2006

# Behavioral Risk Factor Surveillance System 

## Calculated Variables and Risk Factors

(Version 7 - 04/24/2007)

## Calculated Variables on the 2006 Behavioral Risk Factor Surveillance System Data File

## INTRODUCTION:

This document provides information on calculated variables and risk factors for the 2006
Behavioral Risk Factor Surveillance System. These variables are calculated from responses to survey questions. 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 ${ }^{\circledR}$. 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 2006: <br> _MAM502Y

CALCULATED VARIABLES WITH CHANGED NAMES FOR 2006:
_PNEUMOC changed to _PNEUMO2 due to PNEUVAC2 changing to PNEUVAC3.
_RFSEAT3 (from 1998) changed to _RFSEAT5 due to a change in how responses were grouped.
_RFBING3 changed to _RFBING4 due to DRNK2GE5 changing to DRNK3GE5.
_EXTEETH changed to _EXTETH2 due to _RMVTEETH changing to _RMVTETH2.
_ALTEETH changed to _ALTETH2 due to _RMVTEETH changing to _RMVTETH2.
_DENTVST changed to _DENVST1 due to LASTDEN2 changing to LASTDEN3.

## Section 1: Health Status

_RFHLTH Health Status. _RFHLTH is derived from GENHLTH.
1 Good or Better Respondents report having excellent, very good or good health Health $\quad($ GENHLTH $=1,2,3)$
2 Fair or Poor Respondents who report having fair or poor health Health (GENHLTH =4, 5)
9 Don't Know/ Not Respondents who report they don't know their general health Sure/ Refused/ status, those who refused to answer the general health question, and Missing those with missing responses (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
There are no calculated variables for Section 3.

## Section 4: Exercise



## Section 5: Diabetes

There are no calculated variables for Section 5.

## Section 6: Oral Health

_EXTETH2 Adults that have had permanent teeth extracted. Variable is derived from RMVTETH3. (Meets Healthy People 2010 Objective 21-3: Increase the proportion of adults who have never had a permanent tooth extracted because of dental caries or periodontal disease.)
No Have had no permanent teeth removed (RMVTETH3=8).
Yes Have had permanent teeth removed (RMVTETH3=1 or 2 or 3).
Don't Know/ Not Respondent either with missing values, or refused to answer or did Sure/ Refused/ not know if they had any permanent teeth extracted Missing (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 (continued)



Section 7: Cardiovascular Disease Prevalence
There are no calculated variables for Section 7.

## Section 8: Asthma

|  | Adults who have ever been told they have asthma. _LIASTHM is derived from ASTHMA2. |  |
| :---: | :---: | :---: |
|  | No | Respondents that have not been told by a doctor, nurse, or health professional that they had asthma (ASTHMA2=2) |
|  | Yes | Respondents that have been told by a doctor, nurse, or health professional that they had asthma (ASTHMA2=1) |
|  | Don’t Know/ Not Sure/ 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 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; |

_CASTHMA Adults who have been told they currently have asthma. _CASTHMA is derived from ASTHMA2 and ASTHNOW. professional that they had asthma (ASTHMA2=2) or do not still have asthma (ASTHMA2=1 and ASTHNOW=2)
Yes Respondents that have been told by a doctor, nurse or health professional that they had asthma (ASTHMA2=1) and that they still have asthma (ASTHNOW=1)
9 Don't Know/ Not Respondents who reported they did not know if they had been told Sure/ Refused/ Missing

SAS code: 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)

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 8: Asthma (continued)

|  | that they had asthma. _ ASTHMST is derived from ASTHMA2 and ASTHNOW. |  |
| :---: | :---: | :---: |
|  | Current | Have been told by a doctor, nurse, or health professional that they had asthma (ASTHMA2=1) and that they still have asthma (ASTHNOW=1) |
|  | Former | Have been told by a doctor, nurse, or health professional that they had asthma (ASTHMA2=1) but do not still have asthma (ASTHNOW=2) |
|  | Never | Have not been told by a doctor, nurse, or health professional that they had asthma (ASTHMA2=2) |
|  | Don’t Know/ Not Sure/ 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 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 9: Disability

There are no calculated variables for Section 9.

