

# A Profile of Health among Massachusetts Adults, 2017

Results from the Behavioral Risk Factor Surveillance  
System

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HEALTH SURVEY PROGRAM  
OFFICE OF DATA MANAGEMENT AND OUTCOMES ASSESSMENT  
MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH



December 2018

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# MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

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## Health Survey Program

Office of Data Management and Outcomes Assessment

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Results from the Behavioral Risk Factor Surveillance System

*Charles D. Baker, Governor*

*Marylou Sudders, Secretary of Health and Human Services*

*Monica Bharel, MD, MPH, Commissioner, Department of Public Health*

*Abigail R. Averbach, MSc, Assistant Commissioner, Department of Public Health*

*Natalie Nguyen Durham, Director, Office of Data Management and Outcomes Assessment*

*December 2018*

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For further information about this report, about the Behavioral Risk Factor Surveillance System, or the Health Survey Program, please contact: Maria McKenna, Health Survey Program, Office of Data Management and Outcomes Assessment, Massachusetts Department of Public Health, 250 Washington Street, 6<sup>th</sup> floor, Boston, MA 02108-4619. Telephone: (617) 624-5643. Email: [maria.mckenna@massmail.state.ma.us](mailto:maria.mckenna@massmail.state.ma.us). Website: <https://www.mass.gov/behavioral-risk-factor-surveillance>

# INTRODUCTION

The Behavioral Risk Factor Surveillance System (BRFSS) is a continuous multimode survey of adults ages 18 and older and is conducted in all states as a collaboration between the federal Centers for Disease Control and Prevention (CDC) and state departments of health. The landline telephone portion of the survey has been conducted in Massachusetts since 1986; a cell phone component was added in 2011. The BRFSS collects data on a variety of health risk factors, preventive behaviors, chronic conditions, and emerging public health issues. The information obtained in this survey assists in identifying the need for health interventions, monitoring the effectiveness of existing interventions and prevention programs, developing health policy and legislation, and measuring progress toward attaining state and national health objectives.

Each year, the BRFSS includes a core set of questions developed by the CDC. These questions addressed health status, health care access and utilization, overweight and obesity status, asthma, diabetes, immunizations, tobacco use, alcohol consumption, HIV/AIDS testing and other selected public health topics.

In addition to the core CDC questions, the Massachusetts Health Survey Program, in collaboration with other Massachusetts Department of Public Health programs, added a number of topics to the surveillance instrument including environmental tobacco exposure, mental illness and stigma, sexual violence, and other selected topics.

In 2017, 3,229 landline interviews and 3,683 cell phone interviews were completed among Massachusetts adults. Interviews were administered in the respondents' preferred language, with a choice of English, Spanish, or Portuguese.

This report summarizes selected results from the combined landline and cell phone portions of the 2017 Massachusetts BRFSS. In each section of the report, a description of survey questions used to obtain estimates for key variables is provided. Tables detailing the overall estimates and estimates by demographic and socioeconomic characteristics (gender, age, race-ethnicity, disability status, education and annual household income) are provided in the main body of the report in the form of crude percentages.

In the Appendix of the report, tables are presented detailing age-adjusted percentages for 2017 indicators and their 95% confidence intervals. United States (US) median data for all participating states and territories for variables with comparable national data are presented for 2017 in a separate table.

All percentages in this report are weighted (see definition on page 61) to represent the total Massachusetts population in 2017.

# HIGHLIGHTS

## **OVERALL HEALTH MEASURES**

- Hispanic adults were more likely than White, Black, or Asian (non-Hispanic) adults to report that their overall health was fair or poor.
- Females were more likely than males to report they had experienced at least 15 days of poor physical health in the previous month and that their mental health was not good for at least 15 days in the previous month

## **HEALTH CARE ACCESS AND UTILIZATION**

- Overall, 3.7% of adults ages 18-64 reported not having any health insurance. Males were more likely than females and Hispanic adults were more likely than White adults to not have health insurance.
- Males were less likely than females to have a personal health care provider or to have had a routine check-up in the previous year.

## **RISK FACTORS AND PREVENTIVE BEHAVIORS**

- The prevalence of cigarette smoking has been declining by an average of 7% per year since 2011. In 2017, 13.7% of adults reported current cigarette smoking. Adults with a disability\* were twice as likely as those without a disability to be current cigarette smokers.
- Overall, use of e-cigarettes is 3.3%; however, among those 18-24 years of age, 7.8% report using electronic cigarettes.
- In 2017, 18.8% of adults reported binge drinking in the previous 30 days. Prevalence is highest among 18-34 year olds and decreases with age. White adults are more likely to report binge drinking than are Black, Hispanic, or Asian adults.
- 61.4% of adults reported being overweight or obese (BMI  $\geq$  25.0) and 25.8% reported being obese (BMI  $\geq$  30.0). Obesity was higher among those with a disability\* and among those with lower educational attainment and was lowest among Asian adults.
- Only 50.9% of adults met the recommendation for aerobic activity. Hispanic and Asian adults were less likely than White adults to report sufficient activity to meet the recommendation.
- Only 18.5% of adults reported consuming fruits and vegetables five or more times per day. Females reported higher intake of fruits and vegetables than males.
- 88.2% of adults reported that they had their cholesterol checked within the past five years and 33.1% of those have ever been told that their cholesterol level was high. Hispanic and Asian adults were less likely than White adults to report having their cholesterol checked. Those with a disability were more likely to report that they had been told that their cholesterol level was high.

- 28.6% of adults report that they have ever been told they have high blood pressure; of these, 78.1% are currently taking medication. Those with a disability\* were twice as likely as those without a disability to report having high blood pressure. Prevalence of high blood pressure was inversely associated with both educational attainment and household income.

## **IMMUNIZATION**

- Among those ages 60 and older, Hispanic adults were less likely than White adults to report that they had received a shingles vaccine.

## **CHRONIC HEALTH CONDITIONS**

- The crude prevalence of diabetes has been increasing by an average of 3% per year since 2011 and that of pre-diabetes by an average of 4% per year. In 2017, 9.5% of adults reported that they had ever been diagnosed with diabetes and an additional 7.7% had been told that they have pre-diabetes.
- Asthma remains more prevalent in Massachusetts than in much of the rest of the nation. In 2017, 11.5% of adults reported that they currently have asthma (national range = 7.3-13.2%). Females were more likely than males to report currently having asthma.
- Nearly 1 in 4 adults report that they have ever been diagnosed with arthritis and 11.3% of all adults have experienced limitations in their usual daily activities due to arthritis. White adults were more likely than Black or Hispanic adults to have been diagnosed with arthritis.
- 18.4% of adults reported that they had ever been diagnosed with a depressive disorder. Females were more likely than males to have been diagnosed with depression. Those with four or more years of college education were less likely to have had a depression diagnosis than those with less education.
- In 2017, 12.1% of Massachusetts adults reported that they had ever been diagnosed with cancer. Among those 75 years of age and older, the prevalence of cancer survivors comprises 35.4% of all residents. White adults were more likely than Hispanic adults to have ever been diagnosed with cancer.

## **OTHER TOPICS – HIV, SEXUAL VIOLENCE, MARIJUANA, & OPIOIDS**

- 44.1% of adults ages 18-64 reported that they had ever been tested for HIV. Adults 18-24 years of age were less likely to report ever having been tested for HIV than those 25-64 years of age. Black adults and Hispanic adults were more likely than White adults or Asian adults to report ever having had an HIV test.
- 18.2% of female adults and 6.2% of male adults reported that they had experienced sexual violence in their lifetime. Adults with a disability (males and females combined) were more likely to report experiencing sexual violence as were adults without a disability.

