BRFSS
Behavioral Risk Factor Surveillance System

Calculated Variables in the 2012

Behavioral Risk Factor Surveillance System

Data File

July 15, 2013

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

INTRODUCTION:

This document provides information on calculated variables for the 2012 Behavioral Risk Factor Surveillance System survey. These variables are calculated from responses to questions in the survey. There are three types of calculated variables.

1. Variables used to stratify and weight the data (not included in this document).

2. Intermediate variables, which are derived from a question response and are used to calculate some other variable or risk factor. Example: WTKG2 is derived from the WEIGHT2 variable in the survey. WTKG2 is then used to calculate the body mass index variable (_BMI4). Most—but not all—of the intermediate variables end with an underscore such as FTJUDAY_.

3. Variables -used to categorize or classify respondents. Most of these begin with an underscore such as _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 of 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, as given, may or may not work in the particular statistical program that you are using.

NEW CALCULATED VARIABLES FOR 2012
_RFPSA21 was added in 2012.

CALCULATED VARIABLES WITH CHANGED NAMES FOR 2012
_DENTVST1 changed to _DENVST2 due to DENCLEAN not being asked.

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 who reported having excellent, very good or good health. (GENHLTH =1, 2, 3)
2	Fair or Poor Health	Respondents who reported having fair or poor health. (GENHLTH =4, 5)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who 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

_HCVU651   *Calculated variable for respondents aged 18-64 who have any form of health care coverage. _HCVU651 is derived from AGE and HLTHPLN1.*

1	Have health care coverage	Respondents who reported having health care coverage (18 <= AGE <= 64 and HLTHPLN1 = 1)
2	Do not have health care coverage	Respondents who reported not having health care coverage (18 <= AGE <= 64 and HLTHPLN1 = 2)
9	Don't know/ Not Sure, Refused or Missing	Respondents who reported that they didn´t know, were not sure, refused to report or had missing responses for having health care coverage (18 <= AGE <= 64 and HLTHPLN1 = 7, 9, or missing or AGE => 65)

SAS Code:
```
IF 18 LE AGE LE 64 THEN DO;
 IF HLTHPLN1=1 THEN _HCVU651=1;
 ELSE IF HLTHPLN1=2 THEN _HCVU651=2;
 ELSE _HCVU651=9;
 END;
 ELSE _HCVU651 = 9;
```

Section 4: Exercise

_TOTINDA *Calculated variable for adults who reported 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 who reported doing any physical activity or exercise. (EXERANY2=1)
2	No physical activity or exercise in last 30 days	Respondents who reported doing no physical activity or exercise. (EXERANY2=2)
9	Don't know/ Refused/ Missing	Respondents who reported they didn't know or 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 5: Chronic Health Conditions

_LTASTH1 *Calculated variable for adults who have ever been told they have asthma.* _LTASTH1 is derived from ASTHMA3.

1	No	Respondents who have not been told by a doctor, nurse or health professional that they had asthma. (ASTHMA3=2)
2	Yes	Respondents who have been told by a doctor, nurse or health professional that they had asthma. (ASTHMA3=1)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who reported they did not know if they had been told by a doctor, nurse or health professional that they had asthma, those who refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, or those with missing responses. (ASTHMA3=7, 9, missing)

SAS Code:
```
IF ASTHMA3=1 THEN _LTASTH1=2;
 ELSE IF ASTHMA3=2 THEN _LTASTH1=1;
 ELSE _LTASTH1=9;
```

Section 5: Chronic Health Conditions

_CASTHM1 *Calculated variable for adults who have been told they currently have asthma. _CASTHM1 is derived from ASTHMA3 and ASTHNOW.*

1	No	Respondents who have not been told by a doctor, nurse or health professional that they had asthma or do not still have asthma. (ASTHMA3=2 or ASTHMA3=1 and ASTHNOW=2)
2	Yes	Respondents who have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma. (ASTHMA3=1 and ASTHNOW=1)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who reported they did not know if they had been told by a doctor, nurse or health professional that they had asthma, those who refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, those who did not know if they still had asthma, those who refused to answer if they still had asthma, or those with missing responses. (ASTHMA3=7, 9, missing; or ASTHNOW=7, 9, missing)

SAS Code:
```
IF ASTHMA3=2 THEN _CASTHM1=1;
 ELSE IF ASTHMA3=1 AND ASTHNOW=1 THEN _CASTHM1=2;
 ELSE IF ASTHMA3=1 AND ASTHNOW=2 THEN _CASTHM1=1;
 ELSE _CASTHM1=9;
```

