -1.0
Eryt. Protoporphyrin	40	ug/dL RBC		0 - 70
Serum Folate	9	ng/mL		2 - 21
RBC Folate	245	ng/mL RBC		70 - 424
Serum Ferritin	52	ng/ml		15 - 570
Iron	157	µg/dL		22 - 163
TIBC	382	µg/dL		247- 455
Transferrin Saturation	41	%		16 - 60
Total PSA	1.7	ng/mL		0 - 4
Vitamin B12	509	µg/dL		204 - 1261
Parathyroid hormone	52	pg/ml		10-65
Blood Lead	1.7	µg/dL		0 - 20
Cadmium	0.4	µg/L		0.3 - 1.2
Total Blood Mercury	0.6	µg/L		< 10.0

Results that are flagged “high” or “low” may indicate a health problem. You may wish to share these results with your doctor.

^^^ Results still pending
--- Test not done
<<< Lower than the limit of detection

Number of hours fasted prior to blood draw: **12** hours

15-5. Federal Resource List to be Included with all Reports of Findings

HEALTH INFORMATION RESOURCE LIST
Information on a variety of health topics is available from the following Federal agencies.

Office of Disease
Federal Building, Room 6C12,
9000 Rockville Pike,
Bethesda, MD 20892,(301)496-1752

Publishes brochures and a series of fact sheets called Age Pages, covering a wide variety of topics related to aging.

National AIDS Information Clearinghouse
P.O. Box 6003, Rockville, MD 20850 (800)458-5231

Provides information and publications on AIDS and supports a national hotline and resource center.

National Clearinghouse for ALCOHOL and Drug Information, P.O. Box 2345, Rockville, MD 20852, (301)468-2600

Distributes a variety of publications on alcohol and drug abuse.

CANCER Information Service,
National Cancer Institute,
Building 31, Room 10A24,
9000 Rockville Pike, MD 20892,
(800)4-CANCER

Provides information about cancer and childbirth,
patients and families. Spanish-speaking staff members are available in California, Florida, Georgia, Illinois, northern

National HEALTH INFORMATION Center, P.O. Box 1133,
Washington, DC 20013-1133
(800)336-4797 (Metropolitan Washington, DC (301)565-4167)

Provides assistance in locating health information resources, and distributes publications on health promotion and disease prevention.

National Heart, Lung, and Blood Institute Education Programs Information Center, 4733 Bethesda Avenue, Suite 530, Bethesda, MD 20814, (301)951-3260

Provides information and materials on smoking, cholesterol, high blood pressure, heart disease, stroke, exercise, and other topics related to heart and lung health.

National Center for Education in MATERNAL and Child Health,
38th and R Streets NW, Washington, DC 20056 (202)625-8400

Provides information on pregnancy

child and adolescent health, nutrition, high risk infants, chronic illness and disability, genetics, and

New Jersey, New York, and Texas.

National DIABETES Information Clearinghouse, Box NDIC, Bethesda, MD 20892 (301)468-2162

Collects and disseminates information to consumers and health professionals on diabetes and its complications.

FOOD and Drug Administration, Office of Consumer Affairs, 5600 Fishers Lane (HFE-88) Rockville, MD 20857 (301)443-3170

Responds to inquiries about foods, cosmetics, medical devices, drugs, health fraud, Reye's syndrome, and radiological health and serves as a clearinghouse for related consumer publications.

women's health. Resource Center distributes materials on organizations and programs.

National Institute of MENTAL HEALTH, 5600 Fishers Lane, Room ISC-05, Rockville, MD 20857, (301)443-4513

Answers general inquiries about mental health and distributes a variety of publications in English and Spanish at no charge.

Office on SMOKING and Health, Department of Health and Human Services, Park Bldg, Room 1-16, Rockville, MD 20857, (301)443-1690

Distributes consumer publications on smoking and health, including smoking and teenagers, smoking and pregnancy, and smoking cessation.

This resource list is a service of the National Center for Health Statistics(NCHS) and the Office of Disease Prevention and Health Promotion(ODPHP).

15-6. List of Exam Measurements Noting Which Results Will Be Given to Respondent

Health Measurements:
*Spirometry
*Blood Pressure
*Bone Density Measurement (low dosage x-ray of spine)
*Oral Health Exam
*Eye Exam
*Hearing Test
*Height, Weight, and Other Body Measures

Laboratory Tests on Urine:
Bone Status Test
Kidney Tests
*Pregnancy Test
*Sexually Transmitted Diseases (STDs)
*Exposure to environmental chemicals

Laboratory Tests on Blood:
*Human Immunodefiency Virus (HIV) antibody
*Anemia
*Cholesterol
Banking of specimens for future genetic research
*Glucose Measures
*Herpes Simplex Virus Type 2
**Infectious Diseases
Kidney Tests
**Environmental chemicals
*Liver Tests
Nutritional Status
*Prostate Specific Antigen Test
Human Papillomavirus (HPV) antibody

Laboratory Tests on Swabs:
*Human Papillomavirus (HPV)

Private Health Interviews:
Health Habits
Mental Health
Nutrition
Physical Activity
Reproductive Health
Sexual Experience
*You will receive results
**You will receive results only if abnormal