- 14.4% of adults reported non-medical use of marijuana in the previous year. Males were more likely than females to report use. Younger adults (ages 18-34) were much more likely than older adults to report non-medical use of marijuana.
- One in four adults reported that they had ever been prescribed an opiate and 1.7% reported non-medical use of an opiate in the previous year. Females were more likely than males to report having ever been prescribed an opiate. White adults were more likely to have ever been prescribed an opiate than were Black, Hispanic, or Asian adults

\*see definition of disability in report



# DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

## MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017

	UNWEIGHTED SAMPLE SIZE	WEIGHTED PERCENT
	N	%†
OVERALL	6,912	100.0
GENDER		
MALE	3,102	47.9
FEMALE	3,801	52.1
AGE GROUP		
18–24	435	13.4
25–34	725	16.7
35–44	715	15.3
45–54	1,036	16.0
55–64	1,444	17.6
65–74	1,357	12.1
75 AND OLDER	1,015	8.9
RACE-ETHNICITY*		
WHITE	5,521	75.3
BLACK	363	6.9
HISPANIC	510	10.6
ASIAN	239	7.2
DISABILITY¶		
DISABILITY	1,784	24.4
NO DISABILITY	4,878	75.6
EDUCATION		
< HIGH SCHOOL	345	10.6
HIGH SCHOOL	1,350	25.8
COLLEGE 1–3 YRS	1,656	26.4
COLLEGE 4+ YRS	3,518	37.3
HOUSEHOLD INCOME		
<\$25,000	749	15.5
\$25,000–34,999	455	8.4
\$35,000–49,999	618	10.6
\$50,000–74,999	760	13.5
\$75,000+	2,546	52.0

\* White, Black, and Asian race categories refer to non-Hispanic

† See BRFSS methodology in “Terms, Definitions and Methodology Used in this Report”

¶ See p 63 for definition of disability

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## SECTION 1: OVERALL HEALTH MEASURES

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## SECTION 1.1: OVERALL HEALTH STATUS

Respondents were asked to describe their overall health as excellent, very good, good, fair, or poor. Presented here are the percentages of adults who reported that their overall health was fair or poor.

<b>TABLE 1.1 – OVERALL HEALTH STATUS AMONG MASSACHUSETTS ADULTS, 2017</b>					
	FAIR OR POOR HEALTH				
	N	%	95% CI		
OVERALL	6,890	15.2	13.9	-	16.6
<b>GENDER</b>					
MALE	3,091	13.9	12.0	-	15.7
FEMALE	3,790	16.5	14.5	-	18.4
<b>AGE GROUP</b>					
18–24	435	8.0	4.8	-	11.1
25–34	724	11.8	8.4	-	15.2
35–44	714	12.5	9.2	-	15.8
45–54	1,033	14.4	11.3	-	17.5
55–64	1,439	19.6	16.3	-	22.9
65–74	1,353	17.9	14.2	-	21.5
75 AND OLDER	1,010	29.4	23.6	-	35.1
<b>RACE-ETHNICITY*</b>					
WHITE	5,509	13.3	11.8	-	14.7
BLACK	361	17.5	10.9	-	24.1
HISPANIC	509	28.8	23.7	-	33.9
ASIAN	238	10.0	4.5	-	15.6
<b>DISABILITY<sup>¶</sup></b>					
DISABILITY	1,772	40.7	36.9	-	44.5
NO DISABILITY	4,870	6.9	5.7	-	8.1
<b>EDUCATION</b>					
< HIGH SCHOOL	342	38.5	31.7	-	45.2
HIGH SCHOOL	1,344	18.3	15.5	-	21.2
COLLEGE 1–3 YRS	1,651	13.7	11.2	-	16.1
COLLEGE 4+ YRS	3,512	7.6	6.2	-	9.1
<b>HOUSEHOLD INCOME</b>					
<\$25,000	746	35.0	29.6	-	40.3
\$25,000–34,999	453	20.5	14.5	-	26.6
\$35,000–49,999	616	11.9	8.0	-	15.7
\$50,000–74,999	759	11.2	7.6	-	14.8
\$75,000+	2,542	5.5	4.0	-	6.9
* White, Black, and Asian race categories refer to non-Hispanic					
¶ See p 63 for definition of disability					

## SECTION 1.2: QUALITY OF LIFE

All respondents were asked to report: (1) the number of days during the past month that their physical health, which includes physical illness and injury, had not been good; and (2) the number of days during the past month they would describe their mental health, which includes stress, depression, and problems with emotions, as not good.

Presented here are the percentages of adults who reported that (1) they had experienced at least 15 days of poor physical health in the previous month; or (2) their mental health was not good for at least 15 days during the past month.

TABLE 1.2 – QUALITY OF LIFE AMONG MASSACHUSETTS ADULTS, 2017								
	15+ DAYS OF POOR PHYSICAL HEALTH				15+ DAYS OF POOR MENTAL HEALTH			
	N	%	95% CI		N	%	95% CI	
OVERALL	6,727	10.0	8.9	- 11.1	6,759	10.7	9.5	- 11.9
GENDER								
MALE	3,027	8.4	6.9	- 9.8	3,040	8.5	7.0	- 10.0
FEMALE	3,692	11.5	9.9	- 13.1	3,711	12.7	10.9	- 14.5
AGE GROUP								
18–24	†				426	14.0	9.6	- 18.3
25–34	709	5.4	3.3	- 7.5	712	10.1	7.1	- 13.2
35–44	701	7.6	4.9	- 10.3	702	13.5	10.1	- 16.8
45–54	1,015	11.1	8.4	- 13.8	1,022	9.8	7.1	- 12.4
55–64	1,408	16.4	13.2	- 19.5	1,419	11.3	8.7	- 13.8
65–74	1,321	12.7	9.5	- 15.8	1,325	6.6	4.4	- 8.7
75 AND OLDER	968	18.5	13.6	- 23.5	975	8.4	4.0	- 12.8
RACE-ETHNICITY*								
WHITE	5,402	10.4	9.2	- 11.6	5,409	10.5	9.2	- 11.9
BLACK	348	8.8	3.7	- 13.9	351	13.4	7.6	- 19.3
HISPANIC	480	10.6	7.3	- 14.0	493	13.1	9.4	- 16.9
ASIAN	†				†			
DISABILITY <sup>¶</sup>								
DISABILITY	1,694	30.2	26.6	- 33.7	1,708	26.1	22.7	- 29.6
NO DISABILITY	4,800	3.8	3.0	- 4.6	4,817	5.8	4.7	- 7.0
EDUCATION								
< HIGH SCHOOL	316	21.3	15.5	- 27.0	320	15.6	10.7	- 20.5
HIGH SCHOOL	1,306	12.3	9.9	- 14.6	1,306	13.0	10.2	- 15.9
COLLEGE 1–3 YRS	1,619	9.6	7.6	- 11.6	1,626	12.9	10.4	- 15.4
COLLEGE 4+ YRS	3,447	5.9	4.7	- 7.1	3,467	6.3	5.1	- 7.6
HOUSEHOLD INCOME								
<\$25,000	717	19.1	14.9	- 23.3	727	18.5	14.3	- 22.8
\$25,000–34,999	440	15.0	9.8	- 20.2	446	14.3	8.9	- 19.8
\$35,000–49,999	604	9.2	5.6	- 12.8	608	11.7	7.2	- 16.3
\$50,000–74,999	751	7.1	4.0	- 10.1	749	11.0	6.7	- 15.3
\$75,000+	2,515	4.7	3.5	- 6.0	2,520	5.8	4.4	- 7.2

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
<sup>†</sup> Insufficient data

### SECTION 1.3: DISABILITY

In 2017, respondents were asked about disabilities and activity limitations. Respondents were classified as having a disability if they answered “yes” to one or more of the following questions:

1. Are you limited in any way in any activities because of physical, mental, or emotional problems?
2. Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?
3. Are you blind or do you have serious difficulty seeing, even when wearing glasses?
4. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering or making decisions?
5. Do you have serious difficulty walking or climbing stairs?
6. Do you have difficulty dressing or bathing?
7. Because of a physical, mental or emotional condition, do you have difficulty doing errands alone such as visiting a doctor’s office or shopping?

