Mississippi State Department of Health

Cholesterol Awareness

Analysis of 2021 Mississippi Behavioral Risk Factor Surveillance System (BRFSS) Data

May 31, 2023

Mississippi BRFSS
Behavioral Risk Factor Surveillance System

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Important Information

About BRFSS

- The Mississippi Behavioral Risk Factor Surveillance System (BRFSS) is conducted annually to monitor the prevalence of behaviors that contribute to the leading causes of morbidity and mortality among adults in our state.
- The 2021 Mississippi BRFSS was completed by 4,421 Mississippians aged 18 years or older.

About This Report

- The estimates in this report are weighted to represent the adult population of Mississippi.
- For BRFSS data, CDC recommends not interpreting percentages where the denominator is based upon fewer than 50 non-weighted respondents or the relative standard error (RSE) of the estimate is greater than 30%. In the tables of this report, results replaced with a dash (-) indicate a sample size of less than 50 or an RSE greater than 30%.
- The difference between two estimates is considered statistically significant (also stated as "significantly higher/lower" or "significant" in this report) if the 95% confidence intervals do not overlap.
- In this report, "Other Race" refers to adults who reported their race/ethnicity as anything other than White, Non-Hispanic (NH) or Black, NH.
- In the 2021 MS BRFSS, the numbers of responses for individual races and ethnicities contained in the "Other Race" demographic group (Table A, below) were too low to allow for meaningful estimates. To request additional race/ethnicity data, please submit a data request using MSDH's online form.

Table A. Races and Ethnicities Included in the "Other Races/Ethnicities" Demographic Group

Race/Ethnicity	TOTAL 2021 SURVEY SAMPLE		
	Unweighted Total	Weighted Total	Weighted Percent
American Indian or Alaskan Native, Non-Hispanic	29	17,686	0.78
Asian, Non-Hispanic	21	17,235	0.76
Any race, Hispanic	39	53,067	2.34
Multiracial, Non-Hispanic	18	19,757	0.87
Native Hawaiian or Pacific Islander, Non-Hispanic	4	2,960	0.13
Other race, Non-Hispanic	32	23,092	1.02
Total "Other Races/Ethnicities" Demographic Group	143	133,797	5.89

Survey Questions for Each Topic in This Report
(2021 MS BRFSS Survey)

- Length of Time Since Last Cholesterol Screening
    - *Cholesterol is a fatty substance found in the blood. About how long has it been since you last had your cholesterol checked?* (Asked of all respondents. From Core Section 6: Cholesterol Awareness)

- History of High Cholesterol
    - *Have you ever been told by a doctor, nurse, or other health professional that your cholesterol is high?* (Asked only of respondents who have ever had their cholesterol checked. From Core Section 6: Cholesterol Awareness)

- Current Cholesterol Medication Use
    - *Are you currently taking medicine prescribed by your doctor or other health professional for your cholesterol?* (Asked only of respondents who have ever had their cholesterol checked, regardless of history of high cholesterol. From Core Section 6: Cholesterol Awareness)

Length of Time Since Last Cholesterol Screening

Overall

- Approximately 9 in 10 adults (88.8%) had ever had their cholesterol checked.
    - 72.1% had their most recent screening within the past year.
    - 13.1% had their most recent screening within the past 1 to 5 years.
    - 3.6% had their most recent screening 5 or more years ago.
- Approximately 1 in 10 adults (11.2%) had never received a cholesterol screening.

The following estimates include only individuals who have <u>ever</u> had their cholesterol checked.

Sex (Figure 1.1)

- The percentage of having a cholesterol screening in the past year was **significantly higher** among **women** (83.8%) compared to men (78.3%).

Race/Ethnicity (Figure 1.2)

- There were **no significant differences** in the percentage of having a cholesterol screening in the past year among White, NH adults (79.9%), Black, NH adults (82.3%), and adults of other races/ethnicities (83.8%).

Age (Figure 1.3)

- The percentage of having a cholesterol screening in the past year increased as age increased and was **significantly higher** among adults aged **55-64 years** (87.0%) **and 65+ years** (90.5%) compared to adults aged 18-24 years (68.9%), 25-34 years (72.0%), and 35-44 years (72.2%).

Educational Attainment (Figure 1.4)

- There were **no significant differences** in the percentage of having a cholesterol screening in the past year among education level groups.

