

Calculated Variables
in the
2023 Data File
of the
Behavioral Risk Factor Surveillance System

(Version #12 - Revised: May 23, 2024)



Introduction

This document provides information on calculated variables for the 2023 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, which are 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. For example, WTKG3 is derived from the WEIGHT2 variable in the survey. WTKG3 is then used to calculate the body mass index variable (_BMI5). Most—but not all—of the intermediate variables end with an underscore such as FTJUDA2_.
3. Variables used to categorize or classify respondents. Most of these begin with an underscore such as _BMI5. 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. These variables commonly focus on health behaviors 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. Not all variables used to derive the calculated variables are in the public-access data set.

Calculated Variables in the 2023 BRFSS Data File

New Calculated Variables for 2023:

METVL12_ was added in 2023.

METVL22_ was added in 2023.

PAMISS3_ was added in 2023.

_MINAC12 was added in 2023.

_MINAC22 was added in 2023.

Calculated Variables with Changed Names for 2023:

ACTIN11_ changed to ACTIN12_ due to FC60_ changing to FC601_.

ACTIN21_ changed to ACTIN22_ due to FC60_ changing to FC601_.

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PA2MIN_ changed to PA3MIN_ due to PAMIN12_ changing to PAMIN13_ and PAMIN22_ changing to PAMIN23_.

PA2VIGM_ changed to PA3VIGM_ due to PAVIG12_ changing to PAVIG13_ and PAVIG22_ changing to PAVIG23_.

PAMIN12_ changed to PAMIN13_ due to ACTIN12_ changing to ACTIN13_ and _MINAC11 changing to _MINAC12.

PAMIN22_ changed to PAMIN23_ due to ACTIN22_ changing to ACTIN23_ and _MINAC21 changing to _MINAC22.

PAVIG12_ changed to PAVIG13_ due to ACTIN12_ changing to ACTIN13_ and _MINAC11 changing to _MINAC12.

PAVIG22_ changed to PAVIG23_ due to ACTIN22_ changing to ACTIN23_ and _MINAC21 changing to _MINAC22.

_HCVU652 changed to _HCVU653 due to PRIMINSR changing to PRIMINS1.

_HLTHPLN changed to _HLTHPL1 due to PRININSR changing to PRIMINS1.

_PA150R3 changed to _PA150R4 due to PA2VIGM_ changing to PA3VIGM_ and PA2MIN_ changing to PA3MIN_ and PAMISS2_ changing to PAMISS3_.

_PA30022 changed to _PA30023 due to _PA300R3 changing to _PA300R4.

_PA300R3 changed to _PA300R4 due to PA2MIN_ changing to PA3MIN_ and PAMISS2_ changing to PAMISS3_.

_PACAT2 changed to _PACAT3 due to PA2MIN_ changing to PA3MIN_ and PA2VIGM_ changing to PA3VIGM_ and PAMISS2_ changing to PAMISS3_.

_PAINDX2 changed to _PAINDX3 due to PA2MIN_ changing to PA3MIN_ and PAMISS2_ changing to PAMISS3_.

_PAREC2 changed to _PAREC3 due to _PAINDX2 changing to _PAINDX3.

_PASTAE2 changed to _PASTAE3 due to _PAREC2 changing to _PAREC3.

Calculated Variables in the 2023 BRFSS Data File

Section 1: Health Status		
_RFHLTH <i>Calculated variable for adults with good or better health. _RFHLTH is derived from GENHLTH.</i>		
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		
_PHYS14D <i>Calculated variable for 3 level not good physical health status: 0 days, 1-13 days, 14-30 days. _PHYS14D is derived from PHYSHLTH.</i>		
1	Zero days when physical health not good	Respondents who reported no days when their physical health was not good (PHYSHLTH=88)
2	1-13 days when physical health not good	Respondents who reported 1-13 days when their physical health was not good (1 <= PHYSHLTH <= 13)
3	14+ days when physical health not good	Respondents who reported 14 or more days when their physical health was not good (14 <= PHYSHLTH <= 30)
9	Don't know/Refused/ Missing	Respondents who reported they didn't know, refused or had missing values for PHYSHLTH (PHYSHLTH=77,99, or missing)
	SAS Code:	IF PHYSHLTH IN (77,99,.) THEN _PHYS14D=9; ELSE IF PHYSHLTH=88 THEN _PHYS14D=1; ELSE IF 1 LE PHYSHLTH LE 13 THEN _PHYS14D=2; ELSE _PHYS14D=3;

Calculated Variables in the 2023 BRFSS Data File

Section 2: Healthy Days		
_MENT14D <i>Calculated variable for 3 level not good mental health status: 0 days, 1-13 days, 14-30 days.</i> _MENT14D is derived from MENTHLTH.		
1	Zero days when mental health not good	Respondents who reported no days when their mental health was not good (MENTHLTH=88)
2	1-13 days when mental health not good	Respondents who reported 1-13 days when their mental health was not good (1 <= MENTHLTH <= 13)
3	14+ days when mental health not good	Respondents who reported 14 or more days when their mental health was not good (14 <= MENTHLTH <= 30)
9	Don't know/ Refused/ Missing	Respondents who reported they didn't know, refused or had missing values for MENTHLTH (MENTHLTH=77,99, or missing)
	SAS Code:	IF MENTHLTH IN (77,99,.) THEN _MENT14D=9; ELSE IF MENTHLTH=88 THEN _MENT14D=1; ELSE IF 1 LE MENTHLTH LE 13 THEN _MENT14D=2; ELSE _MENT14D=3;

Section 3: Health Care Access		
_HLTHPL1 <i>Calculated variable for adults who had some form of health insurance.</i> _HLTHPL1 is derived from PRIMINS1.		
1	Have some form of insurance	Respondents who said they had some form of health insurance (PRIMINS1=1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
2	Do not have some form of health insurance	Respondents who said they did not have some form of health insurance (PRIMINS1=88)
9	Don't know, refused or missing insurance response	Respondents who refused, didn't know or were missing a response to having some form of health insurance (PRIMINS1=77, 99 or missing)
	SAS Code:	IF PRIMINS1 in (1,2,3,4,5,6,7,8,9,10) THEN _HLTHPL1=1; ELSE IF PRIMINS1=88 THEN _HLTHPL1=2; ELSE _HLTHPL1=9;

Calculated Variables in the 2023 BRFSS Data File

Section 3: Health Care Access		
_HCVU653 <i>Calculated variable for respondents aged 18-64 who have any form of health insurance. _HCVU653 is derived from AGE and PRIMINS1.</i>		
1	Have some form of health insurance	Respondents who reported having some form of health insurance (18 <= AGE <= 64 and PRIMINS1=1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
2	Do not have any form of health insurance	Respondents who reported not having any form of health insurance (18 <= AGE <= 64 and PRIMINS1=88)
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 PRIMINS1=77, 99, or missing or AGE = > 65)
	SAS Code:	<pre>IF 18 LE AGE LE 64 THEN DO; IF PRIMINS1 in (1,2,3,4,5,6,7,8,9,10) THEN _HCVU653=1; ELSE IF PRIMINS1=88 THEN _HCVU653=2; ELSE _HCVU653=9; END; ELSE _HCVU653 = 9;</pre>

Section 4: Exercise (Physical Activity)		
_TOTINDA <i>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.</i>		
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:	<pre>IF EXERANY2 IN (1) THEN _TOTINDA=1; ELSE IF EXERANY2 IN (2) THEN _TOTINDA=2; ELSE IF EXERANY2 IN (.,7,9) THEN _TOTINDA=9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
METVL12_ <i>Calculated variable for activity met value for first activity. METVL12_ is derived from EXTRACT12.</i>		
0	Activity MET Value	Estimated first activity MET value
1 - 128	Activity MET Value (one implied decimal place)	Estimated first activity MET value
.	Not asked or Missing	Respondents with a don't know, refused or missing value for the first activity (EXTRACT12=(77,99,))
	SAS Code:	<pre> IF EXTRACT12 IN (01) THEN METVL12_=3.5; /* Walking*/ ELSE IF EXTRACT12 IN (02) THEN METVL12_=6.5; /* Running or jogging*/ ELSE IF EXTRACT12 IN (03) THEN METVL12_=4.5; /* Gardening or yard work*/ ELSE IF EXTRACT12 IN (04) THEN METVL12_=6.8; /* Bicycling or bicycling machine exercise*/ ELSE IF EXTRACT12 IN (05) THEN METVL12_=7.3; /* Aerobics video or class*/ ELSE IF EXTRACT12 IN (06) THEN METVL12_=3.8; /* Calisthenics*/ ELSE IF EXTRACT12 IN (07) THEN METVL12_=5.0; /* Elliptical/EFX machine exercise*/ ELSE IF EXTRACT12 IN (08) THEN METVL12_=3.3; /* Household activities */ ELSE IF EXTRACT12 IN (09) THEN METVL12_=0.0; /* Weightlifting*/ ELSE IF EXTRACT12 IN (10) THEN METVL12_=0.0; /* Yoga, Pilates, or Tai Chi*/ ELSE IF EXTRACT12 IN (11) THEN METVL12_=4.5; /*Other*/ METVL12_=(ROUND(METVL12_,0.1))*10; </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
METVL22_ <i>Calculated variable for activity met value for second activity. METVL22_ is derived from EXTRACT22.</i>		
0	Activity MET Value	Estimated second activity MET value
1 - 128	Activity MET Value (one implied decimal place)	Estimated second activity MET value
.	Not asked or Missing	Respondents with a don't know, refused or missing value for the second activity (EXTRACT22=(77,99,))
	SAS Code:	<pre> IF EXTRACT22 IN (01) THEN METVL22_=3.5; /* Walking*/ ELSE IF EXTRACT22 IN (02) THEN METVL22_=6.5; /* Running or jogging*/ ELSE IF EXTRACT22 IN (03) THEN METVL22_=4.5; /* Gardening or yard work*/ ELSE IF EXTRACT22 IN (04) THEN METVL22_=6.8; /* Bicycling or bicycling machine exercise*/ ELSE IF EXTRACT22 IN (05) THEN METVL22_=7.3; /* Aerobics video or class*/ ELSE IF EXTRACT22 IN (06) THEN METVL22_=3.8; /* Calisthenics*/ ELSE IF EXTRACT22 IN (07) THEN METVL22_=5.0; /* Elliptical/EFX machine exercise*/ ELSE IF EXTRACT22 IN (08) THEN METVL22_=3.3; /* Household activities */ ELSE IF EXTRACT22 IN (09) THEN METVL22_=0.0; /* Weightlifting*/ ELSE IF EXTRACT22 IN (10) THEN METVL22_=0.0; /* Yoga, Pilates, or Tai Chi*/ ELSE IF EXTRACT22 IN (11) THEN METVL22_=4.5; /*Other*/ METVL22_=(ROUND(METVL22_,0.1))*10; </pre>

