# Calculated Variables in the 2022 Data File of the Behavioral Risk Factor Surveillance System

(Version #14 - Revised: September 29, 2023)





#### **INTRODUCTION:**

This document provides information on calculated variables for the 2022 Behavioral Risk Factor Surveillance System survey. These variables are calculated from responses to questions in the survey. There are three types of calculated variables:

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

2. Intermediate variables, which are derived from a question response and are used to calculate some other variable or risk factor. Example: 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. The common focus of these variables is on health behaviors that are associated with a risk of illness or injury.

The tables in this report include a description of what the responses mean and a copy of the code used to calculate these variables in SAS<sup>®</sup>. 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 dataset.

#### NEW CALCULATED VARIABLES FOR 2022:

**YRSSMOK** was added in 2022. **PACKDAY** was added in 2022. PACKYRS was added in 2022. \_YRSQUIT was added in 2022. **SMOKGRP** was added in 2022. LCSREC was added in 2022. HADCOLN was added in 2022. \_CLNSCP1 was added in 2022. **HADSIGM** was added in 2022. SGMSCP1 was added in 2022. SGMS101 was added in 2022. **RFBLDS5** was added in 2022. STOLDN1 was added in 2022. \_VIRCOL1 was added in 2022. SBONTI1 was added in 2022. CRCREC2 was added in 2022.

#### CALCULATED VARIABLES WITH CHANGED NAMES FOR 2022:

\_CPRACE1 changed to \_CPRACE2 due to RCSBRAC2 changing to RCSBRAC3 and CRACASC1 chaanging to CRACASC2.

\_CRACE1 changed to \_CRACE2 due to CRACASC1 changing to CRACASC2.

\_CURECI1 changed to \_CURECI2 due to ECIGNOW1 changing to ECIGNOW2.

\_DRNKWK1 changed to \_DRNKWK2 due to DROCDY3\_ changing to DROCDY4\_.

\_M\_RACE change to \_M\_RACE1 due to MRACASC1 changing to MRACASC2.

\_MRACE changed to \_MRACE1 due to MRACASC1 changing to MRACASC2.

\_PRACE1 changed to \_PRACE2 due to MRACASC1 changing to MRACASC2 and ORACE3 changing to ORACE4.

\_RACE changed to \_RACE1 due to \_MRACE1 changing to \_MRACE2.

\_RACEG21 changed to \_RACEG22 due to \_RACE changing to \_RACE1.

RACEGR3 changed to RACEGR4 due to RACE changing to RACE1.

RACEPRV changed to RACEPR1 due to RACE changing to RACE1.

\_RFBING5 changed to \_RFBING6 due to ALCDAY5 changing back to ALCDAY4.

\_RFDRHV7 was changed to \_RFDRHV8 because \_DRNKWK1 change to \_DRNKWK2 abd ALCDAY5 changing to ALCDAY4.

CRACASC1 changed to CRACASC2 due to CRACORG1 changing to CRACORG2.

CRACORG1 changed to CRACORG2 due to RCSRACE1 changing to RCSRACE2.

DRNKANY5 changed to DRNKANY6 due to ALCDAY5 changing back to ALCDAY4.

DROCDY3\_changed to DROCDY4\_due to ALCDAY5 changing back to ALCDAY4 and DRNKANY5 changing to DRNKANY6.

MRACASC1 changed to MRACASC2 due to MRACORG1 changing to MRACORG2.

MRACORG1 changed to MRACORG2 due to MRACE1 changing to MRACE2.

Section 1:	Section 1: Health Status		
_RFHL1	<b>CH</b> Calculated varial	ble for adults with good or better healthRFHLTH is derived from GENHLTH.	
1	Good or Better Health	Respondents who reported having excellent, very good or good health. (GENHLTH =1, 2, 3)	
2	Fair or Poor Health	Respondents who reported having fair or poor health. (GENHLTH =4, 5)	
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who reported they didn't know, refused to answer, or had missing responses for the general health status question. (GENHLTH =7, 9, missing)	
	SAS Code:	IF 4 LE GENHLTH LE 5 THEN _RFHLTH=2; ELSE IF 1 LE GENHLTH LE 3 THEN _RFHLTH=1; ELSE _RFHLTH=9;	

Section 2:	Section 2: Healthy Days		
_PHYS1	PHYS14D Calculated variable for 3 level not good physical health status: 0 days, 1-13 days, 14-30 days. PHYS14D is derived from PHYSHLTH.		
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 ( $14  PHYSHLTH )$	
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;	

Section 2:	Section 2: Healthy Days		
_MENT		ble for 3 level not good mental health status: 0 days, 1-13 days, 14-30 days. 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)</td	
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)</td	
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:	Section 3: Health Care Access		
_HLTHI	_HLTHPLN <i>Calculated variable for adults who had some form of health insurance.</i> _HLTHPLN is derived from PRIMINSR.		
1	Have some form of insurance	Respondents who said they had some form of health insurance (PRIMINSR=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 (PRIMINSR=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 (PRIMINSR=77, 99 or missing)	
	SAS Code:	<pre>IF PRIMINSR in (1,2,3,4,5,6,7,8,9,10) THEN _HLTHPLN=1; ELSE IF PRIMINSR=88 THEN _HLTHPLN=2; ELSE _HLTHPLN=9;</pre>	

Section 3:	Section 3: Health Care Access		
_HCVU6	_HCVU652 <i>Calculated variable for respondents aged 18-64 who have any form of health insurance.</i> _HCVU652 is derived from AGE and PRIMINSR.		
1	Have some form of health insurance	Respondents who reported having some form of health insurance (18 = AGE </= 64 and PRIMINSR=1, 2, 3, 4, 5, 6, 7, 8, 9, 10)</th	
2	Do not have any form of health insurance	Respondents who reported not having any form of health insurance (18 = AGE </= 64 and PRIMINSR=88)</td	
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 ( $18 \le AGE \le 64$ and PRIMINSR=77, 99, or missing or AGE => 65)	
	SAS Code:	<pre>IF 18 LE AGE LE 64 THEN DO; IF PRIMINSR in (1,2,3,4,5,6,7,8,9,10) THEN _HCVU652=1; ELSE IF PRIMINSR=88 THEN _HCVU652=2; ELSE _HCVU652=9; END; ELSE _HCVU652 = 9;</pre>	

Section 4:	Exercise		
TOTIN	<b>_TOTINDA</b> Calculated variable for adults who reported doing physical activity or exercise during the past 30 days other than their regular jobTOTINDA is derived from EXERANY2.		
1	Had physical activity or exercise	Respondents who reported doing any physical activity or exercise. (EXERANY2=1)	
2	No physical activity or exercise in last 30 days	Respondents who reported doing no physical activity or exercise. (EXERANY2=2)	
9	Don't know/ Refused/ Missing	Respondents who reported they didn't know or refused to answer, and those with missing responses for the physical activity/exercise question. (EXERANY2=7, 9, missing)	
	SAS Code:	IF EXERANY2 IN (1) THEN _TOTINDA=1; ELSE IF EXERANY2 IN (2) THEN _TOTINDA=2; ELSE IF EXERANY2 IN (.,7,9) THEN _TOTINDA=9;	

**Section 5: Inadequate Sleep** There are no calculated variables for Section 5.

Section 6:	Section 6: Oral Health		
<b>_EXTETH3</b> Calculated variable for adults aged 18+ who have had permanent teeth extracted. <b>_EXTETH</b> derived from RMVTETH4.			
1	Not at risk	Respondents who reported having had no permanent teeth removed. (RMVTETH4=8)	
2	At risk	Respondents who reported having had permanent teeth removed. (RMVTETH4=1 or 2 or 3)	
9	Don't know/ Not Sure Or Refused/ Missing	Respondent who reported they didn't know, refused to answer, or had missing values for the had any permanent teeth extracted question. (RMVTETH4=7, 9, missing)	
	SAS Code:	<pre>IF RMVTETH4 IN (1,2,3) THEN _EXTETH3=2; ELSE IF RMVTETH4=8 THEN _EXTETH3=1; ELSE _EXTETH3=9;</pre>	

