2008

Behavioral Risk Factor Surveillance System

Calculated Variables

(Version #4 - Revised: August 31, 2010)

INDRODUCTION:

This document provides information on calculated variables and risk factors for the 2006 Behavioral Risk Factor Survey. These variables are calculated from responses to questions in the survey. There are three types of calculated variables.

The first are those variables used to stratify and weight the data, which are not inclued in this document.

The second are intermediate variables. These are variables are derived from a question response and are used to calculate some other variable or risk factor. For example: WTKG2 is derived from the WEIGHT2 variable in the survey. WTKG2 is then used to calculate the body mass index variable (_BMI4). Most of the intermediate variables end with an underscore (Example: FTJUDAY_), but not all of them do.

The third type of calculated variables, are those used to categorize or classify respondents. Most of these begin with an underscore. (Example: _BMI4.) Exceptions are: _DENSTR2, _GEOSTR, and _STATE, which are determined before the interview. Some of the calculated variables group continuous variables such as weight, age, or body mass index, into categories. Other calculated variables regroup non-continuous variables to simplify analyses. The common focus of these variables is on health behaviors that are associated with a "risk" for illness or injury.

The tables in this report include a description of what the responses mean and a copy of the code used to calculate these variables in SAS®. The syntax of the code may or may not work as is in other statistical programs.

NEW CALCULATED VARIABLES FOR 2008

_RFBLDS2 was added in 2008.

Section 1: Health Status

_RFHLTH *Calculated variable for adults with good or better health.* _RFHLTH is derived from GENHLTH.

1	Good or Better Health	Respondents that reported having excellent, very good or good health. (GENHLTH =1, 2, 3)
2	Fair or Poor Health	Respondents that reported having fair or poor health. (GENHLTH =4, 5)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents that reported they didn't know, refused to answer, or had missing responses for the general health status question. (GENHLTH =7, 9, missing)

SAS Code:

```
IF 4 LE GENHLTH LE 5 THEN _RFHLTH=2;
 ELSE IF 1 LE GENHLTH LE 3 THEN _RFHLTH=1;
 ELSE _RFHLTH=9;
```

Section 2: Healthy Days - Health-Related Quality of Life

There are no calculated Variables for Section 2.

Section 3: Health Care Access

_HCVU65 *Calculated variable for respondents aged 18-64 that have any form of health care coverage.* _HCVU65 is derived from AGE and HLTHPLAN.

1	Have health care coverage	Respondents that reported having health care coverage (18 <= AGE <= 64 and HLTHPLAN = 1)
2	Do not have health care coverage	Respondents that reported not having health care coverage (18 <= AGE <= 64 and HLTHPLAN = 2)
9	Don't know/ Not Sure, Refused or Missing	Respondents that reported that reported they didn´t know, were not sure, refused to report or had missing responses for having health care coverage (18 <= AGE <= 64 and HLTHPLAN = 7, 9, or missing or AGE => 65)

SAS Code:

```
IF 18 LE AGE LE 64 THEN DO;
 IF HLTHPLAN=1 THEN _HCVU65=1;
 ELSE IF HLTHPLAN=2 THEN _HCVU65=2;
 ELSE _HCVU65=9;
 END;
 ELSE _HCVU65 = 9;
```

Section 4: Sleep

There are no calculated Variables for Section 4.

Section 5: Exercise

_TOTINDA *Calculated variable for adults that report doing physical activity or exercise during the past 30 days other than their regular job.* _TOTINDA is derived from EXERANY2.

1	Had physical activity or exercise	Respondents that reported doing any physical activity or exercise. (EXERANY2=1)
2	No physical activity or exercise in last 30 days	Respondents that report doing no physical activity or exercise. (EXERANY2=2)
9	Don’t know/ Refused/ Missing	Respondents that reported they didn’t know, refused to answer, and those with missing responses for the physical activity/exercise question. (EXERANY2=7, 9, missing)

SAS Code:

```
IF EXERANY2 IN (1) THEN _TOTINDA=1;
 ELSE IF EXERANY2 IN (2) THEN _TOTINDA=2;
 ELSE IF EXERANY2 IN (.,7,9) THEN _TOTINDA=9;
```

Section 6: Diabetes

There are no calculated Variables for Section 6.

Section 7: Oral Health

_EXTETH2 *Calculated variable for adults aged 18+ that have had permanent teeth extracted.* _EXTETH2 is derived from RMVTETH3.

1	Not at risk	Respondents that reported having had no permanent teeth removed. (RMVTETH3=8)
2	At risk	Respondents that reported having had permanent teeth removed. (RMVTETH3=1 or 2 or 3)
9	Don’t know/ Not Sure Or Refused/ Missing	Respondent that reported they didn´t know, refused to answer, or had missing values for the had any permanent teeth extracted question. (RMVTETH3=7, 9, missing)

SAS Code:

```
IF RMVTETH3 IN (1,2,3) THEN _EXTETH2=2;
ELSE IF RMVTETH3=8 THEN _EXTETH2=1;
ELSE _EXTETH2=9;
```

Section 7: Oral Health

_ALTETH2 *Calculated variable for adults aged 65+ who have had all their natural teeth extracted.* _ALTETH2 is derived from AGE and RMVTETH3.

1	No	Respondents aged 65 or more that reporteded having none or some natural teeth removed. (AGE > 64 and RMVTETH3=1, 2, 8)
2	Yes	Respondents aged 65 or more that reporteded having all natural teeth removed. (AGE > 64 and RMVTETH3=3)
9	Don’t know/ Not Sure Or Refused/ Missing	Respondents who didn’t know, or refused to report their age or didn’t know, or refused to report if they had any natural teeth removed. (AGE=7, 9, missing; or RMVTETH3=7, 9, missing)
.	Missing or Age Less Than 65	Respondents aged 18–64. (18 <= AGE <= 64)

SAS Code:

```
IF AGE >= 65 THEN DO;
IF RMVTETH3 IN (1,2,8) THEN _ALTETH2=1;
ELSE IF RMVTETH3=3 THEN _ALTETH2=2;
ELSE IF RMVTETH3 IN (.,7,9) THEN _ALTETH2=9;
END;
ELSE IF AGE IN (.,7,9) THEN _ALTETH2=9;
ELSE _ALTETH2=.;
```

Section 7: Oral Health

_DENVST1 *Calculated variable for adults that have visited a dentist, dental hygenist or dental clinic within the past year.* _DENVST1 is derived from LASTDEN3 and DENCLEAN.

1	Yes	Respondents that reported having had dental visit or teeth cleaning visit in the past year. (LASTDEN3=1 or DENCLEAN=1)
2	No	Respondents that reported having not had dental visit or teeth cleaning visit in the past year. (LASTDEN3=2, 3, or 4 and DENCLEAN=2, 3, 4, 7, 8, 9, or missing)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents with missing values or who refused or didn't know if they had a dental visit or teeth cleaning visit in the past year. (LASTDEN3=.,7,9 and DENCLEAN=7, 9, or missing)

SAS Code:

```
IF LASTDEN3=8 THEN _DENVST1=2;
ELSE IF LASTDEN3 IN (2,3,4) AND DENCLEAN IN (.,2,3,4,7,8,9) THEN
_DENVST1=2;
ELSE IF LASTDEN3=1 OR DENCLEAN=1 THEN _DENVST1=1;
ELSE IF LASTDEN3 IN (.,7,9) AND DENCLEAN IN (2,3,4,8) THEN
_DENVST1=2;
ELSE _DENVST1=9;
```

Section 8: Cardiovascular Disease Prevalence

There are no calculated Variables for Section 8.

Section 9: Asthma

_LTASTHM *Calculated variable for adults who have ever been told they have asthma.* _LTASTHM is derived from ASTHMA2.

1	No	Respondents that have not been told by a doctor, nurse or health professional that they had asthma. (ASTHMA2=2)
2	Yes	Respondents that have been told by a doctor, nurse or health professional that they had asthma. (ASTHMA2=1)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents that reporteded they did not know if they had been told by a doctor, nurse or health professional that they had asthma, those that refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, or those with missing responses. (ASTHMA2=7, 9, missing)

SAS Code:

```
IF ASTHMA2=1 THEN _LTASTHM=2;
 ELSE IF ASTHMA2=2 THEN _LTASTHM=1;
 ELSE _LTASTHM=9;
```

Section 9: Asthma

_CASTHMA *Calculated variable for adults who have been told they currently have asthma.* _CASTHMA is derived from ASTHMA2 and ASTHNOW.