Section 5: Chronic Health Conditions

_ASTHMS1 *Calculated variable for computed asthma status. _ASTHMS1 is derived from ASTHMA3 and ASTHNOW.*

1	Current	Respondents who have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma. (ASTHMA3=1and ASTHNOW=1)
2	Former	Respondents who have been told by a doctor, nurse or health professional that they had asthma but do not still have asthma. (ASTHMA3=1 and ASTHNOW=2)
3	Never	Respondents who have not been told by a doctor, nurse or health professional that they had asthma. (ASTHMA3=2)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who reported they didn't know if they had been told by a doctor, nurse or health professional that they had asthma, those who refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, those who didn't know if they still had asthma, those that refused to answer if they still had asthma, or those with missing responses. (ASTHMA3=7, 9, missing; or ASTHNOW=7, 9, missing)

SAS Code:
```
IF ASTHMA3=1 AND ASTHNOW=1 THEN _ASTHMS1=1;
 ELSE IF ASTHMA3=1 AND ASTHNOW=2 THEN _ASTHMS1=2;
 ELSE IF ASTHMA3=2 THEN _ASTHMS1=3;
 ELSE _ASTHMS1=9;
```

Section 5: Chronic Health Conditions

_DRDXAR1 *Calculated variable for respondents who have had a doctor diagnose them as having some form of arthritis.* _DRDXAR1 is derived from HAVARTH3.

1	Diagnosed with arthritis	Respondents who have been told by a doctor they had arthritis (HAVARTH2=1)
2	Not diagnosed with arthritis	Respondents who have not been told by a doctor they had arthritis (HAVARTH2=2)
.	Don´t know/ Not Sure/ Refused/ Missing	Respondents who reported they didn´t know if they had been told by a doctor they had arthritis, those who refused to answer if they had been told by a doctor they had arthritis, and those with missing responses (HAVARTH2=7,9, or missing)

SAS Code:
```
IF HAVARTH3 = 1 THEN _DRDXAR1=1;
 ELSE IF HAVARTH3 = 2 THEN _DRDXAR1=2;
 ELSE IF HAVARTH3 IN (7,9,.) THEN _DRDXAR1=.;
```

Section 6: Oral Health

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

1	Not at risk	Respondents who reported having had no permanent teeth removed. (RMVTETH3=8)
2	At risk	Respondents who reported having had permanent teeth removed. (RMVTETH3=1 or 2 or 3)
9	Don't know/ Not Sure Or Refused/ Missing	Respondent who 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 6: 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 who reported having none or some natural teeth removed. (AGE > 64 and RMVTETH3=1, 2, 8)
2	Yes	Respondents aged 65 or more who reported 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 6: Oral Health

_DENVST2 *Calculated variable for adults who have visited a dentist, dental hygenist or dental clinic within the past year.* _DENVST2 is derived from LASTDEN3.

1	Yes	Respondents who reported having had dental visit in the past year. (LASTDEN3=1)
2	No	Respondents who reported having not had dental visit in the past year. (LASTDEN3=2, 3, or 4)
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 in the past year. (LASTDEN3=7,9 or missing)

SAS Code:

```
IF LASTDEN3=1 THEN _DENVST2=1;
ELSE IF LASTDEN3 IN (2,3,4,8) THEN _DENVST2=2;
ELSE IF LASTDEN3 IN (.,7,9) THEN _DENVST2=9;
```

Section 7: 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 - 654321	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 who reported they didn´t know, or weren´t sure of their race. (MRACE=7)
9	Refused	Respondents who 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 7: 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 - 123456	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 who reported they didn´t know, or weren´t sure of their race. (MRACEORG=7)
9	Refused	Respondents who 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 7: 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 who reported their race as white. (MRACE=1 or MRACEASC>11 and ORACE2=1)
2	Black or African American	Respondents who reported their race as black. (MRACE=2 or MRACEASC>11 and ORACE2=2)
3	Asian	Respondents who reported their race as Asian. (MRACE=3 or MRACEASC>11 and ORACE2=3)
4	Native Hawaiian or other Pacific Islander	Respondents who reported their race as Native Hawaiian or Pacific Islander. (MRACE=4 or MRACEASC>11 and ORACE2=4)
5	American Indian or Alaskan Native	Respondents who 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 who 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 who 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 who 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 7: Demographics