Annual Household Income (Figure 1.5)

- There were **no significant differences** in the percentage of having a cholesterol screening in the past year among annual household income groups.

Figure 1.1. Percentage of Respondents with Cholesterol Screening in the Past Year by Sex

Figure 1.2. Percentage of Respondents with Cholesterol Screening in the Past Year by Race/Ethnicity

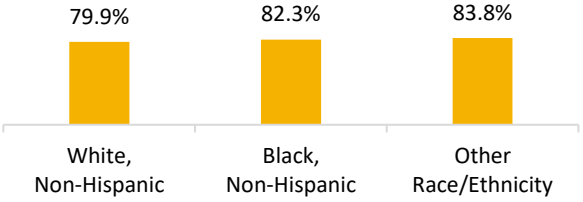


Figure 1.3. Percentage of Respondents with Cholesterol Screening in the Past Year by Age

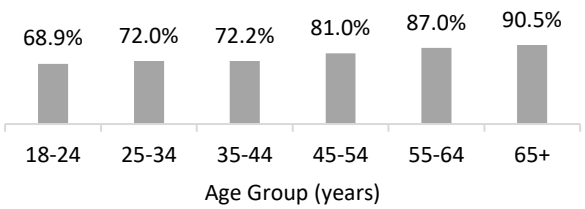
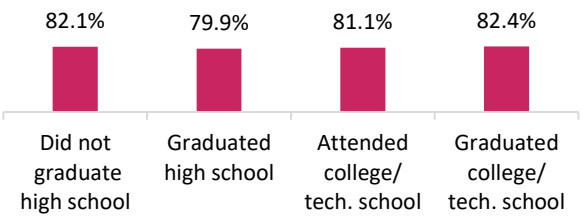


Figure 1.4. Percentage of Respondents with Cholesterol Screening in the Past Year by Education Level



Length of Time Since Last Cholesterol Screening
(continued)

Figure 1.5. Percentage of Respondents with Cholesterol Screening in the Past Year by Annual Household Income

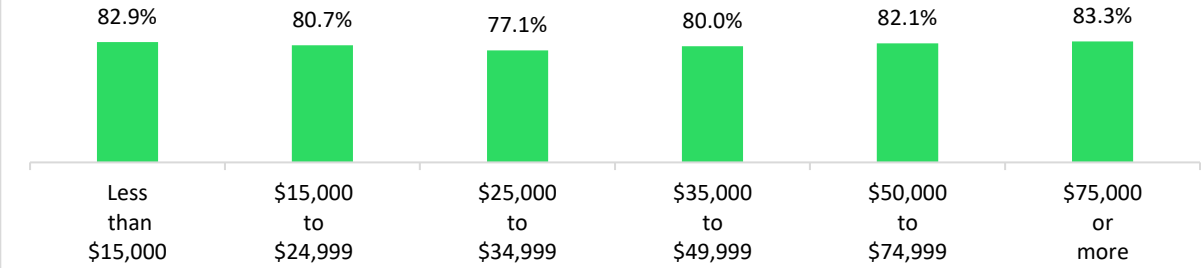


TABLE 1. Cholesterol Screening in the Past Year Among Adults Who Have Ever Had A Cholesterol Screening