## Section 10: Tobacco Use


_RFSMOK3 Adults who are current smokers. _RFSMOK3 derived from _SMOKER3.

## No

Don't Know/ Not Sure/ Refused/

Missing

## Section 11: Demographics Race variables

MRACEORG Reported MRACE variable with any trailing 7, 8, or 9 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. (Example: If MRACE=3147 then MRACEORG=314.)
SAS code:

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

MRACEASC Reported MRACE variable with any trailing 7, 8, or 9 removed, in ascending order. MRACEASC is derived from MRACEORG. The values that make up MRACEORG are sorted from smallest to largest. (Example: If MRACEORG=513 then MRACEASC=135.)
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 11: Demographics Race variables (continued)

| _PRACE | Preferred <br> ORACE2. <br> MRACEA <br> _PRACE <br> variable. | race category. _PRACE is derived from MRACEASC and If MRACEASC has only one response, then _PRACE= SC. If MRACEASC has more than one response then ORACE2. Hispanic or Latino information is not used to derive this |
| :---: | :---: | :---: |
| 1 | White | Respondents who report their race as white (MRACE=1 or MRACEASC>11 and ORACE2=1) |
| 2 | Black | Respondents who report their race as black (MRACE=2 or MRACEASC>11 and ORACE2=2) |
| 3 | Asian | Respondents who report they are Asian (MRACE=3 or MRACEASC>11 and ORACE2=3) |
| 4 | Native Hawaiian or Pacific Islander | Respondents who report their race as Native Hawaiian or Pacific Islander (MRACE=4 or MRACEASC>11 and ORACE2=4) |
| 5 | American Indian, Alaska Native | Respondents who report 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 N | No Preferred Race | Respondents who report they are of more than one race group but do not report a preference or preferred race is missing (MRACEASC>11 and ORACE2=7 or 9) |
| 8 | $\begin{aligned} & \text { Multiracial } \\ & \text { (Preferred Race } \\ & \text { Not Asked) } \end{aligned}$ | Respondents who report 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 | Respondents who report they did not know their race and did not answer the question about which race best represents them. <br> (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 11: Demographics Race variables (continued)

_MRACE 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. Hispanic or Latino information not used in defining this variable.
01 White only Respondents who report they are white (MRACEASC=1)
02 Black only Respondents who report they are black (MRACEASC=2)
03
Asian only Respondents who report they are Asian (MRACEASC=3)
Native Hawaiian Respondents who report they are Native Hawaiian or Pacific
or Pacific Islander Islander (MRACEASC=4) only
05 American Indian, Respondents who report they are American Indian or Alaska Alaska Native Native (MRACEASC=5)
only
06 Other Race only Respondents who report they are of some other race group not listed in the question responses (MRACEASC=6)
07 Multiracial Respondents who report they are of more than one race group (MRACEASC>11)
Don't Know/ Not Respondents who report they did not know their race
Sure (MRACEASC=7)
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 11: Demographics Race variables (continued)

RACE2 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, NonHispanic

Respondents who report they are white and not of Hispanic origin (_MRACE=01 and HISPANC2=2)
2 Black only, NonRespondents who report they are black and not of Hispanic origin Hispanic (_MRACE=02 and HISPANC2=2)
3 Asian only, NonHispanic Respondents who report they are Asian and not of Hispanic origin (_MRACE=03 and HISPANC2=2)
4 Native Hawaiian or Pacific Islander only, NonHispanic
5 American Indian,
Alaska Native only, NonHispanic
6 Other Race only,
Non-Hispanic Respondents who report they are Native Hawaiian or Islander and not of Hispanic origin (_MRACE=04 and HISPANC2=2)