Section 6:	Section 6: Oral Health		
—		ble for adults aged 65+ who have had all their natural teeth extractedALTETH3 is GE and RMVTETH4.	
1	No	Respondents aged 65 or more who reported having none or some natural teeth removed. (AGE > 64 and RMVTETH4=1, 2, 8)	
2	Yes	Respondents aged 65 or more who reported having all natural teeth removed. (AGE $> 64$ and RMVTETH4=3)	
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who didn't know, or refused to report their age or didn't know, or refused to report if they had any natural teeth removed. (AGE=7, 9, missing; or RMVTETH4=7, 9, missing)	
	Missing or Age < 65	Respondents aged 18–64. (18 = AGE </= 64)</th	
	SAS Code:	<pre>IF AGE &gt;= 65 THEN DO; IF RMVTETH4 IN (1,2,8) THEN _ALTETH3=1; ELSE IF RMVTETH4=3 THEN _ALTETH3=2; ELSE IF RMVTETH4 IN (.,7,9) THEN _ALTETH3=9; END; ELSE IF AGE IN (.,7,9) THEN _ALTETH3=9; ELSE _ALTETH3=.;</pre>	

	Section 6: Oral Health		
_DENVS		ble for adults who have visited a dentist, dental hygenist or dental clinic within the past 3 is derived from LASTDEN4.	
1	Yes	Respondents who reported having had dental visit in the past year. (LASTDEN4=1)	
2	No	Respondents who reported having not had dental visit in the past year. (LASTDEN4=2, 3, or 4)	
9	Don't know/ Not Sure Or Refused/ Missing	Respondents with missing values or who refused or didn't know if they had a dental visit in the past year. (LASTDEN4=7,9 or missing)	
	SAS Code:	IF LASTDEN4=1 THEN _DENVST3=1; ELSE IF LASTDEN4 IN (2,3,4,8) THEN _DENVST3=2; ELSE IF LASTDEN4 IN (.,7,9) THEN _DENVST3=9;	

Section 7:	Section 7: Chronic Health Conditions		
_MICHI	_MICHD Calculated variable for respondents that have ever reported having coronary heart disease (chd) or myocardial infarction (mi)MICHD is derived from CVDINFR4, and CVDCRHD4.		
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:	Section 7: Chronic Health Conditions		
LTASTH1 Calculated variable for adult ASTHMA3.		ele for adults who have ever been told they have asthmaLTASTH1 is derived from	
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:	<pre>IF ASTHMA3=1 THEN _LTASTH1=2; ELSE IF ASTHMA3=2 THEN _LTASTH1=1; ELSE _LTASTH1=9;</pre>	

Section 7:	Section 7: Chronic Health Conditions		
_CASTH		ble for adults who have been told they currently have asthmaCASTHM1 is derived 3 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:	<pre>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;</pre>	

Section 7:	Section 7: Chronic Health Conditions		
_ASTHN	AS1 Calculated varia ASTHNOW.	ble for computed asthma statusASTHMS1 is derived from ASTHMA3 and	
1	Current	Respondents who have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma. (ASTHMA3=1and ASTHNOW=1)	
2	Former	Respondents who have been told by a doctor, nurse or health professional that they had asthma but do not still have asthma. (ASTHMA3=1 and ASTHNOW=2)	
3	Never	Respondents who have not been told by a doctor, nurse or health professional that they had asthma. (ASTHMA3=2)	
9	Don't know/ Not Sure Or Refused/ Missing	Respondents who reported they didn't know if they had been told by a doctor, nurse or health professional that they had asthma, those who refused to answer if they had been told by a doctor, nurse or health professional that they had asthma, those who didn't know if they still had asthma, those that refused to answer if they still had asthma, or those with missing responses. (ASTHMA3=7, 9, missing; or ASTHNOW=7, 9, missing)	
	SAS Code:	<pre>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;</pre>	

Section 7:	Section 7: Chronic Health Conditions		
	_DRDXAR2 Calculated variable for respondents who have had a doctor diagnose them as having some form of arthritisDRDXAR2 is derived from HAVARTH4.		
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:	Section 8: Demographics		
_RACEI	_RACEPR1 Calculated variable for computed race groups used for internet prevalence tablesRACEPR1 is derived from _RACE1 and _IMPRACE		
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. (_RACE1=1 or _RACE1=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. (_RACE1=2 or _RACE1=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. (_RACE1=3 or _RACE1=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. (_RACE1=4 or _RACE1=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. (_RACE1=5)	
6	Multiracial, non-Hispanic	Respondents who reported they are of more than one race group and are not of Hispanic origin. (_RACE1=7)	
7	Hispanic	Respondents who reported they are of Hispanic origin or were imputed to be of Hispanic origin. (_RACE1=8 or _RACE1=9 and _IMPRACE=5)	
	SAS Code:	<pre>IF _RACE1 in (1,2,3,4,5) THEN _RACEPR1=_RACE1; IF _RACE1=7 THEN _RACEPR1=6; IF _RACE1=8 THEN _RACEPR1=7; IF _RACE1 in (9,.) THEN DO; IF _IMPRACE IN (1,2,6) THEN _RACEPR1=_IMPRACE; ELSE IF _IMPRACE=3 THEN _RACEPR1=4; ELSE IF _IMPRACE=4 THEN _RACEPR1=3; ELSE IF _IMPRACE=5 THEN _RACEPR1=7; END;</pre>	

Section 8:	ection 8: Demographics		
_SEX	Calculated variable	for calculated sex variableSEX is derived from BIRTHSEX and SEXVAR	
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:	IF BIRTHSEX IN (1,2) THEN DO; _SEX=BIRTHSEX; END; ELSE DO; _SEX=SEXVAR; END;	

Calculated Variables in the 2022 BRFSS Data File

	Section 8: Demographics		
_AGEG5	SYR Calculated varia	ble for fourteen-level age categoryAGEG5YR is derived from AGE.	
1	Age 18 to 24	Respondents with reported age between 18 and 24 years (18 = AGE </= 24)</td	
2	Age 25 to 29	Respondents with reported age between 25 and 29 years (25 = AGE </= 29)</td	
3	Age 30 to 34	Respondents with reported age between 30 and 34 years (30 = AGE </= 34)</td	
4	Age 35 to 39	Respondents with reported age between 35 and 39 years (35 = AGE </= 39)</td	
5	Age 40 to 44	Respondents with reported age between 40 and 44 years (40 = AGE </= 44)</td	
6	Age 45 to 49	Respondents with reported age between 45 and 49 years (45 = AGE </= 49)</td	
7	Age 50 to 54	Respondents with reported age between 50 and 54 years (50 = AGE </= 54)</td	
8	Age 55 to 59	Respondents with reported age between 55 and 59 years (55 = AGE </= 59)</td	
9	Age 60 to 64	Respondents with reported age between 60 and 64 years (60 = AGE </= 64)</td	
10	Age 65 to 69	Respondents with reported age between 65 and 69 years (65 = AGE </= 69)</td	
11	Age 70 to 74	Respondents with reported age between 70 and 74 years (70 = AGE </= 74)</td	
12	Age 75 to 79	Respondents with reported age between 75 and 79 years (75 = AGE </= 79)</td	
13	Age 80 or older	Respondents with reported age between 80 and 99 years (80 = AGE </= 99)</td	
14	Don't know/ Refused/ Missing	Respondents who reported they didn't know, were not sure, refused to report or had missing responses for their age. (AGE=7, 9, missing)	
	SAS Code:	IF 18 LE AGE LE 24 THEN _AGEG5YR = 1; ELSE IF 25 LE AGE LE 29 THEN _AGEG5YR = 2; ELSE IF 30 LE AGE LE 34 THEN _AGEG5YR = 3; ELSE IF 35 LE AGE LE 39 THEN _AGEG5YR = 4; ELSE IF 40 LE AGE LE 44 THEN _AGEG5YR = 5; ELSE IF 45 LE AGE LE 49 THEN _AGEG5YR = 6; ELSE IF 50 LE AGE LE 54 THEN _AGEG5YR = 7; ELSE IF 55 LE AGE LE 59 THEN _AGEG5YR = 8; ELSE IF 60 LE AGE LE 64 THEN _AGEG5YR = 9; ELSE IF 65 LE AGE LE 69 THEN _AGEG5YR = 10; ELSE IF 70 LE AGE LE 74 THEN _AGEG5YR = 11; ELSE IF 75 LE AGE LE 79 THEN _AGEG5YR = 12; ELSE IF 80 LE AGE LE 99 THEN _AGEG5YR = 13; ELSE _AGEG5YR = 14;	