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

1	White only	Respondents who reported they are white. (MRACEASC=1)
2	Black or African American only	Respondents who report they are black. (MRACEASC=2)
3	Asian Only	Respondents who reported they are Asian. (MRACEASC=3)
4	Native Hawaiian or other Pacific Islander only	Respondents who reported they are native Hawaiian or Pacific Islander. (MRACEASC=4)
5	American Indian or Alaskan Native only	Respondents who reported they are American Indian or Alaska Native. (MRACEASC=5)
6	Other race only	Respondents who reported they are of some other race group not listed in the question responses. (MRACEASC=6)
7	Multiracial	Respondents who 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 who reported they did not know their race. (MRACEASC=7)
99	Refused	Respondents who 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 7: Demographics

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

1	White only, non-Hispanic	Respondents who reported they are white and not of Hispanic origin. (_MRACE=1 and HISPANC2=2)
2	Black only, non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (_MRACE=2 and HISPANC2=2)
3	Asian only, non-Hispanic	Respondents who reported they are Asian and not of Hispanic origin. (_MRACE=3 and HISPANC2=2)
4	Native Hawaiian or other Pacific Islander only, Non-Hispanic	Respondents who reported they are Native Hawaiian or Pacific Islander and not of Hispanic origin. (_MRACE=4 and HISPANC2=2)
5	American Indian or Alaskan Native only, Non-Hispanic	Respondents who reported they are American Indian or Alaska Native and not of Hispanic origin. (_MRACE=5 and HISPANC2=2)
6	Other race only, non-Hispanic	Respondents who 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)
7	Multiracial, non-Hispanic	Respondents who reported they are of more than one race group and are not of Hispanic origin. (_MRACE=7 and HISPANC2=2)
8	Hispanic	Respondents who reported they are of Hispanic origin. (HISPANC2=1)
9	Don't know/ Not sure/ Refused	Respondents who 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 7: Demographics

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

1	Non-Hispanic White	Respondents who reported they are white and not of Hispanic origin. (RACE2=1)
2	Non-White or Hispanic	Respondents who 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 who 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 7: Demographics

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

1	White only, Non-Hispanic	Respondents who reported they are white and not of Hispanic origin. (RACE2=1)
2	Black only, Non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (RACE2=2)
3	Other race only, Non-Hispanic	Respondents who reported they are not white and not black and not of Hispanic origin. (RACE2=3, 4, 5, 6)
4	Multiracial, Non-Hispanic	Respondents who reported being multiracial but not of Hispanic origin. (RACE2=7)
5	Hispanic	Respondents who reported they are of Hispanic origin. (RACE2=8)
9	Don't know/ Not sure/ Refused	Respondents who 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 7: Demographics

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

1	White - Non-Hispanic	Respondents who reported they are white and not of Hispanic origin. (_RACEGR2=1)
2	Black - Non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (_RACEGR2=2)
3	Hispanic	Respondents who 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 7: 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	One census 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 7: 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 7: 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 who reported they didn´t know, were not sure, refused to report or had missing responses for their age. (AGE=7, 9, missing)

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 7: 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 who 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 7: 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 7: Demographics

HTIN4   *Calculated variable for reported height in inches. HTIN4 is derived from HEIGHT2. HTIN4 is calculated by adding the foot portion of HEIGHT2 multiplied by 12, to the inch portion.*

36 - 95	Height in inches	Respondents calculated height in inches. (HTIN4=(height in feet x 12) + height in inches)
999	Don't know/ Refused/ Missing	Respondents who 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 or HEIGHT3 < 36 inches or HEIGHT3 > 95 inches)

SAS Code:

```
IF 300<=HEIGHT3<=311 THEN HTIN4=((HEIGHT3-300)+36);
ELSE IF 400<=HEIGHT3<=411 THEN HTIN4=((HEIGHT3-400)+48);
ELSE IF 500<=HEIGHT3<=511 THEN HTIN4=((HEIGHT3-500)+60);
ELSE IF 600<=HEIGHT3<=611 THEN HTIN4=((HEIGHT3-600)+72);
ELSE IF 700<=HEIGHT3<=711 THEN HTIN4=((HEIGHT3-700)+84);
```