1	No	Respondents that have not been told by a doctor, nurse or health professional that they had asthma or do not still have asthma. (ASTHMA2=2 or ASTHMA2=1 and ASTHNOW=2)
2	Yes	Respondents that have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma. (ASTHMA2=1 and ASTHNOW=1)
9	Don’t know/ Not Sure Or Refused/ Missing	Respondents that reporteded they did not know if they had been told by a doctor, nurse or health professional that they had asthma, those that refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, those that did not know if they still had asthma, those that refused to answer if they still had asthma, or those with missing responses. (ASTHMA2=7, 9, missing or ASTHNOW=7, 9, missing)

SAS Code:

```
IF ASTHMA2=2 THEN _CASTHMA=1;
 ELSE IF ASTHMA2=1 AND ASTHNOW=1 THEN _CASTHMA=2;
 ELSE IF ASTHMA2=1 AND ASTHNOW=2 THEN _CASTHMA=1;
 ELSE _CASTHMA=9;
```

Section 9: Asthma

_ASTHMST *Calculated variable for computed asthma status.* _ASTHMST is derived from ASTHMA2 and ASTHNOW.

1	Current	Respondents that have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma. (ASTHMA2=1and ASTHNOW=1)
2	Former	Respondents that have been told by a doctor, nurse or health professional that they had asthma but do not still have asthma. (ASTHMA2=1 and ASTHNOW=2)
3	Never	Respondents that have not been told by a doctor, nurse or health professional that they had asthma. (ASTHMA2=2)
9	Don’t know/ Not Sure Or Refused/ Missing	Respondents that reporteded they didn’t know if they had been told by a doctor, nurse or health professional that they had asthma, those that refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, those that didn’t know if they still had asthma, those that refused to answer if they still had asthma, or those with missing responses. (ASTHMA2=7, 9, missing; or ASTHNOW=7, 9, missing)

SAS Code:

```
IF ASTHMA2=1 AND ASTHNOW=1 THEN _ASTHMST=1;
 ELSE IF ASTHMA2=1 AND ASTHNOW=2 THEN _ASTHMST=2;
 ELSE IF ASTHMA2=2 THEN _ASTHMST=3;
 ELSE _ASTHMST=9;
```

Section 10: Disability

There are no calculated Variables for Section 10.

Section 11: Tobacco Use

_SMOKER3 *Calculated variable for four-level smoker status: everyday smoker, someday smoker, former smoker, non-smoker.* _SMOKER3 is derived from SMOKE100 and SMOKDAY2.

1	Current smoker - now smokes every day	Respondents that reported having smoked at least 100 cigarettes in their lifetime and now smoke every day. (SMOKE100=1 and SMOKDAY2=1)
2	Current smoker - now smokes some days	Respondents that reported having smoked at least 100 cigarettes in their lifetime and now smoke some days. (SMOKE100=1 and SMOKDAY2=2)
3	Former smoker	Respondents that reported having smoked at least 100 cigarettes in their lifetime and currently do not smoke. (SMOKE100=1 and SMOKDAY2=3)
4	Never smoked	Respondents that reported they had not smoked at least 100 cigarettes in their lifetime. (SMOKE100=2)
9	Don’t know/ Refused/ Missing	Respondents that reporteded they didn’t know if they had smoked 100 cigarettes in their lifetime, those that refused to answer if they had smoked 100 cigarettes in their lifetime, those that didn’t know if they now smoked every day, some days or not at all, those that refused to answer if they now smoked every day, some days or not at all, or those with missing responses. (SMOKE100=7, 9, missing; or SMOKDAY2=7, 9, missing)

SAS Code:

```
IF SMOKE100=2 THEN _SMOKER3=4;
 ELSE IF SMOKE100=1 THEN DO;
 IF SMOKDAY2=1 THEN _SMOKER3=1;
 ELSE IF SMOKDAY2=2 THEN _SMOKER3=2;
 ELSE IF SMOKDAY2 = 3 THEN _SMOKER3=3;
 ELSE _SMOKER3=9;
 END;
 ELSE _SMOKER3=9;
```

Section 11: Tobacco Use

_RFSMOK3 *Calculated variable for adults who are current smokers.* _RFSMOK3 is derived from _SMOKER3.

1	No	Respondents that reported they had not smoked at least 100 cigarettes in their lifetime, those that reported having smoked 100 cigarettes in their lifetime but do not currently smoke. (_SMOKER3=3, 4)
2	Yes	Respondents that reported having smoked at least 100 cigarettes in their lifetime and currently smoke. (_SMOKER3=1, 2)
9	Don't know/ Refused/ Missing	Respondents that reporteded they did not know if they had smoked 100 cigarettes in their lifetime, those that refused to answer if they had smoked 100 cigarettes in their lifetime, those that didn't know if they now smoked every day, some days or not at all, those that refused to answer if they now smoked every day, some days or not at all, or those with missing responses. (_SMOKER3=9)

SAS Code:

```
IF _SMOKER3 IN (1,2) THEN _RFSMOK3=2;
 ELSE IF _SMOKER3 IN (3,4) THEN _RFSMOK3=1;
 ELSE _RFSMOK3=9;
```

Section 12: Demographics

MRACEORG *Calculated variable for mrace with trailing 7,8,9s removed.* MRACEORG is derived from MRACE in the original order in which the data were received from the state
territory. If MRACE is greater than 9 then any trailing 7, 8, or 9 is removed. If MRACE is less than or equal to 9 then MRACEORG is equal to MRACE.

1 - 65432 1	Race code(s)	Respondents reported race or races in original order (MRACE=1, 2, 3, 4, 5, 6, or MRACE > 10)
7	Don't know/ Not sure	Respondents that reported they didn´t know, or weren´t sure of their race. (MRACE=7)
9	Refused	Respondents that refused to give their race. (MRACE=9)

SAS Code:

```
IF LENGTH(MRACE) > 1 THEN DO;
 MRACEORG = PUT(COMPRESS(MRACE,'789'),6.);
 END;
 ELSE DO;
 MRACEORG=MRACE;
 END;
```

Section 12: Demographics

MRACEASC *Calculated variable for mrace with 7,8,9s removed, in ascending order.* MRACEASC is derived from MRACEORG. The values that make up MRACEORG are sorted from smallest to largest.

1 - 12345 6	Race code(s)	Respondents reported race or races in ascending order (MRACEORG=1, 2, 3, 4, 5, 6, or MRACEORG > 10)
7	Don’t know/ Not sure	Respondents that reported they didn´t know, or weren´t sure of their race. (MRACEORG=7)
9	Refused	Respondents that refused to give their race. (MRACEORG=9)

SAS Code:

```
IF LENGTH(TRIM(LEFT(MRACEORG))) > 1 THEN DO;
 LEN=LENGTH(RIGHT(MRACEORG));
 DO I = 1 TO LEN-1;
 DO J = 1 TO LEN-1 WHILE (SUBSTR(MRACEORG,J+1,1) NE ' ');
IF SUBSTR(MRACEORG,J,1) > SUBSTR(MRACEORG,J+1,1) THEN
SUBSTR(MRACEORG,J,2) = REVERSE(SUBSTR(MRACEORG,J,2));
 END;
 END;
 END;
 MRACEASC = INPUT(MRACEORG,6.);
```

Section 12: Demographics

_PRACE *Calculated variable for preferred race category.* _PRACE is derived from MRACEASC and ORACE2. If MRACEASC has only one response, then _PRACE= MRACEASC. If MRACEASC has more than one response then _PRACE=ORACE2.

1	White	Respondents that reported their race as white. (MRACE=1 or MRACEASC>11 and ORACE2=1)
2	Black or African American	Respondents that reported their race as black. (MRACE=2 or MRACEASC>11 and ORACE2=2)
3	Asian	Respondents that reported their race as Asian. (MRACE=3 or MRACEASC>11 and ORACE2=3)
4	Native Hawaiian or other Pacific Islander	Respondents that reported their race as Native Hawaiian or Pacific Islander . (MRACE=4 or MRACEASC>11 and ORACE2=4)
5	American Indian or Alaskan Native	Respondents that reported their race as American Indian or Alaska Native. (MRACE=5 or MRACEASC>11 and ORACE2=5)
6	Other race	Respondents who report they are of some other race group not listed in the question responses. (MRACE=6 or MRACEASC>11 and ORACE2=6)
7	No preferred race	Respondents that reported they are of more than one race group but did not report a preference or the preferred race is missing (MRACEASC>11 and ORACE2=7 or 9)
8	Multiracial but preferred race not asked	Respondents that reported they are of more than one race group but did not answer the question about which race best represents them NOTE: This is a data collection error. (MRACEASC >11 and ORACE2=8 or MRACEASC >11 and ORACE2= Missing)
77	Don’t know/ Not sure	Respondents that reported they didn´t know their race and did not answer the question about which race best represents them. (MRACEASC=7)
99	Refused	Respondents who refused to give their race and did not answer the question about which race best represents them. (MRACEASC=9)

SAS Code:

```
IF 1 LE MRACEASC LE 6 THEN _PRACE=MRACEASC;
 ELSE IF MRACEASC EQ 7 THEN _PRACE=77;
 ELSE IF MRACEASC EQ 9 THEN _PRACE=99;
 ELSE IF MRACEASC GE 12 AND ORACE2 IN (7,9) THEN _PRACE=7;
 ELSE IF MRACEASC GE 12 AND ORACE2 EQ . THEN _PRACE=8;
ELSE IF MRACEASC GE 12 AND ORACE2 EQ 8 THEN _PRACE=8;
 ELSE IF 1 LE ORACE2 LE 6 THEN _PRACE=ORACE2;
```

Section 12: Demographics

_MRACE *Calculated variable for multiracial race categorization.* _MRACE is derived from MRACEASC. If respondents report more than one race they are assigned to the multiracial category. Otherwise _MRACE=MRACEASC.