Section 8:	Section 8: Demographics		
_AGE65	YR Calculated varial	ble for two-level age categoryAGE65YR is derived from AGE.	
1	Age 18 to 64	Respondents with reported ages 18–64. (18 = AGE </= 64)</td	
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:	Section 8: Demographics		
_AGE80	Calculated variable	e for imputed age value collapsed above 80AGE80 is derived from _IMPAGE.	
18 - 24	Imputed Age 18 to 24	Respondents with reported Imputed Age between 18 and 24 years (18 = Imputed Age </= 24)</td	
25 - 29	Imputed Age 25 to 29	Respondents with reported Imputed Age between 25 and 29 years (25 = Imputed Age </= 29)</td	
30 - 34	Imputed Age 30 to 34	Respondents with reported Imputed Age between 30 and 34 years (30 = Imputed Age </= 34)</td	
35 - 39	Imputed Age 35 to 39	Respondents with reported Imputed Age between 35 and 39 years (35 = Imputed Age </= 39)</td	
40 - 44	Imputed Age 40 to 44	Respondents with reported Imputed Age between 40 and 44 years (40 = Imputed Age </= 44)</td	
45 - 49	Imputed Age 45 to 49	Respondents with reported Imputed Age between 45 and 49 years (45 = Imputed Age </= 49)</td	
50 - 54	Imputed Age 50 to 54	Respondents with reported Imputed Age between 50 and 54 years (50 = Imputed Age </= 54)</td	
55 - 59	Imputed Age 55 to 59	Respondents with reported Imputed Age between 55 and 59 years (55 = Imputed Age </= 59)</td	
60 - 64	Imputed Age 60 to 64	Respondents with reported Imputed Age between 60 and 64 years (60 = Imputed Age </= 64)</td	
65 - 69	Imputed Age 65 to 69	Respondents with reported Imputed Age between 65 and 69 years (65 = Imputed Age </= 69)</td	
70 - 74	Imputed Age 70 to 74	Respondents with reported Imputed Age between 70 and 74 years (70 = Imputed Age </= 74)</td	
75 - 79	Imputed Age 75 to 79	Respondents with reported Imputed Age between 75 and 79 years (75 = Imputed Age </= 79)</td	
80 - 99	Imputed Age 80 or older	Respondents with reported Imputed Age between 80 and 99 years (80 = Imputed Age </= 99)</td	
	SAS Code:	IF 18 LE _IMPAGE LE 80 THEN _AGE80=_IMPAGE; ELSE IF _IMPAGE GE 80 THEN _AGE80=80;	

Calculated Variables in the 2022 BRFSS Data File

Section 8: I	Section 8: Demographics		
_AGE_G	Calculated variates age).	ble for six-level imputed age categoryAGE_G is derived from _IMPAGE (imputed	
1	Age 18 to 24	Respondents with imputed ages between 18–24 years of age. (18 = _IMPAGE </= 24)</th	
2	Age 25 to 34	Respondents with imputed ages between 25–34 years of age. (25 = _IMPAGE </= 34)</td	
3	Age 35 to 44	Respondents with imputed ages between 35–44 years of age. (35 = _IMPAGE </= 44)</td	
4	Age 45 to 54	Respondents with imputed ages between 45–54 years of age. (45 = _IMPAGE </= 54)</td	
5	Age 55 to 64	Respondents with imputed ages between 55–64 years of age. (55 = _IMPAGE </= 64)</td	
6	Age 65 or older	Respondents with imputed ages between $65-99$ years of age. (IMPAGE = > $65$ )	
	SAS Code:	<pre>IF (18&lt;=_IMPAGE&lt;=24) THEN _AGE_G = 1; ELSE IF (25&lt;=_IMPAGE&lt;=34) THEN _AGE_G = 2; ELSE IF (35&lt;=_IMPAGE&lt;=44) THEN _AGE_G = 3; ELSE IF (45&lt;=_IMPAGE&lt;=54) THEN _AGE_G = 4; ELSE IF (55&lt;=_IMPAGE&lt;=64) THEN _AGE_G = 5; ELSE IF (_IMPAGE &gt;= 65) THEN _AGE_G = 6;</pre>	

Section 8:	Section 8: Demographics		
HTIN4		<i>e for reported height in inches.</i> HTIN4 is derived from HEIGHT3. HTIN4 is Iding 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&lt;=HEIGHT3&lt;=311 THEN HTIN4=((HEIGHT3-300)+36); ELSE IF 400&lt;=HEIGHT3&lt;=411 THEN HTIN4=((HEIGHT3-400)+48); ELSE IF 500&lt;=HEIGHT3&lt;=511 THEN HTIN4=((HEIGHT3-500)+60); ELSE IF 600&lt;=HEIGHT3&lt;=611 THEN HTIN4=((HEIGHT3-600)+72); ELSE IF 700&lt;=HEIGHT3&lt;=711 THEN HTIN4=((HEIGHT3-700)+84);</pre>	

Section 8:	Section 8: Demographics		
HTM4	HTM4Calculated 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:	IF 300 <= HEIGHT3 <= 711 THEN HTM4=HTIN4*0.0254; ELSE IF 9091 <= HEIGHT3 < 9244 THEN HTM4=(HEIGHT3-9000)/100;	

Section 8:	Demographics		
WTKG3	WTKG3 <i>Calculated variable for reported weight in kilograms.</i> WTKG3 is derived from WEIGHT2 by multiplying WEIGHT2 by 0.4535924 kg per lb.		
2300 - 29500	Weight in kilograms [2 implied decimal places]	Respondents reported or calculated weight in kilograms.	
	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 &lt; 0650 THEN WTKG3=WEIGHT2*0.4535924; ELSE IF 9023 LE WEIGHT2 &lt; 9295 THEN WTKG3=WEIGHT2-9000; END;</pre>	

Section 8:	Section 8: Demographics		
_BMI5		<i>y for body mass index (bmi).</i> _BMI5 is derived from WTKG3 and HTM4. It is widing WTKG3 by HTM4 <sup>2</sup> .	
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 &gt; 99.99 THEN _BMI5=.; IF _BMI5 &lt; 12.00 THEN _BMI5=.; IF _PREGNANT=1 THEN _BMI5=.;</pre>	

Section 8:	ection 8: Demographics			
_BMI5C		ble for four-categories of body mass index (bmi)BMI5CAT is derived from _BMI5.		
1	Underweight	Respondents classified as underweight based on body mass index. ( $BMI5 < 18.50$ )		
2	Normal Weight	Respondents classified as normal weight based on body mass index. (18.50 =_BMI5 < 25.00)</td		
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)</td		
	Don't know/ Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. (_BMI5=.)		
	SAS Code:	IF (0.00 LE _BMI5 < 18.50) THEN _BMI5CAT=1; ELSE IF (18.50 LE _BMI5 < 25.00) THEN _BMI5CAT=2; ELSE IF (25.00 LE _BMI5 < 30.00) THEN _BMI5CAT=3; ELSE IF _BMI5 GE 30.00 THEN _BMI5CAT=4;		

Section 8:	Section 8: Demographics			
—		le for adults who have a body mass index greater than 25.00 (overweight or obese). rived from _BMI5.		
1	No	Respondents not classified as overweight or obese based on body mass index. (12 = BMI5 < 25.00)</th		
2	Yes	Respondents classified as overweight or obese based on body mass index. (25.00 = BMI5 </= 99.99)</td		
9	Don't know/ Refused/ Missing	Respondents with an unknown, refused, or missing value for body mass index. (_BMI5=missing)		
	SAS Code:	<pre>IF (12.00 LE _BMI5 &lt; 25.00) THEN _RFBMI5=1; ELSE IF (25.00 &lt;= _BMI5 &lt; 99.99) THEN _RFBMI5=2; ELSE _RFBMI5=9; ** Round off HTM4, WTKG3 and _BMI5 to 2 decimal places and remove the decimal **; HTIN4 = round(HTIN4,1); HTM4 = round((HTM4*100),1); WTKG3 = round((WTKG3*100),1); IF _BMI5 NE . THEN _BMI5 = ROUND((_BMI5*100),1);</pre>		

	Section 8: Demographics CHLDCNT <i>Calculated variable for number of children in household</i> . CHLDCNT is derived from CHILDREN.		
_CHLDO	<b>INI</b> Calculated varia	ble for number of children in householdCHLDCNT is derived from CHILDREN.	
1	No children in household	Respondents who reported having no children. (CHILDREN=88)	
2	One child in household	Respondents who reported having one child. (CHILDREN=1)	
3	Two children in household	Respondents who reported having two children. (CHILDREN=2)	
4	Three children in household	Respondents who reported having three children. (CHILDREN=3)	
5	Four children in household	Respondents who reported having four children. (CHILDREN=4)	
6	Five or more children in household	Respondents who reported having five or more children. (5 $\leq$ EHILDREN $\leq$ 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 _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 &lt;= CHILDREN &lt; 88 THEN _CHLDCNT = 6; ELSE IF CHILDREN = 99 THEN _CHLDCNT = 9; ELSE IF CHILDREN = . THEN _CHLDCNT = 9;</pre>	