**TABLE 1.3 – DISABILITY AMONG MASSACHUSETTS ADULTS, 2017**

	N	HAVE DISABILITY¶	
		%	95% CI
OVERALL	6,662	24.4	22.7 - 26.0
<b>GENDER</b>			
MALE	2,979	21.7	19.4 - 23.9
FEMALE	3,677	26.8	24.4 - 29.2
<b>AGE GROUP</b>			
18–24	414	15.2	9.8 - 20.6
25–34	697	14.6	11.0 - 18.3
35–44	691	16.9	13.0 - 20.7
45–54	1,008	21.7	17.9 - 25.5
55–64	1,393	28.8	24.9 - 32.6
65–74	1,325	33.6	28.9 - 38.3
75 AND OLDER	971	54.4	48.0 - 60.8
<b>RACE-ETHNICITY*</b>			
WHITE	5,340	23.1	21.2 - 25.0
BLACK	343	23.1	15.9 - 30.3
HISPANIC	485	42.2	36.2 - 48.1
ASIAN	232	10.4	5.3 - 15.5
<b>EDUCATION</b>			
< HIGH SCHOOL	333	51.1	43.8 - 58.5
HIGH SCHOOL	1,282	32.0	28.0 - 35.9
COLLEGE 1–3 YRS	1,583	23.6	20.5 - 26.6
COLLEGE 4+ YRS	3,426	12.4	10.8 - 14.0
<b>HOUSEHOLD INCOME</b>			
<\$25,000	730	45.9	40.1 - 51.6
\$25,000–34,999	443	36.8	29.6 - 43.9
\$35,000–49,999	598	24.8	19.4 - 30.1
\$50,000–74,999	750	22.1	16.8 - 27.4
\$75,000+	2,496	10.1	8.0 - 12.3

\* White, Black, and Asian race categories refer to non-Hispanic

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## SECTION 2: HEALTH CARE ACCESS AND UTILIZATION

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## SECTION 2.1: HEALTH INSURANCE STATUS

All respondents were asked if they had any type of health care coverage at the time of the interview. Those who indicated that they had no coverage were asked a follow-up question to be certain that they had considered all types of health care coverage. This included health care coverage from their employer or someone else's employer, a plan that they had bought on their own, Medicare, MassHealth, Commonwealth Care, and coverage through the military, or the Indian Health Service. CDC estimates of uninsured adults, based solely upon the CDC core health insurance question, may differ from estimates derived from the Massachusetts BRFSS estimates, which were based on the CDC core health insurance question and the Massachusetts follow-up question. Table 2.1 presents the Massachusetts BRFSS data

TABLE 2.1 – OVERALL HEALTH STATUS AMONG MASSACHUSETTS ADULTS, AGES 18-64, 2017				
	NO HEALTH INSURANCE			
	N	%	95% CI	
OVERALL	3,865	3.7	2.8	- 4.7
GENDER				
MALE	1,799	5.6	4.0	- 7.2
FEMALE	2,064	1.9	1.0	- 2.8
AGE GROUP				
18–24	†			
25–34	545	4.8	2.6	- 7.1
35–44	636	3.5	1.6	- 5.4
45–54	973	4.0	2.1	- 5.9
55–64	1,391	3.6	1.6	- 5.6
RACE-ETHNICITY*				
WHITE	2,921	2.3	1.5	- 3.1
BLACK	†			-
HISPANIC	387	8.5	4.7	- 12.3
ASIAN	†			
DISABILITY <sup>¶</sup>				
DISABILITY	782	5.7	3.0	- 8.3
NO DISABILITY	2,941	3.4	2.4	- 4.4
EDUCATION				
< HIGH SCHOOL	195	12.4	6.8	- 18.1
HIGH SCHOOL	739	3.2	1.9	- 4.5
COLLEGE 1–3 YRS	961	3.6	1.8	- 5.4
COLLEGE 4+ YRS	1,957	1.6	0.7	- 2.5
HOUSEHOLD INCOME				
<\$25,000	386	5.2	2.5	- 7.9
\$25,000–34,999	†			
\$35,000–49,999	†			
\$50,000–74,999	†			
\$75,000+	†			

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

## SECTION 2.2: HEALTH CARE ACCESS

All respondents were asked if they had a person that they thought of as their personal doctor or health care provider. All respondents were also asked whether they were unable to see a doctor at any time in the past year due to cost and about how long since they last visited a doctor for a routine checkup. Presented here are the percentages of adults who reported that they did not have a personal health care provider, the percentages of adults who reported that cost had prevented them from seeing a doctor at some point in the past year, and the percentage of adults who had visited a medical provider for a checkup in the past year.

**TABLE 2.2 – HEALTH CARE ACCESS AMONG MASSACHUSETTS ADULTS, 2017**

	HAVE PERSONAL HEALTH CARE PROVIDER				COULD NOT SEE DOCTOR DUE TO COST			
	N	%	95% CI		N	%	95% CI	
OVERALL	6,872	86.6	85.2	- 88.0	6,879	9.3	8.1	- 10.5
GENDER								
MALE	3,087	84.3	82.2	- 86.3	3,086	9.7	8.1	- 11.4
FEMALE	3,778	88.7	86.8	- 90.7	3,785	8.9	7.1	- 10.6
AGE GROUP								
18–24	433	71.2	65.2	- 77.2	432	11.0	6.1	- 15.9
25–34	716	77.9	73.7	- 82.1	722	11.4	8.6	- 14.3
35–44	713	86.8	83.5	- 90.1	711	12.1	8.5	- 15.6
45–54	1,031	89.1	86.1	- 92.0	1,033	10.5	7.8	- 13.2
55–64	1,436	92.5	90.0	- 94.9	1,433	7.1	5.0	- 9.3
65–74	1,357	95.7	93.3	- 98.1	1,353	6.2	3.7	- 8.8
75 AND OLDER	1,005	96.4	94.3	- 98.5	†			
RACE-ETHNICITY*								
WHITE	5,497	90.0	88.5	- 91.4	5,505	7.9	6.6	- 9.3
BLACK	362	88.2	82.6	- 93.8	360	11.5	5.9	- 17.0
HISPANIC	505	72.9	67.6	- 78.3	502	18.1	13.8	- 22.3
ASIAN	235	74.5	66.8	- 82.3	†	.	.	.
DISABILITY <sup>¶</sup>								
DISABILITY	1,770	87.2	84.1	- 90.3	1,772	16.4	13.1	- 19.7
NO DISABILITY	4,854	86.3	84.7	- 88.0	4,859	7.2	6.0	- 8.4
EDUCATION								
< HIGH SCHOOL	340	71.7	65.3	- 78.2	343	20.4	14.7	- 26.1
HIGH SCHOOL	1,339	85.5	82.3	- 88.7	1,336	9.1	6.4	- 11.7
COLLEGE 1–3 YRS	1,647	88.1	85.6	- 90.6	1,650	9.8	7.4	- 12.3
COLLEGE 4+ YRS	3,507	90.4	88.8	- 92.1	3,507	5.9	4.7	- 7.1
HOUSEHOLD INCOME								
<\$25,000	739	80.3	75.3	- 85.3	738	17.9	13.5	- 22.4
\$25,000–34,999	452	81.3	74.9	- 87.8	453	11.2	6.8	- 15.6
\$35,000–49,999	614	83.8	78.6	- 88.9	614	11.7	7.2	- 16.3
\$50,000–74,999	759	86.7	82.4	- 90.9	758	9.4	6.0	- 12.7
\$75,000+	2,541	91.2	89.2	- 93.2	2,541	5.6	3.7	- 7.5