1	White only	Respondents that reported they are white. (MRACEASC=1)
2	Black or African American only	Respondents that report they are black. (MRACEASC=2)
3	Asian Only	Respondents that reported they are Asian. (MRACEASC=3)
4	Native Hawaiian or other Pacific Islander only	Respondents that reported they are native Hawaiian or Pacific Islander. (MRACEASC=4)
5	American Indian or Alaskan Native only	Respondents that reported they are American Indian or Alaska Native. (MRACEASC=5)
6	Other race only	Respondents that reported they are of some other race group not listed in the question responses. (MRACEASC=6)
7	Multiracial	Respondents that reported they are of more than one race group but do not specify a preferred race. (MRACEASC>11 and ORACE2=7, 8, 9, or missing)
77	Don’t know/ Not sure	Respondents that reported they did not know their race. (MRACEASC=7)
99	Refused	Respondents that refused to give their race information. (MRACEASC=9)

SAS Code:

```
IF MRACEASC GE 12 THEN _MRACE = 7;
 ELSE IF MRACEASC EQ 9 THEN _MRACE = 99;
 ELSE IF MRACEASC EQ 7 THEN _MRACE = 77;
 ELSE IF 1 LE MRACEASC LE 6 THEN _MRACE = MRACEASC;
```

Section 12: Demographics

RACE2 *Calculated variable for race ethnicity categories.* RACE2 is derived from _MRACE and HISPANC2. All respondents who report they are of Hispanic or Latino origin are coded as Hispanic.

1	White only, non-Hispanic	Respondents that reported they are of some other race group not listed in the question responses and are not of Hispanic origin. (_MRACE=6 and HISPANC2=2)
2	Black only, non-Hispanic	Respondents that reported they are of more than one race group and are not of Hispanic origin. (_MRACE=7 and HISPANC2=2)
3	Asian only, non-Hispanic	Respondents that reported they are of Hispanic origin. (HISPANC2=1)
4	Native Hawaiian or other Pacific Islander only, Non-Hispanic	Respondents that reported they did not know, or refused to give their race and are not of Hispanic origin or did not know, or refused to answer if they are of Hispanic origin. (_MRACE =77, 99 and HISPANC2=2 or HISPANC2=7, 9)

SAS Code:

```
IF HISPANC2 IN (7,9) OR (_MRACE IN(77,99) AND HISPANC2 EQ 2) THEN
DO;
RACE2 = 9 ;
END;
ELSE IF HISPANC2 = 2 THEN DO;
IF _MRACE = 1 THEN RACE2 = 1 ;
ELSE IF _MRACE = 2 THEN RACE2 = 2 ;
ELSE IF _MRACE = 3 THEN RACE2 = 3 ;
ELSE IF _MRACE = 4 THEN RACE2 = 4 ;
ELSE IF _MRACE = 5 THEN RACE2 = 5 ;
ELSE IF _MRACE = 6 THEN RACE2 = 6 ;
ELSE IF _MRACE = 7 THEN RACE2 = 7 ;
END;
ELSE IF HISPANC2 = 1 THEN DO;
RACE2 = 8 ;
END;
```

Section 12: Demographics

_RACEG2 *Calculated variable for white hispanic race group.* _RACEG2 is derived from RACE2.

1	Non-Hispanic White	Respondents that reported they are white and not of Hispanic origin. (RACE2=1)
2	Non-White or Hispanic	Respondents that reported they are non-white or of Hispanic origin. (RACE2=2, 3, 4, 5, 6, 7, 8)
9	Don't know/ Not sure/ Refused	Respondents that reported they did not know, or refused to give their race and are not of Hispanic origin or did not know, or refused to answer if they are of Hispanic origin. (RACE2=9)

SAS Code:

```
IF RACE2 = 1 THEN _RACEG2 = 1;
 ELSE IF RACE2 IN (2,3,4,5,6,7,8) THEN _RACEG2 = 2;
 ELSE IF RACE2 = 9 THEN _RACEG2 = 9;
```

Section 12: Demographics

_RACEGR2 *Calculated variable for five-level race ethnicity category.* _RACEGR2 is derived from RACE2.

1	White only, Non-Hispanic	Respondents that reported they are white and not of Hispanic origin. (RACE2=1)
2	Black only, Non-Hispanic	Respondents that reported they are black and not of Hispanic origin. (RACE2=2)
3	Other race only, Non-Hispanic	Respondents that reported they are not white and not black and not of Hispanic origin. (RACE2=3, 4, 5, 6)
4	Multiracial, Non-Hispanic	Respondents that reported being multiracial but not of Hispanic origin. (RACE2=7)
5	Hispanic	Respondents that reported they are of Hispanic origin. (RACE2=8)
9	Don't know/ Not sure/ Refused	Respondents that reported they did not know, or refused to give their race and are not of Hispanic origin or did not know, or refused to answer if they are of Hispanic origin. (RACE2=9)

SAS Code:

```
IF RACE2=1 THEN _RACEGR2=1;
 ELSE IF RACE2=2 THEN _RACEGR2=2;
 ELSE IF 3 LE RACE2 LE 6 THEN _RACEGR2=3;
 ELSE IF RACE2=7 THEN _RACEGR2=4;
 ELSE IF RACE2=8 THEN _RACEGR2=5;
 ELSE IF RACE2=9 THEN _RACEGR2=9;
```

Section 12: Demographics

_RACE_G *Calculated variable for race groups used for internet prevalence tables.* _RACE_G is derived from _RACEGR2.

1	White - Non-Hispanic	Respondents that reported they are white and not of Hispanic origin. (_RACEGR2=1)
2	Black - Non-Hispanic	Respondents that reported they are black and not of Hispanic origin. (_RACEGR2=2)
3	Hispanic	Respondents that reported that they are of Hispanic origin. (_RACEGR2=5)
4	Other race only, Non-Hispanic	All other respondents with valid race responses except for those reporting multiracial or Hispanic origins. (_RACEGR2=3)
5	Multiracial, Non-Hispanic	All other respondents reporting multiracial but non-Hispanic origin. (_RACEGR2=4)
.	Don’t know/ Not sure/ Refused component question	Respondents with don´t know, refused or missing values for _RACEGR2. (_RACEGR2=9, missing)

SAS Code:

```
IF _RACEGR2 = 1 THEN _RACE_G = 1;
 ELSE IF _RACEGR2 = 2 THEN _RACE_G = 2;
 ELSE IF _RACEGR2 = 3 THEN _RACE_G = 4;
 ELSE IF _RACEGR2 = 4 THEN _RACE_G = 5;
 ELSE IF _RACEGR2 = 5 THEN _RACE_G = 3;
```

Section 12: Demographics

_CNRACE *Calculated variable for number of census race categories chosen.* _CNRACE is derived from MRACEASC and is equal to the number of "census" race categories chosen.

0	Other/ do not know/ refused	No census race categories chosen by the respondent. (6 <= MRACEASC <= 9)
1	1 category chosen	Onecensus race category chosen by the respondent. (MRACEASC=1)
2	2 category chosen	Two census race categories chosen by the respondent. (MRACEASC=2)
3	3 category chosen	Three census race categories chosen by the respondent. (MRACEASC=3)
4	4 category chosen	Four census race categories chosen by the respondent. (MRACEASC=4)
5	5 category chosen	Five census race categories chosen by the respondent. (MRACEASC=5)

SAS Code:

```
** REMOVES EXTRA CHARACTERS **;
 MRACE_=COMPRESS(MRACEASC,'679');
 ** REMOVES BLANK SPACES **;
 IF MRACEASC NOTIN (6,7,9) THEN DO;
 _CNRACE=LENGTH(COMPRESS(MRACE_));
 END;
 ELSE DO;
 _CNRACE=0;
 END;
```

Section 12: Demographics

_CNRACEC *Calculated variable for number of census race categories chosen, collapsed.* _CNRACEC is derived from _CNRACE.

