

Supporting Statement B

***Poison Help* Campaign General Population Survey**

OMB Control No. 0915-0343--Reinstatement

B. Collection of Information Employing Statistical Methods

1. Respondent Universe and Sampling Methods

Poisonings can occur from a wide variety of common natural and manufactured substances found in most households. As a result, all households are at risk for unintentional poisonings and are, therefore, potential users of poison center services.

The *Poison Help* General Population Survey is a random-digit-dial (RDD) and cellular telephone survey covering the 50 States and the District of Columbia. Households will be randomly sampled, and a screening interview will be administered to a household respondent 18 years of age or older using the General Population Survey Screener (Appendix C). Respondents will then have the option of completing the survey in either English or Spanish.

The sampling method to be used for the *Poison Help* General Population Survey is a dual-frame sample design that combines cell phone sample with list-assisted methods and has been used widely for similar data collections in recent years. This dual frame methodology will be used because the proportion of Americans who rely solely or mostly on cell phones for their telephone service has increased significantly in recent years. Sampling drawn from both landline and cell phone numbers helps to ensure that the data collection represents all adults who have access to either or both cell phones or landlines.

In a list-assisted sample, a simple random sample of telephone numbers is selected from all telephone numbers that are in 100-banks (the set of numbers with the same first 8 digits) in which there is at least one residential telephone number listed in the White Pages directory. This is called the listed stratum. Telephone numbers in the listed stratum include both listed and unlisted numbers and both residential and non-residential numbers.

The cell phone sample is drawn through systematic sampling from dedicated cell phone banks of 100 contiguous numbers and shared service banks with no directory-listed landline numbers (to ensure that the cell phone sample does not include banks that are also included in the landline sample). The sample frame is designed to be representative both geographically and by large and small wireless carriers.

Both the landline and cell samples will be released for interviewing in replicates, which are small random samples of the larger sample to maximize response rate (expected to net at least 38 percent). Using replicates to control the release of telephone numbers ensures that the complete call procedures are followed for the entire sample (which leads to higher response rates). The use of replicates will also ensure that the regional distribution of numbers called is appropriate.

The number of telephone numbers to be sampled has been determined by incorporating information on estimated residency rates, precision requirements, and response rates. For the landline sample, it is anticipated that approximately 35 percent of telephone numbers sampled within the listed stratum are expected to be residential and the balance are expected to be non-working or business telephone numbers. For the cell phone sampling, it is expected that 53 percent of the telephone numbers are expected to be working personal cell phone numbers and the balance will be non-assigned, working numbers. We expect to obtain a 5 percent response rate to the landline sample and 10 percent to the cell phone sample. Based on the sampling parameters described, 26,000 landline households are needed to complete 1,856 screening interviews and 7,500 cell phone respondents are needed to screen 744 interviews. We expect to conduct interviews in 77 percent of households who meet the screening eligibility requirements and that 2,000 *Poison Help* General Population Survey interviews will be completed.

Table B-1. Planned sample size for the *Poison Help* General Population Survey

Category	Target population
Number of households in U.S.....	116,926,305 ¹
Sample of landline telephone numbers.....	100,000
Residential landline telephone numbers in sample.....	35,000
Landline screened households.....	1,856
Sample of cell phone telephone numbers.....	14,151
Active personal cell phone respondents in sample.....	7,500
Cell phone screened households.....	744
Total households screened	2,600
Completed interviews.....	2,000

¹U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

2. Procedures for the Collection of Information

B.2.1 Statistical Methodology for Sample Selection

The sampling frame for the *Poison Help* General Population Survey will be comprised from the frame of all telephone numbers in 100-banks with one or more listed telephone

numbers for the first quarter of 2017 and all wireless banks currently in use by major and minor cell phone carriers.

Before telephone calling begins, interviewers will receive comprehensive training on household selection procedures and the survey instrument. When interviewers reach someone on a landline phone, they will ask to speak to the youngest male 18 years of age or older. If there is no eligible male, interviewers will then ask to speak to the youngest female 18 years of age or older. This method is used to improve participation of men and younger age groups who are often more difficult to interview because they are less likely to be home and/or answer the telephone. For the cell phone sampling, it is assumed that the cell phone is a personal device, so no effort is made to give other household members a chance to be interviewed. Instead, interviewers ask if the person who answers the cell phone is 18 years of age or older to determine if they are eligible to complete the survey.