DEMOGRAPHIC GROUPS	RESPONDENTS		Yes			No		
	TOTAL	WEIGHTED	N(1)	%(2)	C.I. (95%)	N(1)	%(2)	C.I. (95%)
TOTAL	3,818	1,828,200	3208	81.2	79.6-82.9	610	18.8	17.1-20.4
Male	1,524	849,252	1,239	78.3	75.5-81.0	285	21.7	19.0-24.5
Female	2,294	978,947	1,969	83.8	81.8-85.8	325	16.2	14.2-18.2
White, Non-Hispanic (NH)	2,266	1,069,164	1,863	79.9	77.7-82.0	403	20.1	18.0-22.3
Black, Non-Hispanic (NH)	1,373	633,438	1,190	82.3	79.4-85.3	183	17.7	14.7-20.6
Other Races/Ethnicities	111	93,914	90	83.8	75.8-91.8	21	16.2	8.2-24.2
18-24 years	128	127,486	85	68.9	59.8-78.0	43	31.1	22.0-40.2
25-34 years	335	269,052	231	72.0	66.7-77.4	104	28.0	22.6-33.3
35-44 years	421	288,049	317	72.2	66.8-77.6	104	27.8	22.4-33.2
45-54 years	551	300,705	455	81.0	76.9-85.1	96	19.0	14.9-23.1
55-64 years	805	342,878	698	87.0	84.2-89.8	107	13.0	10.2-15.8
65+ years	1,517	475,630	1,366	90.5	88.7-92.3	151	9.5	7.7-11.3
Less than H.S.	377	261,737	324	82.1	77.0-87.2	53	17.9	12.8-23.0
H.S. or G.E.D.	1,082	527,758	897	79.9	76.7-83.2	185	20.1	16.8-23.3
Some Post-H.S.	1,087	622,448	908	81.1	78.1-84.1	179	18.9	15.9-21.9
College Graduate	1,256	410,277	1,065	82.4	79.6-85.1	191	17.6	14.9-20.4
Less than $15,000	278	143,950	239	82.9	77.1-88.7	39	17.1	11.3-22.9
$15,000-$24,999	453	198,532	380	80.7	76.0-85.4	73	19.3	14.6-24.0
$25,000-$34,999	497	250,925	409	77.1	72.2-82.1	88	22.9	17.9-27.8
$35,000-$49,999	472	213,501	386	80.0	75.2-84.9	86	20.0	15.1-24.8
$50,000-$74,999	498	239,069	422	82.1	77.6-86.6	76	17.9	13.4-22.4
$75,000+	773	401,554	648	83.3	79.9-86.6	125	16.7	13.4-20.1

(1) Unweighted number
(2) Weighted percent
Note: Denominator excludes respondents with do not know/refused/missing responses and adults who have never had a cholesterol screening

History of High Cholesterol

In this report, a respondent is considered to have a **history of high cholesterol** if they reported that a health professional had ever told them that their cholesterol was high.

Overall

- Approximately 4 in 10 adults (38.3%) had ever been told that their cholesterol was high.

Sex (Figure 2.1)

- The percentage of having a history of high cholesterol was **higher** among **men** (39.0%) compared to women (37.6%); however, the difference was **not statistically significant**.

Race/Ethnicity (Figure 2.2)

- The percentage of having a history of high cholesterol was **highest** among **White, NH adults** (40.2%), followed by Black, NH adults (36.8%), and adults of other races/ethnicities (28.1%); however, the differences were **not statistically significant**.

Age (Figure 2.3)

- The percentage of having a history of high cholesterol increased as age increased and was **significantly higher** among adults aged **55-64 years** (53.1%) **and 65+ years** (55.6%) compared to adults of all examined younger age groups. (Note: The percentage for adults aged 18-24 years was suppressed due to low response.)

Educational Attainment (Figure 2.4)

- The percentage of having a history of high cholesterol increased as level of education decreased and was **significantly higher** among adults who **did not complete high school** (49.6%) compared to adults of all higher education level groups.

Annual Household Income (Figure 2.5)

- The percentage of having a history of high cholesterol was **significantly higher** among adults whose annual household income was **$15,000 to $24,999** (48.6%) compared to adults of all higher income levels.

Trend (Figure 2.6)

- The percentage of history of high cholesterol **decreased** from 41.9% in 2013 to 38.3% in 2021; however, the difference between the two estimates is **not statistically significant**.

Figure 2.1. Percentage of Respondents with History of High Cholesterol by Sex

Figure 2.2. Percentage of Respondents with History of High Cholesterol by Race/Ethnicity

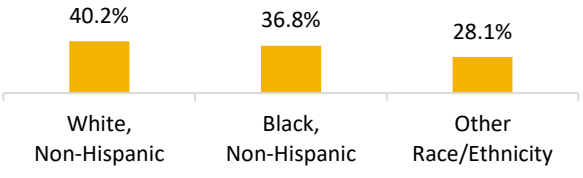
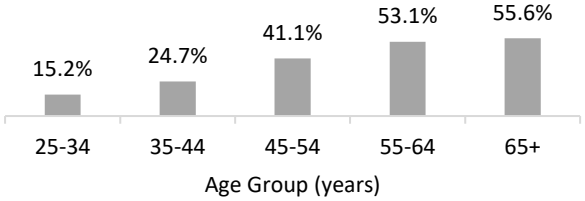
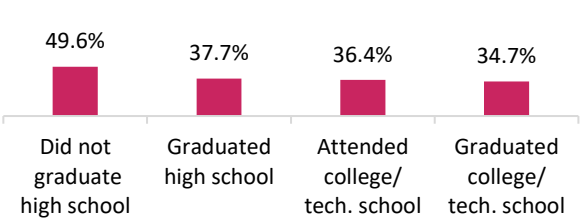


Figure 2.3. Percentage of Respondents with History of High Cholesterol by Age



Note: 18-24 years age group suppressed due to low response.