Respondents who report they are American Indian or Alaska Native and not of Hispanic origin (_MRACE=05 and HISPANC2=2)

Respondents who report they are of some other race group not listed in the question responses and are not of Hispanic origin (_MRACE=06 and HISPANC2=2)
7 Multiracial, NonRespondents who report they are of more than one race group and are not of Hispanic origin (_MRACE=07 and HISPANC2=2)
8 Hispanic
9 Don't Know/ Not Sure/ Refused/ Missing

SAS code: Respondents who report they are of Hispanic origin (HISPANC2=1)
Respondents who did not know their race or refused to give their race and are not of Hispanic origin or did not know if they are of Hispanic origin or refused to answer if they are of Hispanic origin (_MRACE $=77$, 99 and HISPANC2=2, or HISPANC2=7, 9)
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 11: Demographics Race variables (continued)

_RACEG2 White/Hispanic race group._RACEG2 is derived from RACE2.
1 White only, Non- Respondents who report they are white and not of Hispanic origin Hispanic (RACE2=1)
2 Non-White, All other respondents with valid RACE2 responses (RACE2=2, 3, Multiracial or $4,5,6,7,8$ )

Hispanic
9 Don't Know/ Not Respondents for whom RACE2=9 Sure/ Refused/

Missing
SAS code: IF RACE2 = $1 \quad$ THEN _RACEG2 = 1; ELSE IF RACE2 IN (2,3,4,5,6,7,8) THEN _RACEG2 = 2; ELSE IF RACE2 = 9 THEN _RACEG2 = 9;
_RACEGR2 Five-level race/ethnicity category. _RACEGR2 is derived from RACE2.
1 White only, Non- Respondents who report they are white and not of Hispanic origin Hispanic (RACE2=1)
2 Black only, Non- Respondents who report they are black and not of Hispanic origin Hispanic (RACE2=2)
3 Other Race only, All other respondents with valid race responses except for those Non-Hispanic reporting multiracial or Hispanic origins (RACE2=3, 4, 5, 6)
4 Multiracial, Non- All other respondents reporting multiracial but non-Hispanic origin Hispanic (RACE2=7)
5
Hispanic Respondents who report that they are of Hispanic origin (RACE2=8)
9 Don't Know/ Not
Sure/ Refused
SAS code:

|  | IF | RACE2 |  | THEN | 2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELS | IF | RACE2 = 2 |  | THEN | RACEGR2 |  |  |
| ELS | IF | 3 LE RACE2 | LE 6 | THEN | RACEGR2 | 3 |  |
| ELS | IF | RACE2 EQ 7 |  | THEN | RACEGR2 |  |  |
| ELS | IF | RACE2 EQ 8 |  | THEN | RACEGR2 |  |  |
| ELS |  | RACE2 $=9$ |  | THEN | RACEGR2 |  |  |

## Section 11: Demographics Race variables (continued)

_RACE_G Five-level race/ethnicity category._RACE_G is derived from _RACEGR2. _RACE_G is used to create the data for the Web tables.

1 White only, Non- Respondents who report they are white and not of Hispanic origin Hispanic (_RACEGR2=1)
2 Black only, Non- Respondents who report they are black and not of Hispanic origin Hispanic (_RACEGR2=2)
3 Hispanic Respondents who report that they are of Hispanic origin (_RACEGR2=5)
4 Other Race only, All other respondents with valid race responses except for those Non-Hispanic reporting multiracial or Hispanic origins (_RACEGR2=3)
5 Multiracial, Non- All other respondents reporting multiracial but non-Hispanic origin Hispanic (_RACEGR2=4)
Don't Know/ Not Respondents for whom _RACEGR2=9 or _RACEGR2="Missing" Sure/ Refused/ Missing
SAS code:

_CNRACE Number of census race categories chosen. _CNRACE is derived from MRACEASC and is equal to the number of "census" race categories chosen:
(White, Black, Asian, Native Hawaiian/Pacific Islander, American Indian/Alaska Native).