Section 4: Exercise (Physical Activity)		
MAXVO21_ <i>Calculated variable for estimated age-gender specific maximum oxygen consumption. MAXVO21_ is derived from BIRTHSEX, SEXVAR and AGE.</i>		
0 - 5010	Estimated Maximum Oxygen Consumption (two implied decimal places)	Respondents estimated maximum oxygen consumption ((IF (BIRTHSEX=1 or BIRTHSEX=. and SEXVAR=1) THEN MAXVO21_=60-(.55*AGE)) or (IF (BIRTHSEX=2 or BIRTHSEX=. and SEXVAR=2) THEN MAXVO21_=48-(.37*AGE)))
99900	Don't know/Not Sure/ Refused/ Missing	Respondents with a missing value for age
	SAS Code:	<pre> MAXVO21_=999; IF (18<= AGE <=99 & ((BIRTHSEX=1 or BIRTHSEX in (.,7,9) and SEXVAR=1) OR (BIRTHSEX=2 or BIRTHSEX in (.,7,9) and SEXVAR=2))) THEN DO; IF (BIRTHSEX=1 or BIRTHSEX in (.,7,9) and SEXVAR=1) THEN MAXVO21_=60-(.55*AGE); ELSE IF (BIRTHSEX=2 or BIRTHSEX in (.,7,9) and SEXVAR=2) THEN MAXVO21_=48-(.37*AGE); END; MAXVO21_=(ROUND(MAXVO21_,0.01))*100; </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
FC601_ <i>Calculated variable for estimated functional capacity. FC601_ is derived from MAXVO21_.</i>		
0 - 859	Estimated Functional Capacity (2 implied decimal places)	Respondents estimated functional capacity ((ROUND((.60*(MAXVO21_/100)/3.5),0.01))*100)
99900	Don't know/Not Sure/ Refused/ Missing	Respondents with no estimate for functional capacity
	SAS Code:	IF (0 < MAXVO21_/100 < 55) THEN FC601_=(.60*(MAXVO21_/100))/3.5; ELSE FC601_=999; FC601_=(ROUND(FC601_,0.01))*100;

Section 4: Exercise (Physical Activity)		
ACTIN13_ <i>Calculated variable for estimated activity intensity for first activity. ACTIN13_ is derived from FC601_ and METVL12_.</i>		
0	Not Moderate or Vigorous or No Activity	Respondent reported first activity to be one with estimated intensity not moderate or vigorous ((METVL12_/10 >= 0))
1	Moderate	Respondent reported first activity to be one with moderate estimated intensity ((METVL12_/10 >= 3.0))
2	Vigorous	Respondent reported first activity to be one with vigorous estimated intensity ((METVL12_/10 >= FC601_/100))
.	Not asked or Missing	Respondent reported first activity to be one with no estimated intensity
	SAS Code:	IF FC601_ < 99900 THEN DO; IF ((METVL12_/10) >= (FC601_/100)) THEN ACTIN13_=2; ELSE IF ((METVL12_/10) >= 3.0) THEN ACTIN13_=1; ELSE IF ((METVL12_/10) >= 0) THEN ACTIN13_=0; END;

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
ACTIN23_ <i>Calculated variable for estimated activity intensity for second activity. ACTIN23_ is derived from FC601_ and METVL23_.</i>		
0	Not Moderate or Vigorous or No Activity	Respondent reported second activity to be one with estimated intensity not moderate or vigorous ((METVL22_/10 >= 0))
1	Moderate	Respondent reported second activity to be one with moderate estimated intensity ((METVL22_/10 >= 3.0))
2	Vigorous	Respondent reported second activity to be one with vigorous estimated intensity ((METVL22_/10 >= FC601_/100))
.	Not asked or Missing	Respondent reported second activity to be one with no estimated intensity
	SAS Code:	<pre>IF FC601_ < 99900 THEN DO; IF ((METVL22_/10) >= (FC601_/100)) THEN ACTIN23_=2; ELSE IF ((METVL22_/10) >= 3.0) THEN ACTIN23_=1; ELSE IF ((METVL22_/10) >= 0) THEN ACTIN23_=0; END;</pre>

Section 4: Exercise (Physical Activity)		
PADUR1_ <i>Calculated variable for minutes of first activity. PADUR1_ is derived from EXERHMM1.</i>		
0 - 599	Minutes of Activity	Respondents number of minutes of first activity (INT(EXERHMM1/100)*60 + (EXERHMM1-INT(EXERHMM1/100)*100))
.	Not asked or Missing	Respondents who reported they didn't know, refused or had a missing value for EXERHMM1 (EXERHMM1=(777,999,.))
	SAS Code:	<pre>IF EXERHMM1 NOTIN (777,999,.) THEN DO; PADUR1_=INT(EXERHMM1/100)*60 + (EXERHMM1-INT(EXERHMM1/100)*100); END;</pre>

Section 4: Exercise (Physical Activity)		
PADUR2_ <i>Calculated variable for minutes of second activity. PADUR2_ is derived from EXERHMM2.</i>		
0 - 599	Minutes of Activity	Respondents number of minutes of second activity (INT(EXERHMM2/100)*60 + (EXERHMM2-INT(EXERHMM2/100)*100))
.	Not asked or Missing	Respondents who reported they didn't know, refused or had a missing value for EXERHMM2 (EXERHMM2=(777,999,.))
	SAS Code:	<pre>IF EXERHMM2 NOTIN (777,999,.) THEN DO; PADUR2_=INT(EXERHMM2/100)*60 + (EXERHMM2-INT(EXERHMM2/100)*100); END;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
PAFREQ1_ <i>Calculated variable for physical activity frequency per week for first activity. PAFREQ1_ is derived from EXERANY2 and EXEROFT1.</i>		
0 - 98999	Activity times per week (3 implied decimal places)	Respondents report times per week for the first activity (EXERANY2=1 and (101 <= EXEROFT1 <= 199) or (201 <= EXEROFT1 <= 299))
.	Not asked or Missing	Respondents that did not report doing the first activity or didn't know, refused or had a missing value for EXEROFT1 ((EXERANY2=1 and EXEROFT1 = (777,999,missing)) or (EXERANY2=2,7,9,missing))
	SAS Code:	<pre>IF EXERANY2=1 AND EXEROFT1 NOTIN (777,999,.) THEN DO; IF (101 <= EXEROFT1 <= 199) THEN PAFREQ1_ = EXEROFT1 - 100; ELSE IF (201 <= EXEROFT1 <= 299) THEN PAFREQ1_ = (EXEROFT1 - 200) / (30/7); END; ELSE PAFREQ1_ = .; PAFREQ1_ = (ROUND(PAFREQ1_, .001)) * 1000;</pre>

Section 4: Exercise (Physical Activity)		
PAFREQ2_ <i>Calculated variable for physical activity frequency per week for second activity. PAFREQ2_ is derived from EXERANY2 and EXEROFT2.</i>		
0 - 98999	Activity times per week (3 implied decimal places)	Respondents report times per week for the second activity (EXERANY2=1 and (101 <= EXEROFT2 <= 199) or (201 <= EXEROFT2 <= 299))
.	Not asked or Missing	Respondents that did not report doing the second activity or didn't know, refused or had a missing value for EXEROFT2 ((EXERANY2=1 and EXEROFT2 = (777,999,missing)) or (EXERANY2=2,7,9,missing))
	SAS Code:	<pre>IF EXERANY2=1 AND EXEROFT2 NOTIN (777,999,.) THEN DO; IF (101 <= EXEROFT2 <= 199) THEN PAFREQ2_ = EXEROFT2 - 100; ELSE IF (201 <= EXEROFT2 <= 299) THEN PAFREQ2_ = (EXEROFT2 - 200) / (30/7); END; ELSE PAFREQ2_ = .; PAFREQ2_ = (ROUND(PAFREQ2_, .001)) * 1000;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
_MINAC12 <i>Calculated variable for minutes of physical activity per week for first activity. _MINAC12 IS DERIVED FROM PADUR1_, PAFREQ1_, ACTIN13_ AND EXTRACT12.</i>		
0	Minutes of Activity per week	Respondents who reported doing zero minutes of first activity per week ((PADUR1_ >= 0 AND PADUR1_ < 10) or (PADUR2_=. AND ACTIN22_=0))
1 - 99999	Minutes of Activity per week	Respondents who reported doing one or more minutes of first activity per week (ROUND((PAFREQ1_/1000)*PADUR1_,1))
.	Not asked or Missing	Respondents who reported they didn't know, refused or had a missing value for the number of minutes per week for the first activity
	SAS Code:	IF PADUR1_ >=10 THEN _MINAC12=ROUND((PAFREQ1_/1000)*PADUR1_,1); ELSE IF (PADUR1_ >=0 AND PADUR1_ <10) THEN _MINAC12=0; IF (ACTIN13_=0) THEN _MINAC12=0; IF EXTRACT12 IN (09,10) THEN _MINAC12=0;