Figure 2.4. Percentage of Respondents with History of High Cholesterol by Education Level



History of High Cholesterol *(continued)*

Figure 2.5. Percentage of Respondents with History of High Cholesterol by Annual Household Income

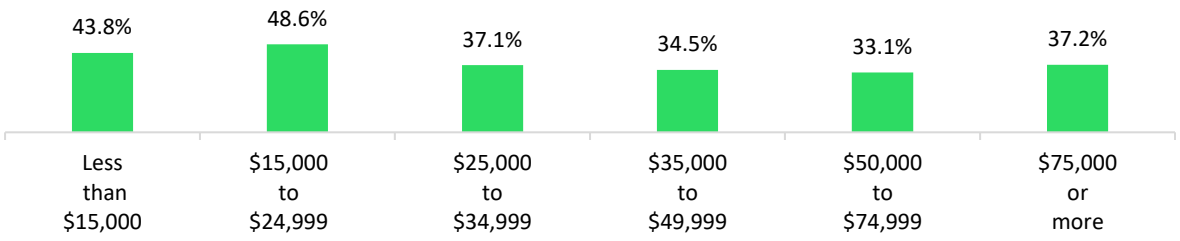


Figure 2.6. 2013-2021 Trend of Prevalence of History of High Cholesterol

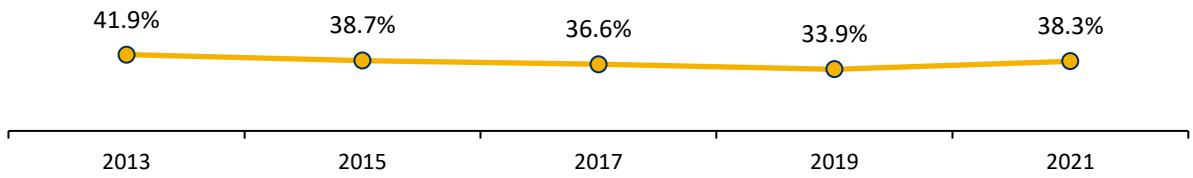


TABLE 2. History of High Cholesterol
Ever been told by a doctor, nurse, or other health professional that your cholesterol is high?

DEMOGRAPHIC GROUPS	RESPONDENTS		Yes			No		
	TOTAL	WEIGHTED	N(1)	%(2)	C.I. (95%)	N(1)	%(2)	C.I. (95%)
TOTAL	3,785	1,809,550	1,594	38.3	36.3-40.3	2,191	61.7	59.7-63.7
Male	1,508	837,963	659	39.0	35.8-42.1	849	61.0	57.9-64.2
Female	2,277	971,588	935	37.6	35.1-40.2	1,342	62.4	59.8-64.9
White, Non-Hispanic (NH)	2,241	1,056,843	965	40.2	37.6-42.7	1,276	59.8	57.3-62.4
Black, Non-Hispanic (NH)	1,369	632,512	560	36.8	33.4-40.2	809	63.2	59.8-66.6
Other Races/Ethnicities	108	88,973	40	28.1	18.4-37.8	68	71.9	62.2-81.6
18-24 years	127	125,444	--	--	--	--	--	--
25-34 years	332	266,439	48	15.2	10.5-20.0	284	84.8	80.0-89.5
35-44 years	418	282,683	105	24.7	19.6-29.8	313	75.3	70.2-80.4
45-54 years	549	299,024	212	41.1	36.0-46.1	337	58.9	53.9-64.0
55-64 years	800	340,846	407	53.1	48.8-57.4	393	46.9	42.6-51.2
65+ years	1,500	471,028	796	55.6	52.3-58.8	704	44.4	41.2-47.7
Less than H.S.	371	258,241	192	49.6	43.3-56.0	179	50.4	44.0-56.7
H.S. or G.E.D.	1,073	524,430	467	37.7	34.0-41.4	606	62.3	58.6-66.0
Some Post-H.S.	1,078	612,468	446	36.4	32.9-40.0	632	63.6	60.0-67.1
College Graduate	1,247	408,433	484	34.7	31.4-37.9	763	65.3	62.1-68.6
Less than $15,000	275	143,308	141	43.8	35.9-51.8	134	56.2	48.2-64.1
$15,000-$24,999	451	197,756	218	48.6	42.8-54.3	233	51.4	45.7-57.2
$25,000-$34,999	491	248,250	201	37.1	31.6-42.6	290	62.9	57.4-68.4
$35,000-$49,999	469	211,708	188	34.5	29.1-40.0	281	65.5	60.0-70.9
$50,000-$74,999	494	233,558	184	33.1	27.9-38.3	310	66.9	61.7-72.1
$75,000+	770	400,274	300	37.2	32.7-41.6	470	62.8	58.4-67.3