Section 8:	Section 8: Demographics			
_EDUCA	G Calculated varia	ble for level of education completedEDUCAG is derived from EDUCA.		
1	Did not graduate High School	Respondents who reported they did not graduate high school. (EDUCA=1,2,3)		
2	Graduated High School	Respondents who reported they graduated high school. (EDUCA=4)		
3	Attended College or Technical School	Respondents who reported they attended college or technical school. (EDUCA=5)		
4	Graduated from College or Technical School	Respondents who reported they graduated from college or technical school. (EDUCA=6)		
9	Don't know/ Not sure/ Missing	Respondents who reported they didn't know, were not sure, refused, or had a missing value for EDUCA. (EDUCA=9, missing)		
	SAS Code:	IF EDUCA IN (1,2,3) THEN EDUCAG = 1; ELSE IF EDUCA IN (4) THEN EDUCAG = 2; ELSE IF EDUCA IN (5) THEN EDUCAG = 3; ELSE IF EDUCA IN (6) THEN EDUCAG = 4; ELSE IF EDUCA IN (.,9) THEN EDUCAG = 9;		

Section 8: Demographics		
_INCOM	IG1 Calculated varia	ble for income categoriesINCOMG1 is derived from INCOME3.
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:	IF INCOME3 IN (1,2) THEN _INCOMG1 = 1; ELSE IF INCOME3 IN (3,4) THEN _INCOMG1 = 2; ELSE IF INCOME3 IN (5) THEN _INCOMG1 = 3; ELSE IF INCOME3 IN (6) THEN _INCOMG1 = 4; ELSE IF INCOME3 IN (7,8) THEN _INCOMG1 = 5; ELSE IF INCOME3 IN (9,10) THEN _INCOMG1 = 6; ELSE IF INCOME3 IN (11) THEN _INCOMG1 = 7; ELSE IF INCOME3 IN (77,99,.) THEN _INCOMG1 = 9; ELSE IF INCOME3 IN (11) THEN _INCOMG1 = 7; ELSE IF INCOME3 IN (77,99,.) THEN _INCOMG1 = 7; ELSE IF INCOME3 IN (77,99,.) THEN _INCOMG1 = 9;

Section 8:	Demographics	
_PRACE2 Calculated variable for preferred race categoryPRACE2 is derived from MRACASC2 and ORACE4. If MRACEASC2 has only one response, then _PRACE2=MRACASC2. If MRACASC2 has more than one response then _PRACE2=ORACE4.		
1	White	Respondents who reported their race as white. (MRACASC2=10 or MRACASC2 > 99 and ORACE4=10)
2	Black or African American	Respondents who reported their race as black. (MRACASC2=20 or MRACASC2 > 99 and ORACE4=20)
3	American Indian or Alaskan Native	Respondents who reported their race as American Indian or Alaska Native. (MRACASC2=30 or MRACASC2 > 99 and ORACE4=30)
4	Asian	Respondents who reported their race as Asian. (MRACASC2=40 or MRACASC2 > 99 and ORACE4=40)
5	Native Hawaiian or other Pacific Islander	Respondents who reported their race as Native Hawaiian or Pacific Islander. (MRACASC2=50 or MRACASC2 > 99 and ORACE4=50)
6	Multiracial but preferred race not answered	Respondents who reported they are of more than one race group but did not answer the question about which race best represents them NOTE: This is a data collection error. (MRACASC2 > 99 and ORACE4= Missing)
7	Multiracial but no preferred race	Respondents who reported they are of more than one race group but did not report a preference or the preferred race is missing (MRACASC2 > 99 and ORACE4=77 or 99)
77	Don't know/ Not sure	Respondents who reported they didn't know their race and did not answer the question about which race best represents them. (MRACASC2=77)
88	No race choice given	Respondents who reported no race choice. (MRACASC2=88)
99	Refused	Respondents who refused to give their race and did not answer the question about which race best represents them. (MRACASC2=99)
	SAS Code:	<pre>IF MRACASC2 EQ 10 THEN _PRACE2 = 1; ELSE IF MRACASC2 EQ 20 THEN _PRACE2 = 2; ELSE IF MRACASC2 EQ 30 THEN _PRACE2 = 3; ELSE IF 40 LE MRACASC2 LE 49 THEN _PRACE2=4; ELSE IF 50 LE MRACASC2 LE 59 THEN _PRACE2=5; ELSE IF MRACASC2 EQ 88 THEN _PRACE2=88; ELSE IF MRACASC2 EQ 77 THEN _PRACE2=77; ELSE IF MRACASC2 EQ 99 THEN _PRACE2=99; ELSE IF MRACASC2 GT 99 THEN DO; IF ORACE4=77 THEN _PRACE2=7; ELSE IF ORACE4=09 THEN _PRACE2=6; ELSE IF ORACE4=. THEN _PRACE2=6; ELSE IF ORACE4 EQ 10 THEN _PRACE2=2; ELSE IF ORACE4 EQ 30 THEN _PRACE2=3; ELSE IF ORACE4 EQ 30 THEN _PRACE2=3; ELSE IF 40 LE ORACE4 LE 49 THEN _PRACE2=4; ELSE IF 50 LE ORACE4 LE 59 THEN _PRACE2=5; END;</pre>

Section 8:	Section 8: Demographics			
_MRAC	MRACASC2. If category. If MR	<i>ble for calculated multiracial race categorization.</i> _MRACE2 is derived from f respondents reported more than one race they are assigned to the multiracial ACASC2 is less than 40 or equal to 77,88, or 99 then _MRACE2=MRACASC2. If 40-47 then _MRACE2=40. If MRACASC2 is 50-54 then _MRACE2=50.		
1	White only	Respondents who reported they are white. (MRACASC2=10)		
2	Black or African American only	Respondents who report they are black. (MRACASC2=20)		
3	American Indian or Alaskan Native only	Respondents who reported they are American Indian or Alaska Native. (MRACASC2=30)		
4	Asian Only	Respondents who reported they are Asian. (MRACASC2=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. (MRACASC2=50,51,52,53,54)		
6	Multiracial	Respondents who reported they are of more than one race group (MRACASC2 > 99)		
77	Don't know/ Not sure	Respondents who reported they did not know their race. (MRACASC2=77)		
88	No race choice given	Respondents who reported no race choice. (MRACASC2=88)		
99	Refused	Respondents who refused to give their race information. (MRACASC2=99)		
	SAS Code:	IF MRACASC2 GT 99 THEN MRACE2 = 6; ELSE IF MRACASC1 EQ 99 THEN MRACE2 = 99; ELSE IF MRACASC2 EQ 88 THEN MRACE2 = 88; ELSE IF MRACASC2 EQ 77 THEN MRACE2 = 77; ELSE IF MRACASC2 EQ 10 THEN MRACE2 = 1; ELSE IF MRACASC2 EQ 20 THEN MRACE2 = 2; ELSE IF MRACASC2 EQ 30 THEN MRACE2 = 3; ELSE IF 40 LE MRACASC2 LE 47 THEN MRACE2 = 4; ELSE IF 50 LE MRACASC2 LE 54 THEN MRACE2 = 5;		

Section 8:	Section 8: Demographics			
HISPA	_HISPANC <i>Calculated variable for Hispanic, Latino/a, or spanish origin calculated variable.</i> _HISPANC is derived from HISPANC3			
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:	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;		

Section 8: Demographics _RACE1 Calculated variable for race/ethnicity categoriesRACE1 is derived from _MRACE2 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. (_MRACE2=1 and _HISPANC=2)
2	Black only, non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (_MRACE2=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. (_MRACE2=3 and _HISPANC=2)
4	Asian only, non-Hispanic	Respondents who reported they are Asian and not of Hispanic origin. (_MRACE2=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. (_MRACE2=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. (MRACASC2=60 and _HISPANC=2)
7	Multiracial, non-Hispanic	Respondents who reported they are of more than one race group and are not of Hispanic origin (_MRACE2=6 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. (_MRACE2 =77,88, 99 and _HISPANC=2 or _HISPANC=7, 9)
	SAS Code:	<pre>IF _HISPANC=9 OR (_MRACE2 IN(77,99) AND _HISPANC EQ 2) THEN DO; RACE1 = 9 ; END; ELSE IF _HISPANC =2 THEN DO; IF _MRACE2 = 1 THEN _RACE1 = 1 ; ELSE IF _MRACE2 = 2 THEN _RACE1 = 2 ; ELSE IF _MRACE2 = 3 THEN _RACE1 = 3 ; ELSE IF _MRACE2 = 4 THEN _RACE1 = 3 ; ELSE IF _MRACE2 = 5 THEN _RACE1 = 4 ; ELSE IF _MRACE2 = 5 THEN _RACE1 = 5 ; ELSE IF _MRACE2 = 6 THEN _RACE1 = 7 ; END; ELSE IF _HISPANC=1 THEN DO; RACE1 = 8 ; END;</pre>