1	One category chosen	One census race category chosen by the respondent. (_CNRACE=1)
2	Two or more categories chosen	Two or more census race categories chosen by the respondent. (_CNRACE>1)
.	_CNRACE = 0 or missing	No census race categories chosen by the respondent. (_CNRACE=0)

SAS Code:

```
IF _CNRACE EQ 0 THEN _CNRACEC=. ;
 ELSE IF _CNRACE EQ 1 THEN _CNRACEC=1;
 ELSE _CNRACEC=2 ;
```

Section 12: Demographics

_AGEG5YR *Calculated variable for fourteen-level age category.* _AGEG5YR is derived from AGE.

1	Age 18 to 24	Respondents with reported age between 18 and 24 years (18 <= AGE <= 24)
2	Age 25 to 29	Respondents with reported age between 25 and 29 years (25 <= AGE <= 29)
3	Age 30 to 34	Respondents with reported age between 30 and 34 years (30 <= AGE <= 34)
4	Age 35 to 39	Respondents with reported age between 35 and 39 years (35 <= AGE <= 39)
5	Age 40 to 44	Respondents with reported age between 40 and 44 years (40 <= AGE <= 44)
6	Age 45 to 49	Respondents with reported age between 45 and 49 years (45 <= AGE <= 49)
7	Age 50 to 54	Respondents with reported age between 50 and 54 years (50 <= AGE <= 54)
8	Age 55 to 59	Respondents with reported age between 55 and 59 years (55 <= AGE <= 59)
9	Age 60 to 64	Respondents with reported age between 60 and 64 years (60 <= AGE <= 64)
10	Age 65 to 69	Respondents with reported age between 65 and 69 years (65 <= AGE <= 69)
11	Age 70 to 74	Respondents with reported age between 70 and 74 years (70 <= AGE <= 74)
12	Age 75 to 79	Respondents with reported age between 75 and 79 years (75 <= AGE <= 79)
13	Age 80 or older	Respondents with reported age between 80 and 99 years (80 <= AGE <= 99)
14	Don’t know/ Refused/ Missing	Respondents that reported they didn´t know, were not sure, refused to report or had missing responses for their age. (AGE=7, 9, missing)

Section 12: Demographics

_AGEG5YR *Calculated variable for fourteen-level age category.* _AGEG5YR is derived from AGE.

SAS Code:

```
IF 18 LE AGE LE 24 THEN _AGEG5YR = 1;
 ELSE IF 25 LE AGE LE 29 THEN _AGEG5YR = 2;
 ELSE IF 30 LE AGE LE 34 THEN _AGEG5YR = 3;
 ELSE IF 35 LE AGE LE 39 THEN _AGEG5YR = 4;
 ELSE IF 40 LE AGE LE 44 THEN _AGEG5YR = 5;
ELSE IF 45 LE AGE LE 49 THEN _AGEG5YR = 6;
 ELSE IF 50 LE AGE LE 54 THEN _AGEG5YR = 7;
 ELSE IF 55 LE AGE LE 59 THEN _AGEG5YR = 8;
 ELSE IF 60 LE AGE LE 64 THEN _AGEG5YR = 9;
 ELSE IF 65 LE AGE LE 69 THEN _AGEG5YR = 10;
ELSE IF 70 LE AGE LE 74 THEN _AGEG5YR = 11;
 ELSE IF 75 LE AGE LE 79 THEN _AGEG5YR = 12;
 ELSE IF 80 LE AGE LE 99 THEN _AGEG5YR = 13;
 ELSE _AGEG5YR = 14;
```

Section 12: Demographics

_AGE65YR *Calculated variable for two-level age category.* _AGE65YR is derived from AGE.

1	Age 18 to 64	Respondents with reported ages 18–64. (18 <= AGE <=64)
2	Age 65 or older	Respondents with reported ages 65–99. (65 >= AGE >= 99)
3	Don’t know/ Refused/ Missing	Respondents that reported they didn´t know, were not sure, refused, or had a missing value for AGE. (AGE=7,9,or missing)

SAS Code:

```
IF 18 LE AGE LE 64 THEN _AGE65YR=1;
 ELSE IF 65 LE AGE LE 99 THEN _AGE65YR=2;
 ELSE _AGE65YR = 3;
```

Section 12: Demographics

_AGE_G *Calculated variable for six-level imputed age category.* _AGE_G is derived from _IMPAGE (imputed age).

1	Age 18 to 24	Respondents with imputed ages between 18–24 years of age. (18 <= _IMPAGE <= 24)
2	Age 25 to 34	Respondents with imputed ages between 25–34 years of age. (25 <= _IMPAGE <= 34)
3	Age 35 to 44	Respondents with imputed ages between 35–44 years of age. (35 <= _IMPAGE <= 44)
4	Age 45 to 54	Respondents with imputed ages between 45–54 years of age. (45 <= _IMPAGE <= 54)
5	Age 55 to 64	Respondents with imputed ages between 55–64 years of age. (55 <= _IMPAGE <= 64)
6	Age 65 or older	Respondents with imputed ages between 65–99 years of age. (_IMPAGE => 65)

SAS Code:

```
IF (18<=_IMPAGE<=24) THEN _AGE_G = 1;
 ELSE IF (25<=_IMPAGE<=34) THEN _AGE_G = 2;
 ELSE IF (35<=_IMPAGE<=44) THEN _AGE_G = 3;
 ELSE IF (45<=_IMPAGE<=54) THEN _AGE_G = 4;
 ELSE IF (55<=_IMPAGE<=64) THEN _AGE_G = 5;
 ELSE IF (_IMPAGE >= 65) THEN _AGE_G = 6;
```

Section 12: Demographics

HTIN3 *Calculated variable for reported height in inches.* HTIN3 is derived from HEIGHT2. HTIN3 is calculated by adding the foot portion of HEIGHT2 multiplied by 12, to the inch portion.

1 - 998	Height in inches	Respondents calculated height in inches. (HTIN3=(HTM3x100) ÷ 2.54 or HTIN3=(height in feet x 12) + height in inches)
999	Don’t know/ Refused/ Missing	Respondents that reported they didn´t know, were not sure, refused to report or had missing responses for their height. (HEIGHT3=777, 999, 7777, 9999 or missing)

SAS Code:

```
** CREATE HEIGHT1 CHARACTER VARIABLE **;
 HEIGHT1=PUT(HEIGHT3,4.);
 IF HEIGHT3 NOT IN (777,999,7777,9999,.) THEN DO;
 IF 1 LE HEIGHT3 LT 800 and 0 LE (INPUT((substr(HEIGHT1,3,2)),2.))
LE 11 THEN DO;
HTIN3=(INPUT((substr(HEIGHT1,3,2)),2.)) +
((INPUT((substr(HEIGHT1,2,1)),1.))*12);
 END;
 ELSE IF 9000 LT HEIGHT3 LT 9242 THEN DO;
 HTIN3=input(((HEIGHT3 - 9000)/2.54),3.0);
 END;
 END;
```

Section 12: Demographics

HTM3 *Calculated variable for reported height in meters.* HTM3 is derived from the variable HTIN3 by multiplying HTIN3 by 2.54 cm per in and dividing by 100 cm per meter.

1 - 998	Height in meters [2 implied decimal places]	Respondents reported or calculated height in meters. (HTM3=(HTIN3 x 2.54) ÷ 100 or HTM3 = (HEIGHT3 - 9000) ÷ 100)
999	Don't know/ Refused/ Missing	Respondents that reported they didn´t know, were not sure, refused to report or had missing responses for their height. (HEIGHT3=777, 999, 7777, 9999 or missing)

SAS Code:

```
** CONVERSION FACTOR = 39.3701 in/M **;
 IF HEIGHT3 NOT IN (777,999,7777,9999,.) THEN DO;
 IF 1 LE HEIGHT3 LT 800 and 0 LE (INPUT((substr(HEIGHT1,3,2)),2.))
LE 11 THEN DO;
 HTM3 = (HTIN3 * 2.54) / 100;
 END;
 ELSE IF 9000 LT HEIGHT3 LT 9242 THEN DO;
HTM3 = (HEIGHT3 - 9000)/100;
 END;
 END;
```

Section 12: Demographics

WTKG2 *Calculated variable for reported weight in kilograms.* WTKG2 is derived from WEIGHT2 by dividing WEIGHT2 by 2.2 kg per lb.

1 - 99998	Weight in kilograms [2 implied decimal places]	Respondents reported or calculated weight in kilograms.
99999	Don't know/ Refused/ Missing	Respondents that reported they didn´t know, were not sure, refused to report or had missing responses for their weight.

SAS Code:

```
** CONVERSION FACTOR = 2.2046 kg/lb **;
 IF WEIGHT2 NOT IN (777,999,7777,9999,.) THEN DO;
 IF 0001 LE WEIGHT2 < 9000 THEN DO;
 WTKG2=WEIGHT2/2.2;
 END;
 ELSE IF WEIGHT2 > 9000 THEN DO;
 WTKG2=WEIGHT2-9000;
 END;
 END;
```

Section 12: Demographics

_BMI4 *Calculated variable for body mass index (bmi).* _BMI4 is derived from WTKG2 and HTM3. It is calculated by dividing WTKG2 by HTM3².

