

## **Appendix A: History of HINTS 1 through 4 (2001-2014)**

The development and communication of public messages about cancer prevention, detection, diagnosis, treatment, and survivorship require comprehensive understanding of individuals' access to cancer related information; perceived trust in information sources; cancer- and health-related knowledge; and factors that facilitate or hinder communication. In response to the critical mission of informing dissemination and communication of cancer information to the public and to support related programmatic efforts, NCI funded the first HINTS in June 2001 (OMB #0925-0507, Exp. Date: 8/31/03). The purpose of funding a national probability survey to assess health communication processes is to provide communication researchers with population estimates of the prevalence of cancer-relevant knowledge, attitudes, and information-seeking behaviors in the U.S. adult population (18+). Through each administration of HINTS, survey content is aligned with emerging theories of media usage (Viswanath and Finnegan, 1996), risk information processing (Fischhoff, Bostrom, and Quadrel, 1993; Croyle and Lerman, 1999), behavior change (Weinstein, 1993), health communication (Glanz, Lewis, and Rimer, 1997), and the diffusion of innovations (Rogers, 1995), to expand the scientific knowledge base in health communication and support evidence-based planning of population-level interventions.

The first round of HINTS (HINTS 1), administered in 2002 and 2003, used a probability-based sample, drawing on random digit dialing (RDD) telephone numbers as the sample frame of highest penetration at that time. Data were collected from 6,369 respondents. HINTS 1 yielded a response rate of 33 percent, which was lower than anticipated but consistent with declining response rates for RDD studies in the field of survey research overall (Singer, Van Hoewyck, & Maher, 2000).

In an effort to address diminishing response rates, the second cycle of HINTS (OMB #0925-0538, Exp. 11/30/2007), conducted in 2005, included embedded methodological experiments to compare data collected by telephone with data collected through the Internet. In addition, this field study explored the impact of varying levels of incentives on response rates. Even though data were collected from 5,586 respondents, the overall response rate for HINTS 2 was low at 24 percent. Although decreasing telephone response rates have been experienced across the survey industry (Dillman, 2000; Curtin, et al., 2005), it had been expected that providing respondents with an Internet alternative, a monetary incentive for nonresponders, and making nonresponse conversion a priority would reduce the impact of declining response rates. However, this did not prove to be the case.

HINTS 3 (OMB #0925-0538, Exp. 11/30/2008), conducted in 2008, included the additional priority of exploring strategies to increase response. The mixed-mode data collection design employed dual sampling frames, both RDD and Addressed Based Sampling (ABS) frames, and provided a nationally representative sample in each. An RDD telephone survey and a mail questionnaire were implemented as the two modes including telephone follow up of a subsample of the nonrespondents. RDD respondents received the full questionnaire administered via computer-assisted telephone interview (CATI). Data were collected from 4,092 respondents via CATI and 3,582 respondents via mail for a total of 7,674 respondents. HINTS 3 results showed

that the CATI interview had an overall response rate of 24 percent while the mailed survey had an overall response rate of 31 percent.

Based on the higher response rates for the mail survey (over the RDD survey) described above, HINTS 4 (OMB #0925-0538, Exp. 10/31/2014) employed a single-mode mail survey with the inclusion of the \$2 incentive. To more quickly address emerging issues in the field of health communication while still maintaining the ongoing measurement of trends, HINTS 4 included 4 data collection cycles (fielding 2011-2014). The instrument for each data collection cycle included a core module of trended items in addition to special topic modules implemented in only some of the cycles, increasing capacity of the HINTS instruments to include additional topics and measures. As with previous rounds, HINTS 4 included embedded methodological experiments designed to maximize response rates, reduce bias, and obtain the highest quality data. Experiments included variations in the respondent selection process, the formatting and structure of questionnaire items administered by mail, and specific activities targeting Spanish-speaking populations. The last cycle for HINTS 4 (i.e., Cycle 4) will be fielded through October 31, 2014.

The history of the HINTS 4 data collection cycles is illustrated below.

Table A1-1 HINTS Data Collection Cycles History

	<b>Data Collection Conducted From</b>	<b>Number of Respondents</b>	<b>Response Rate</b>
HINTS 1	2002 and 2003	6,369	33%
HINTS 2	2005	5,586	24%
HINTS 3	2008	7,674	28%
HINTS 4 - Cycle 1	October 25, 2011 - February 21, 2012	3,565	37%
HINTS 4 - Cycle 2	October 9, 2012 - January 22, 2013	3,630	40%
HINTS 4 - Cycle 3	September 5 - December 3, 2013	3,185	35%
HINTS 4 - Cycle 4	August 19 - October 31, 2014	3,500 (est)	TBD