Behavioral Risk Factor

Surveillance System

Use of 2008 Multiple Version Questionnaire Data

(Version #1 - Revised: 04/30/2009)

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Use of 2008 Multiple Questionnaire Data

The Behavioral Surveillance Branch will provide limited support for the landline survey data collection of multiple (three) questionnaire versions within the guidelines outlined below in 2009. The 2009 core instrument must be asked without any changes in all versions of the questionnaire. The optional modules can be included on all versions or exclusively on a single version, but must be asked during all twelve months of data collection. BSB will provide an additional weighting variable for use with data collected from questions asked on one version of the questionnaire.

The guidelines below were provided by BSB to assist states in making decisions regarding the implementation of a multiple questionnaires in 2008. Since two states conducted three versions in 2008 the guidelines are included with the 2008 documentation.

To reduce confusion about which weight to use with which variable, three additional data sets are available for 2008. These data sets contain the data from the states which conducted multiple version questionnaires and used optional modules in 2008. The list below shows the optional modules included in the data sets by state. There are four sub-headings 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.

2008 Multi Questionnaire states and modules:

State	Module List
California	**Common:** Childhood Asthma Prevalence, Random Child Selection **Survey 1:** Diabetes, Pre-Diabetes **Survey 2:** Binge Drinking
Colorado	**Survey 1:** Adult Asthma History, Influenza - High Risk/Health Care Worker **Survey 2:** Anxiety and Depression, Diabetes, Pre-Diabetes, Visual Impairment and Access to Eye Care
Kansas	**Common:** Childhood Asthma Prevalence, Random Child Selection **Survey 1:** Diabetes, Pre-Diabetes, Visual Impairment and Access to Eye Care **Survey 2:** Anxiety and Depression, Other Tobacco Products, Secondhand Smoke I, Veterans Health Status
Maine	**Common:** Childhood Asthma Prevalence, Diabetes, Pre-Diabetes, Random Child Selection **Survey 1:** Anxiety and Depression, Binge Drinking
Massachusetts	**Common:** Pre-Diabetes **Survey 1:** Childhood Asthma Prevalence, Diabetes, Random Child Selection **Survey 2:** Anxiety and Depression
Michigan	**Common:** Childhood Asthma Prevalence, Diabetes, Random Child Selection **Survey 1:** Binge Drinking
Nebraska	**Common:** Childhood Asthma Prevalence, Other Tobacco Products, Random Child Selection, Reactions to Race **Survey 1:** Anxiety and Depression, Binge Drinking **Survey 2:** Diabetes, Pre-Diabetes **Survey 3:** General Preparedness
New Jersey	**Common:** Childhood Asthma Prevalence, Random Child Selection **Survey 1:** Diabetes

	Survey 2: Other Tobacco Products, Secondhand Smoke I

New York	**Common:** Child HPV (Human Papilloma Virus), Childhood Asthma Prevalence, Random Child Selection **Survey 1:** Anxiety and Depression, Diabetes, Pre-Diabetes, Visual Impairment and Access to Eye Care **Survey 2:** General Preparedness, Influenza - High Risk/Health Care Worker
Ohio	**Common:** Childhood Asthma Prevalence, Random Child Selection **Survey 1:** Anxiety and Depression, Child HPV (Human Papilloma Virus), Diabetes, Pre-Diabetes, Visual Impairment and Access to Eye Care
Pennsylvania	**Common:** Child HPV (Human Papilloma Virus), Childhood Asthma Prevalence, Diabetes, Pre-Diabetes, Random Child Selection **Survey 1:** Adult HPV (Human Papilloma Virus) **Survey 2:** General Preparedness
Washington	**Common:** Diabetes **Survey 1:** Anxiety and Depression
Wisconsin	**Common:** Binge Drinking, Diabetes, Other Tobacco Products, Pre-Diabetes **Survey 1:** Childhood Asthma Prevalence, Random Child Selection

The analysis of the multiple questionnaire data requires some careful consideration of which records to use with the appropriate weight. For the core questions and optional modules asked on the “Common” questionnaire the _FINALWT variable should be used to produce estimates. For optional modules used only on “Survey 1” the _FINALQ1 variable should be used to produce estimates for records with variable QSTVER = 1. For optional modules used only on “Survey 2” the _FINALQ2 variable should be used to produce estimates for records with variable QSTVER = 2. For optional modules used only on “Survey 3” the _FINALQ3 variable should be used to produce estimates for records with variable QSTVER = 3.

Minimum sample size:

The ASA Working Group has recommended that states using multiple versions of the questionnaire have an effective sample size of at least 2,500 for producing a statewide estimate for each version of the questionnaire. This implies a total sample greater than or equal to 2,500 multiplied by the number of questionnaire versions used in 2008. For example, to conduct three versions in 2008 would require a minimum sample size of at least 7,500 resulting in an effective sample size of 2500 for each version.

Number of regions for weighting the data (_REGION):

Be aware that geographically stratifying for weighting the data by more than one _REGION will reduce the weighting categories such that more collapsing across the weighting cells will be required. The implication of more collapsing is the weights provided for one version may not be as well distributed across the post-stratification cells if the number of completes available in a region is too small.

Use of Optional Modules:

BSB requests an accurate list of modules to be used on each version or both. This list will determine the modules expected by the editing programs and reports. If any module questions are altered, deleted, or not asked of each eligible respondent the entire year, the revised module must be treated as state-added questions and should not be included in the list of optional modules. Regardless of asking optional modules on one or both versions of questionnaire, module data will be stored in the same locations. Modules should be asked throughout all twelve months of the survey.

Sample:

Data exported from CATI will need to have a field called QSTVER to identify the questionnaire version. This can be created by CATI programming or in the sample file prior to importing into CATI. The field is set in column 180 (PATH) in the sample file from Genesys. The default value is '0' to indicate only one questionnaire version. To assign sample to a specific version this field can be modified when loading the sample.

The first approach requires some preparation before loading the sample, but simplifies the data collection. Before importing the sample, replicates can be randomly assigned to each of the questionnaires. The questionnaire value (1 for Questionnaire 1, and 2 for questionnaire 2, 3 for 3) can added to the end of the sample file using SAS, SPSS or another software that has randomization functions. A user-defined field called QSTVER is created to read questionnaire versions. The import layout of the sample file will need to include the user defined QSTVER field. The CATI uses the information from this field to determine which questionnaire to present. This method would also allow calculation of response rates for each questionnaire version. This approach requires a whole number multiple, of the number of questionnaire versions, of replicates for each geographic stratum.

The second approach is to use the CATI programming to control the assignment of the questionnaire. This allows different versions of the questionnaire to be assigned within the same replicate. The QSTVER can also be assigned within the CATI programming. For the first version set the QSTVER to a "1", the second version should have QSTVER set to "2", and so on. If the CATI programming approach is used, you may want to consider using quotas each month to limit the number of completes/partial completes for each version of the questionnaire. With this approach, sample management may be an issue particularly if the sample is geographically stratified. Calculation of a Response Rate for each version is not possible.

Weights:

BSB will produce an individual weight for each version of the questionnaire. The _FINALWT should be used with the core questions and any modules asked on all versions. The version 1 weight (_FINALQ1) should be used with analysis of variables specific to questionnaire version 1. Additional weights will be produced for corresponding versions of the questionnaire. These additional weights will be included in the state data file.

A separate aggregate data file for each questionnaire version will be produced to assist with analysis of module data for the public use web site and programs within CDC. The questionnaire version data file will contain the module data associated with the version and the corresponding weight.