1 - 9998	1 or greater	Respondents calculated body mass index (BMI) {units=kilograms per meter squared}. (_BMI4 = WTKG2 / (HTM3xHTM3))
9999	Don't know/ Refused/ Missing	Respondents that had a missing value for their height in meters or weight in kilograms. (WTKG2=missing or HTM3=missing)

SAS Code:

```
IF (WTKG2 NOTIN (.)) AND (HTM3 NOTIN (.)) THEN _BMI4=WTKG2/(HTM3 ** 2);
 ELSE _BMI4=.;
 _BMI4=ROUND(_BMI4,.01);
 IF _BMI4 GT 99.98 THEN _BMI4=99.98;
 ELSE IF _BMI4=. THEN _BMI4=99.99;
```

Section 12: Demographics

_BMI4CAT *Calculated variable for three-categories of body mass index (bmi).* _BMI4CAT is derived from _BMI4.

1	Neither overweight nor obese	Respondents not classified as overweight or obese based on body mass index. (_BMI4 < 25.00)
2	Overweight	Respondents classified as overweight based on body mass index. (25.00 <= _BMI4 < 30.00)
3	Obese	Respondents classified as obese based on body mass index. (30.00 <= _BMI4 < 99.99)
9	Don't know/ Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. (_BMI4=99.99)

SAS Code:

```
IF (0.00 LE _BMI4 < 25.00) THEN _BMI4CAT=1;
 ELSE IF (25.00 LE _BMI4 < 30.00) THEN _BMI4CAT=2;
 ELSE IF (30.00 LE _BMI4 < 99.99) THEN _BMI4CAT=3;
 ELSE IF (_BMI4 = 99.99) THEN _BMI4CAT=9;
```

Section 12: Demographics

_RFBMI4 *Calculated variable for adults who have a body mass index greater than 25.00 (overweight or obese).* _RFBMI4 is derived from _BMI4.

1	No	Respondents not classified as overweight or obese based on body mass index. (_BMI4 < 25.00)
2	Yes	Respondents classified as overweight or obese based on body mass index. (25.00 <= _BMI4 < 99.99)
9	Don’t know/ Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. (_BMI4=99.99)

SAS Code:

```
IF (0.00 LE _BMI4 < 25.00) THEN _RFBMI4=1;
 ELSE IF (25.00 <=  _BMI4 < 99.99) THEN _RFBMI4=2;
 ELSE IF (_BMI4 = 99.99) THEN _RFBMI4=9;
** Round off HTM3, WTKG2 and _BMI4 to 2 decimal places and remove
the decimal **;
 HTIN3 = round(HTIN3,1);
 HTM3 = round((HTM3*100),1);
 WTKG2 = round((WTKG2*100),1);
 _BMI4 = ROUND((_BMI4*100),1);
 IF HTIN3=. THEN HTIN3=999;
IF HTM3=. THEN HTM3=999;
 IF WTKG2=. THEN WTKG2=99999;
```

Section 12: Demographics

_CHLDCNT *Calculated variable for number of children in household.* _CHLDCNT is derived from CHILDREN.

1	No children in household	Respondents that reported having no children. (CHILDREN=88)
2	One child in household	Respondents that reported having one child. (CHILDREN=1)
3	Two children in household	Respondents that reported having two children. (CHILDREN=2)
4	Three children in household	Respondents that reported having three children. (CHILDREN=3)
5	Four children in household	Respondents that reported having four children. (CHILDREN=4)
6	Five or more children in household	Respondents that reported having five or more children. (5 <= CHILDREN < 87)
9	Don’t know/ Not sure/ Missing	Respondents that reported they didn´t know, were not sure, refused or had a missing value for CHILDREN. (CHILDREN=99)

SAS Code:

```
IF CHILDREN = 88 THEN _CHLDCNT = 1;
 ELSE IF CHILDREN = 01 THEN _CHLDCNT = 2;
 ELSE IF CHILDREN = 02 THEN _CHLDCNT = 3;
 ELSE IF CHILDREN = 03 THEN _CHLDCNT = 4;
 ELSE IF CHILDREN = 04 THEN _CHLDCNT = 5;
ELSE IF 05 <= CHILDREN < 88 THEN _CHLDCNT = 6;
 ELSE IF CHILDREN = 99 THEN _CHLDCNT = 9;
 ELSE IF CHILDREN = . THEN _CHLDCNT = 9;
```

Section 12: Demographics

_EDUCAG *Calculated variable for level of education completed.* _EDUCAG is derived from EDUCA.

1	Did not graduate High School	Respondents that reported they did not graduate high school. (EDUCA=1,2,3)
2	Graduated High School	Respondents that reported they graduated high school. (EDUCA=4)
3	Attended College or Technical School	Respondents that reported they attended college or technical school. (EDUCA=5)
4	Graduated from College or Technical School	Respondents that reported they graduated from college or technical school. (EDUCA=6)
9	Don’t know/ Not sure/ Missing	Respondents that reported they did´t know, were not sure, refused, or had a missing value for EDUCA. (EDUCA=9, missing)

SAS Code:

```
IF EDUCA IN (1,2,3) THEN _EDUCAG = 1;
 ELSE IF EDUCA IN (4) THEN _EDUCAG = 2;
 ELSE IF EDUCA IN (5) THEN _EDUCAG = 3;
 ELSE IF EDUCA IN (6) THEN _EDUCAG = 4;
 ELSE IF EDUCA IN (.,9) THEN _EDUCAG = 9;
```

Section 12: Demographics

_INCOMG *Calculated variable for income categories.* _INCOMG is derived from INCOME2.

1	Less than $15,000	Respondents whos reported income is less than $15,000. (INCOME2=1,2)
2	$15,000 to less than $25,000	Respondents whos reported income is $15,000 to less than $25,000. (INCOME2=3,4)
3	$25,000 to less than $35,000	Respondents whos reported income is $25,000 to less than $35,000. (INCOME2=5)
4	$35,000 to less than $50,000	Respondents whos reported income is $35,000 to less than $50,000. (INCOME2=6)
5	$50,000 or more	Respondents whos reported income is $50,000 or more. (INCOME2=7,8)
9	Don’t know/ Not sure/ Missing	Respondents that refused to answer, didn´t know or had a missing value for INCOME2. (INCOME2=77,99, or missing)

SAS Code:

```
IF INCOME2 IN (1,2) THEN _INCOMG = 1;
 ELSE IF INCOME2 IN (3,4) THEN _INCOMG = 2;
 ELSE IF INCOME2 IN (5) THEN _INCOMG = 3;
ELSE IF INCOME2 IN (6) THEN _INCOMG = 4;
 ELSE IF INCOME2 IN (7,8) THEN _INCOMG = 5;
 ELSE IF INCOME2 IN (77,99,.) THEN _INCOMG = 9;
```

Section 13: Alcohol Consumption

DROCDY2_ *Calculated variable for drink-occasions-per-day.* DROCDY2_ is derived from ALCDAY4 by dividing the ALCDAY4 variable by 7 days per week or 30 days per month.

0	No Drink-Occasions per day	Respondents reported no occasions per day that they consumed alcohol. (ALCDAY4=888 or DRNKANY4=2)
1 - 899	Drink-Occasions per day	Respondents reported number of occasions per day that they consumed alcohol. (ALCDAY4 not equal to 777, 888, 999, or missing and DRNKANY4 not equal to 2, 7, 9, or missing)
900	Don’t know/ Not Sure Or Refused/ Missing	Respondents that reported they did not know how many days they had at least one drink of alcohol, those that refused to answer how many days they had at least one drink of alcohol, those with missing responses. (ALCDAY4=777, 999, or missing or DRNKANY4=7, 9, or missing)

SAS Code:

```
IF DRNKANY4 NOTIN (.,2,7,9) AND ALCDAY4 NOTIN (888,777,999,.) THEN
DO;
 IF 101 LE ALCDAY4 LE 107 THEN DROCDY2_=(ALCDAY4-100)/7;
 ELSE IF 201 LE ALCDAY4 LE 230 THEN DROCDY2_=(ALCDAY4-200)/30;
 END;
ELSE IF ALCDAY4 EQ 888 THEN DROCDY2_=0;
 ELSE IF DRNKANY4 EQ 2 THEN DROCDY2_=0;
 ELSE DROCDY2_=9;
```

Section 13: Alcohol Consumption

_RFBING4 *Calculated variable for binge drinkers (males having five or more drinks on one occasion, females having four or more drinks on one occasion).* _RFBING4 is derived from DRNK3GE5 and ALCDAY4.