Section 7: Demographics

HTM4		*Calculated variable for reported height in meters.* HTM4 is derived from the variable HTIN4 by multiplying HTIN4 by 2.54 cm per in and dividing by 100 cm per meter. HTM4 is derived from HEIGHT2 metric values by dividing by 100.
91 - 244	Height in meters [2 implied decimal places]	Respondents reported or calculated height in meters. (HTM4=HTIN4 x 0.0254 or HTM4 = (HEIGHT3 - 9000) ÷ 100)
999	Don't know/ Refused/ Missing	Respondents who 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 or HEIGHT3 < 0.91 meters or HEIGHT3 2.44 meters)
| | **SAS Code:** | ```
IF 300 <= HEIGHT3 <= 711 THEN HTM4=HTIN4*0.0254;
ELSE IF 9091 <= HEIGHT3 < 9244 THEN HTM4=(HEIGHT3-9000)/100;
``` |

Section 7: Demographics

WTKG3		*Calculated variable for reported weight in kilograms.* WTKG3 is derived from WEIGHT2 by multiplying WEIGHT2 by 0.4535924 kg per lb.
2300 - 29500	Weight in kilograms [2 implied decimal places]	Respondents reported or calculated weight in kilograms.
99999	Don't know/ Refused/ Missing	Respondents who reported they didn´t know, were not sure, refused to report or had missing responses for their weight.
| | **SAS Code:** | ```
** CONVERSION FACTOR = 0.4535924 kg/lb **;
IF WEIGHT2 NOT IN (777,999,7777,9999,.) THEN DO;
IF 0050 LE WEIGHT2 < 0650 THEN WTKG3=WEIGHT2*0.4535924;
ELSE IF 9023 LE WEIGHT2 < 9295 THEN WTKG3=WEIGHT2-9000;
END;
``` |

