Behavioral Risk Factor Surveillance System

2013 Landline Telephone Survey
Multiple-Version Questionnaire
Use of Data

(08/15/2014)

Background

In its 2013 landline telephone survey, the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire included 22 optional modules available for states to use as standardized questions. The limited time available for communicating with a respondent over the telephone, however, did not allow a state to use all of the optional modules. Please note the landline telephone survey data by itself should be analyzed with caution as there is potential for bias introduced to the sample due to the growing number of households only able to be reached by a cellular telephone.

In an effort to help states make the most of the time available with a respondent, CDC provided limited support for the landline survey data collection of multiple-version (up to three) questionnaires in 2013, and this document provides details about the use of data collected under these circumstances.

BRFSS conducted the multiple-version questionnaire plan for a statewide-representative subset of the state's sample. The subset of telephone numbers for data collection still followed the state sample design, and administrators used it as a state's BRFSS sample, but the optional modules and state-added questions may have been different from each other. In order for the multiple-version questionnaire data to have been available for use as a separate data set, users had to follow these three requirements:

a. Interviewers must have asked the questions in the core questionnaire without making any changes, throughout all questionnaire versions;
b. States may have included the optional modules on all versions or just on a single version, but they must have asked the questions during all 12 months of data collection; and
c. A questionnaire version must have had an effective sample size of at least 2,500 complete interviews in order for BRFSS to include the appropriate weighting variables with the data set.

Examples

How a State May Choose to Use Single- or Multiple-Version Questionnaires (10,000 complete interviews from landline telephone surveys, using nine optional modules)

Single-version questionnaire

A state may choose to collect data for the same nine optional modules across all 10,000 interviews.

Split the modules across subsets of the sample

If a state chooses to split the modules across subsets of the 10,000 interviews, the number of questions presented to each respondent can be reduced, while theoretically maintaining a representative sample for the

state—provided that the state takes into account the requirements for collecting multiple-version questionnaires. The state may choose up to three versions and must maintain an effective sample size of 2,500 for each version. There are different ways to conduct the survey with this strategy:

The state could pick modules a, b, and c and deliver them to all sample subsets as "common" modules; or

The state could have two versions of the survey: **version 1** could use modules d, e, and f; **version 2** could use modules g, h, and I. In this example if the sample were split evenly, there would be approximately 5,000 interviews for each of the multiple-version questionnaires.

Appropriate Variables and Weights

BRFSS uses the questionnaire version variable (QSTVER) to distinguish between the multiple-version questionnaire data. The landline telephone data have a value ranging from 10 to 13. A state with a QSTVER equal to 10 collected only one version of the BRFSS landline telephone survey in 2013. The analysis of the landline telephone optional module data for this state should use the LAND2013 data set with the corresponding landline telephone final weights (_LANDWT, _CLANDWT, _HHOLDWT) as described in the document 2013 Landline Telephone Survey Questionnaire Use of Data .rtf.

A state with QSTVER equal to 11 collected two or more versions of the landline telephone survey. The analysis of the landline telephone optional module for this state requires more attention to which states use the weighting variable to generate estimates. The data for a state collecting a landline telephone version 1 questionnaire (QSTVER = 11) is located in LAND12V1. This data set contains the data records with QSTVER = 11; BRFSS has weighted it to the state population totals with a subset of the whole BRFSS sample for the state. The analysis of the landline telephone optional module data for version 1 for this state should use the LAND12V1 data set with the corresponding landline telephone final weights (_LNDWTV1, _CLDWTV1). From the example above with a state collecting 10,000 interviews and assigning optional modules d, e, f to version 1, generating estimates for the optional modules d, e, f would use the weight variable _LNDWTV1. This weight would be applicable only to records from the state with QSTVER = 11.

A state with QSTVER equal to 12 collected two or more versions of the landline telephone survey. The data for a state collecting a landline telephone version 2 questionnaire (QSTVER = 12) is located in LAND12V2. This data set contains the data records with QSTVER = 12; BRFSS weighted it to the state population totals with a subset of the whole BRFSS sample for the state. The analysis of the landline optional module data for version 2 for this state should use the LAND12V2 data set with the corresponding landline final weights (_LNDWTV2, _CLDWTV2). From the example above with a state collecting 10,000 interviews and assigning optional modules g, h, i to version 2, generating estimates for the optional modules g, h, i would use the weight variable _LNDWTV2. This weight would be applicable only to records from the state with QSTVER = 12.

A state with QSTVER equal to 13 collected three versions of the landline telephone survey. The data for a state collecting a landline version 3 questionnaire (QSTVER = 13) is located in LAND12V3. This data set contains the data records with QSTVER = 13; BRFSS weighted it to the state population totals with a subset of the whole BRFSS sample for the state. The analysis of the landline optional module data for version 3 for this state should

use the LAND12V3 data set with the corresponding landline telephone final weights (_LNDWTV3, _CLDWTV3).

