

COMPARABILITY OF DATA: BRFSS 1999

The BRFSS is a cross-sectional surveillance survey currently involving 52 reporting areas. The Virgin Islands and Guam are point-in-time surveys and are not discussed here. It is important to note that any survey will have natural variation over sample sites; therefore some variation between states is to be expected. The complex sample design and the multiple reporting areas complicate the analysis of the BRFSS. Although CDC works with the states to minimize deviations, in 1999 there were some deviations in sampling and weighting protocols, sample size, response rates, and collection or processing procedures. In addition, California's questionnaire had a few minor differences in wording of questions and a more restrictive age range for the HIV/AIDS questions. The following section identifies other known variations for the 1999 data year.

A. 1999 Data Anomalies and Deviations from Sampling Frame and Weighting Protocols

California

California used a sample design in which only phone numbers from hundred blocks with one or more listed household numbers are included in the sampling frame. Such hundred blocks are estimated to contain 97.8% of all household numbers in California. Numbers from this frame are selected with an equal probability of selection.

Hawaii

Hawaii uses a sampling frame obtained from the state's telephone company. The frame purportedly contains all working prefixes in Hawaii. The frame is divided into six strata, corresponding to the major islands of Hawaii. The working prefixes are used to randomly generate telephone numbers with a probability proportional to the number of known household numbers in the hundred block to which a number belongs. Telephone numbers from hundred blocks with no known household numbers have a zero probability of being included in the sample. The percentage of telephone households excluded from the sampling frame is unknown. The numbers generated are subsequently screened by GTE Hawaii, who screens out all but the listed and unlisted household numbers in the sample.

Other areas

In a few states, a portion of sample records intended for use during one month may have been completed in another month. This deviation should only affect analyses based on monthly, rather than annual, data.

B. Other 1999 limitations of the data

Telephone coverage varies by state and also by subpopulation. Telephone coverage averages about 95% for U.S. states as a whole, but ranges from 1.8% non-coverage in Delaware, to 13.3%

in New Mexico. It is estimated 10% of households in Puerto Rico are without telephones.

Dual questionnaires and/or partial year coverage occurred in Illinois and Texas. Illinois used dual questionnaires and collected data on core items involving immunization, cholesterol, hypertension, colorectal screening, injury and alcohol consumption and modules concerning exercise, cigar smoking, fruits and vegetables and weight control for only six months of the interviewing period. Texas collected data for the modules on Arthritis, Asthma, Cardiovascular Disease, Folic Acid, Preventive Counseling Services, Sexual Behavior and Social Context for only part of the year. Data users will need to alter program code so that the usual "missing/dk/refused" codes are not combined with "9's" appearing in records due to noncoverage in the states mentioned here.

Almost all states define a completed interview as one in which information for the respondent is available through at least the demographic section of the questionnaire. However, Arkansas, Idaho, Oregon, Texas and Wyoming require completion of all questions on the core, modules and state-added sections for an interview to be given the disposition of "complete".

California modified the wording of mammography, clinical breast exam, Papanicolaou (PAP) smear questions and chronic alcohol use. These questions may have limited comparability to those of other reporting areas. California also asked the HIV/AIDS section questions to persons 18-45 years of age rather than to those 18-64 years of age as specified. Illinois used a skip pattern within the HIV/AIDS section which affected the HIV testing, results and counseling responses. Washington added an additional response category the Oral Health questions resulting in an opportunity for respondents to answer the dental cleaning question. These respondents would have otherwise not have been asked the question. These questions may have limited comparability to those of other reporting areas.

Almost all states collect data monthly, but a few states missed one or more months of collection in 1999. Hawaii, Maryland, Massachusetts and South Carolina did not collect data in January. New Hampshire did not collect data in January and February.

Income non-response varies substantially by reporting area. Although the median non-response rate on this item is 6.8%, it ranges from 2.8% to 26.8% across states. More than twenty-six percent of the District of Columbia's respondent records were missing income, as were 20% of the records in Oklahoma, New Jersey and Arizona. Compared with other items on the survey, income non-response is relatively high. For example, item non-response for age has a median of less than 0.5%, and a maximum of 1.4%. Other demographic items (not shown in the tables), including education, employment, and marital status have less than 1% item non-response.