Section 4: Exercise (Physical Activity)		
_MINAC22 <i>Calculated variable for minutes of physical activity per week for second activity. _MINAC22 IS DERIVED FROM PADUR1_, PAFREQ1_, ACTIN23_ AND EXTRACT22.</i>		
0	Minutes of Activity per week	Respondents who reported doing zero minutes of second activity per week ((PADUR2_ >= 0 AND PADUR2_ < 10) or (PADUR2_=. AND ACTIN22_=0))
1 - 99999	Minutes of Activity per week	Respondents who reported doing one or more minutes of second activity per week (ROUND((PAFREQ2_/1000)*PADUR2_))
.	Not asked or Missing	Respondents who reported they didn't know, refused or had a missing value for the number of minutes per week for the second activity
	SAS Code:	IF PADUR2_ >=10 THEN _MINAC22=ROUND((PAFREQ2_/1000)*PADUR2_); ELSE IF (PADUR2_ >=0 AND PADUR2_ <10) THEN _MINAC22=0; IF (ACTIN23_=0) THEN _MINAC22=0; IF EXTRACT22 IN (09,10,88) THEN _MINAC22=0;

Section 4: Exercise (Physical Activity)		
STRFREQ_ <i>Calculated variable for strength activity frequency per week. STRFREQ_ is derived from STRENGTH.</i>		
0 - 98999	Strength Activity times per week (3 implied decimal places)	Respondents reported times per week for strengthening activity
.	Not asked or Missing	Respondents that did not report doing any strengthening activity or didn't know, refused or had a missing value for STRENGTH
	SAS Code:	IF STRENGTH IN (777,999,.) THEN STRFREQ_=.; ELSE IF (STRENGTH < 200) THEN STRFREQ_=STRENGTH-100; ELSE IF (200 < STRENGTH < 300) THEN STRFREQ_=(STRENGTH-200)/(30/7); ELSE IF (STRENGTH = 888) THEN STRFREQ_=0; STRFREQ_=(ROUND(STRFREQ_,.001))*1000;

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
PAMISS3_ <i>Calculated variable for missing physical activity data. PAMISS3_ is derived from ACTIN13_, _MINAC12, ACTIN23_, _MINAC22 and EXERANY2.</i>		
0	Not Missing Physical Activity Data	Respondents with no missing physical activity data ((NMISS(ACTIN13_,_MINAC12,ACTIN23_,_MINAC22)=0 AND EXERANY2=1) or EXERANY2=2)
1	Missing Physical Activity Data	Respondents with missing physical activity data ((NMISS(ACTIN13_,_MINAC12,ACTIN23_,_MINAC22) > 0 AND EXERANY2=1))
9	Don't know/Not Sure/Refused	Respondents that didn't know or refused to answer if they did any activity
	SAS Code:	IF (NMISS (ACTIN13_, _MINAC12, ACTIN23_, _MINAC22) > 0 AND EXERANY2=1) THEN PAMISS3_ = 1; ELSE IF EXERANY2=1 OR EXERANY2=2 THEN PAMISS3_ = 0; ELSE PAMISS3_ = 9;

Section 4: Exercise (Physical Activity)		
PAMIN13_ <i>Calculated variable for minutes of physical activity per week for first activity. PAMIN13_ is derived from ACTIN13_ and _MINAC12.</i>		
0 - 99999	Minutes of Activity per week	Respondents minutes of first activity or vigorous equivalent minutes
.	Not asked or Missing	Respondents with no value for minutes of first activity and no value for vigorous equivalent minutes
	SAS Code:	IF ACTIN13_ = 2 THEN DO; PAMIN13_ = ROUND (_MINAC12 * 2, 1); END; ELSE IF ACTIN13_ = 1 THEN DO; PAMIN13_ = ROUND (_MINAC12, 1); END; IF ACTIN13_ = 0 THEN PAMIN13_ = 0;

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
PAMIN23_ <i>Calculated variable for minutes of physical activity per week for second activity. PAMIN23_ is derived from ACTIN23_ and _MINAC22.</i>		
0 - 99999	Minutes of Activity per week	Respondents minutes of second activity or vigorous equivalent
.	Not asked or Missing	Respondents with no value for minutes of second activity and no value for vigorous equivalent minutes
	SAS Code:	<pre>IF ACTIN23_=2 THEN DO; PAMIN23_=ROUND(_MINAC22*2,1); END; ELSE IF ACTIN23_=1 THEN DO; PAMIN23_=ROUND(_MINAC22,1); END; IF ACTIN23_=0 THEN PAMIN23_=0;</pre>

Section 4: Exercise (Physical Activity)		
PA3MIN_ <i>Calculated variable for minutes of total physical activity per week. PA3MIN_ is derived from PAMIN13_ and PAMIN23_.</i>		
0 - 99999	Minutes of Activity per week	Respondents minutes of combined activity or vigorous equivalent minutes (ROUND((SUM(PAMIN13_,PAMIN23_)),1))
.	Not asked or Missing	Respondents with no value for minutes of combined activity and no value for vigorous equivalent minutes
	SAS Code:	<pre>PA3MIN_=ROUND((SUM(PAMIN13_,PAMIN23_)),1);</pre>

Section 4: Exercise (Physical Activity)		
PAVIG13_ <i>Calculated variable for minutes of vigorous physical activity per week for first activity. PAVIG13_ is derived from ACTIN13_ and _MINAC12.</i>		
0 - 99999	Minutes of Activity per week	Respondents vigorous activity minutes of first activity
.	Not asked or Missing	Respondents with no value for vigorous activity minutes of first activity
	SAS Code:	<pre>IF ACTIN13_=2 THEN PAVIG13_=ROUND(_MINAC12,1); ELSE IF ACTIN13_ IN (0,1) THEN PAVIG13_=0;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
PAVIG23_ <i>Calculated variable for minutes of vigorous physical activity per week for second activity.</i> PAVIG23_ is derived from ACTIN23_ and _MINAC22.		
0 - 99999	Minutes of Activity per week	Respondents vigorous activity minutes of second activity
.	Not asked or Missing	Respondents with no value for vigorous activity minutes of second activity
	SAS Code:	IF ACTIN23_=2 THEN PAVIG23_=ROUND(_MINAC22,1); ELSE IF ACTIN23_ IN (0,1) THEN PAVIG23_=0;

Section 4: Exercise (Physical Activity)		
PA3VIGM_ <i>Calculated variable for minutes of total vigorous physical activity per week.</i> PA3VIGM_ is derived from PAVIG13_ and PAVIG23_.		
0 - 99999	Minutes of Activity per week	Respondents vigorous activity minutes of combined activity (ROUND((SUM(PAVIG13_,PAVIG23_)),1))
.	Not asked or Missing	Respondents with no value for vigorous activity minutes of combined activity
	SAS Code:	PA3VIGM_=ROUND((SUM(PAVIG13_, PAVIG23_)),1);

Section 4: Exercise (Physical Activity)		
_PACAT3 <i>Calculated variable for physical activity categories.</i> _PACAT3 is derived from EXERANY2, PA3MIN_, PAMISS3_ and PA3VIGM_.		
1	Highly Active	Respondents who reported doing enough physical activity to meet the 300-minute (or vigorous equivalent) aerobic recommendation ((PA3MIN_ > 300) or (PA3VIGM_ > 150))
2	Active	Respondents who reported doing 150-300 minutes (or vigorous equivalent) of physical activity (150 <= PA3MIN_ <= 300 AND PAMISS3_=0)
3	Insufficiently Active	Respondents who reported doing insufficient physical activity (11-149 minutes) (1 <= PA3MIN_ <= 149 AND PAMISS3_=0)
4	Inactive	Respondents who reported doing no physical activity ((PA3MIN_=0 AND PAMISS3_=0) or (EXERANY2=2))
9	Don't know/Not Sure/Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	IF EXERANY2=2 THEN _PACAT3=4; ELSE IF EXERANY2 IN (.,7,9) THEN _PACAT3=9; ELSE IF EXERANY2=1 THEN DO; IF PA3MIN_ > 300 THEN _PACAT3=1; ELSE IF PA3VIGM_ > 150 THEN _PACAT3=1; ELSE IF 150 <= PA3MIN_ <= 300 AND PAMISS3_=0 THEN _PACAT3=2; ELSE IF 1 <= PA3MIN_ <=149 AND PAMISS3_=0 THEN _PACAT3=3; ELSE IF PA3MIN_=0 AND PAMISS3_=0 THEN _PACAT3=4; ELSE _PACAT3=9; END;