1-5
0

MRACEASC is between 1 and 5
MRACEASC is between 6 and 9
***************************

* 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 11: Demographics Race variables (continued)

_CNRACEC Number of census race categories chosen, collapsed._CNRACEC is derived from _CNRACE.
1 One category One census race category chosen by the respondent (_CNRACE=1)
2 More than one Two or more census race categories chosen by the respondent category (_CNRACE > 1)
Don't Know/ Not Respondents for whom _CNRACE=0
Sure/ Refused/
Missing


## Section 11: Demographics Age variables



## Section 11: Demographics Age variables (continued)


_AGE_G Six-level age category._AGE_G is derived from _IMPAGE (imputed age). _AGE_G is used to create the data for the web tables.

| 1 | 18-24 | Respondents with imputed ages 18-24 (18 <= _IMPAGE <= 24) |
| :---: | :---: | :---: |
| 2 | 25-34 | Respondents with imputed ages 25-34 (25 <= _IMPAGE <= 34) |
| 3 | 35-44 | Respondents with imputed ages 35-44 (35 <= _IMPAGE <= 44) |
| 4 | 45-54 | Respondents with imputed ages 45-54 (45 <= _IMPAGE <= 54) |
| 5 | 55-64 | Respondents with imputed ages 55-64 (55 <= _IMPAGE <= 64) |
| 6 | 65+ | Respondents with imputed ages 65-99 (_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 11: Demographics Overweight \& Obese

HTIN3 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. (Note: HTIN3 gets rounded after all of the BMI calculations occur to make sure that there are no decimals.)
SAS code:

```
* CREATE HEIGHT1 CHARACTER VARIABLE;
HEIGHT1=PUT(HEIGHT3,4.);
IF HEIGHT3 NOT IN (777,999,7777,9999,.) THEN DO;
    IF 0001 LE HEIGHT3 LT 9000 THEN DO;
            HTIN3=(INPUT((substr(HEIGHT1,3,2)),2.)) +
((INPUT((substr(HEIGHT1, 2, 1)),1.))*12);
            HTM3 = (HTIN3 * 2.54) / 100;
        END;
        ELSE DO;
            HTIN3=input(((HEIGHT3 - 9000)/2.54),3.0);
            HTM3 = (HEIGHT3 - 9000)/100;
        END;
END;
HTIN3 = round(HTIN3,1); *remove decimal places
IF HTIN3=. THEN HTIN3=999; *These are done after all
of the BMI calculations but the code is included here;
```


## Section 11: Demographics Overweight \& Obese (continued)

HTM3 Reported height in meters. HTM3 is derived from the variable HTIN3 by multiplying HTIN3 by $2.54 \mathrm{~cm} / \mathrm{in}$ and dividing by $100 \mathrm{~cm} /$ meter. (Note: HTM3 is stored in the data set with two implied decimal places and gets rounded after all of the BMI (Body Mass Index) calculations are completed; therefore, all calculations include the decimals.)
SAS code:

```
IF HEIGHT3 NOT IN (777,999,7777,9999,.) THEN DO;
                        IF 0001 LE HEIGHT3 LT 9000 THEN DO;
                    HTM3 = (HTIN3 * 2.54) / 100;
    END;
        ELSE DO;
            HTM3 = (HEIGHT3 - 9000)/100;
        END;
END;
HTM3 = round((HTM3*100),1); *remove decimal places
IF HTM3=. THEN HTM3=999; *These are done after all
of the BMI calculations but the code is included here;
```

WTKG2 Reported weight in kilograms. WTKG2 is derived from WEIGHT2 by dividing WEIGHT2 by $2.2 \mathrm{~kg} / \mathrm{lb}$. (Note: WTKG2 is stored in the data set with two implied decimal places and gets rounded after all of the BMI calculations are completed; therefore, all calculations include the decimals.)
SAS code:

```
IF WEIGHT2 NOT IN (777,999,7777,9999,.) THEN DO;
        IF 0001 LE WEIGHT2 LT 9000 THEN DO;
            WTKG2 = WEIGHT2 / 2.2;
        END;
        ELSE DO;
            WTKG2 = WEIGHT2 - 9000;
        END;
END;
WTKG2 = round((WTKG2*100),1); *remove decimal places
IF WTKG2=. THEN WTKG2=99999; *These are done after
all of the BMI calculations but the code is included
here;
```