(1) Unweighted number
(2) Weighted percent
Note: Denominator excludes respondents with do not know/refused/missing responses
Estimates with an unweighted denominator <50 or a relative standard error (RSE) > 30% are suppressed (indicated by dashes).

Current Cholesterol Medication Use

This question was asked of all respondents who reported that their cholesterol had ever been checked, regardless of history of high cholesterol. Cholesterol medication may be prescribed for adults without high cholesterol to reduce the risk of cardiovascular disease.

Overall

- Approximately 3 in 10 adults (30.9%) were currently taking prescribed medication for cholesterol.

Sex (Figure 3.1)

- The percentage of current cholesterol medication use was **higher** among **men** (32.1%) compared to women (29.8%); however, the difference was **not statistically significant**.

Race/Ethnicity (Figure 3.2)

- The percentage of current cholesterol medication use was **significantly higher** among **White, NH adults** (32.9%) compared to adults of other races/ethnicities (20.7%). The percentage for Black, NH adults (29.4%) was not significantly different from that of the White, NH and other race/ethnicity groups.

Age (Figure 3.3)

- The percentage of current cholesterol medication use increased as age increased and was **significantly higher** among adults aged **65+ years** (57.7%) compared to adults of all examined younger age groups. (Note: The percentages for adults aged 18-24 years and 25-34 years were suppressed due to low response.)

Educational Attainment (Figure 3.4)

- The percentage of current cholesterol medication use increased as level of education decreased and was **significantly higher** among adults who **did not complete high school** (46.8%) compared to adults of all higher education level groups.

Annual Household Income (Figure 3.5)

- The percentage of current cholesterol medication use was **significantly higher** among adults whose annual household income was **less than $15,000** (39.5%) compared to adults who earned $50,000 to $74,999 (23.6%) or $75,000 or more (24.5%), Additionally, the percentage was **significantly higher** among adults whose income was **$15,000 to $24,999** (42.6%) compared to all higher annual household income groups.

Figure 3.1. Percentage of Respondents Currently Taking Prescribed Cholesterol Medication by Sex

Figure 3.2. Percentage of Respondents Currently Taking Prescribed Cholesterol Medication by Race/Ethnicity

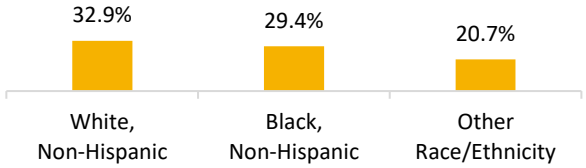
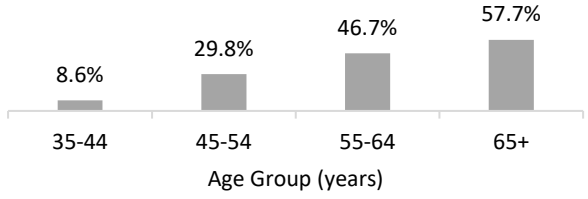
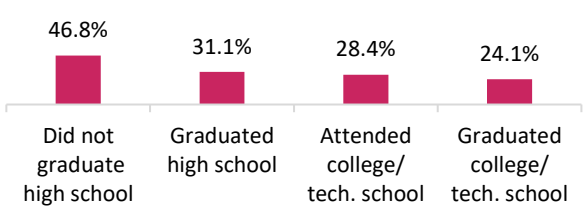


Figure 3.3. Percentage of Respondents Currently Taking Prescribed Cholesterol Medication by Age



Note: 18-24 and 25-34 years age groups suppressed due to low response.

