

OVERVIEW

The California Health Interview Survey (CHIS) is a biennial population-based, omnibus health survey of California. It is the largest telephone survey in California and the largest state health survey in the country. CHIS 2005 is the third data collection cycle following CHIS 2001 and CHIS 2003. One randomly selected adult is interviewed in each of the expected 44,500 participating households throughout California. In addition to adults, interviews are conducted about the health of children (ages 0 to 11 by proxy with the most knowledgeable adult about the health of the selected child) and adolescents (age 12 to 17 conducted with the adolescent following parental permission). CHIS 2005 expects to complete approximately 4,000 adolescent interviews and information about 9,000 children statewide. Major content areas for the 2005 survey include health-related behaviors, health status and conditions, cancer screening, family history of cancer, diet, physical activity, health insurance coverage, mental health, mental health services, and access to health care. To capture the rich diversity of the California population, interviews are conducted in five languages: English, Spanish, Chinese (Mandarin and Cantonese dialects), Vietnamese, and Korean.

The CHIS 2005 sample is designed to provide population-based estimates for most California counties, all major ethnic groups, and several ethnic subgroups. The sample is designed to meet and optimize two goals:

1. To provide local-level estimates for counties with populations of 60,000 or more for local planning and comparisons among counties;
2. To provide statewide estimates for California's overall population, its major race/ethnic groups, as well as for several Asian ethnic groups.

The sample design is created to allow both easy access to and use of CHIS data by organizations and individuals. The collected information and results will be available to state and local health agencies, community-based organizations, health care providers and organizations, advocacy groups, and policy makers. CHIS 2001 and 2003 results and data are currently available in several ways:

- CHIS web site with an interactive query system (*AskCHIS*) for tailored data estimates
- Public-use data files for researchers and analysts
- Published reports
- Scholarly publications
- The UCLA Center for Health Policy Research Data Access Center with special, more-detailed data files only available in this secure environment

CHIS also provides expert technical assistance for researchers and all users of web-based and public-use data.

The CHIS 2005 Sample in Detail

The CHIS 2005 sample of adults, adolescents and children consists of approximately 44,500 households, mostly selected through a random-digit dial (RDD) telephone survey methodology (a small number of surname list sample is used to supplement the Vietnamese and Korean samples). Only residential households with landline telephones are eligible to participate in the CHIS survey. The sample weights, however, statistically adjust estimates to compensate for households without landline telephones.

Sample Size by County (revised for CHIS 2005)

The CHIS sample design has been revised for 2005 and will provide data for more individual counties than the original design (CHIS 2001 and 2003). California's 58 counties are arranged into 44 strata (see Table 1). Forty-one counties form their own sampling stratum (expanded from 33 in the previous design). The remaining 17 counties are arranged into 3 geographically contiguous, multiple county strata. Two of these multiple county strata are identical to the original design and there is one new stratum consisting of Siskiyou, Lassen, Del Norte, Plumas, Trinity, Modoc, and Sierra counties.

All counties have the opportunity to increase their base sample with supplemental funding. Several counties have exercised this option in CHIS 2005, including Humboldt, Marin, San Diego, and Solano counties. As in CHIS 2003, additional households will be sampled in the Antelope Valley Service Planning Area (SPA) in Los Angeles County to ensure an adequate sample.

Sample Size by Age Category (revised for CHIS 2005)

From each household, data are collected about as many as three persons, one person from each age category. One adult (ages 18 and older) from each household is part of the adult sample. In households with adolescents (ages 12-17), one adolescent is interviewed after parental permission is received. In homes with children under age 12, the adult who is most knowledgeable about the selected child is interviewed. The selected adult respondent must be the parent or legal guardian of children and/or adolescents living in the household in order for children and/or adolescents to be eligible for interview. The approximate target number of interviews for each sample is 44,500 adults, 4,000 adolescents, and approximately 9,000 children by adult proxy.

In an effort to increase the size of the child sample, the CHIS interview protocol has been revised for CHIS 2005. This change was made in collaboration with, and the support of, First 5 California. CHIS is a multi-stage interview with as many as four interviews taking place in each participating household. Following the initial screener (to verify the phone number is a residential, non-business phone number and to select one adult at random among all adult household members), three subsequent interviews may take place: the adult extended interview, the child interview, and the adolescent interview. As noted above, children and adolescents are eligible for interview only if the selected adult is their parent or legal guardian. In previous

cycles of CHIS, child interviews were always attempted after the adult extended interview was completed. To increase the yield of child extended interviews, in CHIS 2005 “child-first” interviews will be permitted. To accommodate child-first interviews, the screening questions to identify and select child and/or adolescent eligible participants may be moved from the adult questionnaire to the screener interview.