_BMI4 Body mass index (BMI). _BMI4 is derived from WTKG2 and HTM3. It is calculated by WTKG2 divided by HTM3². (Note: The final _BMI4 value is rounded so it is free of decimals.)

```
SAS code:
```

```
IF (WTKG2 NOTIN (.)) AND (HTM3 NOTIN (.)) THEN _BMI4=
```

IF (WTKG2 NOTIN (.)) AND (HTM3 NOTIN (.)) THEN _BMI4=
WTKG2 / (HTM3 ** 2) ;
WTKG2 / (HTM3 ** 2) ;
ELSE _BMI4=.;
ELSE _BMI4=.;
BMI4=ROUND(_BMI4,.01);
BMI4=ROUND(_BMI4,.01);
IF _BMI4 GT 99.98 THEN _BMI4 = 99.98 ;
IF _BMI4 GT 99.98 THEN _BMI4 = 99.98 ;
ELSE IF _BMI4=. THEN _BMI4 = 99.99 ;
ELSE IF _BMI4=. THEN _BMI4 = 99.99 ;
_BMI4 = ROUND((_BMI4*100),1); *This is done after all
_BMI4 = ROUND((_BMI4*100),1); *This is done after all
of the BMI calculations but the code is included here;

```
of the BMI calculations but the code is included here;
```


## Section 11: Demographics Overweight \& Obese (continued)


_RFBMI4 Adults who have a body mass index greater than 25.00 (Overweight or Obese). Variable is derived from _BMI4.

| 1 | No | Respondents for whom_BMI4<25.00 |
| :--- | :---: | :--- |
| 2 | Yes | Respondents for whom $25.00<=\_$BMI4 $<99.99$ |
| 9 | Don't Know/ Not |  |
| Respondents for whom_BMI4=99.99 |  |  |

## Section 11: Demographics (continued)

_CHLDCNT Number of children._CHLDCNT is derived from CHILDREN.

1 No Children Respondents for whom CHILDREN $=88$
2 One Children Respondents for whom CHILDREN $=1$
3 Two Children
4 Three Children
$6 \quad$ Five or mor
Children
9 Don't Know/ Not Respondents for whom CHILDREN $=99$
Sure/ Refused/
Missing
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;

## Section 11: Demographics (continued)

_EDUCAG Highest grade of education completed. _EDUCAG is derived from EDUCA.
1 Did not graduate Respondents for whom EDUCA = 1, 2, 3
High School
2 High School Respondents for whom EDUCA = 4 graduate
3 Attended College Respondents for whom EDUCA = 5
or Technical School
$4 \quad$ College or $\quad$ Respondents for whom EDUCA $=6$
Technical School graduate
9 Don't Know/ Not Respondents for whom EDUCA = 9 or Missing Sure/ Refused/ 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 $=9 ;$ |  |

INCOMG Annual Household Income. _INCOMG is derived from INCOME2.
1 Less than \$15,000 Respondents for whom INCOME2 = 1 or 2
$2 \$ 15,000$ to less Respondents for whom INCOME2 $=3$ or 4 than \$25,000
3 \$25,000 to less Respondents for whom INCOME2 $=5$ than \$35,000
$4 \quad \$ 35,000$ to less Respondents for whom INCOME2 $=6$ than \$50,000
$5 \quad \$ 50,000$ or more Respondents for whom INCOME2 $=7$ or 8
9 Don't Know/ Not Respondents for whom INCOME2 = 77 or 99 or Missing Sure/ Refused/ Missing
SAS code:

|  | IF | INCOME2 |  | (1) | THEN | 㖪 | = 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELS | IF | INCOME2 |  | (3, | THEN | INCOMG |  |
| LS | IF | INCOME2 |  | (5) | THEN | INCOMG |  |
| LS | IF | INCOME2 | IN | (6) | THEN | INCOMG |  |
| LS | IF | INCOME2 | IN | $(7,8)$ | THEN | INCOMG |  |
| ELS | IF | INCOME2 | IN | (77, | THEN | INCOMG |  |

## Section 12: Veterans Status

There are no calculated variables for Section 14.