Section 8:	Section 8: Demographics			
_RACEO	G22 Calculated variat	ble for white non-Hispanic race groupRACEG22 is derived from _RACE1.		
1	Non-Hispanic White	Respondents who reported they are white and not of Hispanic origin. (_RACE1=1)		
2	Non-White or Hispanic	Respondents who reported they are non-white or of Hispanic origin. (_RACE1=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. (_RACE1=9)		
	SAS Code:	<pre>IF _RACE1 = 1 THEN _RACEG22 = 1; ELSE IF _RACE1 IN (2,3,4,5,6,7,8) THEN _RACEG22 = 2; ELSE IF _RACE1=9 THEN _RACEG22 = 9;</pre>		

Section 8: Demographics		
_RACE0	GR4 Calculated varia	ble for five-level race/ethnicity categoryRACEGR4 is derived from _RACE1.
1	White only, Non- Hispanic	Respondents who reported they are white and not of Hispanic origin. (_RACE1=1)
2	Black only, Non-Hispanic	Respondents who reported they are black and not of Hispanic origin. (_RAC1E=2)
3	Other race only, Non- Hispanic	Respondents who reported they are not white and not black and not of Hispanic origin. (_RACE1=3, 4, 5, 6)
4	Multiracial, Non- Hispanic	Respondents who reported being multiracial but not of Hispanic origin. (_RACE1=7)
5	Hispanic	Respondents who reported they are of Hispanic origin. (_RACE1=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. (_RACE1=9)
	SAS Code:	<pre>IF _RACE1=1 THEN _RACEGR4=1; ELSE IF _RACE1=2 THEN _RACEGR4=2; ELSE IF 3 LE _RACE1 LE 5 THEN _RACEGR4=3; ELSE IF _RACE1=7 THEN _RACEGR4=4; ELSE IF _RACE1=8 THEN _RACEGR4=5; ELSE IF _RACE1=9 THEN _RACEGR4=9;</pre>

Section 8:	Section 8: Demographics			
_METSTAT Calculated variable for metropolitan statusMETSTAT is derived from _URBNRRL.				
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>		

	Section 8: Demographics _URBSTAT <i>Calculated variable for urban/rural status</i> URBSTAT is derived from _URBNRRL.		
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	Breast and Cervical Can	cer Screening
_RFMA		able for women respondents aged 40+ who have had a mammogram in the past two A22 is derived from BIRTHSEX, SEXVAR, AGE, HADMAM, and HOWLONG.
1	Yes	Female respondents aged 40 and older who have received a mammogram within the past two years. ((BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and AGE >/= 40 and HADMAM=1 and HOWLONG=1,2)
2	No	Female respondents aged 40 and older who have not received a mammogram within the past two years. ((BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and AGE >/= 40 and HADMAM=2 or HADMAM=1 and HOWLONG=3,4,5)
9	Don't know/ Not Sure/ Refused	Female respondents aged 40 and older with don't know, not sure, or refused responses for HADMAM or HOWLONG or female respondents with don't know, not sure, refused or missing responses for AGE, HADMAM or HOWLONG. ((BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and HADMAM=7,9, missing or HOWLONG=7,9, missing or AGE=7,9,missing)
	Missing or Age < 40 or Male	Female respondents < 40 years old, or male respondents. ((BIRTHSEX=1 or (BIRTHSEX notin (1,2) and SEXVAR=1)) or (BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and AGE < 40)
	SAS Code:	<pre>IF (BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) AND AGE GE 40 THEN DO; IF HADMAM=1 THEN DO; IF HOWLONG IN (1,2) THEN _RFMAM22=1; ELSE IF HOWLONG IN (3,4,5) THEN _RFMAM22=2; ELSE IF HOWLONG IN (7,9,.) THEN _RFMAM22=9; END; ELSE IF HADMAM=2 THEN _RFMAM22=2; ELSE IF HADMAM IN (7,9,.) THEN _RFMAM22=9; END; ELSE IF SEX1=2 AND AGE IN (.,7,9) THEN _RFMAM22=9; ELSE _RFMAM22=.;</pre>

Section 10:	Section 10: Breast and Cervical Cancer Screening		
_MAM5023 Calculated variable for women respondents aged 50-74 who have had a mammogram in the past two yearsMAM5023 is derived from BIRTHSEX, SEXVAR, AGE, HADMAM, and HOWLONG.			
1	Received a mammogram within the past 2 years.	Female respondents aged 50-74 who have received a mammogram within the past two years. ((BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and 50 = AGE </= 74 and HADMAM=1 and HOWLONG=1,2)</th	
2	Did not receive a mammogram within the past 2 years.	Female respondents aged 50-74 who have not received a mammogram within the past two years. ((BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and 50 = AGE </= 74 and HADMAM=2 or HADMAM=1 and HOWLONG=3,4,5)</td	
	Missing, Age < 50 or > 74 or Male	Female respondents < 50 years old, > 74 years old or male respondents. ((BIRTHSEX=1 or (BIRTHSEX notin (1,2) and SEXVAR=1) or (BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) and AGE < 50 or SEX1=2 and AGE > 74)	
	SAS Code:	<pre>IF (BIRTHSEX=2 or (BIRTHSEX notin (1,2) and SEXVAR=2)) AND 50 LE AGE LE 74 THEN DO; IF HADMAM=2 THEN _MAM5023=2; ELSE IF HADMAM=1 THEN DO; IF HOWLONG IN (1,2) THEN _MAM5023=1; ELSE IF HOWLONG IN (3,4,5) THEN _MAM5023=2; END; END;</pre>	

	Section 11: Colorectal Cancer Screening _HADCOLN Calculated variable for had colonoscopy calculated variableHADCOLN is derived from HADSIGM4 and COLNSIGM.		
1	1       Have had a colonoscopy       Respondents who have had a colonoscopy (HADSIGM4=1 and COLNSIGM=1,3)		
2	Have not had a colonoscopy	Respondents who have not had a colonoscopy. (HADSIGM4=1 and COLNSIGM=2 or HADSIGM4=2)	
	SAS Code:	<pre>IF HADSIGM4=1 THEN DO; IF COLNSIGM IN (1,3) THEN _HADCOLN=1; IF COLNSIGM=2 THEN _HADCOLN=2; END; IF HADSIGM4=2 THEN DO; _HADCOLN=2; END;</pre>	

Section 11	Section 11: Colorectal Cancer Screening		
_CLNSC	CLNSCP1         Calculated variable for respondents aged 45-75 who have had a colonoscopy within the past ten years.           _CLNSCP1 is derived from _HADCOLN, AGE, and COLNTES1.		
1	Had a colonoscopy in the past ten years	Respondents aged 45-75 who have had a colonoscopy within the past ten years. (45 = AGE </= 75 and _HADCOLN =1 and COLNTES1=1,2,3,4)</th	
2	Had a colonoscopy ten or more years ago	Respondents aged 45-75 who have had a colonoscopy ten or more years ago. (45 = AGE </= 75 and _HADCOLN=1 and COLNTES1=5)</td	
3	Have never had a colonoscopy	Respondents aged 45-75 who have never had a colonoscopy. (45 = AGE </= 75 and _HADCOLN=2)</td	
	Missing, Age < 45, Age > 75	Respondents aged 45 -75 with don't know, refused or missing responses for _HADCOLN or COLNTES1, or respondents aged < 45, or respondents aged > 75. (45 = AGE </= 75 and _HADCOLN=missing or COLNTES1=missing or AGE < 45 or AGE 75)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF _HADCOLN=2 THEN _CLNSCP1=3; ELSE IF _HADCOLN=1 THEN DO; IF COLNTES1 IN (1,2,3,4) THEN _CLNSCP1=1; ELSE IF COLNTES1=5 THEN _CLNSCP1=2; END; END;</pre>	