1	No	Respondents that reported they did not drink in the past 30 days, or those that report that they did drink alcohol in the past 30 days but did not report having five or more drinks of alcohol on an occasion. (ALCDAY4<231 and DRNK3GE5=88; or ALCDAY4=888)
2	Yes	Respondents that reported they did drink in the past 30 days and had five or more drinks on one or more occasions in the past month. (ALCDAY4<231 and 1<=DRNK3GE5<=76)
9	Don't know/ Refused/ Missing	Respondents that reporteded that they did not know if they had consumed five or more drinks of alcohol on one occasion or refused to answer if they had consumed five or more drinks of alcohol on one occasion or those with missing responses. (DRNK3GE5=77, 99, missing; or ALCDAY4=777, 999, missing)

SAS Code:

```
IF DRNKANY4 NOTIN (.,2,7,9) AND ALCDAY4 NOTIN (888) THEN DO;
 IF 1 LE DRNK3GE5 LE 76 THEN _RFBING4=2;
 ELSE IF DRNK3GE5 IN (.,77,99) THEN _RFBING4=9;
 ELSE IF DRNK3GE5 IN (88) THEN _RFBING4=1;
 END;
ELSE IF ALCDAY4 = 888 THEN _RFBING4=1;
 ELSE IF DRNKANY4 = 2 THEN _RFBING4=1;
 ELSE _RFBING4=9;
```

Section 13: Alcohol Consumption

_DRNKDY3 *Calculated variable for calculated total number of alcoholic beverages consumed per day.* _DRNKDY3 is derived from DROCDY2_ and AVEDRNK2 by multiplying the total number of drink occasions per day (DROCDY2_) by the average number of drinks per occasion (AVEDRNK2).

0	Did not drink	Respondents who did not drink in the past month. (DROCDY2_=0)
1 - 9899	Number of drinks per day	Respondents reported number of alcholic drinks in the past month. (0 < DROCDY2_ < 990)
9900	Don't know/ Not sure/ Refused/ Missing	Respondents who refused to report the number of alcohol drinks consumed per day, or respondents who did not know the number of alcohol drinks consumed per day, or those with missing responses or respondents who refused to report the number drink occasions per day, or respondents who did not know the number of drink occasions per day, or those with missing responses. (AVEDRNK2=.,77,99 or DROCDY2_=900)

SAS Code:

```
IF DROCDY2_ = 0 THEN _DRNKDY3=0;
 ELSE IF DROCDY2_ = 9 THEN _DRNKDY3=99;
 ELSE IF AVEDRNK2 IN (.,77,99) THEN _DRNKDY3=99;
 ELSE _DRNKDY3=AVEDRNK2 * DROCDY2_;
_DRNKDY3=ROUND((_DRNKDY3*100),1);
*This is done after all of the alcohol calculations but the code is
included here;
```

Section 13: Alcohol Consumption

_DRNKMO3 *Calculated variable for calculated total number of alcoholic beverages consumed per month.* _DRNKMO3 is derived by multiplying _DRNKDY3 by 30.

0	Did not drink in the past month	Respondents who did not consume any drinks of alcohol in the past month. (_DRNKDY3=0)
1 - 9998	Number of Drinks	Respondents reported number of alcholic drinks pre day. (0 < _DRNKDY3 < 9999)
9999	Don't know/ Refused/ Missing	Respondents that reporteded they did not know if they consumed any drinks of alcohol in the past month, or those that refused to answer if they consumed any drinks of alcohol in the past month. (_DRNKDY3=9999)

SAS Code:

```
IF _DRNKDY3 NOTIN (.,99) THEN _DRNKMO3=_DRNKDY3*30;
 ELSE _DRNKMO3=9999;
_DRNKMO3=ROUND(_DRNKMO3,1);
*This is done after all of the alcohol calculations but the code is
included here;
```

Section 13: Alcohol Consumption

_RFDRHV3 *Calculated variable for heavy drinkers (adult men having more than two drinks per day and adult women having more than one drink per day).* _RFDRHV3 is derived from _DRNKDY3, ALCDAY4, and SEX.

1	No	Male respondents that reported having 2 drinks per day or less, or female respondents that reported having 1 drinks per day or less. (Sex=1 and _DRNKDY3 <= 200 or Sex=2 and _DRNKDY3 <= 100 or ALCDAY4=888)
2	Yes	Male respondents that reported having more than 2 drinks per day, or female respondents that reported having more than 1 drink per day. (Sex=1 and _DRNKDY3 > 200 or Sex=2 and _DRNKDY3 > 100)
9	Don't know/ Refused/ Missing	Respondents with don´t know, refused or missing responses for ALCDAY4 or _DRNKDY3. (ALCDAY4=777, 999, or missing, or _DRNKDY3=99, or missing)

SAS Code:

```
IF SEX=1 AND _DRNKDY3 NOTIN (99,.) THEN DO;
 IF _DRNKDY3 GT 2 THEN _RFDRHV3=2;
 ELSE IF _DRNKDY3 LE 2 THEN _RFDRHV3=1;
 END;
 ELSE IF SEX=2 AND _DRNKDY3 NOTIN (99,.) THEN DO;
 IF _DRNKDY3 GT 1 THEN _RFDRHV3=2;
ELSE IF _DRNKDY3 LE 1 THEN _RFDRHV3=1;
 END;
 ELSE IF ALCDAY4 EQ 888 THEN _RFDRHV3=1;
 ELSE IF DRNKANY4 EQ 2 THEN _RFDRHV3=1;
 ELSE _RFDRHV3=9;
```

Section 13: Alcohol Consumption

_RFDRMN3 *Calculated variable for adult men that are heavy drinkers (having more than two drinks per day).* _RFDRMN3 is derived from _DRNKDY3 and SEX and ALCDAY4.

1	No	Male respondents that reported having 2 drinks per day or less. (SEX=1 and _DRNKDY3 <= 200 or ALCDAY4=888)
2	Yes	Male respondents that reported having more than 2 drinks per day. (SEX=1 and _DRNKDY3 > 200)
9	Don't know/ Refused/ Missing	Male respondents with don´t know, refused or missing responses for ALCDAY4 or _DRNKDY3. (SEX=1 and ALCDAY4=777, 999, or missing, or _DRNKDY3=99, or missing)
.	Respondent is female	Female respondents. (SEX=2)

SAS Code:

```
IF SEX=1 THEN DO;
 IF _DRNKDY3 NOTIN (99,.) THEN DO;
 IF _DRNKDY3 GT 2 THEN _RFDRMN3=2;
 ELSE IF _DRNKDY3 LE 2 THEN _RFDRMN3=1;
 END;
 ELSE IF ALCDAY4 IN (888) THEN _RFDRMN3=1;
 ELSE IF DRNKANY4 EQ 2 THEN _RFDRMN3=1;
ELSE _RFDRMN3=9;
 END;
 ELSE IF SEX=2 THEN _RFDRMN3=.;
```

Section 13: Alcohol Consumption

_RFDRWM3 *Calculated variable for adult women that are heavy drinkers (having more than one drink per day).* _RFDRWM3 is derived from _DRNKDY3 and SEX and ALCDAY4.

1	No	Female respondents that reported having 1 drink per day or less. (SEX=2 and _DRNKDY3 <= 200 or ALCDAY4=888)
2	Yes	Female respondents that reported having more than 1 drink per day. (SEX=2 and _DRNKDY3 > 200)
9	Don't know/ Refused/ Missing	Female respondents with don´t know, refused or missing responses for ALCDAY4 or _DRNKDY3. (SEX=2 and ALCDAY4=777, 999, or missing, or _DRNKDY3=99, or missing)
.	Respondent is male	Male respondents. (SEX=1)

SAS Code:

```
IF SEX=2 THEN DO;
 IF _DRNKDY3 NOTIN (99,.) THEN DO;
 IF _DRNKDY3 GT 1 THEN _RFDRWM3=2;
 ELSE IF _DRNKDY3 LE 1 THEN _RFDRWM3=1;
 END;
 ELSE IF ALCDAY4 IN (888) THEN _RFDRWM3=1;
 ELSE IF DRNKANY4 EQ 2 THEN _RFDRWM3=1;
ELSE _RFDRWM3=9;
 END;
 Else IF SEX=1 THEN _RFDRWM3=.;
** ROUND OFF _DRNKMO3 TO NO DECIMAL PLACES ** MULTIPLY _DRNKDY3 BY
100 AND THEN ROUND OFF TO NO DECIMAL PLACES AND THEN REMOVE THE DECIMAL
PLACES **;
 DROCDY2_=round((DROCDY2_*100),1);
 _DRNKMO3=ROUND(_DRNKMO3,1);
 _DRNKDY3=ROUND((_DRNKDY3*100),1);
```

Section 14: Immunization

_FLSHOT3 *Calculated variable for adults aged 65+ who have had a flu shot within the past year.* _FLSHOT3 is derived from FLUSHOT3.