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
_PAINDX3 <i>Calculated variable for physical activity index.</i> _PAINDX3 is derived from EXERANY2, PAMISS3_ and PA3MIN_.		
1	Meet Aerobic Recommendations	Respondents who reported doing 150+ minutes (or vigorous equivalent) of physical activity (PA3MIN_ >= 150)
2	Did Not Meet Aerobic Recommendations	Respondents who reported doing insufficient physical activity (0-149 minutes) ((0 <= PA3MIN_ < 150 AND PAMISS3_=0) or (EXERANY2=2))
9	Don't know/ Not Sure/ Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	<pre>IF EXERANY2=2 THEN _PAINDX3=2; ELSE IF EXERANY2 IN (.,7,9) THEN _PAINDX3=9; ELSE IF EXERANY2=1 THEN DO; IF PA3MIN_ >= 150 THEN _PAINDX3=1; ELSE IF 0 <= PA3MIN_ < 150 AND PAMISS3_=0 THEN _PAINDX3=2; ELSE _PAINDX3=9; END;</pre>

Section 4: Exercise (Physical Activity)		
_PA150R4 <i>Calculated variable for adults that participated in 150 minutes (or vigorous equivalent minutes) of physical activity per week.</i> _PA150R4 is derived from EXERANY2, PA3VIGM_, PAMISS3_, and PA3MIN_.		
1	150+ minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing enough physical activity to meet the 150-minute aerobic recommendation (PA3MIN_ >= 150 or PA3VIGM_ >= 75)
2	1-149 minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing insufficient physical activity to meet the 150-minute aerobic recommendation (0 < PA3MIN_ < 150 AND PAMISS3_=0)
3	0 minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing no physical activity (PA3MIN_=0 AND PAMISS3_=0)
9	Don't know/Not Sure/ Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	<pre>IF EXERANY2=2 THEN _PA150R4=3; ELSE IF EXERANY2 IN (7,9,.) THEN _PA150R4=9; ELSE IF EXERANY2=1 THEN DO; IF PA3VIGM_ >= 75 THEN _PA150R4=1; ELSE IF PA3MIN_ >= 150 THEN _PA150R4=1; ELSE IF 0 < PA3MIN_ < 150 AND PAMISS3_=0 THEN _PA150R4=2; ELSE IF PA3MIN_=0 AND PAMISS3_=0 THEN _PA150R4=3; ELSE _PA150R4=9; END;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
<u>PA300R4</u> <i>Calculated variable for adults that participated in greater than 300 minutes (or vigorous equivalent minutes) of physical activity per week. PA300R4 is derived from EXERANY2, PAMISS3_ and PA3MIN_.</i>		
1	301+ minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing enough physical activity to meet the 300-minute aerobic recommendation (PA3MIN_ > 300)
2	1-300 minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing insufficient physical activity to meet the 300-minute aerobic recommendation (0 < PA3MIN_ <= 300 AND PAMISS3_=0)
3	0 minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing no physical activity ((PA3MIN_=0 AND PAMISS3_=0) or (EXERANY2=2))
9	Don't know/Not Sure/Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	<pre>IF EXERANY2=2 THEN _PA300R4=3; ELSE IF EXERANY2 IN (9,7,.) THEN _PA300R4=9; ELSE IF EXERANY2=1 THEN DO; IF PA3MIN_ > 300 THEN _PA300R4=1; ELSE IF 0 < PA3MIN_ <= 300 AND PAMISS3_=0 THEN _PA300R4=2; ELSE IF PA3MIN_=0 AND PAMISS3_=0 THEN _PA300R4=3; ELSE _PA300R4=9; END;</pre>

Section 4: Exercise (Physical Activity)		
<u>PA30023</u> <i>Calculated variable for adults that participated in greater than 300 minutes (or vigorous equivalent minutes) of physical activity per week (2-levels). PA30023 is derived from PA300R4.</i>		
1	301+ minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing enough physical activity to meet the 300+ minute aerobic recommendation (_PA300R4=1)
2	0-300 minutes (or vigorous equivalent minutes) of physical activity	Respondents who reported doing insufficient physical activity to meet the 300-minute aerobic recommendation (_PA300R4 IN (2,3))
9	Don't know/ Not Sure/Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	<pre>IF _PA300R4=1 THEN _PA30023=1; ELSE IF _PA300R4 IN (2,3) THEN _PA30023=2; ELSE _PA30023=9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
<u>_PASTRNG</u> <i>Calculated variable for muscle strengthening recommendation. _PASTRNG is derived from STRFREQ_.</i>		
1	Meet muscle strengthening recommendations	Respondents who reported doing enough physical activity to meet the strengthening recommendation (STRFREQ_/1000 >= 2)
2	Did not meet muscle strengthening recommendations	Respondents who reported doing physical activity but not enough to meet the strengthening recommendation (0 <= STRFREQ_/1000 < 2)
9	Don't know/Not Sure/Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	IF STRFREQ_/1000 >=2 THEN _PASTRNG=1; ELSE IF 0 <= STRFREQ_/1000 < 2 THEN _PASTRNG=2; ELSE _PASTRNG=9;

Section 4: Exercise (Physical Activity)		
<u>_PAREC3</u> <i>Calculated variable for aerobic and strengthening guideline. _PAREC3 is derived from _PASTRNG and _PAINDX3.</i>		
1	Met Both Guidelines	Respondents who reported doing enough physical activity to meet the aerobic and strengthening recommendations (_PASTRNG=1 AND _PAINDX3=1)
2	Met Aerobic Guidelines Only	Respondents who reported doing enough physical activity to meet the aerobic recommendation but not the strengthening (_PASTRNG=2 AND _PAINDX3=1)
3	Met Strengthening Guidelines Only	Respondents who reported doing enough physical activity to meet the strengthening recommendation but not the aerobic (_PASTRNG=1 AND _PAINDX3=2)
4	Did not meet Either Guideline	Respondents who reported doing physical activity but not enough to meet either the aerobic or strengthening recommendations (_PASTRNG=2 AND _PAINDX3=2)
9	Don't know/Not Sure/Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	IF _PASTRNG=1 AND _PAINDX3=1 THEN _PAREC3=1; ELSE IF _PASTRNG=2 AND _PAINDX3=1 THEN _PAREC3=2; ELSE IF _PASTRNG=1 AND _PAINDX3=2 THEN _PAREC3=3; ELSE IF _PASTRNG=2 AND _PAINDX3=2 THEN _PAREC3=4; ELSE _PAREC3=9;

Calculated Variables in the 2023 BRFSS Data File

Section 4: Exercise (Physical Activity)		
_PASTAE3 <i>Calculated variable for aerobic and strengthening (2-level). _PASTAE3 is derived from _PAREC3.</i>		
1	Met Both Guidelines	Respondents who reported doing enough physical activity to meet the aerobic and strengthening recommendations (_PAREC3=1)
2	Did Not Meet Both Guidelines	Respondents who reported doing physical activity but not enough to meet both the aerobic and strengthening recommendations (_PAREC3 IN (2,3,4))
9	Don't know/Not Sure/Refused/ Missing	Respondents who reported they didn't know whether they did physical activity or didn't know how many days or didn't know how much time they did the activity, those who refused to answer, and those with missing responses
	SAS Code:	IF _PAREC3=1 THEN _PASTAE3=1; ELSE IF _PAREC3 IN (2,3,4) THEN _PASTAE3=2; ELSE _PASTAE3=9;

Section 5: Hypertension Awareness		
_RFHYPE6 <i>Calculated variable for adults who have been told they have high blood pressure by a doctor, nurse, or other health professional. _RFHYPE6 is derived from BPHIGH6.</i>		
1	No	Respondents that were not told their pressure is high by a health professional (BPHIGH6=2, 3, or 4)
2	Yes	Respondents that were told their pressure is high by a health professional (BPHIGH6=1)
9	Don't know/Not Sure/Refused/ Missing	Respondents who reported they didn't know if they were told if their blood pressure is high, those who refused to answer if they were told if their blood pressure is high, and those with missing responses (BPHIGH6=7, 9, or missing)
	SAS Code:	IF BPHIGH6 = 1 THEN _RFHYPE6=2; ELSE IF BPHIGH6 = 2 THEN _RFHYPE6=1; ELSE IF BPHIGH6 = 3 THEN _RFHYPE6=1; ELSE IF BPHIGH6 = 4 THEN _RFHYPE6=1; ELSE IF BPHIGH6 IN (.,7,9) THEN _RFHYPE6=9 ;

Calculated Variables in the 2023 BRFSS Data File

Section 6: Cholesterol Awareness		
_CHOLCH3 <i>Calculated variable for cholesterol check within past five years.</i> _CHOLCH3 is derived from CHOLCHK3.		
1	Had cholesterol checked in past 5 years	Respondents who reported having had their cholesterol checked within the past five years (CHOLCH3=2, 3, 4, 5, or 6)
2	Did not have cholesterol checked in past 5 years	Respondents who reported not having had their cholesterol checked within the past five years (CHOLCH3=8)
3	Have never had cholesterol checked	Respondents who reported never having had their cholesterol checked (CHOLCH3=1)
9	Don't know/Not Sure Or Refused/ Missing	Respondents who reported they didn't know if they had their cholesterol checked by a health professional, those who refused to answer if they had their cholesterol checked by a health professional, and those with missing responses (CHOLCH3=7, 9 or missing)
	SAS Code:	IF CHOLCHK3=1 THEN _CHOLCH3=3; ELSE IF CHOLCHK3 in (2, 3, 4, 5, 6) THEN _CHOLCH3=1; ELSE IF CHOLCHK3 = 8 THEN _CHOLCH3=2; ELSE _CHOLCH3=9;

