

National Health Interview Survey (NHIS) Cancer Control Supplement (CCS)

Providing National Surveillance in the Fight against Cancer

Overview

The National Health Interview Survey (NHIS) is a continuous, nationwide in-person survey of approximately 35,000 households in the civilian non-institutionalized population. This survey is conducted by the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) and administered by the US Census Bureau. Since 1987, a Cancer Control Supplement (CCS) has been periodically fielded on the NHIS. Because the NHIS is the premier population-based general health survey conducted continuously in the United States, NCI chose it for the CCS.

Since 2000, the NHIS CCS has been co-sponsored by the NCI and CDC. In 1987, 1992, 2000, 2005, and 2010 a CCS was administered to one sample adult aged 18+ years in each selected household. Respondents were interviewed about their knowledge, attitudes, and practices concerning cancer-related health behaviors and cancer screening use. Respondents who identified as Hispanic/Latino were administered a section on Hispanic Acculturation. Starting in 2005, these questions were replaced with questions on language and time in the United States, and administered to all respondents. The NHIS over samples African-American and Hispanic respondents. NHIS public use data, including questionnaires, datasets, and related documentation, are available on the NCHS Web site.

The 2010 NHIS dataset was publicly released in June 2011. The CCS covered the following topics:

- Diet and Nutrition
- Physical Activity
- Cancer Screening
- Sun Avoidance
- Tobacco Use and Control
- Genetic Testing
- Family History of Cancer
- Cancer Risk Assessment
- Cancer Survivorship

Use of NHIS CCS

NHIS data are used widely throughout the US Department of Health and Human Services (DHHS) to monitor trends in cancer screening and cancer-related health behaviors to track progress toward achieving national health objectives. The data also are used to characterize health and illness, to determine barriers to accessing and using appropriate health care, and to evaluate federal health programs. The NHIS is the official tool for monitoring Healthy People cancer screening and tobacco control objectives. NCI and CDC are jointly responsible for monitoring these goals. Numerous papers have been published on cancer screening, tobacco control, and diet – the three main areas monitored by the NHIS CCS.

Frequency of NHIS CCS

The NHIS CCS has been fielded every 5 years since 2000. Questions on cancer screening and sun protection may be fielded at more frequent intervals in order to update cancer screening patterns and trends.

Continual Quality Improvement in NHIS

NHIS CCS items are revisited before every survey administration to ensure that they are current, relevant, and in line with Healthy People goals. In 2010, items were added to explore emerging technologies in cancer screening and prevention including the use of lung cancer screening tests, virtual colonoscopy for colorectal cancer detection, and HPV vaccine for cervical cancer prevention (also fielded in 2008). Other refinements in questions also have increased the utility of national trend data.

Key to improving the efficiency of the NHIS CCS was development of the multifactor food screener, used to assess approximate intakes of fruits and vegetables, percent energy from fat, and fiber. The screener asks respondents

to report how frequently they consume foods in 16 categories. Before implementation of the short multifactor food screener on the 2000 NHIS, a split sample design was used because an entire instrument was needed to field the food frequency questions. Since 2000, all respondents are administered the same questionnaire, which increases the effective sample size of the survey and allows researchers to analyze cancer control data in greater detail.

Questions were added to the 2005 NHIS to monitor use of the DHHS Smoking Cessation Hotline. Questions about family history of cancer were refined in 2000 and again in 2005.

Selected Publications

Berrigan D, Dodd K, Troiano RP, Reeve BB, Ballard-Barbash R. Physical activity and acculturation among adult Hispanics in the United States. *Res Q Exerc Sport*. 2006 Jun; 77 (2):147-5.

Breen N, A Cronin K, Meissner HI, Taplin SH, Tangka FK, Tiro JA, McNeel TS. Reported drop in mammography : is this cause for concern? *Cancer*. 2007 Jun 15;109(12):2405-9.

Meissner HI, Tiro JA, Haggstrom D, Lu-Yao G, Breen N. Does patient health and hysterectomy status influence cervical cancer screening in older women? *J Gen Intern Med*. 2008 Nov;23(11):1822-8.

Ross LE, Berkowitz Z, Ekwueme DU. Use of the prostate-specific antigen test among U.S. men: findings from the 2005 National Health Interview Survey. *Cancer Epidemiol Biomarkers Prev*. 2008 Mar;17(3):636-44.

Sabatino SA, Coates RJ, Uhler RJ, Breen N, Tangka F, Shaw KM. Disparities in mammography use among US women aged 40-64 years, by race, ethnicity, income, and health insurance status, 1993 and 2005. *Med Care*. 2008 Jul;46(7):692-700.

Shapiro JA, Seeff LC, Thompson TD, Nadel MR, Klabunde CN, Vernon SW. Colorectal cancer test use from the 2005 National Health Interview Survey. *Cancer Epidemiol Biomarkers Prev*. 2008 Jul;17(7):1623-30.

Thompson FE, McNeel TS, Dowling EC, Midthune D, Morrissette M, Zeruto CA. Interrelationships of added sugars intake, socioeconomic status, and race/ethnicity in adults in the United States: National Health Interview Survey, 2005. *J Am Diet Assoc*. 2009 Aug;109(8):1376-83.

Waters EA, Cronin KA, Graubard BI, Han PK, Freedman AN. Prevalence of tamoxifen use for breast cancer chemoprevention among U.S. women. *Cancer Epidemiol Biomarkers Prev*. 2010 Feb;19(2):443-6.

Weaver KE, Rowland JH, Bellizzi KM, Aziz NM. Forgoing medical care because of cost: assessing disparities in healthcare access among cancer survivors living in the United States. *Cancer*. 2010 Jul 15;116(14):3493-504.

Additional Information

NHIS CCS

<http://appliedresearch.cancer.gov/surveys/nhis>

2010 NHIS Dietary Screener

<http://appliedresearch.cancer.gov/surveys/nhis/2010-screener>

NCHS/NHIS Website

NHIS data and questionnaires can be found at: <http://www.cdc.gov/nchs/nhis.htm>

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