Section 11 _HADSI		ble for had sigmoidoscopy calculated variableHADSIGM is derived from
1	HADSIGM4 an Have had a sigmoidoscopy	Respondents who have had a sigmoidoscopy (HADSIGM4=1 and COLNSIGM=2,3)
2	Have not had a sigmoidoscopy	Respondents who have not had a sigmoidoscopy (HADSIGM4=1 and COLNSIGM=1 or HADSIGM4=2)
	SAS Code:	<pre>IF HADSIGM4=1 THEN DO; IF COLNSIGM IN (2,3) THEN _HADSIGM=1; IF COLNSIGM=1 THEN _HADSIGM=2; END; IF HADSIGM4=2 THEN DO; _HADSIGM=2; END;</pre>

	Section 11: Colorectal Cancer Screening _SGMSCP1 Calculated variable for respondents aged 45-75 who have had a sigmoidoscopy within the past five years. SGMSCP1 is derived from HADSIGM, AGE, and SIGMTES1.		
1	Have had a sigmoidoscopy in the past 5 years	Respondents aged 45-75 who have had a sigmoidoscopy within the past 5 years. (45 = AGE </= 75 and _HADSIGM=1 and SIGMTES1=1,2,3)</th	
2	Have had a sigmoidoscopy 5 or more years ago	Respondents aged 45-75 who have had a sigmoidoscopy 5 or more years ago. (45 = AGE </= 75 and _HADSIGM=1 and SIGMTES1=4,5)</td	
3	Have never had a sigmoidoscopy	Respondents aged 45-75 who have never had a sigmoidoscopy. (45 = AGE </= 75 and _HADSIGM=2)</td	
	Missing, Age < 45, Age > 75	Respondents aged 45 -75 with don't know, refused or missing responses for SIGMSCPY or SIGMTEST, or respondents aged < 45, or respondents aged > 75. (45 = AGE </= 75 and _HADSIGM=missing or SIGMTES1=missing or AGE < 45 or AGE 75)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF _HADSIGM=2 THEN _SGMSCP1=3; ELSE IF _HADSIGM=1 THEN DO; IF SIGMTES1 IN (1,2,3) THEN _SGMSCP1=1; ELSE IF SIGMTES1 IN (4,5) THEN _SGMSCP1=2; END; END;</pre>	

Section 11	Section 11: Colorectal Cancer Screening		
SGMS101 Calculated variable for respondents aged 45-75 who have had a sigmoidoscopy within the past ten year SGMS101 is derived from _HADSIGM, AGE, and SIGMTES1.			
1	Have had a sigmoidoscopy in the past 10 years	Respondents aged 45-75 who have had a sigmoidoscopy within the past 10 years. (45 = AGE </= 75 and _HADSIGM=1 and SIGMTES1=1,2,3,4)</td	
2	Have had a sigmoidoscopy 10 or more years ago	Respondents aged 45-75 who have had a sigmoidoscopy 10 or more years ago. (45 = AGE </= 75 and _HADSIGM=1 and SIGMTES1=5)</td	
3	Have never had a sigmoidoscopy	Respondents aged 45-75 who have never had a sigmoidoscopy. (45 = AGE </= 75 and _HADSIGM=2)</td	
	Missing, Age < 45, Age > 75	Respondents aged 45 -75 with don't know, refused or missing responses for _HADSIGM or SIGMTES1, or respondents aged < 45, or respondents aged > 75. (45 = AGE </= 75 and _HADSIGM=7,9 or missing or SIGMTES1=7,9 or missing or AGE < 45 or AGE 75)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF _HADSIGM=2 THEN _SGMS101=3; ELSE IF _HADSIGM=1 THEN DO; IF SIGMTES1 IN (1,2,3,4) THEN _SGMS101=1; ELSE IF SIGMTES1=5 THEN _SGMS101=2; END; END;</pre>	

Section 11: Colorectal Cancer Screening		
<b>_RFBLDS5</b> Calculated variable for respondents aged 45-75 who have had a stool test within the past year. <b>_RFBLDS5</b> is derived from AGE, COLNCNCR, SMALSTOL, and STOLTEST.		
1	Had a blood stool test in the past year	Respondents aged 45-75 who have had a blood stool test within the past year. (45 = AGE </= 75 and COLNCNCR=1 and SMALSTOL=1 and STOLTEST=1)</th
2	Have had a blood stool test one or more years ago	Respondents aged 45-75 who have had a blood stool test one or more years ago. (45 = AGE </= 75 and COLNCNCR=1 and SMALSTOL=1 and STOLTEST=2,3,4,5)</th
3	Have never had a blood stool test	Respondents aged 45-75 who have never had a blood stool test. (45 = AGE </= 75 and (COLNCNCR=1 and SMALSTOL=2) or COLNCNCR=2)</th
l	Missing, Age < 45, Age > 75 or CONLCNCR=7, 9	Respondents aged 45 -75 with don't know, refused or missing responses for SMALSTOL or STOLTEST, or respondents aged < 45, or respondents aged > 75 or had a don't know, refused or missing value for COLNCNCR. (45 = AGE </= 75 and SMALSTOL=missing or STOLTEST=missing or AGE < 45 or AGE 75 or COLNCNCR=7,9, or missing)
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF COLNCNCR=2 THEN _RFBLDS5=3; ELSE IF COLNCNCR=1 THEN DO; IF SMALSTOL=2 THEN _RFBLDS5=3; ELSE IF SMALSTOL=1 THEN DO; IF STOLTEST=1 THEN _RFBLDS5=1; ELSE IF STOLTEST IN (2,3,4,5) THEN _RFBLDS5=2; END; END; END;</pre>

	Section 11: Colorectal Cancer Screening <u>STOLDN1</u> Calculated variable for respondents aged 45-75 who have had a stool dna test within the past three years. STOLDN1 is derived from AGE, COLNCNCR, STOOLDNA, and SDNATEST.		
1	Had a stool DNA test in the past 3 years	Respondents aged 45-75 who have had a stool DNA test within the past 3 years. (45 = AGE </= 75 and COLNCNCR=1 and STOOLDN2=1 and SDNATES1=1,2,3)</th	
2	Have had a stool DNA test 3 or more years ago	Respondents aged 45-75 who have had a stool DNA test 3 or more years ago. (45 = AGE </= 75 and COLNCNCR=1 and STOOLDN2=1 and SDNATES1=4,5)</th	
<mark>3</mark>	Have never had a stool DNA test	Respondents aged 45-75 who have never had a stool DNA test. (45 = AGE </= 75 and (COLNCNCR=1 and STOOLDN2=2) or COLNCNCR=2)</th	
<mark>.</mark>	Missing, Age < 45, Age > 75 or CONLCNCR=7, 9	Respondents aged 45 -75 with don't know, refused or missing responses for STOOLDNA or SDNATEST, or respondents aged < 45, or respondents aged > 75 or had a don't know, refused or missing value for COLNCNCR. (45 = AGE </= 75 and STOOLDN2=missing or SDNATES1=missing or AGE < 45 or AGE 75 or COLNCNCR=7,9, or missing)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF COLNCNCR=2 THEN _STOLDN1=3; ELSE IF COLNCNCR=1 THEN DO; IF STOOLDN2=2 THEN _STOLDN1=3; ELSE IF STOOLDN2=1 THEN DO; IF SDNATES1 in (1,2,3) THEN _STOLDN1=1; ELSE IF SDNATES1 IN (4,5) THEN _STOLDN1=2; END; END; END;</pre>	

	Section 11: Colorectal Cancer Screening _VIRCOL1 Calculated variable for respondents aged 45-75 who have had a virtual colonoscopy within the past five years. VIRCOL1 is derived from AGE, COLNCNCR, VIRCOLO1, and VCLNTES2.		
1	Had a virtual colonoscopy in the past 5 years	Respondents aged 45-75 who have had a virtual colonoscopy within the past 5 years. (45 = AGE </= 75 and COLNCNCR=1 and VIRCOLO1=1 and VCLNTES2=1,2,3)</th	
2	Have not had a virtual colonoscopy in the past 5 or more years	Respondents aged 45-75 who have not had a virtual colonoscopy within the past 5 or more years. (45 = AGE </= 75 and COLNCNCR=1 and VIRCOLO1=1 and VCLNTES2=4,5)</th	
3	Have never had a virtual colonoscopy	Respondents aged 45-75 who have never had a virtual colonoscopy. (45 = AGE </= 75 and (COLNCNCR=1 and VIRCOLO1=2) or COLNCNCR=2)</th	
	Missing, Age < 45, Age > 75 or CONLCNCR=7, 9	Respondents aged 45 -75 with don't know, refused or missing responses for VIRCOLO1 or VCLNTES2, or respondents aged < 45, or respondents aged > 75, or had a don't know, refused or missing value for COLNCNCR. (45 = AGE </= 75 and VIRCOLO1=missing or VCLNTES2=missing or AGE < 45 or AGE 75 or COLNCNCR=7,9, or missing)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF COLNCNCR=2 THEN _VIRCOL1=3; ELSE IF COLNCNCR=1 THEN DO; IF VIRCOL01=2 THEN _VIRCOL1=3; ELSE IF VIRCOL01=1 THEN DO; IF VCLNTES2 IN (1,2,3) THEN _VIRCOL1=1; ELSE IF VCLNTES2 IN (4,5) THEN _VIRCOL1=2; END; END; END;</pre>	