Section 6: Cholesterol Awareness		
_RFCHOL3 <i>Calculated variable for adults who have had their cholesterol checked and have been told by a doctor, nurse, or other health professional that it was high.</i> _RFCHOL3 is derived from CHOLCHK3 and TOLDHI3.		
1	No	Respondents who reported having had their blood cholesterol checked but had not been told it was high (CHOLCHK3=2,3,4,5,6 or 8 and TOLDHI3=2)
2	Yes	Respondents who reported having had their blood cholesterol checked and had been told that they have high blood cholesterol (CHOLCHK3=2,3,4,5,6 or 8 and TOLDHI3=1)
9	Don't know/Not Sure Or Refused/ Missing	Respondents who reported they didn't know if they had their blood cholesterol checked, those who reported they didn't know if they have been told their blood cholesterol was high, those who refused to answer if they had their blood cholesterol checked, those who refused to answer if they had been told that their blood cholesterol was high, and those with missing responses (CHOLCHK3=2,3,4,5,6 or 8 and TOLDHI3=7,9, or missing)
.	Missing	Respondents who reported they have not had their blood cholesterol checked (CHOLCHK3=1,7,9 or missing)
	SAS Code:	IF CHOLCHK3 in (2, 3, 4, 5, 6, 8) AND TOLDHI3=1 THEN _RFCHOL3=2; ELSE IF CHOLCHK3 in (2, 3, 4, 5, 6, 8) AND TOLDHI3=2 THEN _RFCHOL3=1; ELSE IF CHOLCHK3 in (2, 3, 4, 5, 6, 8) AND TOLDHI3 in (7, 9, .) THEN _RFCHOL3=9;

Calculated Variables in the 2023 BRFSS Data File

Section 7: Chronic Health Conditions		
_MICHD <i>Calculated variable for respondents that have ever reported having coronary heart disease (CHD) or myocardial infarction (MI). _MICHD is derived from CVDINFR4, and CVDCRHD4.</i>		
1	Reported having MI or CHD	Respondents who reported having had MI or CHD (CVDINFR4=1 OR CVDCRHD4=1)
2	Did not report having MI or CHD	Respondents who reported not having had MI and CHD (CVDINFR4=2 AND CVDCRHD4=2)
.	Not asked or Missing	Respondents who reported they didn't know, refused or had a missing value for the MI or CHD questions (CVDINFR4=7, 9 OR MISSING OR CVDCRHD4=7, 9, OR MISSING)
	SAS Code:	IF CVDINFR4=1 OR CVDCRHD4=1 THEN _MICHD=1; ELSE IF CVDINFR4=2 AND CVDCRHD4=2 THEN _MICHD=2;

Section 7: Chronic Health Conditions		
_LTASTH1 <i>Calculated variable for adults who have ever been told they have asthma. _LTASTH1 is derived from ASTHMA3.</i>		
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;

Calculated Variables in the 2023 BRFSS Data File

Section 7: Chronic Health Conditions		
_CASTHM1 <i>Calculated variable for adults who have been told they currently have asthma.</i> _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 7: Chronic Health Conditions		
_ASTHMS1 <i>Calculated variable for computed asthma status.</i> _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=1 and 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;

Calculated Variables in the 2023 BRFSS Data File

Section 7: Chronic Health Conditions		
<u>_DRDXAR2</u> <i>Calculated variable for respondents who have had a doctor diagnose them as having some form of arthritis. _DRDXAR2 is derived from HAVARTH4.</i>		
1	Diagnosed with arthritis	Respondents who have been told by a doctor they had arthritis (HAVARTH4=1)
2	Not diagnosed with arthritis	Respondents who have not been told by a doctor they had arthritis (HAVARTH4=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 (HAVARTH4=7,9, or missing)
	SAS Code:	<pre>IF HAVARTH4 = 1 THEN _DRDXAR2=1; ELSE IF HAVARTH4 = 2 THEN _DRDXAR2=2; ELSE IF HAVARTH4 IN (7,9,.) THEN _DRDXAR2=.;</pre>

Section 8: Demographics		
<u>_SEX</u> <i>Calculated variable for calculated sex variable. _SEX is derived from BIRTHSEX and SEXVAR</i>		
1	Male	Male respondent (BIRTHSEX=1 or BIRTHSEX notin (1,2) and SEXVAR=1)
2	Female	Female respondent (BIRTHSEX=2 or BIRTHSEX notin (1,2) and SEXVAR=2)
	SAS Code:	<pre>IF BIRTHSEX IN (1,2) THEN DO; _SEX=BIRTHSEX; END; ELSE DO; _SEX=SEXVAR; END;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: 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:	<pre> 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; </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
<u>AGE65YR</u> <i>Calculated variable for two-level age category. _AGE65YR is derived from AGE.</i>		
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 8: Demographics		
<u>AGE80</u> <i>Calculated variable for imputed age value collapsed above 80. _AGE80 is derived from _IMPAGE.</i>		
18 - 24	Imputed Age 18 to 24	Respondents with reported Imputed Age between 18 and 24 years (18 <= Imputed Age <= 24)
25 - 29	Imputed Age 25 to 29	Respondents with reported Imputed Age between 25 and 29 years (25 <= Imputed Age <= 29)
30 - 34	Imputed Age 30 to 34	Respondents with reported Imputed Age between 30 and 34 years (30 <= Imputed Age <= 34)
35 - 39	Imputed Age 35 to 39	Respondents with reported Imputed Age between 35 and 39 years (35 <= Imputed Age <= 39)
40 - 44	Imputed Age 40 to 44	Respondents with reported Imputed Age between 40 and 44 years (40 <= Imputed Age <= 44)
45 - 49	Imputed Age 45 to 49	Respondents with reported Imputed Age between 45 and 49 years (45 <= Imputed Age <= 49)
50 - 54	Imputed Age 50 to 54	Respondents with reported Imputed Age between 50 and 54 years (50 <= Imputed Age <= 54)
55 - 59	Imputed Age 55 to 59	Respondents with reported Imputed Age between 55 and 59 years (55 <= Imputed Age <= 59)
60 - 64	Imputed Age 60 to 64	Respondents with reported Imputed Age between 60 and 64 years (60 <= Imputed Age <= 64)
65 - 69	Imputed Age 65 to 69	Respondents with reported Imputed Age between 65 and 69 years (65 <= Imputed Age <= 69)
70 - 74	Imputed Age 70 to 74	Respondents with reported Imputed Age between 70 and 74 years (70 <= Imputed Age <= 74)
75 - 79	Imputed Age 75 to 79	Respondents with reported Imputed Age between 75 and 79 years (75 <= Imputed Age <= 79)
80 - 99	Imputed Age 80 or older	Respondents with reported Imputed Age between 80 and 99 years (80 <= Imputed Age <= 99)
	SAS Code:	IF 18 LE _IMPAGE LE 80 THEN _AGE80=_IMPAGE; ELSE IF _IMPAGE GE 80 THEN _AGE80=80;

Calculated Variables in the 2023 BRFSS Data File

Section 8: 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:	<pre>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;</pre>

Section 8: Demographics		
HTIN4	Calculated variable for reported height in inches. HTIN4 is derived from HEIGHT3. HTIN4 is calculated by adding the foot portion of HEIGHT3 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)
.	Don't know/Refused/ Not asked or Missing	Respondents who reported they didn't know, were not sure, refused or had missing responses for their height.
	SAS Code:	<pre>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);</pre>

Section 8: 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)
.	Don't know/ Refused/ Not asked or Missing	Respondents who reported they didn't know, were not sure, refused or had missing responses for their height.
	SAS Code:	<pre>IF 300 <= HEIGHT3 <= 711 THEN HTM4=HTIN4*0.0254; ELSE IF 9091 <= HEIGHT3 < 9244 THEN HTM4=(HEIGHT3-9000)/100;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
WTKG3 <i>Calculated variable for reported weight in kilograms. WTKG3 is derived from WEIGHT2 by multiplying WEIGHT2 by 0.4535924 kg per lb.</i>		
2300 - 29500	Weight in kilograms [2 implied decimal places]	Respondents reported or calculated weight in kilograms.
.	Don't know/Refused/Not asked or Missing	Respondents who reported they didn't know, were not sure, or refused or had missing responses for their weight.
	SAS Code:	<pre> ** 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; </pre>

Section 8: Demographics		
_BMI5 <i>Calculated variable for body mass index (BMI). _BMI5 is derived from WTKG3 and HTM4. It is calculated by dividing WTKG3 by HTM4².</i>		
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:	<pre> 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=.; </pre>

Section 8: Demographics		
_BMI5CAT <i>Calculated variable for four-categories of body mass index (BMI). _BMI5CAT is derived from _BMI5.</i>		
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:	<pre> 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; </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
<u>_RFBMI5</u> <i>Calculated variable for adults who have a body mass index greater than 25.00 (overweight or obese).</i>		
<u>_RFBMI5</u> is derived from <u>_BMI5</u>.		
1	No	Respondents not classified as overweight or obese based on body mass index. (12 <= <u>_BMI5</u> < 25.00)
2	Yes	Respondents classified as overweight or obese based on body mass index. (25.00 <= <u>_BMI5</u> <= 99.99)
9	Don't know/Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. (<u>_BMI5</u> =missing)
	SAS Code:	<pre>IF (12.00 LE <u>_BMI5</u> < 25.00) THEN <u>_RFBMI5</u>=1; ELSE IF (25.00 <= <u>_BMI5</u> < 99.99) THEN <u>_RFBMI5</u>=2; ELSE <u>_RFBMI5</u>=9; ** Round off HTM4, WTKG3 and <u>_BMI5</u> to 2 decimal places and remove the decimal **; HTIN4 = round(HTIN4,1); HTM4 = round((HTM4*100),1); WTKG3 = round((WTKG3*100),1); IF <u>_BMI5</u> NE . THEN <u>_BMI5</u> = ROUND((<u>_BMI5</u>*100),1);</pre>