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data



**TABLE 2.2 (CONTINUED) - HEALTH CARE ACCESS AMONG MASSACHUSETTS ADULTS, 2017**

	HAD A ROUTINE CHECKUP IN THE PAST YEAR		
	N	%	95% CI
OVERALL	6,832	76.4	74.7 - 78.0
<b>GENDER</b>			
MALE	3,060	73.5	71.1 - 76.0
FEMALE	3,764	79.0	76.7 - 81.2
<b>AGE GROUP</b>			
18-24	427	71.0	65.4 - 76.6
25-34	714	61.1	56.2 - 66.1
35-44	706	68.3	63.6 - 73.0
45-54	1,026	79.1	75.6 - 82.7
55-64	1,433	84.1	81.0 - 87.1
65-74	1,345	87.5	84.1 - 90.9
75 AND OLDER	1,000	91.2	87.5 - 94.8
<b>RACE-ETHNICITY*</b>			
WHITE	5,469	77.6	75.8 - 79.4
BLACK	361	79.4	72.0 - 86.8
HISPANIC	497	74.4	69.3 - 79.5
ASIAN	233	65.9	57.6 - 74.1
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,751	82.6	79.5 - 85.7
NO DISABILITY	4,837	74.4	72.4 - 76.3
<b>EDUCATION</b>			
< HIGH SCHOOL	333	77.0	71.0 - 83.1
HIGH SCHOOL	1,331	78.8	75.3 - 82.2
COLLEGE 1-3 YRS	1,634	77.3	73.9 - 80.6
COLLEGE 4+ YRS	3,493	74.1	71.7 - 76.5
<b>HOUSEHOLD INCOME</b>			
<\$25,000	733	78.3	73.4 - 83.2
\$25,000-34,999	452	74.7	68.4 - 81.0
\$35,000-49,999	615	77.2	71.2 - 83.2
\$50,000-74,999	753	72.4	66.9 - 77.9
\$75,000+	2,528	74.7	72.1 - 77.4

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

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## SECTION 3: RISK FACTORS AND PREVENTIVE BEHAVIORS

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## SECTION 3.1: TOBACCO USE

A current smoker was defined as someone who has smoked at least 100 cigarettes in his/her lifetime and who currently smokes either some days or everyday. A former smoker was defined as someone who has smoked at least 100 cigarettes in his/her lifetime but no longer smokes. Presented here are the percentage of adults who reported being current smokers and the percentage of adults who reported being former smokers.

TABLE 3.1.1 – TOBACCO USE AMONG MASSACHUSETTS ADULTS, 2017									
	CURRENT SMOKER				FORMER SMOKER				
	N	%	95% CI		N	%	95% CI		
OVERALL	6,668	13.7	12.3	- 15.0	6,668	25.1	23.4	- 26.7	
GENDER									
MALE	2,987	14.8	12.8	- 16.9	2,987	27.7	25.2	- 30.2	
FEMALE	3,674	12.6	10.8	- 14.4	3,674	22.7	20.5	- 24.8	
AGE GROUP									
18–24	420	7.4	4.4	- 10.5	420	5.3	2.8	- 7.8	
25–34	693	16.2	12.1	- 20.2	693	15.6	11.9	- 19.3	
35–44	697	17.0	13.1	- 21.0	697	18.9	14.9	- 23.0	
45–54	1,005	17.4	13.8	- 21.1	1,005	21.1	17.3	- 24.8	
55–64	1,394	15.2	12.1	- 18.4	1,394	34.8	30.7	- 38.9	
65–74	1,323	9.9	7.1	- 12.7	1,323	40.9	36.0	- 45.7	
75 AND OLDER	975	8.3	4.0	- 12.6	975	47.3	41.0	- 53.7	
RACE-ETHNICITY*									
WHITE	5,345	13.5	11.9	- 15.0	5,345	29.5	27.4	- 31.5	
BLACK	342	15.7	9.0	- 22.4	342	13.5	7.8	- 19.3	
HISPANIC	488	18.3	13.6	- 23.1	488	14.1	10.3	- 17.9	
ASIAN	†				†				
DISABILITY <sup>¶</sup>									
DISABILITY	1,761	23.8	20.4	- 27.2	1,761	32.3	28.7	- 35.8	
NO DISABILITY	4,832	10.3	8.9	- 11.8	4,832	22.6	20.8	- 24.5	
EDUCATION									
< HIGH SCHOOL	331	27.9	21.6	- 34.2	331	18.7	13.0	- 24.5	
HIGH SCHOOL	1,291	18.3	15.1	- 21.4	1,291	28.9	25.2	- 32.6	
COLLEGE 1–3 YRS	1,587	14.9	12.1	- 17.6	1,587	31.4	27.9	- 35.0	
COLLEGE 4+ YRS	3,420	5.7	4.5	- 7.0	3,420	19.8	17.8	- 21.8	
HOUSEHOLD									
<\$25,000	734	24.1	19.1	- 29.2	734	20.2	15.9	- 24.5	
\$25,000–34,999	443	18.7	12.7	- 24.6	443	26.3	19.7	- 32.9	
\$35,000–49,999	602	13.6	9.1	- 18.2	602	26.6	21.0	- 32.2	
\$50,000–74,999	747	15.2	10.3	- 20.2	747	31.0	25.7	- 36.4	
\$75,000+	2,490	8.0	6.3	- 9.7	2,490	23.8	21.2	- 26.4	

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
<sup>†</sup> Insufficient data

Respondents were asked if they currently use chewing tobacco, snuff, or snus (Swedish for snuff) every day, some days, or not at all. Presented is the percentage of adults who reported using chewing tobacco, snuff or snus either every day or some days.

<b>TABLE 3.1.2 - SMOKELESS TOBACCO USE AMONG MASSACHUSETTS ADULTS, 2017</b>			
	USE SMOKELESS TOBACCO		
	N	%	95% CI
OVERALL	6,703	2.3	1.6 - 3.0
<b>GENDER</b>			
MALE	2,998	3.8	2.6 - 5.0
FEMALE	†		
<b>AGE GROUP</b>			
18–24	†		
25–34	†		
35–44	†		
45–54	†		
55–64	†		
65–74	†		
75 AND OLDER	†		
<b>RACE-ETHNICITY*</b>			
WHITE	5,573	1.7	1.1 - 2.3
BLACK	†		
HISPANIC	†		
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,770	2.8	1.4 - 4.2
NO DISABILITY	4,857	2.1	1.4 - 2.9
<b>EDUCATION</b>			
< HIGH SCHOOL	†		
HIGH SCHOOL	1,291	2.1	1.1 - 3.2
COLLEGE 1–3 YRS	1,603	3.1	1.6 - 4.7
COLLEGE 4+ YRS	†		
<b>HOUSEHOLD INCOME</b>			
<\$25,000	†		
\$25,000–34,999	†		
\$35,000–49,999	†		
\$50,000–74,999	†		
\$75,000+	2,506	1.5	0.7 - 2.3

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

Respondents were asked if they ever tried electronic cigarettes, and if so, if they currently use electronic cigarettes every day, some days, or not at all. Presented is the percentage of adults who reported using electronic cigarettes either every day or some days.

<b>TABLE 3.1.3 – ELECTRONIC CIGARETTE USE AMONG MASSACHUSETTS ADULTS, 2017</b>			
	USE E-CIGARETTES		
	N	%	95% CI
OVERALL	6,649	3.3	2.5 - 4.0
<b>GENDER</b>			
MALE	2,984	4.2	3.0 - 5.4
FEMALE	3,658	2.4	1.5 - 3.4
<b>AGE GROUP</b>			
18–24	418	7.8	4.1 - 11.6
25–34	694	5.5	3.0 - 8.1
35–44	689	3.1	1.4 - 4.7
45–54	1,005	2.0	1.0 - 3.0
55–64	1,384	1.9	0.9 - 2.8
65–74	†		
75 AND OLDER	†		
<b>RACE-ETHNICITY*</b>			
WHITE	5,326	3.5	2.6 - 4.4
BLACK	†		
HISPANIC	†		
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,757	3.9	2.6 - 5.2
NO DISABILITY	4,815	3.0	2.1 - 3.9
<b>EDUCATION</b>			
< HIGH SCHOOL	†		
HIGH SCHOOL	1,277	5.0	3.1 - 6.9
COLLEGE 1–3 YRS	1,585	3.5	2.1 - 5.0
COLLEGE 4+ YRS	3,419	1.4	0.9 - 1.9
<b>HOUSEHOLD INCOME</b>			
<\$25,000	728	7.4	4.2 - 10.7
\$25,000–34,999	†		
\$35,000–49,999	598	3.3	1.4 - 5.2
\$50,000–74,999	743	3.4	1.7 - 5.2
\$75,000+	2,494	2.4	1.2 - 3.7