	ection 11: Colorectal Cancer Screening SBONTI1 Calculated variable for respondents aged 45-75 who have had a sigmoidoscopy within the past ten years		
	and a blood stoo and _RFBLDS5	<i>l test in the past year.</i> _SBONTI1 is derived from AGE, COLNCNCR, _SGMS101	
1	Both on time	Respondents aged 45-75 who have had a sigmoidoscopy within the past ten years and a blood stool test in the past year. (45 = AGE </= 75 and COLNCNCR=1 and _SGMS101=1 and _RFBLDS5=1)</th	
2	At least one not on time	Respondents aged 45-75 who have not a sigmoidoscopy within the past ten years or have not had a blood stool test in the past year. (45 = AGE </= 75 and (COLNCNCR=1 and (_SGMS101=2 or _RFBLDS5=2) or (_SGMS101_3 or _RFBLDS5_3)) or (COLNCNCR=2 and _SGMS101_3))</th	
3	Never had either	Respondents aged 45-75 who have never had a sigmoidoscopy or a blood stool test. (45 =<br AGE = 75 and (COLNCNCR=1 and _SGMS101=3 and _RFBLDS5=3) or (COLNCNCR=2<br and _SGMS101=3))	
l	Missing, Age < 45, Age > 75	Respondents aged 45 -75 with missing responses for COLNCNCR, SGMS101 or RFBLDS5, or respondents aged < 45, or respondents aged > 75. (45 = AGE </= 75 and<br SGMS101=missing or RFBLDS54=missing or COLNCNCR=7, 9, or missing or AGE < 45 or AGE > 75)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF COLNCNCR=1 THEN DO; IF _SGMS101=1 AND _RFBLDS5=1 THEN _SBONTI1=1; ELSE IF _SGMS101=3 AND _RFBLDS5=3 THEN _SBONTI1=3; ELSE IF _SGMS101=. or _RFBLDS5=. THEN _SBONTI1=.; ELSE _SBONTI1=2; END; ELSE IF COLNCNCR=2 THEN DO; IF _SGMS101=3 THEN _SBONTI1=3; ELSE IF _SGMS101=. or _RFBLDS5=. THEN _SBONTI1=.; ELSE _SBONTI1=2; END; ELSE IF COLNCNCR IN (7,9,.) THEN _SBONTI1=.; END;</pre>	

Section 11	Section 11: Colorectal Cancer Screening		
_CRCRI	_CRCREC2 Calculated variable for respondents aged 45-75 who have fully met the uspstf recommendations. _CRCREC2 is derived from AGE, COLNCNCR, _RFBLDS5, _SGMSCP1, _CLNSCP1, _STOLDN1, _VIRCOL1 and _SBONTI1		
1	Had at least one of the recommended CRC tests within the recommended time interval	Respondents age 45-75 that did have at least one of the recommended CRC tests within the recommended time interval (45 = AGE </= 75 and _RFBLDS5=1 or _SGMSCP1=1 or _CLNSCP1=1 or _STOLDN1=1 or _VIRCOL1=1 or _SBONTI1=1)</th	
2	Did not have any of the recommended CRC tests within the recommended time interval	Respondents age 45-75 that did not have any of the recommended CRC tests within the recommended time interval (45 = AGE </= 75 and (COLNCNCR=1 and _RFBLDS5, _SGMSCP1, _CLNSCP1, _STOLDN1, _VIRCOL1, and _SBONTI1 not all equal to 3 or missing) or (COLNCNCR=2 AND _CLNSCP1 _ missing AND _SGMSCP1 _ missing))</th	
3	Have never had any of the recommended CRC tests	Respondents age 45-75 that did have never had any of the recommended CRC tests (45 =<br AGE = 75 and (COLNCNCR=1 and _RFBLDS5=3 and _SGMSCP1=3 and _CLNSCP1=3<br and _STOLDN1=3 and _VIRCOL1=3 and _SBONTI1=3) or (COLNCNCR=2 and _CLNSCP1=3 and _SGMSCP1=3))	
I	Missing, Age < 45, Age > 75	Respondents aged 45-75 with missing responses for _RFBLDS5 or _SGMSCP1 or CLNSCP1 or _STOLDN1 or _VIRCOL1 or _SBONT11, or respondents aged < 45 or respondents aged > 75. (45 = AGE </= 75 and _RFBLDS5=missing or _SGMSCP1=missing<br or _CLNSCP1=missing or _STOLDN1=missing or _VIRCOL1=missing or _SBONT11=missing or AGE < 45 or AGE > 75)	
	SAS Code:	<pre>IF 45 &lt;= AGE &lt;= 75 THEN DO; IF COLNCNCR=1 THEN DO; IF _RFBLDS5=1 OR _SGMSCP1=1 OR _CLNSCP1=1 OR _STOLDN1=1 OR VIRCOL1=1 OR SBONTI1=1 THEN _CRCREC2=1; ELSE IF _RFBLDS5=3 AND _SGMSCP1=3 AND _CLNSCP1 =3 AND _STOLDN1=3 AND _VIRCOL1=3 AND _SBONTI1=3 THEN _CRCREC2=3; ELSE IF _RFBLDS5 NE . OR _SGMSCP1 NE . OR _CLNSCP1 NE . OR _STOLDN1 NE . OR _VIRCOL1 NE . OR _SBONTI1 NE . THEN _CRCREC2=2; END; ELSE IF _CLNSCP1=1 OR _SGMSCP1=1 THEN _CRCREC2=1; ELSE IF _CLNSCP1=3 AND _SGMSCP1=3 THEN _CRCREC2=3; ELSE IF _CLNSCP1=3 AND _SGMSCP1 NE . THEN _CRCREC2=2; ELSE IF _CLNSCP1 NE . AND _SGMSCP1 NE . THEN _CRCREC2=2; ELSE IF _CLNSCP1 EQ . OR _SGMSCP1 NE . THEN _CRCREC2=2; ELSE IF _CLNSCP1 EQ . OR _SGMSCP1 EQ . THEN _CRCREC2=.; END; ELSE IF COLNCNCR IN (7,9,.) THEN DO; IF _CLNSCP1=1 OR _SGMSCP1=1 THEN _CRCREC2=1; ELSE _CRCREC2=.; END; END;</pre>	

Section 12	Section 12: Tobacco Use		
_SMOKER3 Calculated variable for four-level smoker status: everyday smoker, someday smoker, former smoker, non-smokerSMOKER3 is derived from SMOKE100 and SMOKDAY2.			
1	Current smoker - now smokes every day	Respondents who reported having smoked at least 100 cigarettes in their lifetime and now smoke every day. (SMOKE100=1 and SMOKDAY2=1)	
2	Current smoker - now smokes some days	Respondents who reported having smoked at least 100 cigarettes in their lifetime and now smoke some days. (SMOKE100=1 and SMOKDAY2=2)	
3	Former smoker	Respondents who reported having smoked at least 100 cigarettes in their lifetime and currently do not smoke. (SMOKE100=1 and SMOKDAY2=3)	
4	Never smoked	Respondents who reported they had not smoked at least 100 cigarettes in their lifetime. (SMOKE100=2)	
9	Don't know/ Refused/ Missing	Respondents who reported they didn't know if they had smoked 100 cigarettes in their lifetime, those who refused to answer if they had smoked 100 cigarettes in their lifetime, those who didn't know if they now smoked every day, some days or not at all, those who refused to answer if they now smoked every day, some days or not at all, or those with missing responses. (SMOKE100=7, 9, missing; or SMOKDAY2=7, 9, missing)	
	SAS Code:	<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>	

RFSM	OK3 Calculated varia	able for adults who are current smokersRFSMOK3 is derived from _SMOKER3.
1	No	Respondents who reported they had not smoked at least 100 cigarettes in their lifetime, those who reported having smoked 100 cigarettes in their lifetime but do not currently smoke. (_SMOKER3=3, 4)
2	Yes	Respondents who reported having smoked at least 100 cigarettes in their lifetime and currently smoke. (_SMOKER3=1, 2)
9	Don't know/ Refused/ Missing	Respondents who reported they did not know if they had smoked 100 cigarettes in their lifetime, those who refused to answer if they had smoked 100 cigarettes in their lifetime, those who didn't know if they now smoked every day, some days or not at all, those who refused to answer if they now smoked every day, some days or not at all, or those with missing responses. (_SMOKER3=9)
	SAS Code:	<pre>IF _SMOKER3 IN (1,2) THEN _RFSMOK3=2; ELSE IF _SMOKER3 IN (3,4) THEN _RFSMOK3=1; ELSE _RFSMOK3=9;</pre>