Section 8: Demographics		
<u>_CHLDCNT</u> <i>Calculated variable for number of children in household. <u>_CHLDCNT</u> is derived from CHILDREN.</i>		
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:	<pre>IF CHILDREN = 88 THEN <u>_CHLDCNT</u> = 1; ELSE IF CHILDREN = 01 THEN <u>_CHLDCNT</u> = 2; ELSE IF CHILDREN = 02 THEN <u>_CHLDCNT</u> = 3; ELSE IF CHILDREN = 03 THEN <u>_CHLDCNT</u> = 4; ELSE IF CHILDREN = 04 THEN <u>_CHLDCNT</u> = 5; ELSE IF 05 <= CHILDREN < 88 THEN <u>_CHLDCNT</u> = 6; ELSE IF CHILDREN = 99 THEN <u>_CHLDCNT</u> = 9; ELSE IF CHILDREN = . THEN <u>_CHLDCNT</u> = 9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
<u>EDUCAG</u> <i>Calculated variable for level of education completed. <u>EDUCAG</u> is derived from EDUCA.</i>		
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:	<pre>IF EDUCA IN (1,2,3) THEN <u>EDUCAG</u> = 1; ELSE IF EDUCA IN (4) THEN <u>EDUCAG</u> = 2; ELSE IF EDUCA IN (5) THEN <u>EDUCAG</u> = 3; ELSE IF EDUCA IN (6) THEN <u>EDUCAG</u> = 4; ELSE IF EDUCA IN (.,9) THEN <u>EDUCAG</u> = 9;</pre>

Section 8: Demographics		
<u>INCOMG1</u> <i>Calculated variable for income categories. <u>INCOMG1</u> is derived from INCOME3.</i>		
1	Less than \$15,000	Respondents whose reported income is < \$15,000. (INCOME3=1,2)
2	\$15,000 to < \$25,000	Respondents whose reported income is \$15,000 to < \$25,000. (INCOME3=3,4)
3	\$25,000 to < \$35,000	Respondents whose reported income is \$25,000 to < \$35,000. (INCOME3=5)
4	\$35,000 to < \$50,000	Respondents whose reported income is \$35,000 to < \$50,000. (INCOME3=6)
5	\$50,000 to < \$100,000	Respondents whose reported income is \$50,000 to < \$100,000. (INCOME3=7,8)
6	\$100,000 to < \$200,000	Respondents whose reported income is \$100,000 to < \$200,000. (INCOME3=9,10)
7	\$200,000 or more	Respondents whose reported income is \$200,000 or more. (INCOME3=11)
9	Don't know/Not sure/Missing	Respondents who refused to answer, didn't know or had a missing value for INCOME3. (INCOME3=77, 99, or missing)
	SAS Code:	<pre>IF INCOME3 IN (1,2) THEN <u>INCOMG1</u> = 1; ELSE IF INCOME3 IN (3,4) THEN <u>INCOMG1</u> = 2; ELSE IF INCOME3 IN (5) THEN <u>INCOMG1</u> = 3; ELSE IF INCOME3 IN (6) THEN <u>INCOMG1</u> = 4; ELSE IF INCOME3 IN (7,8) THEN <u>INCOMG1</u> = 5; ELSE IF INCOME3 IN (9,10) THEN <u>INCOMG1</u> = 6; ELSE IF INCOME3 IN (11) THEN <u>INCOMG1</u> = 7; ELSE IF INCOME3 IN (77,99,.) THEN <u>INCOMG1</u> = 9; ELSE IF INCOME3 IN (11) THEN <u>INCOMG1</u> = 7; ELSE IF INCOME3 IN (77,99,.) THEN <u>INCOMG1</u> = 9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
_MRACE1	Calculated variable for calculated multiracial race categorization. _MRACE1 is derived from MRACASC1. If respondents reported more than one race they are assigned to the multiracial category. If MRACASC1 is less than 40 or equal to 60 then _MRACE1=MRACASC1. If MRACASC1 is 40-47 then _MRACE1=40. If MRACASC1 is 50-54 then _MRACE1=50.	
1	White only	Respondents who reported they are white. (MRACASC1=10)
2	Black or African American only	Respondents who report they are black. (MRACASC1=20)
3	American Indian or Alaskan Native only	Respondents who reported they are American Indian or Alaska Native. (MRACASC1=30)
4	Asian Only	Respondents who reported they are Asian. (MRACASC1=40,41,42,43,44,45,46,47)
5	Native Hawaiian or other Pacific Islander only	Respondents who reported they are native Hawaiian or Pacific Islander. (MRACASC1=50,51,52,53,54)
6	Other race only	Respondents who reported they are of some other race group not listed in the question responses. (MRACASC1=60)
7	Multiracial	Respondents who reported they are of more than one race group (MRACASC1 > 99)
77	Don't know/Not sure	Respondents who reported they did not know their race. (MRACASC1=77)
99	Refused	Respondents who refused to give their race information. (MRACASC1=99)
	SAS Code:	<pre> IF MRACASC1 GT 99 THEN _MRACE1 = 7; ELSE IF MRACASC1 EQ 99 THEN _MRACE1 = 99; ELSE IF MRACASC1 EQ 77 THEN _MRACE1 = 77; ELSE IF MRACASC1 EQ 10 THEN _MRACE1 = 1; ELSE IF MRACASC1 EQ 20 THEN _MRACE1 = 2; ELSE IF MRACASC1 EQ 30 THEN _MRACE1 = 3; ELSE IF 40 LE MRACASC1 LE 47 THEN _MRACE1 = 4; ELSE IF 50 LE MRACASC1 LE 54 THEN _MRACE1 = 5; ELSE IF MRACASC1=60 THEN _MRACE1=6; </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
<u>_HISPANC</u> <i>Calculated variable for Hispanic, Latino/a, or Spanish origin calculated variable. _HISPANC is derived from HISPANC3</i>		
1	Hispanic, Latino/a, or Spanish origin	Respondents who reported being of Hispanic, Latino/a, or Spanish origin (HISPANC3=1,2,3,4 or HISPANC3 > 9)
2	Not of Hispanic, Latino/a, or Spanish origin	Respondents who reported they were not of Hispanic, Latino/a, or Spanish origin (HISPANC3=5)
9	Don't Know, Refused or Missing	Respondents who refused to report if they were of Hispanic, Latino/a, or Spanish origin (HISPANC3=7)
.	Not asked or Missing	Respondents who reported they did not know if they were of Hispanic, Latino/a, or Spanish origin (HISPANC3=9)
	SAS Code:	<pre>HISPNUM=INPUT (HISPANC3, 4.0); IF HISPNUM in (5,58) THEN _HISPANC=2; ELSE IF HISPNUM in (7,9,.) THEN _HISPANC=9; ELSE _HISPANC=1;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
_RACE	Calculated variable for race/ethnicity categories. _RACE is derived from _MRACE1 and _HISPANC. 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. (_MRACE1=1 and _HISPANC=2)
2	Black only, non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (_MRACE1=2 and _HISPANC=2)
3	American Indian or Alaskan Native only, Non-Hispanic	Respondents who reported they are American Indian or Alaska Native and not of Hispanic origin. (_MRACE1=3 and _HISPANC=2)
4	Asian only, non-Hispanic	Respondents who reported they are Asian and not of Hispanic origin. (_MRACE1=4 and _HISPANC=2)
5	Native Hawaiian or other Pacific Islander only, Non-Hispanic	Respondents who reported they are Native Hawaiian or Pacific Islander and not of Hispanic origin. (_MRACE1=5 and _HISPANC=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. (_MRACE1=6 and _HISPANC=2)
7	Multiracial, non-Hispanic	Respondents who reported they are of more than one race group and are not of Hispanic origin. (_MRACE1=7 and _HISPANC=2)
8	Hispanic	Respondents who reported they are of Hispanic origin. (_HISPANC=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. (_MRACE1 =77, 99 and _HISPANC=2 or _HISPANC=7, 9)
	SAS Code:	<pre> IF _HISPANC=9 OR (_MRACE1 IN(77,99) AND HISPANC3 EQ 2) THEN DO; _RACE = 9 ; END; ELSE IF _HISPANC =2 THEN DO; IF _MRACE1 = 1 THEN _RACE = 1 ; ELSE IF _MRACE1 = 2 THEN _RACE = 2 ; ELSE IF _MRACE1 = 3 THEN _RACE = 3 ; ELSE IF _MRACE1 = 4 THEN _RACE = 4 ; ELSE IF _MRACE1 = 5 THEN _RACE = 5 ; ELSE IF _MRACE1 = 6 THEN _RACE = 6 ; ELSE IF _MRACE1 = 7 THEN _RACE = 7 ; END; ELSE IF _HISPANC=1 THEN DO; _RACE = 8 ; END; </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
_RACEG21 <i>Calculated variable for white non-Hispanic race group. _RACEG21 is derived from _RACE.</i>		
1	Non-Hispanic White	Respondents who reported they are white and not of Hispanic origin. (_RACE=1)
2	Non-White or Hispanic	Respondents who reported they are non-white or of Hispanic origin. (_RACE=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. (_RACE=9)
	SAS Code:	<pre>IF _RACE = 1 THEN _RACEG21 = 1; ELSE IF _RACE IN (2,3,4,5,6,7,8) THEN _RACEG21 = 2; ELSE IF _RACE=9 THEN _RACEG21 = 9;</pre>

