

National Collaborative on Childhood Obesity Research

Active Living Research Conference
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About NCCOR

The National Collaborative on Childhood Obesity Research brings together three of the nation's leading research funders – **the Centers for Disease Control and Prevention**, the **National Institutes of Health** and the **Robert Wood Johnson Foundation** – to address the problem of childhood obesity in America.



A collaboration among:



Why Collaborate?

- Accelerate progress by working together more effectively
- More efficient use of funding
- Address gaps through jointly funded projects
- History of success in tobacco cessation



Mission

To improve the efficiency, effectiveness, and application of childhood obesity research and to halt—and reverse—the current childhood obesity trend through enhanced coordination and collaboration.

A collaboration among:



NCCOR Focuses on Four Areas of Need

- Need 1: Common measures and methods
- Need 2: Evaluating and identifying effective interventions
- Need 3: Rapid assessment of promising policies and environmental changes
- Need 4: Faster application to speed progress

Need 1: Common Measures and Methods

Registry of Measures

- Web-based registry of measures to assess variables in childhood obesity prevention research
- Standard measures are needed to describe and evaluate interventions
- Will help identify gaps in measures and fuel new measurement development
- Estimated completion: Late 2010

Need 2: Evaluating and Identifying Effective Interventions

Webinar Series

- Promoted and conducted a four-part webinar series on policy evaluation from February 2009 – June 2009
- Webinar 1: Basics of Design to Evaluate Policy Interventions
- Webinar 2: Addressing Pitfalls to Research in Real World Settings
- Webinar 3: Enhancing the Usefulness of Evidence to Inform Practice
- Webinar 4: Communicating Results Effectively

Need 1: Common Measures and Methods

Catalogue of Surveillance Systems

- Describe existing local, state, and national obesity-related policy, health-monitoring systems
- Track changes across multiple levels – including individuals, food, physical activity, and energy balance policies and environments
- Estimated completion: Late 2010

NCCOR Catalogue of Surveillance System : Storyboards

A collaboration among:



National Health and Nutrition Examination Survey (NHANES)

At a Glance	Methods	Key Variables	Data Access and Cost
Linkage Capabilities	Selected Publications	Special Notes	Resources and Help

Survey website: <http://www.cdc.gov/nchs/nhanes.htm>

Sponsor: Centers for Disease Control and Prevention (CDC)/National Center for Health Statistics (NCHS)

Purpose: NHANES is designed to collect nationally representative information about the health and nutrition status of people in the United States

Target population: Since 1999, civilian, non-institutionalized U.S. population, ages 2 months to 74 years

Data availability: Extensive national-level data are available free-of-charge for public-use on the NHANES Web site

Conducted: Began in 1971. Since 1999, it has been a continuous survey, with data collected in 2-year cycles.

Surveys conducted in:

NHANES 2005-2006

NHANES 2003-2004

NHANES 2001-2002

NHANES 1999-2000

NHANES III 1988-1994

NHANES II 1976-1980

NHANES I 1971-1975

Hispanic NHANES 1982-1984

Relevance to Childhood Obesity Research:

NHANES data can be used to generate national estimates of health and nutritional status and study their risk factors and association with health promotion and disease prevention.

See also:

System A – <similarity / relatedness>

System B – <similarity / relatedness>

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Data Collection Methods

General: In-person interviews, proxy interviews for children younger than X, health examinations, and follow-up interviews and questionnaires

Dietary Data: 24-hour recalls, food frequency questionnaires, and other questionnaires on dietary behaviors

Nutritional Status: Blood tests during health examination

Physical Activity: Interviews, questionnaires, accelerometers

Weight, Height, and Related Measures: Measurements taken during health examinations; interviews, questionnaires

Sample Size: Approximately 5,000 per year

Response Rate: Varies by survey cycle and segment, as well as demographic group. Overall response rate for NHANES 2005-06 for interviewed subjects was 80.45%, for examined subjects was 77.36%.

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Key Variables/Measures	Methods
<i>Descriptive:</i> Age, sex, race/ethnicity, education, country of birth, food assistance program participation, Poverty Income Ratio, income, employment, health insurance coverage, marital status, and pregnancy status.	Questionnaire
<i>Diet:</i> Food group intake (e.g., whole grains), nutrient intake (including calories), dietary supplement usage, breastfeeding, milk intake, frequency of food consumption at home and outside the home, food security, welfare/food assistance program participation.	Questionnaire, Dietary recall
<i>Nutritional Status:</i> Survey includes a range of laboratory indices of nutritional status such as serum cholesterol and plasma glucose.	Laboratory tests
<i>Physical Activity:</i> Cardio-respiratory fitness, physical functioning and other measures of physical activity and physical fitness for ages 2 and older, daily physical activity and sedentary behaviors	Computer-assisted questionnaire
<i>Weight, Height, and Related Measures:</i> Measured height, weight, waist circumference, waist/hip ratio, skin fold thickness	Examination

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Data Access and Cost

Data Availability: Extensive national-level data are available on the [NHANES](#) Web site

Limited access:

Full access:

Cost: Free-of-charge for public-use

See Special Note: Using restricted-use data. Investigators must submit proposals to obtain restricted-use data (processing usually takes 6-8 weeks). [More>](#)

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Linkage Capability

NCHS has performed several linkages between NHANES and public data sets including those of the National Death Index, Centers for Medicare and Medicaid Services, and Social Security Administration. Although probably not directly relevant to childhood obesity, these linkages provide a precedent and methodology for other linkages between NHANES and large, national data sets.