Figure 3.4. Percentage of Respondents Currently Taking Prescribed Cholesterol Medication by Education Level



Current Cholesterol Medication Use *(continued)*

Figure 3.5. Percentage of Respondents Currently Taking Prescribed Cholesterol Medication by Annual Household Income

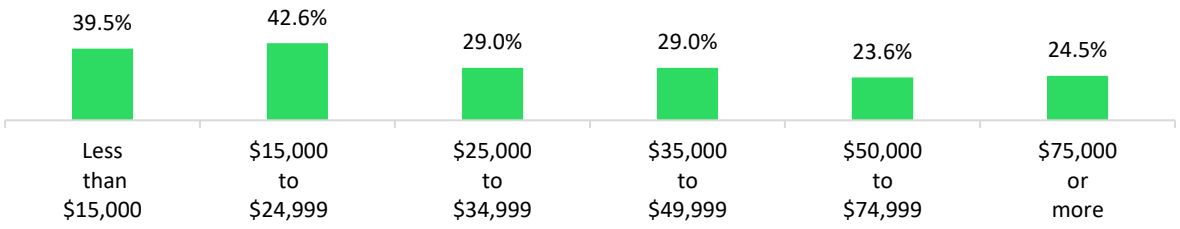


TABLE 3. Current Cholesterol Medication Use
Currently taking medicine prescribed by doctor or other health care professional for cholesterol

DEMOGRAPHIC GROUPS	RESPONDENTS		Yes			No		
	TOTAL	WEIGHTED	N(1)	%(2)	C.I. (95%)	N(1)	%(2)	C.I. (95%)
TOTAL	3,801	1,820,620	1,462	29.1	29.1-32.7	2,339	67.3	67.3-70.9
Male	1,512	843,759	627	32.1	29.2-35.0	885	67.9	65.0-70.8
Female	2,289	976,861	835	29.8	27.5-32.1	1,454	70.2	67.9-72.5
White, Non-Hispanic (NH)	2,256	1,064,531	887	32.9	30.5-35.2	1,369	67.1	64.8-69.5
Black, Non-Hispanic (NH)	1,369	631,860	518	29.4	26.4-32.4	851	70.6	67.6-73.6
Other Races/Ethnicities	109	92,913	35	20.7	12.3-29.1	74	79.3	70.9-87.7
18-24 years	128	127,486	--	--	--	--	--	--
25-34 years	335	269,052	--	--	--	--	--	--
35-44 years	421	288,049	45	8.6	5.6-11.5	376	91.4	88.5-94.4
45-54 years	551	300,705	161	29.8	25.2-34.4	390	70.2	65.6-74.8
55-64 years	804	342,080	359	46.7	42.3-51.0	445	53.3	49.0-57.7
65+ years	1,504	470,429	867	57.7	54.5-60.9	637	42.3	39.1-45.5
Less than H.S.	374	260,074	200	46.8	40.5-53.0	174	53.2	47.0-59.5
H.S. or G.E.D.	1,078	525,603	445	31.1	27.8-34.4	633	68.9	65.6-72.2
Some Post-H.S.	1,082	620,079	397	28.4	25.2-31.6	685	71.6	68.4-74.8
College Graduate	1,251	408,885	414	24.1	21.4-26.7	837	75.9	73.3-78.6
Less than $15,000	278	143,950	143	39.5	32.0-47.1	135	60.5	52.9-68.0
$15,000-$24,999	453	198,532	206	42.6	36.9-48.2	247	57.4	51.8-63.1
$25,000-$34,999	492	248,796	178	29.0	24.1-34.0	314	71.0	66.0-75.9
$35,000-$49,999	472	213,501	176	29.0	24.0-34.1	296	71.0	65.9-76.0
$50,000-$74,999	497	238,923	151	23.6	19.1-28.2	346	76.4	71.8-80.9
$75,000+	769	399,945	238	24.5	20.8-28.2	531	75.5	71.8-79.2

(1) Unweighted number
(2) Weighted percent
Note: Denominator excludes respondents with do not know/refused/missing responses
Estimates with an unweighted denominator <50 or a relative standard error (RSE) > 30% are suppressed (indicated by dashes).