The data sets LAND12V1, LAND12V2, and LAND12V3 contain the data from the states that conducted multiple-version questionnaires and used optional modules in 2013. The list below shows the optional modules included in the data sets by state. There are four subheadings to identify how a module was used by the state. "Common" indicates the module was used on all versions; "Survey 1" indicates modules used only on version 1; "Survey 2" indicates modules used only on version 2; "Survey 3" indicates modules used only on version 3. The absence of a survey number indicates there were no optional modules exclusive to the missing number version of the survey.

2013 Multi Questionnaire states and modules:

Modules By State	
California	**Common:** Health Care Access, Random Child Selection, Childhood Asthma Prevalence **Survey 1:** Colorectal Cancer Screening, Social Context, Influenza, Sugar Drinks, Industry and Occupation **Survey 2:** Social Context, Arthritis Management, Sugar Drinks, Industry and Occupation **Survey 3:** Influenza
Colorado	**Survey 1:** **Survey 2:** Health Care Access, Mental Illness & Stigma
Indiana	**Common:** Diabetes, Health Care Access, Random Child Selection, Childhood Asthma Prevalence, Pre-Diabetes **Survey 1:** Sugar Drinks, Sodium or Salt-Related Behavior
Iowa	**Common:** Diabetes, Health Care Access, Influenza, Cardiovascular Health, Sodium or Salt-Related Behavior **Survey 1:** Pre-Diabetes, Sugar Drinks **Survey 2:** Social Context
Kansas	**Common:** Random Child Selection, Childhood Asthma Prevalence **Survey 1:** Diabetes, Pre-Diabetes, Sugar Drinks, Sodium or Salt-Related Behavior **Survey 2:** Social Context, Arthritis Management, Mental Illness & Stigma, Adult Human Papilloma Virus (HPV)
Maine	**Common:** Pre-Diabetes **Survey 1:** Diabetes, Social Context, Cardiovascular Health, Random Child Selection, Childhood Asthma Prevalence, Sodium or Salt-Related Behavior
Maryland	**Common:** Health Care Access, Random Child Selection, Childhood Asthma Prevalence, Sugar Drinks, Sodium or Salt-Related Behavior, Industry and Occupation
Massachusetts	**Common:** Colorectal Cancer Screening, Diabetes, Health Care Access, Prostate Cancer Screening, Influenza, Pre-Diabetes, Adult Human Papilloma Virus (HPV), Prostate Cancer Screening Decision Making Module, Industry and Occupation **Survey 1:** Cardiovascular Health, Random Child Selection, Childhood Asthma Prevalence, Sodium or Salt-Related Behavior **Survey 2:** Mental Illness & Stigma
Michigan	**Common:** Colorectal Cancer Screening, Health Care Access, Random Child Selection, Childhood Asthma Prevalence, Industry and Occupation **Survey 1:** Diabetes **Survey 2:** Arthritis Management **Survey 3:** Arthritis Management

Modules By State	
Montana	**Common:** Diabetes, Health Care Access, Random Child Selection, Childhood Asthma Prevalence, Industry and Occupation **Survey 1:** Pre-Diabetes, Sodium or Salt-Related Behavior **Survey 2:** Arthritis Management
Nebraska	**Common:** Colorectal Cancer Screening, Health Care Access, Random Child Selection, Childhood Asthma Prevalence **Survey 1:** Social Context, Cardiovascular Health, Sugar Drinks, Sodium or Salt-Related Behavior **Survey 2:** Diabetes, Pre-Diabetes, Industry and Occupation
New Jersey	**Common:** Diabetes, Health Care Access, Random Child Selection, Childhood Asthma Prevalence **Survey 1:** Social Context, Industry and Occupation **Survey 2:** Sodium or Salt-Related Behavior **Survey 3:** Colorectal Cancer Screening, Prostate Cancer Screening, Mental Illness & Stigma, Adult Human Papilloma Virus (HPV), Sugar Drinks, Breast Cancer and Cervical Cancer Screening
New York	**Common:** Health Care Access **Survey 1:** Random Child Selection, Childhood Asthma Prevalence, Mental Illness & Stigma **Survey 2:** Colorectal Cancer Screening, Arthritis Management, Sugar Drinks, Industry and Occupation
North Carolina	**Common:** Diabetes, Health Care Access, Pre-Diabetes **Survey 1:** Cardiovascular Health, Sodium or Salt-Related Behavior **Survey 2:** Mental Illness & Stigma, Sugar Drinks
Ohio	**Common:** Health Care Access **Survey 1:** Diabetes, Random Child Selection, Childhood Asthma Prevalence, Mental Illness & Stigma, Pre-Diabetes, Sugar Drinks, Sodium or Salt-Related Behavior
Oklahoma	**Common:** Random Child Selection, Childhood Asthma Prevalence **Survey 1:** Colorectal Cancer Screening, Diabetes, Cardiovascular Health, Pre-Diabetes, Sodium or Salt-Related Behavior, Breast Cancer and Cervical Cancer Screening **Survey 2:** Health Care Access, Sugar Drinks
Oregon	**Common:** Diabetes, Health Care Access, Cardiovascular Health, Random Child Selection, Childhood Asthma Prevalence, Industry and Occupation **Survey 1:** Breast Cancer and Cervical Cancer Screening **Survey 2:** Arthritis Management, Pre-Diabetes
Texas	**Common:** Random Child Selection, Childhood Asthma Prevalence **Survey 1:** Diabetes, Pre-Diabetes
Utah	**Common:** Health Care Access, Arthritis Management, Random Child Selection, Childhood Asthma Prevalence, Sugar Drinks, Industry and Occupation **Survey 2:** Pre-Diabetes, Sodium or Salt-Related Behavior **Survey 3:** Sodium or Salt-Related Behavior