Section 12	Section 12: Tobacco Use		
_CUREC	CI2 Calculated variab ECIGNOW2.	ole for adults who are current e-cigarette usersCURECI2 is derived from	
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:	<pre>IF ECIGNOW2 IN (2,3) THEN _CURECI2=2; ELSE IF ECIGNOW2 IN (1,4) THEN _CURECI2=1; ELSE _CURECI2=9;</pre>	

Section 13	ection 13: Lung Cancer Screening		
_YRSSM	_YRSSMOK Calculated variable for number of years respondent smoked cigarettesYRSSMOK is derived from LCSLAST, LCSFIRST, _SMOKER3, and AGE.		
1 - 100	Years smoked cigarettes	Calculated number of years smoked cigarettes (IF _SMOKER3 IN (1,2) AND AGE > 9 THEN _YRSSMOK=(AGE-LCSFIRST_) or IF _SMOKER3=3 AND LCSLAST_ > LCSFIRST_ THEN _YRSSMOK=(LCSLASTLCSFIRST_))	
	SAS Code:	<pre>IF LCSLAST IN (777,999) THEN LCSLAST_ = .; ELSE LCSLAST_=LCSLAST; IF LCSFIRST IN (777,999,888) THEN LCSFIRST_=.; ELSE LCSFIRST_=LCSFIRST; IF _SMOKER3 IN (1,2) AND _IMPAGE &gt; LCSFIRST_ THEN DO; _YRSSMOK=(_IMPAGE-LCSFIRST_); END; IF _SMOKER3 = 3 AND LCSLAST_ &gt; LCSFIRST_ THEN DO; _YRSSMOK=(LCSLASTLCSFIRST_); END;</pre>	

	Section 13: Lung Cancer Screening          _PACKDAY       Calculated variable for number of packs of cigarettes smoked per dayPACKDAY is derived from LCSNUMCG.		
0 - 100	Number of packs of cigarettes smoked per day	Calculated number of packs of cigarettes smoked per day (_PACKDAY=(LCSNUMCG_/20))	
	SAS Code:	<pre>IF LCSNUMCG IN (777,999) THEN LCSNUMCG_=.; ELSE LCSNUMCG_=LCSNUMCG; _PACKDAY=(LCSNUMCG_/20);</pre>	

Section 13	Section 13: Lung Cancer Screening		
_PACKY	_PACKYRS Calculated variable for number of years smoked reported number of packs per dayPACKYRS is derived from YRSSMOK, and PACKDAY.		
0 - 999	Number of years smoked	Calculated number of years smoked reported packs per day (_PACKYRS=round(_YRSSMOK*_PACKDAY))	
	SAS Code:	_PACKYRS=round(_YRSSMOK*_PACKDAY);	

	Section 13: Lung Cancer ScreeningYRSQUIT Calculated variable for number of years since quit smoking cigarettesYRSQUIT is derived from AGE, and LCSLAST .		
1 - 100	Number of years since smoked cigarettes	Calculated number of years since smoked cigarettes (_YRSQUIT=(AGE-LCSLAST_))	
	SAS Code:	<pre>IF _IMPAGE &gt; LCSLAST_ THEN DO; _YRSQUIT=(_IMPAGE-LCSLAST_); END;</pre>	

Section 13	ection 13: Lung Cancer Screening		
_SMOK	_SMOKGRP <i>Calculated variable for smoking group.</i> _SMOKGRP is derived from _SMOKER3, _PACKYRS, and YRSQUIT.		
1	Current smoker, 20+ Pack Years	Calculated Current smoker, 20+ Pack Years (_SMOKER3 IN (1,2) AND _PACKYRS>=20)	
2	Former smoker, 20+ Pack Years, quit < 15 years	Calculated Former smoker, 20+ Pack Years, quit < 15 years (_SMOKER3=3 AND _PACKYRS>=20 AND 0<=_YRSQUIT<15)	
3	All other current and former smokers	Calculated All other current and former smokers (All others where _SMOKER3 IN (1,2,3))	
4	Never smoker	Calculated Never smoker (_SMOKER3=4)	
	SAS Code:	<pre>IF _SMOKER3 IN (1,2) AND _PACKYRS&gt;=20 THEN _SMOKGRP=1; ELSE IF _SMOKER3=3 AND _PACKYRS&gt;=20 AND 0&lt;=_YRSQUIT&lt; 15 THEN _SMOKGRP=2; ELSE IF _SMOKER3=4 THEN _SMOKGRP=4; ELSE IF _SMOKER3 IN (1,2,3) THEN _SMOKGRP=3;</pre>	

Section 13	Section 13: Lung Cancer Screening		
_LCSRF	LCSREC         Calculated variable for lung cancer screening recommendation status. LCSREC is derived from           _IMPAGE, _SMOKGRP, LCSSCNCR, and LCSCTWHN.		
1	Meet USPSTF recommendation: did have CAT/ CT chest scan in last year	Calculated current and former smokers who had CAT/CT scan in last year (LCSSCNCR=1 AND _SMOKGRP in (1,2) AND LCSCTWHN=1)	
2	Does not meet USPSTF recommendation: did not have CAT/ CT chest scan in last year	Calculated current and former smokers who did not have CAT/CT scan in last year (All other current and former smokers)	
	SAS Code:	<pre>IF 50 &lt;= _IMPAGE &lt;= 80 THEN DO; IF _SMOKGRP IN (1,2,3) AND LCSSCNCR=2 THEN _LCSREC=2; ELSE IF LCSSCNCR=1 AND _SMOKGRP in (1,2) THEN DO; IF LCSCTWHN=1 THEN _LCSREC=1; ELSE IF LCSCTWHN IN (2,3,4,5,6) THEN _LCSREC=2; END; ELSE IF LCSSCNCR=1 AND _SMOKGRP=3 THEN _LCSREC=2; END;</pre>	

Section 14	ection 14: Alcohol Consumption		
DRNKA		able for adults who reported having had at least one drink of alcohol in the past 30 NY6 is derived from ALCDAY4	
1	Yes	Respondents who reported drinking at least one alcoholic beverage in the past 30 days. (1 = ALCDAY4 </= 231)</td	
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;	

Section 14	Section 14: Alcohol Consumption		
DROCD	DROCDY4_ <i>Calculated variable for drink-occasions-per-day.</i> DROCDY4_ is derived from ALCDAY4 by dividing the ALCDAY4 variable by 7 days per week or 30 days per month.		
0	No Drink-Occasions per day	Respondents reported no occasions per day that they consumed alcohol. (ALCDAY4=888)	
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 14: Alcohol Consumption          RFBING6         Calculated variable for binge drinkers (males having five or more drinks on one occasion, females having four or more drinks on one occasion).        RFBING6 is derived from DRNK3GE5 and ALCDAY4.		
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)</td
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>

Section 14: Alcohol Consumption         _DRNKWK2       Calculated variable for calculated total number of alcoholic beverages consumed per week.         _DRNKWK3 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.		
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>

Section 14: Alcohol Consumption		
_RFDRHV8 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.		
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)</th
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 _DRNKWEK=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; 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>

Section 15	Section 15: Immunization		
_FLSHOT7 <i>Calculated variable for adults aged 65+ who have had a flu shot within the past year.</i> _FLSHOT7 is derived from FLUSHOT7.			
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)</td	
	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 15: Immunization			
<b>_PNEUMO3</b> <i>Calculated variable for adults aged 65+ who have ever had a pneumonia vaccination.</i> <b>_PNEUMO3</b> derived from PNEUVAC4.			
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)</td	
	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>	

Section 16	Section 16: HIV/AIDS			
_AIDTS'	<b>Γ4</b> Calculated variab	<i>le for adults who have ever been tested for hiv.</i> _AIDTST4 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 _AIDTST4=1; ELSE IF HIVTST7=2 THEN _AIDTST4=2; ELSE IF HIVTST7 IN (7,9) THEN _AIDTST4=9; ELSE IF HIVTST7=. THEN _AIDTST4=.;		

## Section 17: Long-term COVID Effects

There are no calculated variables for Section 17.