B.2.2 Estimation Procedure

The estimation procedure will start with creation of base weights for the household, which is the inverse of the probability of selection of the telephone number. An adjustment will be made for oversampling prefixes with high minority concentrations. A non-response adjustment will also be made. The final stage of weighting will be a post-stratification or raking adjustment of the weights to Census Bureau estimates of household totals by household demographic characteristics. National household-level estimates may be produced using these final, raked household weights.

B.2.3 Degree of Accuracy

The estimates produced by the *Poison Help* General Population Survey will provide valuable information for assessing areas in which the campaign might be improved and allow for comparison with future evaluation activities. The estimates are not intended for publication, nor will they be used to make programmatic budgetary decisions.

A key estimate for the *Poison Help* General Population Survey will be whether households are aware of the national, toll-free telephone number to obtain poison exposure or prevention information or if they cite a local number instead. For example, suppose that 10 percent of the households were aware of the national toll-free number and 5 percent were aware only of a local number to reach their poison center. The 90 percent confidence level for the difference of 5 percent between the two estimates is 3.7 percent to 6.3 percent. Thus, the sample sizes of 2,000 for the *Poison Help* General Population Survey yield the required degree of accuracy for comparing these estimates.

B.2.4 Specialized Sampling Procedures

No specialized sampling procedures are required to conduct the *Poison Help* General Population Survey.

B.2.5 Periodic Data Collection Cycles

HRSA plans to conduct the *Poison Help* General Population Survey approximately every 5 years. It was conducted in 2006, 2011, and will now be conducted in 2017.

3. Methods to Maximize Response Rates and Deal with Nonresponse

Efforts to ensure a high response rate involve several strategies. These include methods of contacting and screening households and obtaining cooperation from potential respondents.

Close attention will be paid to fundamentals, such as staff recruitment, specific training techniques, the development of outreach materials and strategies, daily monitoring of interviewers, and the use of established respondent cooperation techniques.

Interviewers with previous records of high productivity on research studies will be selected where possible. Interviewers who are highly motivated, personable, with a positive “can-do” attitude will also be selected. Interviewers are trained to ask interview questions in a natural manner. Because effective contact of respondents is based on careful attention to screening, interviewers also are trained on contact protocols, including spreading calls across different days of the week and different times of the day to increase the likelihood of reaching the appropriate person.

Among other strategies, cooperation is encouraged through steps including establishing a toll-free telephone number for respondent questions. Interviewers are instructed to introduce the study and, if they meet with questions or objections, to implement refusal avoidance methods and answers. One strategy, for instance, is to provide interviewers with a Frequently Asked Questions (FAQs) sheet (Appendix F). Up to seven attempts will be made to contact a potential respondent (including reaching a busy line or answering machine and no-answer calls).

4. Tests of Procedures or Methods to be Undertaken

No pre-testing will be conducted, given the instrument has been successfully implemented twice previously. However, we will start with a soft launch with monitoring to ensure quality and respondent comprehension. Nearly all of the content in this instrument has been fully fielded before, and by the same means and processes described here.

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

Statistical experts have not been employed to review the 2017 Poison Help General Population Survey design.

KRC Research will be responsible for all design and direction. Braun Research, Inc., acting as a subcontractor to KRC Research, will be responsible for conducting the *Poison Help* General Population Survey including sample and sample design; survey programming; data collection (e.g., recruiting and interviewing in English or Spanish); translation; back-translation of open-ends; coding; and data processing (including the implementation of statistical weighting procedures and tabulations). KRC Research will

be responsible for day-to-day supervision and review, program testing, call monitoring, and oversight of fieldwork and data processing overall.

Persons from KRC Research directing the project and analyzing the data will include Senior Vice President Mark David Richards (telephone: 202-230-8767), Vice President Karin Cantrell (telephone: 202-585-2910), and Senior Analyst Mike Ruddell (telephone: 202-585-2946).

HRSA will provide direction to the contractor. The individual at HRSA who will be responsible for receiving and approving contract deliverables from KRC Research is Ms. Jackie Kennedy CDR, USPHS, RN, BSN, MHSA, Poison Control Program, Division of Poison Control and Healthcare Facilities, Health Resources and Services Administration (telephone 301-443-2173).

REFERENCES

Mohadger, L., and West, J. (1992). *Effectiveness of Oversampling Blacks and Hispanics in the NHES Field Test*. NCES Publication No. 92-104. Washington DC: U.S. Department of Education, National Center for Education Statistics.

Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January–June 2016

<https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201612.pdf>