States By Module	
Module	
Adult Human Papilloma Virus (HPV)	**Common:** Massachusetts **Survey 2:** Kansas **Survey 3:** New Jersey
Arthritis Management	**Common:** Utah **Survey 2:** California, Kansas, Michigan, Montana, New York, Oregon **Survey 3:** Michigan
Breast Cancer and Cervical Cancer Screening	**Survey 1:** Oklahoma, Oregon **Survey 3:** New Jersey
Cardiovascular Health	**Common:** Iowa, Oregon **Survey 1:** Maine, Massachusetts, Nebraska, North Carolina, Oklahoma
Childhood Asthma Prevalence	**Common:** California, Indiana, Kansas, Maryland, Michigan, Montana, Nebraska, New Jersey, Oklahoma, Oregon, Texas, Utah **Survey 1:** Maine, Massachusetts, New York, Ohio

States By Module	
Module	
Colorectal Cancer Screening	**Common:** Massachusetts, Michigan, Nebraska **Survey 1:** California, Oklahoma **Survey 2:** New York **Survey 3:** New Jersey
Diabetes	**Common:** Indiana, Iowa, Massachusetts, Montana, New Jersey, North Carolina, Oregon **Survey 1:** Kansas, Maine, Michigan, Ohio, Oklahoma, Texas **Survey 2:** Nebraska
Health Care Access	**Common:** California, Indiana, Iowa, Maryland, Massachusetts, Michigan, Montana, Nebraska, New Jersey, New York, North Carolina, Ohio, Oregon, Utah **Survey 2:** Colorado, Oklahoma
Industry and Occupation	**Common:** Maryland, Massachusetts, Michigan, Montana, Oregon, Utah **Survey 1:** California, New Jersey **Survey 2:** California, Nebraska, New York
Influenza	**Common:** Iowa, Massachusetts **Survey 1:** California **Survey 3:** California
Mental Illness & Stigma	**Survey 1:** New York, Ohio **Survey 2:** Colorado, Kansas, Massachusetts, North Carolina **Survey 3:** New Jersey
Pre-Diabetes	**Common:** Indiana, Maine, Massachusetts, North Carolina **Survey 1:** Iowa, Kansas, Montana, Ohio, Oklahoma, Texas **Survey 2:** Nebraska, Oregon, Utah
Prostate Cancer Screening	**Common:** Massachusetts **Survey 3:** New Jersey
Prostate Cancer Screening Decision Making Module	**Common:** Massachusetts
Random Child Selection	**Common:** California, Indiana, Kansas, Maryland, Michigan, Montana, Nebraska, New Jersey, Oklahoma, Oregon, Texas, Utah **Survey 1:** Maine, Massachusetts, New York, Ohio
Social Context	**Survey 1:** California, Maine, Nebraska, New Jersey **Survey 2:** California, Iowa, Kansas
Sodium or Salt-Related Behavior	**Common:** Iowa, Maryland **Survey 1:** Indiana, Kansas, Maine, Massachusetts, Montana, Nebraska, North Carolina, Ohio, Oklahoma **Survey 2:** New Jersey, Utah **Survey 3:** Utah
Sugar Drinks	**Common:** Maryland, Utah **Survey 1:** California, Indiana, Iowa, Kansas, Nebraska, Ohio **Survey 2:** California, New York, North Carolina, Oklahoma **Survey 3:** New Jersey