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

## SECTION 3.2: SMOKING CESSATION

Respondents who were current smokers were asked if they had stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking. Presented here is the percentage of adult current smokers who reported that they had attempted to quit smoking for one day or longer in the past 12 months

TABLE 3.2 – SMOKING CESSATION AMONG MASSACHUSETTS ADULTS, 2017			
	QUIT ATTEMPT		
	N	%	95% CI
OVERALL	760	57.2	51.7 - 62.6
<b>GENDER</b>			
MALE	373	54.2	46.5 - 61.8
FEMALE	385	60.5	52.9 - 68.0
<b>AGE GROUP</b>			
18–24	†		
25–34	94	56.4	42.3 - 70.6
35–44	105	66.9	55.2 - 78.7
45–54	148	53.3	41.6 - 64.9
55–64	205	51.5	40.3 - 62.8
65–74	125	53.3	38.5 - 68.2
75 AND OLDER	†		
<b>RACE-ETHNICITY*</b>			
WHITE	601	55.4	49.1 - 61.7
BLACK	†		
HISPANIC	74	67.2	53.6 - 80.7
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	314	58.0	49.8 - 66.2
NO DISABILITY	434	56.2	48.9 - 63.5
<b>EDUCATION</b>			
< HIGH SCHOOL	92	52.4	39.5 - 65.4
HIGH SCHOOL	242	55.0	45.6 - 64.4
COLLEGE 1–3 YRS	228	64.8	54.9 - 74.7
COLLEGE 4+ YRS	193	54.9	43.5 - 66.2
<b>HOUSEHOLD INCOME</b>			
<\$25,000	160	61.7	50.1 - 73.4
\$25,000–34,999	70	55.3	37.3 - 73.3
\$35,000–49,999	73	76.2	63.7 - 88.7
\$50,000–74,999	82	38.3	21.8 - 54.8
\$75,000+	164	61.0	50.1 - 71.9

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

### SECTION 3.3: ALCOHOL USE

All respondents were asked about their consumption of alcohol in the past month. A drink of alcohol was defined as a twelve ounce can or bottle of beer, one five ounce glass of wine, or one drink with one shot of liquor. Binge drinking was defined as consumption of five or more drinks for men or four or more drinks for women, on any one occasion in the past month. Heavy drinking was defined as consumption of more than 60 drinks in the past month for men and consumption of more than 30 drinks in the past month for women. Presented here are the percentage of adults who reported binge drinking and the percentage of adults who reported heavy drinking.

**TABLE 3.3 – ALCOHOL USE AMONG MASSACHUSETTS ADULTS, 2017**

	BINGE DRINKING					HEAVY DRINKING				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,481	18.8	17.2	-	20.4	6,448	6.9	5.9	-	7.8
GENDER										
MALE	2,886	22.3	19.9	-	24.7	2,872	6.1	4.7	-	7.5
FEMALE	3,589	15.7	13.5	-	17.9	3,575	7.5	6.2	-	8.9
AGE GROUP										
18–24	405	34.9	28.3	-	41.5	403	9.6	5.7	-	13.5
25–34	676	29.4	24.9	-	33.9	677	6.2	4.2	-	8.2
35–44	673	20.1	15.9	-	24.3	669	6.4	4.3	-	8.5
45–54	979	19.5	15.8	-	23.2	978	7.5	5.1	-	10.0
55–64	1,354	12.5	9.7	-	15.3	1,349	7.7	5.4	-	10.0
65–74	1,287	6.1	3.9	-	8.2	1,279	6.9	4.0	-	9.7
75 AND OLDER	†					949	3.1	1.3	-	4.8
RACE-ETHNICITY*										
WHITE	5,215	20.8	18.8	-	22.7	5,184	7.8	6.6	-	9.0
BLACK	330	10.9	6.1	-	15.7	†				
HISPANIC	465	14.2	10.1	-	18.3	465	5.4	2.5	-	8.3
ASIAN	228	14.2	8.1	-	20.4	†				
DISABILITY <sup>¶</sup>										
DISABILITY	1,717	14.3	10.9	-	17.6	1,706	6.8	4.7	-	8.8
NO DISABILITY	4,695	20.3	18.4	-	22.1	4,672	6.9	5.8	-	8.0
EDUCATION										
< HIGH SCHOOL	317	9.6	5.1	-	14.2	†				
HIGH SCHOOL	1,236	18.6	14.9	-	22.3	1,237	7.0	5.1	-	8.9
COLLEGE 1–3 YRS	1,547	22.3	18.7	-	25.9	1,538	8.3	6.0	-	10.7
COLLEGE 4+ YRS	3,347	19.2	17.2	-	21.2	3,324	6.6	5.4	-	7.9
HOUSEHOLD INCOME										
<\$25,000	718	10.4	7.0	-	13.8	711	3.5	1.6	-	5.4
\$25,000–34,999	433	9.7	5.9	-	13.5	427	6.3	3.1	-	9.4
\$35,000–49,999	584	17.7	12.2	-	23.2	582	6.6	3.2	-	9.9
\$50,000–74,999	730	23.8	18.5	-	29.2	729	6.1	3.8	-	8.4
\$75,000+	2,459	24.0	21.2	-	26.8	2,446	8.6	6.9	-	10.3

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data

### SECTION 3.4: OVERWEIGHT AND OBESITY STATUS

All respondents were asked to report their height and weight. Respondents' overweight status and obesity status were categorized based on their Body Mass Index (BMI), which equals weight in kilograms divided by height in meters squared. All adults with a BMI between 25.0 and 29.9 were classified as being overweight and adults with a BMI greater than or equal to 30.0 were classified as being obese. Presented here are the percentages of adults who were defined as overweight and obese. Please note that the overweight category includes all adults with a BMI of greater than 25.0, including those who are obese.

**TABLE 3.4 – OVERWEIGHT AND OBESE AMONG MASSACHUSETTS ADULTS, 2017**

	OVERWEIGHT (BMI ≥ 25.0)				OBESE (BMI ≥ 30.0)			
	N	%	95% CI		N	%	95% CI	
OVERALL	6,272	61.4	59.4	- 63.4	6,272	25.8	24.1	- 27.6
GENDER								
MALE	2,917	69.8	67.2	- 72.4	2,917	27.6	25.0	- 30.1
FEMALE	3,349	53.3	50.4	- 56.2	3,349	24.2	21.8	- 26.6
AGE GROUP								
18–24	400	32.1	26.1	- 38.2	400	9.5	6.0	- 13.1
25–34	655	55.1	49.9	- 60.2	655	26.2	21.2	- 31.2
35–44	640	64.8	59.3	- 70.2	640	28.7	23.7	- 33.6
45–54	944	70.1	65.9	- 74.4	944	30.6	26.1	- 35.1
55–64	1,322	67.8	63.8	- 71.8	1,322	30.3	26.2	- 34.3
65–74	1,261	73.6	69.3	- 78.0	1,261	31.2	26.4	- 36.0
75 AND OLDER	942	65.7	59.9	- 71.4	942	21.1	16.0	- 26.2
RACE-ETHNICITY*								
WHITE	5,069	62.9	60.7	- 65.1	5,069	25.9	23.9	- 28.0
BLACK	321	67.1	57.9	- 76.2	321	32.4	24.1	- 40.7
HISPANIC	444	68.4	62.5	- 74.3	444	30.9	25.2	- 36.6
ASIAN	210	29.8	21.7	- 37.9	210	10.0	4.9	- 15.1
DISABILITY <sup>¶</sup>								
DISABILITY	1,637	68.4	64.5	- 72.4	1,637	36.2	32.4	- 40.1
NO DISABILITY	4,493	59.3	56.9	- 61.6	4,493	22.6	20.6	- 24.6
EDUCATION								
< HIGH SCHOOL	304	69.1	61.9	- 76.4	304	33.7	26.6	- 40.7
HIGH SCHOOL	1,213	66.1	61.7	- 70.5	1,213	32.5	28.4	- 36.7
COLLEGE 1–3 YRS	1,503	61.8	57.8	- 65.8	1,503	26.2	22.8	- 29.7
COLLEGE 4+ YRS	3,230	56.0	53.2	- 58.7	3,230	19.0	17.0	- 21.1
HOUSEHOLD INCOME								
<\$25,000	692	65.5	59.9	- 71.1	692	33.5	28.0	- 38.9
\$25,000–34,999	430	58.9	51.4	- 66.4	430	29.8	22.8	- 36.9
\$35,000–49,999	575	64.6	57.5	- 71.7	575	30.2	23.7	- 36.7
\$50,000–74,999	714	69.2	63.6	- 74.9	714	25.8	20.1	- 31.5
\$75,000+	2,418	58.5	55.3	- 61.6	2,418	23.1	20.3	- 25.8