Section 8: Demographics		
_RACEGR3 <i>Calculated variable for five-level race/ethnicity category. _RACEGR3 is derived from _RACE.</i>		
1	White only, Non-Hispanic	Respondents who reported they are white and not of Hispanic origin. (_RACE=1)
2	Black only, Non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (_RACE=2)
3	Other race only, Non-Hispanic	Respondents who reported they are not white and not black and not of Hispanic origin. (_RACE=3, 4, 5, 6)
4	Multiracial, Non-Hispanic	Respondents who reported being multiracial but not of Hispanic origin. (_RACE=7)
5	Hispanic	Respondents who reported they are of Hispanic origin. (_RACE=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. (_RACE=9)
	SAS Code:	<pre>IF _RACE=1 THEN _RACEGR3=1; ELSE IF _RACE=2 THEN _RACEGR3=2; ELSE IF 3 LE _RACE LE 6 THEN _RACEGR3=3; ELSE IF _RACE=7 THEN _RACEGR3=4; ELSE IF _RACE=8 THEN _RACEGR3=5; ELSE IF _RACE=9 THEN _RACEGR3=9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
<u>_RACEPRV</u> <i>Calculated variable for computed race groups used for internet prevalence tables. <u>_RACEPRV</u> is derived from <u>_RACE</u> and <u>_IMPRACE</u></i>		
1	White only, non-Hispanic	Respondents who reported they are white and not of Hispanic origin or were imputed to be white and not of Hispanic origin. (_RACE=1 or _RACE=9 and _IMPRACE=1)
2	Black only, non-Hispanic	Respondents who reported they are black and not of Hispanic origin or were imputed to be black and not of Hispanic origin. (_RACE=2 or _RACE=9 and _IMPRACE=2)
3	American Indian or Alaskan Native only, Non-Hispanic	Respondents who reported they are American Indian or Alaska Native and not of Hispanic origin or were imputed to be American Indian or Alaska Native and not of Hispanic origin. (_RACE=3 or _RACE=9 and _IMPRACE=4)
4	Asian only, non-Hispanic	Respondents who reported they are Asian and not of Hispanic origin or were imputed to be Asian and not of Hispanic origin. (_RACE=4 or _RACE=9 and _IMPRACE=3)
5	Native Hawaiian or other Pacific Islander only, Non-Hispanic	Respondents who reported they are Native Hawaiian or Pacific Islander and not of Hispanic origin. (_RACE=5)
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 or were imputed to be some other race group and not of Hispanic origin. (_RACE=6 or _RACE=9 and _IMPRACE=6)
7	Multiracial, non-Hispanic	Respondents who reported they are of more than one race group and are not of Hispanic origin. (_RACE=7)
8	Hispanic	Respondents who reported they are of Hispanic origin or were imputed to be of Hispanic origin. (_RACE=8 or _RACE=9 and _IMPRACE==5)
	SAS Code:	<pre>IF _RACE < 9 THEN _RACEPRV=_RACE; IF _RACE=9 THEN DO; IF _IMPRACE IN (1,2,6) THEN _RACEPRV=_IMPRACE; ELSE IF _IMPRACE=3 THEN _RACEPRV=4; ELSE IF _IMPRACE=4 THEN _RACEPRV=3; ELSE IF _IMPRACE=5 THEN _RACEPRV=8; END;</pre>

Section 8: Demographics		
<u>_METSTAT</u> <i>Calculated variable for metropolitan status. <u>_METSTAT</u> is derived from <u>_URBNRRL</u>.</i>		
1	Metropolitan counties (_URBNRRL = 1,2,3,4)	_URBNRRL = 1,2,3,4 (_URBNRRL = 1,2,3,4)
2	Nonmetropolitan counties (_URBNRRL = 5,6)	_URBNRRL = 5,6 (_URBNRRL = 5,6)
.	Not defined or Missing	Not defined or Missing
	SAS Code:	<pre>IF _URBNRRL IN (1,2,3,4) THEN _METSTAT=1; IF _URBNRRL IN (5,6) THEN _METSTAT=2; IF _STATE=09 and _IMPCTY=005 THEN _METSTAT=1; IF _STATE=25 and _IMPCTY=019 THEN _METSTAT=2; IF _STATE=33 and _IMPCTY=003 THEN _METSTAT=2;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 8: Demographics		
_URBSTAT	<i>Calculated variable for urban/rural status. _URBSTAT is derived from _URBNRRL.</i>	
1	Urban counties (_URBNRRL = 1,2,3,4,5)	_URBNRRL = 1,2,3,4,5 (_URBNRRL = 1,2,3,4,5)
2	Rural counties (_URBNRRL = 6)	_URBNRRL = 6 (_URBNRRL = 6)
.	Not defined or Missing	Not defined or Missing
	SAS Code:	<pre>IF _URBNRRL IN (1, 2, 3, 4, 5) THEN _URBSTAT=1; IF _URBNRRL IN (6) THEN _URBSTAT=2; IF _STATE=09 and _IMPCTY=005 THEN _URBSTAT=1; IF _STATE=25 and _IMPCTY=019 THEN _URBSTAT=1; IF _STATE=33 and _IMPCTY=003 THEN _URBSTAT=1;</pre>

Section 9: Disability

There are no calculated variables for Section 9.

Section 10: Falls

There are no calculated variables for Section 10.

Calculated Variables in the 2023 BRFSS Data File

Section 11: Tobacco Use		
_SMOKER3 <i>Calculated variable for four-level smoker status: everyday smoker, someday smoker, former smoker, non-smoker. _SMOKER3 is derived from SMOKE100 and SMOKDAY2.</i>		
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:	<pre>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;</pre>

Section 11: Tobacco Use		
_RFSMOK3 <i>Calculated variable for adults who are current smokers. _RFSMOK3 is derived from _SMOKER3.</i>		
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:	<pre>IF _SMOKER3 IN (1,2) THEN _RFSMOK3=2; ELSE IF _SMOKER3 IN (3,4) THEN _RFSMOK3=1; ELSE _RFSMOK3=9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 11: Tobacco Use		
_CURECI2 <i>Calculated variable for adults who are current e-cigarette users. _CURECI2 is derived from ECIGNOW2.</i>		
1	Not currently using E-cigarettes	Respondents who reported they had not used E-cigarettes in their lifetime, those who reported having used E-cigarettes in their lifetime but do not currently use E-cigarettes. (ECIGNOW2=1, 4)
2	Current E-cigarette user	Respondents who reported having used E-cigarettes in their lifetime and currently use E-cigarettes. (ECIGNOW2=2,3)
9	Don't know/Refused/Missing	Respondents who reported they did not know if they had used E-cigarettes in their lifetime, those who refused to answer if they had used E-cigarettes in their lifetime, those who didn't know if they now used E-cigarettes every day, some days or not at all, those who refused to answer if they now used E-cigarettes every day, some days or not at all, or those with missing responses. (ECIGNOW2=7,9, or missing)
	SAS Code:	IF ECIGNOW2 IN (2, 3) THEN _CURECI2=2; ELSE IF ECIGNOW2 IN (1, 4) THEN _CURECI2=1; ELSE _CURECI2=9;

Section 12: Alcohol Consumption		
DRNKANY6 <i>Calculated variable for adults who reported having had at least one drink of alcohol in the past 30 days. DRNKANY6 is derived from ALCDAY4</i>		
1	Yes	Respondents who reported drinking at least one alcoholic beverage in the past 30 days. (1 <= ALCDAY4 <= 231)
2	No	Respondents who reported drinking no alcoholic beverages in the past 30 days. (ALCDAY4=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. (ALCDAY4=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. (ALCDAY4=999, Missing)
	SAS Code:	IF 1 <= ALCDAY4 < 231 THEN DRNKANY6=1; ELSE IF ALCDAY4=888 THEN DRNKANY6=2; ELSE IF ALCDAY4=777 THEN DRNKANY6=7; ELSE DRNKANY6=9;

Calculated Variables in the 2023 BRFSS Data File

Section 12: Alcohol Consumption		
DROCDY4_ <i>Calculated variable for drink-occasions-per-day. DROCDY4_ is derived from ALCDAY4 by dividing the ALCDAY4 variable by 7 days per week or 30 days per month.</i>		
0	No Drink-Occasions per day	Respondents reported no occasions per day that they consumed alcohol. (ALCDAY4=888)
1 - 899	Drink-Occasions per day	Respondents reported number of occasions per day that they consumed alcohol. (ALCDAY4 not equal to 777, 888, 999, or missing)
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. (ALCDAY4=777, 999, or missing)
	SAS Code:	<pre>IF ALCDAY4 NOTIN (888,777,999,.) THEN DO; IF 101 LE ALCDAY4 LE 107 THEN DROCDY4_=(ALCDAY4-100)/7; ELSE IF 201 LE ALCDAY4 LE 230 THEN DROCDY4_=(ALCDAY4-200)/30; END; ELSE IF ALCDAY4 EQ 888 THEN DROCDY4_=0; ELSE DROCDY4_=9; * DROCDY4_=round((DROCDY4_*100),1); *This is done after all of the alcohol calculations but the code is included here;</pre>