## Section 13: Alcohol Consumption

DROCDY2_ Drink-occasions-per-day. DROCDY2_ is derived from ALCDAY4 by dividing the ALCDAY4 variable by 7 days per week or 30 days per month. (Note: DROCDY2_ gets multiplied by 100 after _RFCRDR2 is created and before the final data set is created and gets stored in the ASCII file and in the dbf data set with no decimal places, so a value of 1.23 will be 123 in the final data set.)
Don't Know/ Not Respondents that reported they did not know how many days they Sure/ Refused/ had at least one drink of alcohol, those that refused to answer how Missing many days they had at least one drink of alcohol, those with missing responses (ALCDAY4=777, 999, Missing; or DRNKANY4=7, 9, Missing).
SAS code:
IF 101 LE ALCDAY4 LE 107 THEN
DROCDY2_=(ALCDAY4-100)/7;
ELSE IF 201 LE ALCDAY4 LE 230 THEN
DROCDY2_=(ALCDAY4-200)/30;
ELSE IF ALCDAY4 EQ 888 THEN DROCDY2_=0;
ELSE IF DRNKANY4 EQ 2 THEN DROCDY2_=0;
ELSE IF DRNKANY4 IN (.,7,9) THEN DROCDY2_=9; ELSE IF ALCDAY4 IN (.,777,999) THEN DROCDY2_=9; DROCDY2_=round((DROCDY2_*100),1); *This is done after all of the alcohol calculations but the code is included here;

## Section 13: Alcohol Consumption (continued)

_RFBING4 Binge drinkers (adults having five or more drinks on one occasion).
(Name _RFBING4 is derived from DRNK3GE5 and ALCDAY4. (Note: the name changed in was changed from _RFBING3 in 2005 due to DRNK2GE5 changing to 2006) DRNK3GE5.) 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 who report 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/ Not Sure/ Refused/

Missing

SAS code:

## Section 13: Alcohol Consumption (continued)

_DRNKDY3 Total number of alcohol drinks 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). _DRNKDY3 is stored in the data set with two implied decimal places. To get the actual value, divide DRNKDY2 by 100.

99 Don't Know/ Not Sure/ Refused/ Missing

SAS code: Respondents who did not drink in the past month (DROCDY2_=0)
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 (AVEDRNK2=77, 99, Missing) 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 (DROCDY2_=9)
IF DROCDY2 = $0 \quad$ THEN DRNKDY3=0;
ELSE IF DROCDY2_ = $9 \quad$ 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 (continued)

_DRNKMO3 Total number of alcohol drinks per month. _DRNKMO3 is derived by multiplying _DRNKDY3 by 30.

Respondents who did not consume any drinks of alcohol in the past month
9999 Don't Know/ Not Respondents who reported they did not know if they consumed any

Sure/ Refused/
Missing
Missing
SAS code:
drinks of alcohol in the past month, or those that refused to answer
if they consumed any drinks of alcohol in the past month
Respondents with missing responses
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;
_RFDRHV3 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. Heavy alcohol consumption was defined as men having an average of more than 2 drinks per day and women having an average of more than 1 drink per day. (_DRNKDY3 has two implied decimal places; therefore, two drinks per day are represented as _DRNKDY3=200.) female respondents who report having 1 drinks per day or less (Sex=1 and _DRNKDY3 <= 200 or Sex=2 and _DRNKDY3 <= 100 or ALCDAY4=888)
$2 \quad$ Yes Male respondents who report having more than 2 drinks per day, or female respondents who report having more than 1 drink per day
(Sex=1 and _DRNKDY3 > 200 or Sex=2 and _DRNKDY3 > 100)
9 Don't Know/ Not Sure/ Refused/ Missing
SAS code:

## Section 13: Alcohol Consumption (continued)


_RFDRWM3 Adult Women that are heavy drinkers (having more than one drink per day). _RFDRMN3 is derived from _DRNKDY3 and SEX and ALCDAY4. Heavy alcohol consumption was defined as women having an average of more than 1 drink per day. (_DRNKDY3 has two implied decimal places; therefore, two drinks per day are represented as _DRNKDY3=200.)
1 N
No
Female respondents who report having 1 drink per day or less (SEX=2 and _DRNKDY3 <= 200 or ALCDAY4=888)

2
Yes Female respondents who report having more than 1 drink per day (SEX=2 and _DRNKDY3 > 200)
9 Don't Know/ Not Female respondents (SEX=2) for whom ALCDAY4=777, 999, Sure/ Refused/

Missing Male
SAS code:

```
Male respondents (SEX=1)
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
END;
Else IF SEX=1 THEN _RFDRWM3=.;
```


## Section 14: Immunization/Adult Influenza Supplement

_FLSHOT3 Adults aged 65+ who have had a flu shot within the past year. _FLSHOT3 is derived from FLUSHOT3. (Meets Healthy People 2010 Objective \# 14-29: Increase The Proportion Of Adults Who Are Vaccinated Annually Against Influenza - Non-institutionalized Adults Aged 65+.)
1 Yes Respondents aged 65 years or older who reported having a flu shot within the past 12 months (FLUSHOT3=1)
2 No Respondents aged 65 years or older who reported not having had a flu shot within the past 12 months (FLUSHOT3=2)
9 Don't Know/ Not Sure/ Refused 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=7, 9, Missing; or FLUSHOT3=7, 9, Missing)
Missing Respondents aged 18-64
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 15: Falls

There are no calculated variables for Section 15.

## Section 16: Seatbelt Use



## Section 17: Drinking and Driving

There are no calculated variables for Section 17.

## Section 18: Women's Health

_RFMAM2Y Women aged 40 years and older who have had a mammogram within the past two years. Variable derived from SEX, AGE, HADMAM, and HOWLONG.

Female respondents aged 40 years and older that have received a mammogram within the past two years (HADMAM=1 and HOWLONG=1, 2)
No
Female respondents aged 40 years and older that have not received a mammogram within the past two years (HADMAM=2 or HADMAM=1 and HOWLONG=3, 4, 5)
9 Don’t Know/ Not Sure/ Refused 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 (HADMAM=7, 9, Missing or HOWLONG=7, 9, Missing or AGE=7, 9, Missing)
Missing $\quad$ Female respondents less than 40 years old, or male respondents
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 (continued)

_MAM502Y Women aged 50 years and older who have had a mammogram within the past (New variable two years. Variable derived from SEX, AGE, HADMAM, and HOWLONG. for 2006.)

1 Yes

## No

 Female respondents aged 50 years and older that have not received a mammogram within the past two years (HADMAM=2 or HADMAM=1 and HOWLONG=3, 4, 5)9 Don’t Know/ Not Sure/ Refused

Missing
SAS code:

Female respondents aged 50 years and older that have received a mammogram within the past two years (HADMAM=1 and HOWLONG=1, 2)

Female respondents aged 50 years 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 (HADMAM=7, 9, Missing or HOWLONG=7, 9, Missing or AGE=7, 9, Missing)
Female respondents less than 50 years old, or male respondents 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 (continued)