Child first interviews will be attempted only under the following conditions:

- The selected adult respondent is a different household member than the informant who completes the screener interview
- The selected adult respondent is not available at the time the screener interview is completed
- The selected adult respondent is the parent or legal guardian of children under age 12 who live in the household
- The screener informant is also the parent or legal guardian of the selected adult respondent’s child under age 12 living in the household and is the adult in the household most knowledgeable about the health and healthcare of the selected child

When all of these conditions are met (and we do not expect such conditions to be rare), a child-first interview will be attempted. That is, the interviewer will attempt to conduct the child extended interview with the screener informant, who is not the selected adult for the adult interview but is also the parent or legal guardian of the selected child. The expected increase in the number of completed child interviews by allowing child-first interviews is significant (as much as 10%). It does, however, create some complexities since the adult extended interview may never be completed in some cases (the source of important information about the household, such as household income and health insurance coverage). As a consequence of the protocol change, a hybrid “child-first” questionnaire will be conducted to collect critical household information that is otherwise included as part of the adult extended interview. It also requires additional post-data collection statistical work to appropriately weight those households with child only data.

In addition to these changes in the protocol, First 5 California has provided additional funding to provide an additional 560 households with children. This oversample of children is conducted with a statewide sample and screened to identify households with children under the age of 12.

Oversampling Asian Ethnic Groups

Two Asian ethnic groups, Vietnamese and Korean, are augmented in CHIS 2005 with additional sample so that each group’s total adult sample size will reach a target of 500. A combination of geographic targeting based on Census tract density characteristics plus a limited number of surname list sample is used to increase the number of Vietnamese and Koreans in the sample.

Because the CHIS 2005 RDD sample will produce a sufficient number of Chinese (approximately 950) and Filipinos (approximately 700), there is no need to oversample these groups.

Table 1. CHIS 2005 RDD Sample Size Targets for Counties

Stratum	DOF 2005		CHIS: HH Ratio	Sample Target		
	Popul	Est. HHs		CHIS 2005 Base	County Oversmpl	Stratum Total
Los Angeles	10,145,640	3,380,597	0.85	9,000		9,000
San Diego	3,063,322	1,086,008	0.77	2,622	1,118	3,740
Orange	3,074,722	997,400	0.77	2,396		2,396
Santa Clara	1,757,330	595,467	0.76	1,415		1,415
San Bernardino	1,942,091	579,022	0.79	1,420		1,420
Riverside	1,871,587	600,881	0.75	1,415		1,415
Alameda	1,538,138	548,596	0.77	1,321		1,321
Sacramento	1,394,554	512,828	0.76	1,209		1,209
Contra Costa	1,034,834	369,947	0.77	884		884
Fresno	882,711	275,870	0.77	663		663
San Francisco	795,292	344,660	0.76	820		820
Ventura	817,288	251,596	0.80	628		628
San Mateo	723,405	258,665	0.77	623		623
Kern	746,589	238,754	0.76	567		567
San Joaquin	659,566	215,119	0.74	500		500
Sonoma	486,114	183,824	0.87	500		500
Stanislaus	508,636	163,488	0.98	500		500
Santa Barbara	419,599	146,450	1.09	500		500
Solano	427,510	143,153	1.12	500	730	1,230
Tulare	408,295	120,542	1.33	500		500
Santa Cruz	262,312	94,930	1.69	500		500
Marin	251,285	105,632	1.52	500	2,500	3,000
San Luis Obispo	262,634	103,799	1.54	500		500
Placer	303,595	115,029	1.39	500		500
Merced	244,720	73,882	2.17	500		500
Butte	217,053	86,116	1.86	500		500
Shasta	181,385	71,161	2.25	500		500
Yolo	194,385	70,129	2.28	500		500
El Dorado	174,067	65,752	2.44	500		500
Imperial	160,520	47,245	3.39	500		500
Napa	134,372	49,662	3.23	500		500
Kings	143,699	44,304	3.62	500		500
Madera	138,788	42,451	3.77	500		500
Monterey	428,905	131,247	1.22	500		500
Humboldt	130,918	54,470	2.94	500	300	800
Nevada	99,649	40,234	3.19	400		400
Mendocino	90,816	35,288	3.63	400		400
Sutter	88,297	29,948	4.28	400		400
Yuba	66,505	23,099	5.55	400		400
Lake	64,386	26,545	4.83	400		400
San Benito	58,452	17,374	7.38	400		400
Tehama-Glenn-Colusa	109,032	39,023	3.28	400		400
Siskiyou-Lassen-Del Norte- Plumas-Trinity-Modoc-Sierra	158,108	64,588	1.98	400		400
Tuolumne-Calaveras-Amador-Inyo Mariposa-Mono-Alpine	193,118	80,071	1.60	400		400
RDD TOTAL	36,854,224	12,524,844		39,083	4,648	43,731

Statewide Oversamples

Korean (500 target RDD+ list)	123
Vietnamese (500 target RDD+ list)	127
First 5 (child)	562

GRAND TOTAL **44,543**