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability



### SECTION 3.5: PHYSICAL ACTIVITY

In 2017, all respondents who reported ANY leisure-time physical activity were asked what two types of physical activity gave them the most exercise in the past month. They were also asked how frequently and for how long they took part in these activities. All respondents were also asked how frequently they took part in activities or exercises to strengthen muscles.

Presented below, in accordance to the *Healthy People 2020* objectives, are the percentage of respondents who meet the 150-minute aerobic recommendation and the percentage of respondents who meet the muscle-strengthening two or more days per week recommendation. Please note that these indicators are NOT mutually exclusive e.g. people doing aerobic activity may or may not also do muscle-strengthening activities.

TABLE 3.5 – PHYSICAL ACTIVITY AMONG MASSACHUSETTS ADULTS, 2017								
	MET AEROBIC ACTIVITY GUIDELINE				MET MUSCLE STRENGTHENING GUIDELINE			
	N	%	95% CI		N	%	95% CI	
OVERALL	6,139	50.9	48.8	- 52.9	6,358	31.2	29.4	- 33.1
GENDER								
MALE	2,750	52.9	49.9	- 55.8	2,841	34.8	32.0	- 37.6
FEMALE	3,385	49.1	46.2	- 51.9	3,510	28.1	25.6	- 30.6
AGE GROUP								
18–24	386	49.5	42.6	- 56.4	397	44.9	38.1	- 51.7
25–34	645	49.2	43.9	- 54.5	657	36.3	31.5	- 41.1
35–44	660	52.1	46.7	- 57.5	665	35.5	30.1	- 40.8
45–54	947	50.7	45.9	- 55.5	963	31.6	27.3	- 35.9
55–64	1,310	54.0	49.6	- 58.5	1,327	24.2	20.6	- 27.7
65–74	1,246	56.4	51.2	- 61.5	1,272	25.6	21.3	- 29.9
75 AND OLDER	903	43.6	37.0	- 50.2	932	18.0	13.4	- 22.7
RACE-ETHNICITY*								
WHITE	4,957	54.0	51.7	- 56.4	5,112	31.8	29.7	- 33.9
BLACK	306	46.9	37.8	- 56.1	323	32.1	23.7	- 40.4
HISPANIC	449	37.0	31.0	- 42.9	468	26.6	21.1	- 32.1
ASIAN	212	43.7	34.6	- 52.7	221	30.9	22.4	- 39.5
DISABILITY <sup>¶</sup>								
DISABILITY	1,611	36.1	32.3	- 40.0	1,665	19.6	16.6	- 22.6
NO DISABILITY	4,460	55.7	53.3	- 58.1	4,624	34.8	32.6	- 37.1
EDUCATION								
< HIGH SCHOOL	305	36.0	28.6	- 43.4	310	21.7	15.2	- 28.1
HIGH SCHOOL	1,160	45.7	41.2	- 50.3	1,199	25.5	21.6	- 29.5
COLLEGE 1–3 YRS	1,455	51.6	47.4	- 55.7	1,511	32.1	28.2	- 36.0
COLLEGE 4+ YRS	3,191	58.0	55.2	- 60.8	3,301	37.1	34.4	- 39.7
HOUSEHOLD INCOME								
<\$25,000	670	35.1	29.5	- 40.8	684	24.3	19.2	- 29.4
\$25,000–34,999	417	41.6	34.0	- 49.2	428	21.7	15.6	- 27.8
\$35,000–49,999	561	50.3	43.3	- 57.4	571	27.7	21.7	- 33.7
\$50,000–74,999	701	51.9	45.6	- 58.3	721	28.8	23.4	- 34.2
\$75,000+	2,363	59.2	55.9	- 62.4	2,409	38.9	35.8	- 42.1

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability

### SECTION 3.6: FRUIT AND VEGETABLE CONSUMPTION

All respondents were asked how often they consumed fruits and vegetables each day. Presented here is the percent of adults who reported consuming fruit and vegetables five or more times per day.

<b>TABLE 3.6 – FRUIT AND VEGETABLE CONSUMPTION AMONG MASSACHUSETTS ADULTS, 2017</b>			
	CONSUMED FRUITS AND VEGETABLES FIVE OR MORE TIMES PER DAY		
	N	%	95% CI
OVERALL	6,006	18.5	17.0 - 20.1
<b>GENDER</b>			
MALE	2,688	13.9	11.9 - 15.9
FEMALE	3,314	22.7	20.3 - 25.1
<b>AGE GROUP</b>			
18–24	376	20.2	14.2 - 26.1
25–34	636	17.2	13.6 - 20.8
35–44	642	16.1	11.9 - 20.3
45–54	927	19.0	15.3 - 22.7
55–64	1,261	20.3	16.9 - 23.8
65–74	1,204	19.3	15.4 - 23.3
75 AND OLDER	826	14.1	10.0 - 18.3
<b>RACE-ETHNICITY*</b>			
WHITE	4,865	18.4	16.7 - 20.2
BLACK	300	16.7	9.3 - 24.1
HISPANIC	420	15.8	11.1 - 20.4
ASIAN	207	24.6	16.6 - 32.6
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,508	16.6	13.6 - 19.6
NO DISABILITY	4,439	19.3	17.4 - 21.1
<b>EDUCATION</b>			
< HIGH SCHOOL	260	13.3	7.3 - 19.4
HIGH SCHOOL	1,098	14.9	11.7 - 18.0
COLLEGE 1–3 YRS	1,424	17.8	14.6 - 21.0
COLLEGE 4+ YRS	3,193	22.3	20.0 - 24.6
<b>HOUSEHOLD INCOME</b>			
<\$25,000	629	14.2	9.9 - 18.6
\$25,000–34,999	395	14.8	9.4 - 20.2
\$35,000–49,999	538	23.7	17.1 - 30.3
\$50,000–74,999	701	14.0	9.9 - 18.1
\$75,000+	2,350	20.0	17.5 - 22.6

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability

## SECTION 3.7 CHOLESTEROL AWARENESS

All respondents were asked how long it had been since they last had their cholesterol level tested. Respondents who indicated that they had ever had their cholesterol tested were asked if they had ever been told by a doctor, nurse, or other medical professional that they had high cholesterol. Below are the percentages of adults who indicated that they had had their cholesterol tested in the past five years and the percentage of adults who had ever been tested and told that they have high cholesterol.