1	Yes	Respondents aged 65 or older that reporteded having a flu shot within the past 12 months. (AGE >= 65 and FLUSHOT3=1)
2	No	Respondents aged 65 or older that reporteded not having had a flu shot within the past 12 months. (AGE >= 65 and FLUSHOT3=2)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who did not know their age, those that refused to report their age, those that didn't know if they had a flu shot in the past 12 months, or those that refused to answer if they had a flu shot in the past 12 months, or those with missing responses. (AGE >= 65 and FLUSHOT3=7,9, or missing or AGE=7,9, or missing)
.	Age Less Than 65	Respondents aged 18-64. (18 <= AGE <= 64)

SAS Code:

```
IF AGE GE 65 THEN DO;
 IF FLUSHOT3=1 THEN _FLSHOT3=1;
 ELSE IF FLUSHOT3=2 THEN _FLSHOT3=2;
 ELSE IF FLUSHOT3 IN (.,7,9) THEN _FLSHOT3=9;
 END;
 ELSE IF AGE IN (.,7,9) THEN _FLSHOT3=9;
 ELSE _FLSHOT3=.;
```

Section 14: Immunization

_PNEUMO2 *Calculated variable for adults aged 65+ who have ever had a pneumonia vaccination.* _PNEUMO2 is derived from PNEUVAC3.

1	Yes	Respondents aged 65 or older that reporteded having a pneumonia shot. (AGE >= 65 and FLUSHOT3=1)
2	No	Respondents aged 65 or older that reporteded not having had a pneumonia shot. (AGE >= 65 and FLUSHOT3=2)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who did not know their age, those that refused to report their age, those that did not know if they ever had a pneumonia shot, those that refused to answer if they had a pneumonia shot, or those with missing responses. (AGE >= 65 and PNEUVAC3=7,9, or missing or AGE=7,9, or missing)
.	Age Less Than 65	Respondents aged 18-64. (18 <= AGE <= 64)

SAS Code:

```
IF AGE GE 65 THEN DO;
 IF PNEUVAC3=1 THEN _PNEUMO2=1;
 ELSE IF PNEUVAC3=2 THEN _PNEUMO2=2;
 ELSE IF PNEUVAC3 IN (.,7,9) THEN _PNEUMO2=9;
 ELSE _PNEUMO2=.;
 END;
 ELSE IF AGE IN (.,7,9) THEN _PNEUMO2=9;
 ELSE _PNEUMO2=.;
```

Section 15: Falls

There are no calculated Variables for Section 15.

Section 16: Seatbelt Use

_RFSEAT2 *Calculated variable for always or nearly always wear seat belts calculated variable.* _RFSEAT2 is derived from SEATBELT.

1	Always or Almost Always Wear Seat Belt	Respondents that report they always or nearly always use a seatbelt when they ride or drive in a car or they never drive or ride in a car. (SEATBELT=1,2,8)
2	Sometimes, Seldom, or Never Wear Seat Belt	Respondents that report they sometimes, seldom or never use a seatbelt when they ride or drive in a car. (SEATBELT=3,4,5)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents that report they don't know, are not sure, refused or with missing responses for if they use a seatbelt when they ride or drive in a car. (SEATBELT=7,9 or missing)

SAS Code:

```
IF SEATBELT IN (1,2,8) THEN _RFSEAT2=1;
ELSE IF SEATBELT IN (3,4,5) THEN _RFSEAT2=2;
ELSE _RFSEAT2=9;
```

Section 16: Seatbelt Use

_RFSEAT3 *Calculated variable for always wear seat belts calculated variable.* _RFSEAT3 is derived from SEATBELT.

1	Always Wear Seat Belt	Respondents that report they always use a seatbelt when they ride or drive in a car or they never drive or ride in a car. (SEATBELT=1,8)
2	Don't Always Wear Seat Belt	Respondents that report they nearly always, sometimes, seldom or never use a seatbelt when they ride or drive in a car. (SEATBELT=2,3,4,5)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents that reported they don't know, are not sure, refused or have missing responses to if they use a seatbelt when they ride or drive in a car. (SEATBELT=7,9 or missing)

SAS Code:

```
IF SEATBELT IN (1,8) THEN _RFSEAT3=1;
ELSE IF SEATBELT IN (2,3,4,5) THEN _RFSEAT3=2;
ELSE _RFSEAT3=9;
```

Section 17: Drinking and Driving

There are no calculated Variables for Section 17.

Section 18: Women´s Health

_RFMAM2Y *Calculated variable for women respondents aged 40+ that have had a mammogram in the past two years.* _RFMAM2Y is derived from SEX, AGE, HADMAM, and HOWLONG.

1	Yes	Female respondents aged 40 and older that have received a mammogram within the past two years. (Sex=2 and AGE >= 40 and HADMAM=1 and HOWLONG=1,2)
2	No	Female respondents aged 40 and older that have not received a mammogram within the past two years. (Sex=2 and AGE >= 40 and HADMAM=2 or HADMAM=1 and HOWLONG=3,4,5)
9	Don’t know/ Not Sure/ Refused	Female respondents aged 40 and older with don’t know, not sure, or refused responses for HADMAM or HOWLONG or female respondents with don’t know, not sure, refused or missing responses for AGE, HADMAM or HOWLONG. (Sex=2 and HADMAM=7,9, missing or HOWLONG=7,9, missing or AGE=7,9,missing)
.	Missing or Age less than 40 or Male	Female respondents less than 40 years old, or male respondents. (SEX=1 or SEX=2 and AGE < 40)

SAS Code:

```
IF SEX=2 AND AGE GE 40 THEN DO;
IF HADMAM=1 THEN DO;
IF HOWLONG IN (1,2) THEN _RFMAM2Y=1;
ELSE IF HOWLONG IN (3,4,5) THEN _RFMAM2Y=2;
ELSE IF HOWLONG IN (7,9,.) THEN _RFMAM2Y=9;
END;
ELSE IF HADMAM=2 THEN _RFMAM2Y=2;
ELSE IF HADMAM IN (7,9,.) THEN _RFMAM2Y=9;
END;
ELSE IF SEX=2 AND AGE IN (.,7,9) THEN _RFMAM2Y=9;
ELSE _RFMAM2Y=.;
```

Section 18: Women´s Health

_MAM502Y *Calculated variable for women respondents aged 50+ that have had a mammogram in the past two years.* _MAM502y is derived from SEX, AGE, HADMAM, and HOWLONG.

1	Yes	Female respondents aged 50 and older that have received a mammogram within the past two years. (Sex=2 and AGE >= 50 and HADMAM=1 and HOWLONG=1,2)
2	No	Female respondents aged 50 and older that have not received a mammogram within the past two years. (Sex=2 and AGE >= 50 and HADMAM=2 or HADMAM=1 and HOWLONG=3,4,5)
9	Don’t know/ Not Sure/ Refused	Female respondents aged 50 and older with don’t know, not sure, or refused responses for HADMAM or HOWLONG or female respondents with don’t know, not sure, refused or missing responses for AGE, HADMAM or HOWLONG. (Sex=2 and HADMAM=7,9, missing or HOWLONG=7,9, missing or AGE=7,9,missing)
.	Missing or Age less than 50 or Male	Female respondents less than 50 years old, or male respondents. (SEX=1 or SEX=2 and AGE < 50)

SAS Code:

```
IF SEX=2 AND AGE GE 50 THEN DO;
IF HADMAM=1 THEN DO;
IF HOWLONG IN (1,2) THEN _MAM502Y=1;
ELSE IF HOWLONG IN (3,4,5) THEN _MAM502Y=2;
ELSE IF HOWLONG IN (7,9) THEN _MAM502Y=9;
END;
ELSE IF HADMAM=2 THEN _MAM502Y=2;
ELSE IF HADMAM IN (7,9,.) THEN _MAM502Y=9;
END;
ELSE IF SEX=2 AND AGE IN (.,7,9) THEN _MAM502Y=9;
ELSE _MAM502Y=.;
```

Section 18: Women´s Health

_RFPAP32 *Calculated variable for women respondents aged 18+ that have had a pap test in the past three years.* _RFPAP32 is derived from the variables SEX, AGE, HADHYST2, PREGNANT, HADPAP2, and LASTPAP2.