Section 7: Demographics

_BMI5		*Calculated variable for body mass index (bmi).* _BMI5 is derived from WTKG3 and HTM4. It is calculated by dividing WTKG3 by HTM4².
1 - 9999	1 or greater	Respondents calculated body mass index (BMI) {units=kilograms per meter squared}. (_BMI5 = WTKG3 / (HTM4xHTM4))
.	Don't know/ Refused/ Missing	Respondents who had a missing value for their height in meters or weight in kilograms. (WTKG3=missing or HTM4=missing or _BMI5<12.00 or _BMI5>=100 or PREGNANT=1)
| | **SAS Code:** | ```
IF (WTKG3 NOTIN (.)) AND (HTM4 NOTIN (.)) THEN _BMI5=WTKG3/(HTM4 ** 2);
ELSE _BMI5=.;
IF _BMI5 NE . THEN _BMI5=ROUND(_BMI5,.01);
IF _BMI5 > 99.99 THEN _BMI5=.;
IF _BMI5 < 12.00 THEN _BMI5=.;
IF PREGNANT=1 THEN _BMI5=.;
``` |

Section 7: Demographics

_BMI5CAT *Calculated variable for four-categories of body mass index (bmi). _BMI5CAT is derived from _BMI5.*

1	Underweight	Respondents classified as underweight based on body mass index. ($_BMI5 < 18.50$)
2	Normal Weight	Respondents classified as normal weight based on body mass index. ($18.50 <= \_BMI5 < 25.00$)
3	Overweight	Respondents classified as overweight based on body mass index. ($25.00 <= \_BMI5 < 30.00$)
4	Obese	Respondents classified as obese based on body mass index. ($30.00 <= \_BMI5 < 99.99$)
.	Don't know/ Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. ($\_BMI5=.$)

SAS Code:
```
IF (0.00 LE _BMI5 < 18.50) THEN _BMI5CAT=1;
 ELSE IF (18.50 LE _BMI5 < 25.00) THEN _BMI5CAT=2;
 ELSE IF (25.00 LE _BMI5 < 30.00) THEN _BMI5CAT=3;
ELSE IF _BMI5 GE 30.00 THEN _BMI5CAT=4;
```

Section 7: Demographics

_RFBMI5 *Calculated variable for adults who have a body mass index greater than 25.00 (overweight or obese). _RFBMI5 is derived from _BMI5.*

1	No	Respondents not classified as overweight or obese based on body mass index. ($12 <= \_BMI5 < 25.00$)
2	Yes	Respondents classified as overweight or obese based on body mass index. ($25.00 <= \_BMI5 <= 99.99$)
9	Don't know/ Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. ($\_BMI5=missing$)

SAS Code:
```
IF (12.00 LE _BMI5 < 25.00) THEN _RFBMI5=1;
 ELSE IF (25.00 <=  _BMI5 < 99.99) THEN _RFBMI5=2;
 ELSE _RFBMI5=9;
** Round off HTM4, WTKG3 and _BMI5 to 2 decimal places and remove the
decimal **;
 HTIN4 = round(HTIN4,1);
 HTM4 = round((HTM4*100),1);
 WTKG3 = round((WTKG3*100),1);
 IF _BMI5 NE . THEN _BMI5 = ROUND((_BMI5*100),1);
```

Section 7: Demographics

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

1	No children in household	Respondents who reported having no children. (CHILDREN=88)
2	One child in household	Respondents who reported having one child. (CHILDREN=1)
3	Two children in household	Respondents who reported having two children. (CHILDREN=2)
4	Three children in household	Respondents who reported having three children. (CHILDREN=3)
5	Four children in household	Respondents who reported having four children. (CHILDREN=4)
6	Five or more children in household	Respondents who reported having five or more children. ($5 <=$ CHILDREN < 87)
9	Don't know/ Not sure/ Missing	Respondents who 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 7: Demographics

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

1	Did not graduate High School	Respondents who reported they did not graduate high school. (EDUCA=1,2,3)
2	Graduated High School	Respondents who reported they graduated high school. (EDUCA=4)
3	Attended College or Technical School	Respondents who reported they attended college or technical school. (EDUCA=5)
4	Graduated from College or Technical School	Respondents who reported they graduated from college or technical school. (EDUCA=6)
9	Don't know/ Not sure/ Missing	Respondents who reported they didn´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 7: Demographics

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

1	Less than $15,000	Respondents whose reported income is less than $15,000. (INCOME2=1,2)
2	$15,000 to less than $25,000	Respondents whose reported income is $15,000 to less than $25,000. (INCOME2=3,4)
3	$25,000 to less than $35,000	Respondents whose reported income is $25,000 to less than $35,000. (INCOME2=5)
4	$35,000 to less than $50,000	Respondents whose reported income is $35,000 to less than $50,000. (INCOME2=6)
5	$50,000 or more	Respondents whose reported income is $50,000 or more. (INCOME2=7,8)
9	Don't know/ Not sure/ Missing	Respondents who 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 8: Disability

There are no calculated variables for Section 8.

Section 9: 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 who 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 who reported having smoked at least 100 cigarettes in their lifetime and now smoke some days. (SMOKE100=1 and SMOKDAY2=2)
3	Former smoker	Respondents who reported having smoked at least 100 cigarettes in their lifetime and currently do not smoke. (SMOKE100=1 and SMOKDAY2=3)
4	Never smoked	Respondents who reported they had not smoked at least 100 cigarettes in their lifetime. (SMOKE100=2)
9	Don't know/ Refused/ Missing	Respondents who reported they didn't know if they had smoked 100 cigarettes in their lifetime, those who refused to answer if they had smoked 100 cigarettes in their lifetime, those who didn't know if they now smoked every day, some days or not at all, those who 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 9: Tobacco Use

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

1	No	Respondents who reported they had not smoked at least 100 cigarettes in their lifetime, those who reported having smoked 100 cigarettes in their lifetime but do not currently smoke. (_SMOKER3=3, 4)
2	Yes	Respondents who reported having smoked at least 100 cigarettes in their lifetime and currently smoke. (_SMOKER3=1, 2)
9	Don't know/ Refused/ Missing	Respondents who reported they did not know if they had smoked 100 cigarettes in their lifetime, those who refused to answer if they had smoked 100 cigarettes in their lifetime, those who didn't know if they now smoked every day, some days or not at all, those who 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 10: Alcohol Consumption

DRNKANY5   *Calculated variable for adults who reported having had at least one drink of alcohol in the past 30 days..* DRNKANY5 is derived from AKCDAY5

1	Yes	Respondents who reported drinking at least one alcoholic beverage in the past 30 days. (1 <= ALCDAY <= 231)
2	No	Respondents who reported drinking no alcoholic beverages in the past 30 days. (ALCDAY5=888)
7	Don't know/ Not Sure	Respondents who reported not knowing if they drank at least one alcoholic beverage in the past 30 days. (ALCDAY5=777)
9	Refused/ Missing	Respondents who refused to answer or had a missing value for drinking at least one alcoholic beverage in the past 30 days. (ALCDAY5=999, Missing)

SAS Code:

```
IF 1 <= ALCDAY5 < 231 THEN DRNKANY5=1;
ELSE IF ALCDAY5=888 THEN DRNKANY5=2;
ELSE IF ALCDAY5=777 THEN DRNKANY5=7;
ELSE DRNKANY5=9;
```

Section 10: Alcohol Consumption

DROCDY3_   *Calculated variable for drink-occasions-per-day.* DROCDY3_ is derived from ALCDAY5 by dividing the ALCDAY5 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. (ALCDAY5=888)
1 - 899	Drink-Occasions per day	Respondents reported number of occasions per day that they consumed alcohol. (ALCDAY5 not equal to 777, 888, 999, or missing)
900	Don't know/ Not Sure Or Refused/ Missing	Respondents who reported they did not know how many days they had at least one drink of alcohol, those who refused to answer how many days they had at least one drink of alcohol, those with missing responses. (ALCDAY5=777, 999, or missing)

SAS Code:

```
IF ALCDAY5 NOTIN (888,777,999,.) THEN DO;
 IF 101 LE ALCDAY5 LE 107 THEN DROCDY3_=(ALCDAY5-100)/7;
 ELSE IF 201 LE ALCDAY5 LE 230 THEN DROCDY3_=(ALCDAY5-200)/30;
 END;
ELSE IF ALCDAY5 EQ 888 THEN DROCDY3_=0;
 ELSE DROCDY3_=9;
* DROCDY3_=round((DROCDY3_*100),1);
 *This is done after all of the alcohol calculations but the code is
included here;
```

Section 10: Alcohol Consumption

_RFBING5   *Calculated variable for binge drinkers (males having five or more drinks on one occasion, females having four or more drinks on one occasion). _RFBING5 is derived from DRNK3GE5 and ALCDAY5.*

1	No	Respondents who reported they did not drink in the past 30 days, or those who reported that they did drink alcohol in the past 30 days but did not report having five or more drinks of alcohol on an occasion. (ALCDAY5<231 and DRNK3GE5=88; or ALCDAY5=888)
2	Yes	Respondents who reported they did drink in the past 30 days and had five or more drinks on one or more occasions in the past month. (ALCDAY5<231 and 1<=DRNK3GE5<=76)
9	Don't know/ Refused/ Missing	Respondents who reported 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 ALCDAY5=777, 999, missing)

SAS Code:
```
IF ALCDAY5 NOTIN (888) THEN DO;
 IF 1 LE DRNK3GE5 LE 76 THEN _RFBING5=2;
 ELSE IF DRNK3GE5 IN (.,77,99) THEN _RFBING5=9;
 ELSE IF DRNK3GE5 IN (88) THEN _RFBING5=1;
 END;
ELSE IF ALCDAY5 = 888 THEN _RFBING5=1;
  ELSE _RFBING5=9;
```

Section 10: Alcohol Consumption

_DRNKDY4   *Calculated variable for calculated total number of alcoholic beverages consumed per day. _DRNKDY4 is derived from DROCDY3_ and AVEDRNK2 by multiplying the total number of drink occasions per day (DROCDY3_) by the average number of drinks per occasion (AVEDRNK2).*

0	Did not drink	Respondents who did not drink in the past month. (DROCDY3_=0)
1 - 9899	Number of drinks per day	Respondents reported number of alcoholic drinks in the past month. (0 < DROCDY3_ < 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 DROCDY3_=900)

SAS Code:
```
IF DROCDY3_ = 0 THEN _DRNKDY4=0;
ELSE IF DROCDY3_ = 9 THEN _DRNKDY4=99;
ELSE IF AVEDRNK2 IN (.,77,99) THEN _DRNKDY4=99;
ELSE _DRNKDY4=AVEDRNK2 * DROCDY3_;
* _DRNKDY4=ROUND((_DRNKDY4*100),1);
*This is done after all of the alcohol calculations but the code is
included here;
```

Section 10: Alcohol Consumption

_DRNKMO4 *Calculated variable for calculated total number of alcoholic beverages consumed per month. _DRNKMO4 is derived by multiplying _DRNKDY4 by 30.*

0	Did not drink in the past month	Respondents who did not consume any drinks of alcohol in the past month. (_DRNKDY4=0)
1 - 9998	Number of Drinks	Respondents reported number of alcoholic drinks per day. (0 < _DRNKDY4 < 9900)
9999	Don't know/ Refused/ Missing	Respondents who reported they did not know if they consumed any drinks of alcohol in the past month, or those who refused to answer if they consumed any drinks of alcohol in the past month. (_DRNKDY4=9900)

SAS Code:

```
IF _DRNKDY4 NOTIN (.,99) THEN _DRNKMO4=_DRNKDY4*30;
ELSE _DRNKMO4=9999;
* _DRNKMO4=ROUND(_DRNKMO4,1);
*This is done after all of the alcohol calculations but the code is
included here;
```

Section 10: Alcohol Consumption

_RFDRHV4 *Calculated variable for heavy drinkers (adult men having more than two drinks per day and adult women having more than one drink per day). _RFDRHV4 is derived from _DRNKDY4, ALCDAY5, and SEX.*

1	No	Male Respondents who reported having 2 drinks per day or less, or female Respondents who reported having 1 drinks per day or less. (Sex=1 and _DRNKDY4 <= 200 or Sex=2 and _DRNKDY4 <= 100 or ALCDAY5=888)
2	Yes	Male Respondents who reported having more than 2 drinks per day, or female Respondents who reported having more than 1 drink per day. (Sex=1 and _DRNKDY4 > 200 or Sex=2 and _DRNKDY4 > 100)
9	Don't know/ Refused/ Missing	Respondents with don´t know, refused or missing responses for ALCDAY5 or _DRNKDY4. (ALCDAY5=777, 999, or missing, or _DRNKDY43=99, or missing)

SAS Code:

```
IF SEX=1 AND _DRNKDY4 NOTIN (99,.) THEN DO;
 IF _DRNKDY4 GT 2 THEN _RFDRHV4=2;
 ELSE IF _DRNKDY4 LE 2 THEN _RFDRHV4=1;
 END;
 ELSE IF SEX=2 AND _DRNKDY4 NOTIN (99,.) THEN DO;
 IF _DRNKDY4 GT 1 THEN _RFDRHV4=2;
ELSE IF _DRNKDY4 LE 1 THEN _RFDRHV4=1;
 END;
 ELSE IF ALCDAY5 EQ 888 THEN _RFDRHV4=1;
 ELSE _RFDRHV4=9;
```

Section 10: Alcohol Consumption

_RFDRMN4 *Calculated variable for adult men who are heavy drinkers (having more than two drinks per day).* _RFDRMN4 is derived from _DRNKDY4 and SEX and ALCDAY5.

1	No	Male Respondents who reported having 2 drinks per day or less. (SEX=1 and _DRNKDY4 <= 200 or ALCDAY5=888)
2	Yes	Male Respondents who reported having more than 2 drinks per day. (SEX=1 and _DRNKDY4 > 200)
9	Don't know/ Refused/ Missing	Male respondents with don´t know, refused or missing responses for ALCDAY5 or _DRNKDY4. (SEX=1 and ALCDAY5=777, 999, or missing, or _DRNKDY4=99, or missing)
.	Respondent is female	Female respondents. (SEX=2)

SAS Code:

```
IF SEX=1 THEN DO;
 IF _DRNKDY4 NOTIN (99,.) THEN DO;
 IF _DRNKDY4 GT 2 THEN _RFDRMN4=2;
 ELSE IF _DRNKDY4 LE 2 THEN _RFDRMN4=1;
 END;
 ELSE IF ALCDAY5 IN (888) THEN _RFDRMN4=1;
ELSE _RFDRMN4=9;
 END;
 ELSE IF SEX=2 THEN _RFDRMN4=.;
```

Section 10: Alcohol Consumption

_RFDRWM4   *Calculated variable for adult women who are heavy drinkers (having more than one drink per day).* _RFDRWM4 is derived from _DRNKDY4 and SEX and ALCDAY5.

1	No	Female Respondents who reported having 1 drink per day or less. (SEX=2 and _DRNKDY4 <= 200 or ALCDAY5=888)
2	Yes	Female Respondents who reported having more than 1 drink per day. (SEX=2 and _DRNKDY4 > 200)
9	Don't know/ Refused/ Missing	Female respondents with don´t know, refused or missing responses for ALCDAY5 or _DRNKDY4. (SEX=2 and ALCDAY5=777, 999, or missing, or _DRNKDY4=99, or missing)
.	Respondent is male	Male respondents. (SEX=1)

SAS Code:

```
IF SEX=2 THEN DO;
 IF _DRNKDY4 NOTIN (99,.) THEN DO;
 IF _DRNKDY4 GT 1 THEN _RFDRWM4=2;
 ELSE IF _DRNKDY4 LE 1 THEN _RFDRWM4=1;
 END;
 ELSE IF ALCDAY5 IN (888) THEN _RFDRWM4=1;
ELSE _RFDRWM4=9;
 END;
 Else IF SEX=1 THEN _RFDRWM4=.;
** ROUND OFF _DRNKMO4 TO NO DECIMAL PLACES ** MULTIPLY _DRNKDY4 BY
100 AND THEN ROUND OFF TO NO DECIMAL PLACES AND THEN REMOVE THE DECIMAL
PLACES **;
 DROCDY3_=round((DROCDY3_*100),1);
 _DRNKMO4=ROUND(_DRNKMO4,1);
 _DRNKDY4=ROUND((_DRNKDY4*100),1);
```

Section 11: Immunization

_FLSHOT5   *Calculated variable for adults aged 65+ who have had a flu shot within the past year.* _FLSHOT5 is derived from FLUSHOT5.

1	Yes	Respondents aged 65 or older who reported having a flu shot within the past 12 months. (AGE >= 65 and FLUSHOT5=1)
2	No	Respondents aged 65 or older who reported not having had a flu shot within the past 12 months. (AGE >= 65 and FLUSHOT5=2)
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who did not know their age, those who refused to report their age, those who didn't know if they had a flu shot in the past 12 months, or those who refused to answer if they had a flu shot in the past 12 months, or those with missing responses. (AGE >= 65 and FLUSHOT4=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 FLUSHOT5=1 THEN _FLSHOT5=1;
 ELSE IF FLUSHOT5=2 THEN _FLSHOT5=2;
 ELSE IF FLUSHOT5 IN (.,7,9) THEN _FLSHOT5=9;
 END;
 ELSE IF AGE IN (.,7,9) THEN _FLSHOT5=9;
 ELSE _FLSHOT5=.;
```