	CHOLESTEROL CHECKED IN PAST 5 YEARS				HIGH CHOLESTEROL**			
	N	%	95% CI		N	%	95% CI	
OVERALL	6,568	88.2	86.8	- 89.6	5,962	33.1	31.2	- 35.1
GENDER								
MALE	2,926	86.5	84.4	- 88.6	2,619	35.5	32.7	- 38.4
FEMALE	3,635	89.7	87.8	- 91.5	3,338	31.1	28.5	- 33.7
AGE GROUP								
18–24	351	63.0	55.9	- 70.0	224	9.8	4.7	- 15.0
25–34	632	79.4	74.9	- 83.9	508	15.7	11.3	- 20.2
35–44	681	88.7	85.6	- 91.8	599	18.1	14.0	- 22.3
45–54	1,012	94.6	92.9	- 96.4	949	30.9	26.7	- 35.2
55–64	1,420	95.5	93.7	- 97.3	1,339	45.0	40.7	- 49.3
65–74	1,333	96.0	93.9	- 98.0	1,265	55.3	50.3	- 60.3
75 AND OLDER	971	94.9	91.7	- 98.0	925	50.9	44.3	- 57.5
RACE-ETHNICITY*								
WHITE	5,284	90.0	88.5	- 91.5	4,866	33.8	31.6	- 36.0
BLACK	338	89.1	82.6	- 95.5	302	28.8	20.4	- 37.2
HISPANIC	468	81.0	76.0	- 86.0	389	33.1	26.8	- 39.3
ASIAN	219	77.9	70.6	- 85.3	177	28.7	19.6	- 37.8
DISABILITY <sup>¶</sup>								
DISABILITY	1,693	90.0	87.4	- 92.7	1,563	48.5	44.3	- 52.8
NO DISABILITY	4,646	87.5	85.8	- 89.2	4,196	28.4	26.2	- 30.5
EDUCATION								
< HIGH SCHOOL	313	83.4	77.4	- 89.3	261	39.2	31.0	- 47.4
HIGH SCHOOL	1,268	84.6	81.1	- 88.1	1,133	36.8	32.4	- 41.1
COLLEGE 1–3 YRS	1,573	86.8	84.0	- 89.6	1,418	31.1	27.3	- 34.9
COLLEGE 4+ YRS	3,376	92.7	91.4	- 93.9	3,120	30.8	28.3	- 33.3
HOUSEHOLD INCOME								
<\$25,000	698	80.0	74.7	- 85.4	597	40.4	34.2	- 46.6
\$25,000–34,999	436	85.7	80.6	- 90.9	387	35.1	27.2	- 43.0
\$35,000–49,999	590	81.8	75.4	- 88.2	525	27.1	21.2	- 32.9
\$50,000–74,999	734	88.7	84.2	- 93.2	679	36.4	30.4	- 42.4
\$75,000+	2,451	92.6	91.0	- 94.3	2,273	29.4	26.5	- 32.3

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
\*\* Analysis conducted among those who reported having their cholesterol checked.

### SECTION 3.8: HYPERTENSION AWARENESS

All respondents were asked if a doctor, nurse, or other health professional had ever told them that they had high blood pressure. Respondents who answered yes were then asked if they were taking medication for their high blood pressure. Presented below are the percentages of respondents who had been told that they had high blood pressure and, if so, if they are currently taking medication to treat it.

	HIGH BLOOD PRESSURE			TAKE MEDICINE FOR HIGH BLOOD PRESSURE**			
	N	%	95% CI	N	%	95% CI	
OVERALL	6,885	28.6	26.9 - 30.3	2,470	78.1	75.2	- 81.0
<b>GENDER</b>							
MALE	3,085	30.9	28.4 - 33.5	1,167	75.3	71.1	- 79.5
FEMALE	3,792	26.4	24.2 - 28.7	1,301	81.1	77.2	- 84.9
<b>AGE GROUP</b>							
18–24	†			†			
25–34	724	7.5	5.1 - 10.0	62	27.0	12.5	- 41.6
35–44	711	17.3	13.1 - 21.5	123	38.3	25.5	- 51.2
45–54	1,032	25.9	21.9 - 29.9	274	63.5	55.1	- 71.9
55–64	1,443	42.3	38.1 - 46.5	571	85.1	80.5	- 89.7
65–74	1,350	52.8	47.9 - 57.7	727	92.2	88.8	- 95.6
75 AND OLDER	1,011	65.9	60.1 - 71.8	635	93.6	90.5	- 96.6
<b>RACE-ETHNICITY*</b>							
WHITE	5,507	30.6	28.6 - 32.6	2,065	78.8	75.7	- 81.9
BLACK	362	32.4	24.2 - 40.7	143	79.3	65.7	- 92.8
HISPANIC	506	22.1	17.4 - 26.8	135	69.7	58.7	- 80.8
ASIAN	239	13.2	7.3 - 19.0	†			
<b>DISABILITY<sup>¶</sup></b>							
DISABILITY	1,775	47.5	43.6 - 51.4	979	83.5	79.6	- 87.5
NO DISABILITY	4,863	22.9	21.0 - 24.7	1,409	74.0	69.9	- 78.1
<b>EDUCATION</b>							
< HIGH SCHOOL	343	38.5	31.6 - 45.4	157	83.3	75.6	- 91.1
HIGH SCHOOL	1,347	34.9	31.0 - 38.8	613	82.4	77.6	- 87.2
COLLEGE 1–3 YRS	1,653	28.3	25.0 - 31.6	645	75.1	68.7	- 81.5
COLLEGE 4+ YRS	3,502	21.5	19.5 - 23.6	1,039	73.2	68.5	- 78.0
<b>HOUSEHOLD INCOME</b>							
<\$25,000	748	37.2	31.8 - 42.6	341	82.3	76.0	- 88.6
\$25,000–34,999	455	39.5	32.2 - 46.8	203	85.2	75.9	- 94.5
\$35,000–49,999	616	27.4	21.8 - 33.0	253	78.9	70.1	- 87.6
\$50,000–74,999	759	26.6	21.4 - 31.8	256	73.2	62.5	- 83.9
\$75,000+	2,540	21.2	18.8 - 23.7	701	66.9	60.7	- 73.2

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
 \*\* Analysis conducted among those who reported having high blood pressure  
 † Insufficient data

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## SECTION 4: IMMUNIZATION

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## SECTION 4.1: FLU VACCINE AND PNEUMONIA VACCINE

All respondents were asked if they had received an influenza vaccine (flu shot) or nasal flu spray (flu mist) within the past 12 months. In addition, all respondents were asked if they had ever received a pneumonia vaccine. Presented here are the percentages of adults ages 18-49 years, 50-64 years and ages 65 and older who received a flu vaccine or spray in the past year, and the percentage of adults, ages 65 and older, who reported that they had ever had a pneumonia vaccination.

	FLU VACCINE IN PAST YEAR, AGES 18-49				FLU VACCINE IN PAST YEAR, AGES 50-64			
	N	%	95% CI		N	%	95% CI	
OVERALL	2,117	35.2	32.3	- 38.1	1,879	44.2	40.6	- 47.7
GENDER								
MALE	1,029	29.3	25.5	- 33.1	842	41.5	36.3	- 46.8
FEMALE	1,086	41.0	36.7	- 45.3	1,036	46.5	41.7	- 51.4
AGE GROUP								
18-24	394	36.5	29.9	- 43.1				
25-34	658	30.7	26.1	- 35.3				
35-44	659	36.0	30.8	- 41.3				
45-49	406	42.1	34.8	- 49.4				
50-64					1,879	44.2	40.6	- 47.7
RACE-ETHNICITY*								
WHITE	1,434	36.1	32.5	- 39.7	1,595	42.9	39.0	- 46.8
BLACK	150	33.1	21.8	- 44.3	91	52.1	35.9	- 68.4
HISPANIC	277	33.5	26.0	- 40.9	119	47.6	35.2	- 60.0
ASIAN	174	36.6	27.2	- 46.0	†			
DISABILITY¶								
DISABILITY	299	29.8	22.5	- 37.2	491	45.2	38.4	- 52.0
NO DISABILITY	1,797	36.0	32.8	- 39.2	1,367	43.4	39.2	- 47.6
EDUCATION								
< HIGH SCHOOL	109	41.9	30.1	- 53.7	80	44.3	29.9	- 58.7
HIGH SCHOOL	328	21.3	15.5	- 27.0	369	37.5	30.5	- 44.6
COLLEGE 1-3 YRS	500	33.5	27.8	- 39.2	446	42.0	34.9	- 49.0
COLLEGE 4+ YRS	1,171	42.8	38.9	- 46.7	979	50.0	45.0	- 54.9
HOUSEHOLD INCOME								
<\$25,000	230	27.5	19.7	- 35.3	186	50.2	38.9	- 61.5
\$25,000-34,999	111	36.1	24.7	- 47.6	89	43.8	27.1	- 60.4
\$35,000-49,999	176	31.3	21.1	- 41.5	140	37.3	25.2	- 49.5
\$50,000-74,999	239	34.3	24.7	- 43.8	199	36.0	25.6	- 46.4
\$75,000+	973	40.1	35.6	- 44.5	870	43.3	38.2	- 48.5