1	Yes	Female respondents aged 18 and older, with intact cervix, that have received a pap smear within the past three years. (SEX=2 and AGE GE 18 and HADHYST2 NE 1 or PREGNANT=1 and HADPAP2=1 and LASTPAP2=1,2,3)
2	No	Female respondents aged 18 and older, with intact cervix, that have not received a pap smear within the past three years. (SEX=2 and AGE GE 18 and HADHYST2 NE 1 or PREGNANT=1 and HADPAP2=2 or HADPAP2=1 and LASTPAP2=4,5)
9	Don’t know/ Not Sure/ Refused	Female respondents aged 18 and older, with intact cervix, with don’t know, not sure or refused responses for HADPAP2 or LASTPAP2 or females with don’t know, not sure, refused or missing responses to AGE. (SEX=2 and AGE GE 18 and HADHYST2 NE 1 or PREGNANT=1 and HADPAP2=7,9 or LASTPAP2=7,9 or AGE=7,9,missing)
.	Missing or Male	Female respondents aged 18 and older with missing responses for HADPAP2 or LASTPAP2, or with yes, responses for having had a hysterectomy or male respondents. (SEX=2 and AGE >=18 and HADHYST2=1 AND PREGNANT NE 1 or HADPAP2=missing or LASTPAP2=missing or SEX=1)

SAS Code:

```
IF SEX=2 AND HADHYST2=1 AND PREGNANT NE 1 THEN DO;
_RFPAP32=.;
END;
ELSE DO;
IF SEX=2 AND AGE >= 18 THEN DO;
IF HADPAP2=1 THEN DO;
IF 1 LE LASTPAP2 LE 3 THEN _RFPAP32=1;
ELSE IF 4 LE LASTPAP2 LT 7 THEN _RFPAP32=2;
ELSE IF LASTPAP2 IN (7,9) THEN _RFPAP32=9;
ELSE IF LASTPAP2=. THEN _RFPAP32=.;
END;
ELSE IF HADPAP2=2 THEN _RFPAP32=2;
ELSE IF HADPAP2 IN (7,9) THEN _RFPAP32=9;
ELSE IF HADPAP2=. THEN _RFPAP32=.;
END;
ELSE IF SEX=2 AND AGE IN (.,7,9) THEN _RFPAP32=9;
ELSE _RFPAP32=.;
END;
```

Section 19: Prostate Cancer Screening

_RFPSA2Y *Calculated variable for male respondents aged 40+ that have had a psa test in the past 2 years.* _RFPSA2Y is derived from SEX, AGE, PSATEST, and PSATIME.

1	Yes	Male respondents aged 40 and older that have had a PSA test within the past two years. (SEX=1 and AGE >= 40 and PSATEST=1 and PSATIME=1 or 2)
2	No	Male respondents aged 40 and older that have not received a PSA test within the past two years. (SEX=1 and AGE >= 40 and PSATEST=2 or PSATEST=1 and PSATIME=3 or 4 or 5)
9	Don't know/ Not Sure/ Refused	Male respondents aged 40 and older with don't know, not sure or refused responses for PSATEST or PSATIME or male respondents with don't know, not sure, refused or missing responses to AGE. (SEX=1 and AGE >= 40 and PSATEST=7,9 or PSATIME=7,9 or SEX=1 and AGE=7,9,missing)
.	Missing or Age less than 40 or Female	Male respondents aged 40 and older with missing responses for PSATEST or PSATIME, Male respondents aged less than 40, or female respondents. (SEX=1 and AGE >=40 and PSATEST=missing or PSATIME=missing or SEX=1 and AGE < 40 or SEX=2)

SAS Code:

```
IF (SEX=1) AND (AGE GE 40) THEN DO;
IF PSATEST=1 THEN DO;
IF PSATIME IN (1,2) THEN _RFPSA2Y=1;
ELSE IF PSATIME IN (3,4,5) THEN _RFPSA2Y=2;
ELSE IF PSATIME IN (7,9) THEN _RFPSA2Y=9;
ELSE IF PSATIME=. THEN _RFPSA2Y=.;
END;
ELSE IF PSATEST=2 THEN _RFPSA2Y=2;
ELSE IF PSATEST IN (7,9) THEN _RFPSA2Y=9;
ELSE IF PSATEST=. THEN _RFPSA2Y=.;
END;
ELSE IF (SEX=1) AND AGE IN (.,7,9) THEN _RFPSA2Y=9;
ELSE _RFPSA2Y=.;
```

Section 20: Colorectal Cancer Screening

_RFBLDS2 *Calculated variable for respondents aged 50+ that have had a blood stool test within the past two years.* _RFBLDS2 is derived from AGE, BLDSTOOL, and LSTBLDS3.

1	Yes	Respondents aged 50 and older that have had a blood stool test within the past two years. (AGE >=50 and BLDSTOOL=1 and LSTBLDS3=1,2)
2	No	Respondents aged 50 and older that have not received a blood stool test within the past two years. (AGE >=50 and BLDSTOOL=2 or BLDSTOOL=1 and LSTBLDS3=3,4)
9	Don't know/ Not Sure/ Refused	Respondents aged 50 and older with don't know, not sure or refused responses to BLDSTOOL or LSTBLDS3 or with don't know, not sure, refused or missing responses for AGE. (AGE >=50 and BLDSTOOL=7,9 or LSTBLDS3=7,9 or AGE=7,9,missing)
.	Missing or Age less than 50	Respondents aged 50 and older with missing responses for BLDSTOOL or LSTBLDS3, or respondents aged less than 50. (AGE >=50 and BLDSTOOL=missing or LSTBLDS3=missing or AGE<50)

SAS Code:

```
IF AGE>=50 THEN DO;
IF BLDSTOOL=1 THEN DO;
IF LSTBLDS3 IN (1,2) THEN _RFBLDS2=1;
ELSE IF LSTBLDS3 IN (3,4,5) THEN _RFBLDS2=2;
ELSE IF LSTBLDS3 IN (7,9) THEN _RFBLDS2=9;
ELSE IF LSTBLDS3=. THEN _RFBLDS2=.;
END;
ELSE IF BLDSTOOL=2 THEN _RFBLDS2=2;
ELSE IF BLDSTOOL IN (7,9) THEN _RFBLDS2=9;
ELSE IF BLDSTOOL=. THEN _RFBLDS2=.;
END;
ELSE IF AGE IN (.,7,9) THEN _RFBLDS2=9;
ELSE _RFBLDS2=.;
```

Section 20: Colorectal Cancer Screening

_RFSIGM2 *Calculated variable for respondents aged 50 or older that have had a sigmoidoscopy or colonoscopy.* _RFSIGM2 is derived from AGE and HADSIGM3.

1	Yes	Respondents aged 50 and older that have had a sigmoidoscopy or colonoscopy. (AGE >=50 and HADSIGM3=1)
2	No	Respondents aged 50 and older that have never had a sigmoidoscopy or colonoscopy. (AGE >=50 and HADSIGM3=2)
9	Don't know/ Not Sure/ Refused	Respondents aged 50 and older with don't know, not sure or refused responses to HADSIGM or with don't know, not sure, refused or missing responses to AGE. (AGE >=50 and HADSIGM3=7,9 or AGE=7,9,missing)
.	Missing or Age less than 50	Respondents aged 50 and older with missing responses for HADSIGM3, or respondents aged less than 50. (AGE >=50 and HADSIGM3=missing or AGE < 50)

SAS Code:

```
IF AGE>=50 THEN DO;
IF HADSIGM3=1 THEN _RFSIGM2=1;
ELSE IF HADSIGM3=2 THEN _RFSIGM2=2;
ELSE IF HADSIGM3 IN (7,9) THEN _RFSIGM2=9;
ELSE IF HADSIGM3=. THEN _RFSIGM2=.;
END;
ELSE IF AGE IN (.,7,9) THEN _RFSIGM2=9;
ELSE _RFSIGM2=.;
```

Section 21: HIV/AIDS

_AIDTST2 *Calculated variable for adults aged 18-64 that have ever been tested for hiv.* _AIDTST2 is derived from AGE and HIVTST5.

1	Yes	Respondents with reported ages between18 and 64 that reported to have been tested for HIV. (18<=AGE<=64 and HIVTST5=1)
2	No	Respondents with reported ages between18 and 64 that did not report having been tested for HIV. (18<=AGE<=64 and HIVTST5=2)
9	Don't know/ Not Sure/ Refused	Respondents with reported ages between18 and 64 that reported they did not know if they had been tested for HIV, or those with reported ages between18 and 64 that refused to answer if they had been tested for HIV. or respondents that reported they did not know their age or respondents that refused to report their age. (18<=AGE<=64 and HIVTST5=7,9 or AGE=7,9)
.	Missing or Age greater than 64	Respondents with missing responses for HIVTST5 or respondents with reported ages older than 64 or respondents with missing age responses. (18<=AGE<=64 and HIVTST5=missing or AGE > 64 or AGE=missing)

SAS Code:

```
IF 18 <= AGE <= 64 THEN DO;
 IF HIVTST5=1 THEN _AIDTST2=1;
 ELSE IF HIVTST5=2 THEN _AIDTST2=2;
 ELSE IF HIVTST5 IN (7,9) THEN _AIDTST2=9;
 ELSE IF HIVTST5=. THEN _AIDTST2=.;
 END;
 ELSE IF AGE IN (.,7,9) THEN _AIDTST2=9;
 ELSE _AIDTST2=.;
```

Section 22: Emotional Support and Life Satisfaction

There are no calculated Variables for Section 22.