## Section 19: Prostate Cancer Screening

|  | years. Variable is derived from SEX, AGE, PSATEST, and PSATIME. |  |
| :---: | :---: | :---: |
|  | Yes | Male respondents aged 40 years and older that have had a PSA test within the past two years (PSATEST=1 and PSATIME=1, 2) |
|  | No | Male respondents aged 40 years and older that have not received a PSA test within the past two years (PSATEST=2 or PSATEST=1 and PSATIME $=3,4$ or 5) |
|  | Don’t Know/ Not Sure/ Refused | Male respondents aged 40 years 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 (PSATEST=7, 9 or PSATIME=7, 9 or AGE=7, 9, Missing) |
|  | Missing | Male respondents aged 40 years and older with missing responses for PSATEST or PSATIME, Male respondents aged less than 40, or female respondents |
| 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 _RFPSA2 $\bar{Y}=. ;$ |
|  |  | END; |
|  |  | ELSE IF (SEX=1) AND AGE IN (.,7,9) THEN _RFPSA2Y=9; |
|  |  | ELSE _RFPSA2Y=.; |

## Section 20: Colorectal Cancer Screening

_RFBLDST Adults aged 50 years and older who have had a blood stool test within the past two years. Variable is derived from AGE, BLDSTOOL, and LSTBLDS2.
(Meets Healthy People 2010 objective 3-12A: Increase the proportion of adults who receive a colorectal cancer screening examination.)
1
Yes Respondents aged 50 years and older that have had a blood stool test within the past two years (BLDSTOOL=1 and LSTBLDS2=1 or 2)
2 No
Respondents aged 50 years and older that have not received a blood stool test within the past two years (BLDSTOOL=2 or BLDSTOOL=1 and LSTBLDS2=3 or 4)
9 Don’t Know/ Not Sure/ Refused Respondents aged 50 years and older with don't know, not sure or refused responses to BLDSTOOL or LSTBLDS2 (BLDSTOOL=7, 9 or LSTBLDS2=7, 9) or with don't know, not sure, refused, or missing responses for AGE (AGE=7, 9, Missing)
Missing $\quad$ Respondents aged 50 years and older with missing responses for BLDSTOOL or LSTBLDS2, or respondents aged less than 50 years old
SAS code:

```
IF AGE>=50 THEN DO;
    IF BLDSTOOL=1 THEN DO;
    IF LSTBLDS2 IN (1,2) THEN _RFBLDST=1;
    ELSE IF LSTBLDS2 IN (3,4) THEN _RFBLDST=2;
    ELSE IF LSTBLDS2 IN (7,9) THEN _RFBLDST=9;
    ELSE IF LSTBLDS2=. THEN _RFBLDST=.;
    END;
    ELSE IF BLDSTOOL=2 THEN _RFBLDST=2;
    ELSE IF BLDSTOOL IN (7,9) THEN _RFBLDST=9;
    ELSE IF BLDSTOOL=. THEN _RFBLDST=.;
    END;
    ELSE IF AGE IN (.,7,9) THEN _RFBLDST=9;
    ELSE _RFBLDST=.;
```


## Section 20: Colorectal Cancer Screening (continued)

_RFSIGM2 Adults aged 50 years and older who have ever had a sigmoidoscopy or colonoscopy. Variable is derived from AGE and HADSIGM3. (Meets Healthy People 2010 objective 3-12B: Increase the proportion of adults who receive a colorectal cancer screening examination.)
1
Yes Respondents aged 50 years and older that have had a sigmoidoscopy or colonoscopy (HADSIGM3=1)

## No

Respondents aged 50 years and older that have never had a sigmoidoscopy or colonoscopy (HADSIGM3=2)

Don’t Know/ Not Sure/ Refused Respondents aged 50 years and older with don't know, not sure or refused responses to HADSIGM (HADSIGM3=7, 9) or with don't know, not sure, refused or missing responses to AGE (AGE=7, 9, Missing)
Missing $\quad$ Respondents aged 50 years and older with missing responses for HADSIGM3, or respondents aged less than 50 years old
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



## Section 22: Emotional Support and Life Satisfaction

There are no calculated variables for Section 22.