More relevant to childhood obesity research, NCHS is planning a linkage between NHANES and national food assistance program data. See <http://www.ncvhs.hhs.gov/060918p4.pdf> for more information.

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Selected Publications

Akinbami LJ, Ogden CL. Childhood overweight prevalence in the united states: the impact of parent-reported height and weight. *Obesity (Silver Spring)* 2009;17(8):1574-1580.

Gundersen C, Lohman BJ, Garasky S, Stewart S, Eisenmann J. [Food security, maternal stressors, and overweight among low-income US children: Results from the National Health and Nutrition Examination Survey \(1999-2002\)](#). *Pediatrics* 2008;122(3):e529-540.

National Center for Health Statistics (NCHS), CDC. Prevalence of overweight among children and adolescents: United States 2003-2004. April 2006.

Ogden CL, Carroll MD, Curtin LR, McDowell MA, Tabak CJ, Flegal KM, Prevalence of overweight and obesity in the United States, 1999-2004. *JAMA* 2006;295(13):1549-1555.

Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among US children and adolescents, 1999-2000. *JAMA* 2002;288(14):1728-1732.

Ploeg MV, Mancino L, Lin BH, Guthrie J. US food assistance programs and trends in children's weight. *International Journal of Pediatric Obesity* 2007 Aug 29:1-9. [Epub ahead of print]

Robinson WR, Gordon-Larsen P, Kaufman JS, Suchindran CM, Stevens J. The female-male disparity in

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Special Notes

Geographic variables/geocoding: For NHANES III, county and state FIPS codes and Census region data are available in public-use file. Geocoding by zip code is available in the restricted use data set with a special agreement. The following table lists the geographic variables that exist within the NHANES III and Continuous NHANES. The special project restricted-use variables include geocodes that have been added to the datasets from Census. The variable label explains the variable name. When applying for access to this data through the RDC, specify the variable name in your data dictionary.

Using restricted-use data: Investigators must submit proposals to obtain restricted-use data (processing usually takes 6-8 weeks). The cost of merging study data files with NHANES restricted-use data begins at \$500 per day of effort, more if you request more cycles of data. The minimum setup charge of \$500 per day. An additional \$500 per day is charged as needed for file creation and for special handling, such as merging additional data or creating custom files formats.

Restricted-use data may be accessed on-site at the NCHS Research Data Center in Hyattsville, MD. The fee for accessing data on-site is \$200/day. Time on-site in the RDC can be scheduled in daily increments but the minimum reservation is 2 consecutive days. Scheduling time at the RDC is on a first-come, first-served basis.

Restricted-use data also may be accessed remotely. Remote access is designed for researchers who are proficient with SAS and SUDAAN. Fees for remote access are \$500 per month for the survey cycle and \$250 per month for each additional survey cycle. <http://www.cdc.gov/nchs/r&d/rdcremote.htm>

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For further information:

Use of NHANES data: <http://www.cdc.gov/nchs/tutorials/nhanes/surveyorientation/Navigate/intro.htm>.

Tutorials: Web-based Basic, Supplemental , and Special Topics tutorials:
<http://www.cdc.gov/nchs/tutorials/>.

Listserv: The NHANES listserv provides a mechanism for dissemination of information regarding NHANES activities, products, and release dates. For information on how to join the list, see
http://www.cdc.gov/nchs/nhanes/nhanes_listserv.htm.

BROWSE AND SEARCH

NCCOR Surveillance System Catalogue

<description of the purpose of the catalog, intended users, contents, etc.>

Browse

Scope: National, State, Local

Level: Individual, Home, School, Community, Policy

Cost: Free, Fee-based

Age range: 0-1, 2-4, 5-12, 13-18

Measures: Diet, Physical Activity, Weight Status

Alphabetical All, A-F, G-L, M-Q, R-Z

:

Search

enter name or keyword

Go

Number of systems selected: 0

COMPARISON CHARTS

WITH ROLL-OVER TEXT

Comparison Charts:

Roll-overs on Scope, Age Groups and Race/Ethnicity show sample size

	<u>NHANES</u>	<u>InfoUSA</u>	<u>Nielsen Homescan</u>
<u>Scope</u>			
National	✓	✓	✓
State			
Local			
<u>Source</u>			
	CDC/NCHS	InfoUSA, a private company	AC Nielsen, a private company
<u>Unit(s) of study</u>			
Individuals	✓		✓
Households			
Businesses		✓	
Others		✓	
<u>Age groups</u>			
0-1 yr	✓	0-1 yr: n=1000	
2-4 yrs	✓		
5-12 yrs	✓		
13-18 yrs	✓		
<u>Race/Ethnicity</u>			
White, Non-Hispanic	✓	✓	✓
Black, Non-Hispanic	✓	✓	✓
Hispanic	✓	✓	✓

To Stay Informed on NCCOR Activities

- NCCOR website: www.nccor.org
- NCCOR monthly e-newsletter (register via the website)

Questions?

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