Section 11: 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 who reported having a pneumonia shot. (AGE >= 65 and FLUSHOT3=1)
2	No	Respondents aged 65 or older who reported 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 who refused to report their age, those who did not know if they ever had a pneumonia shot, those who 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 12: Falls

There are no calculated variables for Section 12.

Section 13: 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 who reported 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 who reported 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 who reported 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 13: Seatbelt Use

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

1	Always Wear Seat Belt	Respondents who reported 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 who reported 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 who 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 14: Drinking and Driving

There are no calculated variables for Section 14.

Section 15: Breast/Cervical Cancer Screening

_RFMAM2Y *Calculated variable for women respondents aged 40+ who 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 who 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 who 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 15: Breast/Cervical Cancer Screening

_MAM502Y   *Calculated variable for women respondents aged 50+ who 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 who 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 who 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 15: Breast/Cervical Cancer Screening

_RFPAP32   *Calculated variable for women respondents aged 18+ who 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, who 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, who 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 16: Prostate Cancer Screening

_RFPSA21 *Calculated variable for male respondents aged 40+ who have had a psa test in the past 2 years.* _RFPSA21 is derived from SEX, AGE, PSATEST1, and PSATIME.

1	Yes	Male respondents aged 40 and older who have had a PSA test within the past two years. (SEX=1 and AGE >= 40 and PSATEST1=1 and PSATIME=1 or 2)
2	No	Male respondents aged 40 and older who have not received a PSA test within the past two years. (SEX=1 and AGE >= 40 and PSATEST1=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 PSATEST1=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 PSATEST1=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 PSATEST1=1 THEN DO;
IF PSATIME IN (1,2) THEN _RFPSA21=1;
ELSE IF PSATIME IN (3,4,5) THEN _RFPSA21=2;
ELSE IF PSATIME IN (7,9) THEN _RFPSA21=9;
ELSE IF PSATIME=. THEN _RFPSA21=.;
END;
ELSE IF PSATEST1=2 THEN _RFPSA21=2;
ELSE IF PSATEST1 IN (7,9) THEN _RFPSA21=9;
ELSE IF PSATEST1=. THEN _RFPSA21=.;
END;
ELSE IF (SEX=1) AND AGE IN (.,7,9) THEN _RFPSA21=9;
ELSE _RFPSA21=.;
```

Section 17: Colorectal Cancer Screening

_RFBLDS2 *Calculated variable for respondents aged 50+ who 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 who 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 who 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 17: Colorectal Cancer Screening

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

1	Yes	Respondents aged 50 and older who have had a sigmoidoscopy or colonoscopy. (AGE >=50 and HADSIGM3=1)
2	No	Respondents aged 50 and older who 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 18: HIV/AIDS

_AIDTST3 *Calculated variable for adults who have ever been tested for hiv. _AIDTST3 is derived from HIVTST6.*

1	Yes	Respondents who reported to having been tested for HIV. (HIVTST6=1)
2	No	Respondents who did not report having been tested for HIV. (HIVTST6=2)
9	Don't know/ Not Sure/ Refused	Respondents who reported they did not know if they had been tested for HIV, or those who refused to answer if they had been tested for HIV. (HIVTST6=7,9)
.	Missing or Age greater than 64	Respondents with missing responses for HIVTST6. (HIVTST6=missing)

SAS Code:
```
IF HIVTST6=1 THEN _AIDTST3=1;
 ELSE IF HIVTST6=2 THEN _AIDTST3=2;
 ELSE IF HIVTST6 IN (7,9) THEN _AIDTST3=9;
 ELSE IF HIVTST6=. THEN _AIDTST3=.;
```