Section 12: Alcohol Consumption		
_RFBING6 <i>Calculated variable for binge drinkers (males having five or more drinks on one occasion, females having four or more drinks on one occasion).</i> <i>_RFBING6 is derived from DRNK3GE5 and ALCDAY4.</i>		
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. (ALCDAY4 < 231 and DRNK3GE5=88; or ALCDAY4=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. (ALCDAY4 < 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 ALCDAY4=777, 999, missing)
	SAS Code:	<pre>IF ALCDAY4 NOTIN (888) THEN DO; IF 1 LE DRNK3GE5 LE 76 THEN _RFBING6=2; ELSE IF DRNK3GE5 IN (.,77,99) THEN _RFBING6=9; ELSE IF DRNK3GE5 IN (88) THEN _RFBING6=1; END; ELSE IF ALCDAY4 = 888 THEN _RFBING6=1; ELSE _RFBING6=9;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 12: Alcohol Consumption		
<p>_DRNKWK2 <i>Calculated variable for calculated total number of alcoholic beverages consumed per week.</i> _DRNKWK2 is derived from DROCDY4_ and AVEDRNK3 by multiplying the total number of drink occasions per day (DROCDY4_) by the average number of drinks per occasion (AVEDRNK3) times seven days.</p>		
0	Did not drink	Respondents who did not drink in the past month. (DROCDY4_=0 or AVEDRNK3=88)
1 - 98999	Number of drinks per week	Respondents reported number of alcoholic drinks in the past week. (0 < DROCDY4_ < 990)
99900	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. (AVEDRNK3=.,77,99 or DROCDY4_=900)
	SAS Code:	<pre>IF DROCDY4_=0 THEN _DRNKWK2=0; ELSE IF DROCDY4_=9 THEN _DRNKWK2=999; ELSE IF AVEDRNK3 IN (.,77,99) THEN _DRNKWK2=999; ELSE IF AVEDRNK3=88 THEN _DRNKWK2=0; ELSE _DRNKWK2=AVEDRNK3*DROCDY4_*7; * _DRNKWK2=ROUND((_DRNKWK2*100),1); *This is done after all of the alcohol calculations but the code is included here.</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 12: Alcohol Consumption		
_RFDRHV8 <i>Calculated variable for heavy drinkers (adult men having more than 14 drinks per week and adult women having more than 7 drinks per week). _RFDRHV8 is derived from _DRNKWK2, ALCDAY4, and SEXVAR.</i>		
1	No	Male Respondents who reported having 14 drinks per week or less, or Female Respondents who reported having 7 drinks per week or less. ((SEXVAR=1 or BIRTHSEX=1) and _DRNKWK2 <= 1400 or (SEXVAR=2 or BIRTHSEX=2) and _DRNKWK2 <= 700 or ALCDAY4=888)
2	Yes	Male Respondents who reported having more than 14 drinks per week, or Female Respondents who reported having more than 7 drinks per week. ((SEXVAR=1 or BIRTHSEX=1) and _DRNKWK2 > 1400 or (SEXVAR=2 or BIRTHSEX=2) and _DRNKWK2 > 700)
9	Don't know/Refused/ Missing	Respondents with don't know, refused or missing responses for ALCDAY4 or _DRNKWK2. (ALCDAY5=777, 999, or missing, or _DRNKWK2=99, or missing)
	SAS Code:	<pre> IF (SEXVAR=1 or BIRTHSEX=1) AND _DRNKWK2 NOTIN (999,.) THEN DO; IF _DRNKWK2 GT 14 THEN _RFDRHV8=2; ELSE IF _DRNKWK2 LE 14 THEN _RFDRHV8=1; END; ELSE IF (SEXVAR=2 or BIRTHSEX=2) AND _DRNKWK2 NOTIN (999,.) THEN DO; IF _DRNKWK2 GT 7 THEN _RFDRHV8=2; ELSE IF _DRNKWK2 LE 7 THEN _RFDRHV8=1; END; ELSE IF ALCDAY4 EQ 888 THEN _RFDRHV8=1; ELSE _RFDRHV8=9; ** ROUND OFF TO NO DECIMAL PLACES ** MULTIPLY BY 100 AND THEN ROUND OFF TO NO DECIMAL PLACES AND THEN REMOVE THE DECIMAL PLACES **; DROCDY4 =round((DROCDY4*100),1); _DRNKWK2=ROUND((_DRNKWK2*100),1); </pre>

Calculated Variables in the 2023 BRFSS Data File

Section 13: Immunization		
_FLSHOT7 <i>Calculated variable for adults aged 65+ who have had a flu shot within the past year. _FLSHOT7 is derived from FLUSHOT7.</i>		
1	Yes	Respondents aged 65 or older who reported having a flu shot within the past 12 months. (AGE >= 65 and FLUSHOT7=1)
2	No	Respondents aged 65 or older who reported not having had a flu shot within the past 12 months. (AGE >= 65 and FLUSHOT7=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 FLUSHOT7=7,9, or missing or AGE=7,9, or missing)
.	Age < 65	Respondents aged 18-64. (18 <= AGE <= 64)
	SAS Code:	<pre>IF AGE GE 65 THEN DO; IF FLUSHOT7=1 THEN _FLSHOT7=1; ELSE IF FLUSHOT7=2 THEN _FLSHOT7=2; ELSE IF FLUSHOT7 IN (.,7,9) THEN _FLSHOT7=9; END; ELSE IF AGE IN (.,7,9) THEN _FLSHOT7=9; ELSE _FLSHOT7=.;</pre>

Section 13: Immunization		
_PNEUMO3 <i>Calculated variable for adults aged 65+ who have ever had a pneumonia vaccination. _PNEUMO3 is derived from PNEUVAC4.</i>		
1	Yes	Respondents aged 65 or older who reported having a pneumonia shot. (AGE >= 65 and PNEUVAC4=1)
2	No	Respondents aged 65 or older who reported not having had a pneumonia shot. (AGE >= 65 and PNEUVAC4=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 < 65	Respondents aged 18-64. (18 <= AGE <= 64)
	SAS Code:	<pre>IF AGE GE 65 THEN DO; IF PNEUVAC4=1 THEN _PNEUMO3=1; ELSE IF PNEUVAC4=2 THEN _PNEUMO3=2; ELSE IF PNEUVAC4 IN (.,7,9) THEN _PNEUMO3=9; ELSE _PNEUMO3=.; END; ELSE IF AGE IN (.,7,9) THEN _PNEUMO3=9; ELSE _PNEUMO3=.;</pre>

Calculated Variables in the 2023 BRFSS Data File

Section 14: HIV/AIDS		
<u>_AIDTST4</u> <i>Calculated variable for adults who have ever been tested for HIV.</i>		
<u>_AIDTST4</u> is derived from HIVTST7.		
1	Yes	Respondents who reported to having been tested for HIV. (HIVTST7=1)
2	No	Respondents who did not report having been tested for HIV. (HIVTST7=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. (HIVTST7=7,9)
.	Not asked or missing	Respondents with missing responses for HIVTST7. (HIVTST7=missing)
	SAS Code:	IF HIVTST7=1 THEN <u>_AIDTST4</u> =1; ELSE IF HIVTST7=2 THEN <u>_AIDTST4</u> =2; ELSE IF HIVTST7 IN (7,9) THEN <u>_AIDTST4</u> =9; ELSE IF HIVTST7=. THEN <u>_AIDTST4</u> =.;

Section 15: Seatbelt Use and Drinking and Driving		
<u>_RFSEAT2</u> <i>Calculated variable for always or nearly always wear seat belts calculated variable.</i>		
<u>_RFSEAT2</u> 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 <u>_RFSEAT2</u> =1; ELSE IF SEATBELT IN (3,4,5) THEN <u>_RFSEAT2</u> =2; ELSE <u>_RFSEAT2</u> =9;

Section 15: Seatbelt Use and Drinking and Driving		
<u>_RFSEAT3</u> <i>Calculated variable for always wear seat belts calculated variable.</i>		
<u>_RFSEAT3</u> 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 <u>_RFSEAT3</u> =1; ELSE IF SEATBELT IN (2,3,4,5) THEN <u>_RFSEAT3</u> =2; ELSE <u>_RFSEAT3</u> =9;

Calculated Variables in the 2023 BRFSS Data File

Section 15: Seatbelt Use and Drinking and Driving		
<i>_DRNKDRV</i> Calculated variable for drinking and driving. <i>_DRNKDRV</i> is derived from <i>DRNKDRI2</i>.		
1	Have driven after having too much to drink	Respondents who have reported having driven after drinking too much (1 LE DRNKDRI2 LE 76, 78 LE DRNKDRI2 LE 87, 89 LE DRNKDRI2 LE 98)
2	Have not driven after having too much to drink	Respondents who have not reported having driven after drinking too much (DRNKDRI2=88)
9	Don't know/Not Sure/Refused/ Missing	Respondents with don't know, refused, or missing responses for DRNKDRI2. (DRNKDRI2 =77,99 or missing)
	SAS Code:	IF DRNKDRI2 IN (., 77, 99) THEN _DRNKDRV=9; ELSE IF DRNKDRI2=88 THEN _DRNKDRV=2; ELSE _DRNKDRV=1;

Section 16: Long-term COVID Effects

There are no calculated variables for Section 16.