\* White, Black, and Asian race categories refer to non-Hispanic  
 ¶ See p 63 for definition of disability  
 † Insufficient data

**TABLE 4.1.2 – FLU VACCINE AMONG MASSACHUSETTS ADULTS, AGES 65 YEARS AND OLDER, 2017**

	FLU VACCINE IN PAST YEAR, AGES 65+		
	N	%	95% CI
OVERALL	2,208	57.5	53.4 - 61.5
<b>GENDER</b>			
MALE	914	60.5	54.3 - 66.6
FEMALE	1,292	55.0	49.7 - 60.4
<b>AGE GROUP</b>			
65–74	1,274	58.3	53.3 - 63.3
75 AND OLDER	934	56.3	49.6 - 63.0
<b>RACE-ETHNICITY*</b>			
WHITE	1,971	57.0	52.8 - 61.3
BLACK	79	51.3	28.5 - 74.1
HISPANIC	62	61.6	39.8 - 83.4
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	850	58.4	52.1 - 64.7
NO DISABILITY	1,330	56.8	51.4 - 62.1
<b>EDUCATION</b>			
< HIGH SCHOOL	114	45.0	31.2 - 58.8
HIGH SCHOOL	475	50.3	42.2 - 58.4
COLLEGE 1–3 YRS	533	65.7	58.2 - 73.1
COLLEGE 4+ YRS	1,074	61.8	56.4 - 67.2
<b>HOUSEHOLD INCOME</b>			
<\$25,000	253	47.1	35.2 - 58.9
\$25,000–34,999	217	71.6	61.2 - 82.1
\$35,000–49,999	255	58.5	46.4 - 70.5
\$50,000–74,999	278	57.0	45.6 - 68.4
\$75,000+	538	57.3	49.6 - 65.0

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data

**TABLE 4.1.3 – PNEUMONIA VACCINE AMONG MASSACHUSETTS ADULTS, AGES 65 YEARS AND OLDER, 2017**

	EVER HAD PNEUMONIA VACCINE		
	N	%	95% CI
OVERALL	2,121	76.1	72.3 - 79.9
<b>GENDER</b>			
MALE	864	76.9	71.1 - 82.7
FEMALE	1,255	75.4	70.5 - 80.4
<b>AGE GROUP</b>			
65–74	1,218	77.7	73.5 - 81.9
75 AND OLDER	903	73.9	67.2 - 80.6
<b>RACE-ETHNICITY*</b>			
WHITE	1,897	77.7	74.0 - 81.5
BLACK	75	69.4	44.9 - 93.9
HISPANIC	57	59.0	36.0 - 81.9
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	823	77.2	71.0 - 83.4
NO DISABILITY	1,273	75.3	70.5 - 80.0
<b>EDUCATION</b>			
< HIGH SCHOOL	105	52.4	37.6 - 67.2
HIGH SCHOOL	473	82.0	76.2 - 87.8
COLLEGE 1–3 YRS	518	78.5	71.3 - 85.7
COLLEGE 4+ YRS	1,013	79.0	74.4 - 83.6
<b>HOUSEHOLD INCOME</b>			
<\$25,000	246	77.4	65.9 - 89.0
\$25,000–34,999	214	75.4	63.8 - 87.0
\$35,000–49,999	250	81.6	72.0 - 91.2
\$50,000–74,999	268	80.4	72.2 - 88.7
\$75,000+	515	81.1	75.1 - 87.1

\* White, Black, and Asian race categories refer to non-Hispanic

† Insufficient data

¶ See p 63 for definition of disability



## SECTION 4.2: HUMAN PAPILLOMA VIRUS (HPV) VACCINATION

All respondents between the ages of 18-34 were asked if they had ever received the HPV vaccine; if they responded yes, they were then asked how many HPV shots they had received. Presented are the percentage of females aged 18-34 who had ever received the HPV vaccine and the percentage of those who had completed the series of three shots. Percentages for males are not presented due to insufficient data.

	EVER HAD HPV VACCINE				COMPLETED SERIES **			
	N	%	95% CI		N	%	95% CI	
OVERALL	155	59.4	49.5	- 69.3	85	81.6	72.3	- 91.0
AGE GROUP								
18-24	52	72.5	56.2	- 88.8	†			
25-34	103	49.2	37.5	- 60.9	†			
RACE-ETHNICITY*								
WHITE	92	62.3	49.8	- 74.8	57	93.5	86.9	- 100.0
BLACK	†				†			
HISPANIC	†				†			
ASIAN	†				†			
DISABILITY <sup>¶</sup>								
DISABILITY	†				†			
NO DISABILITY	126	61.8	50.6	- 72.9	74	83.2	73.5	- 93.0
EDUCATION								
< HIGH SCHOOL	†				†			
HIGH SCHOOL	†				†			
COLLEGE 1-3 YRS	†				†			
COLLEGE 4+ YRS	74	61.3	47.4	- 75.3	†			
HOUSEHOLD INCOME								
<\$25,000	†				†			
\$25,000-34,999	†				†			
\$35,000-49,999	†				†			
\$50,000-74,999	†				†			
\$75,000+	50	69.4	53.6	- 85.1	†			

\* White, Black, and Asian race categories refer to non-Hispanic  
 ¶ See p 63 for definition of disability  
 \*\* Analysis conducted among those who reported ever having had vaccine  
 † Insufficient data

### SECTION 4.3: HEPATITIS B VIRUS (HBV) VACCINATION

All respondents were asked if they had ever received the Hepatitis B vaccine. They were told to respond yes only if they had received the entire series of 3 shots. Presented below is the percentage of adults who reported that they had ever received the Hepatitis B vaccine.

<b>TABLE 4.3 – HEPATITIS B VACCINE AMONG MASSACHUSETTS ADULTS, 2017</b>			
	RECEIVED 3 SHOTS HBV VACCINE		
	N	%	95% CI
OVERALL	2,327	37.3	34.0 - 40.5
<b>GENDER</b>			
MALE	1,048	34.4	29.9 - 39.0
FEMALE	1,276	40.1	35.4 - 44.8
<b>AGE GROUP</b>			
18–24	114	52.8	40.4 - 65.1
25–34	173	55.0	45.0 - 64.9
35–44	238	42.1	33.6 - 50.7
45–54	352	38.1	30.8 - 45.5
55–64	536	27.8	22.1 - 33.4
65–74	490	29.4	21.4 - 37.4
75 AND OLDER	375	7.5	3.2 - 11.7
<b>RACE-ETHNICITY*</b>			
WHITE	1,888	36.6	32.9 - 40.3
BLACK	128	40.0	26.4 - 53.6
HISPANIC	162	40.1	28.8 - 51.4
ASIAN	68	38.8	23.1 - 54.4
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	641	29.7	23.8 - 35.6
NO DISABILITY	1,659	40.1	36.2 - 44.0
<b>EDUCATION</b>			
< HIGH SCHOOL	102	27.0	14.5 - 39.5
HIGH SCHOOL	481	28.0	21.4 - 34.6
COLLEGE 1–3 YRS	588	39.2	32.5 - 45.9
COLLEGE 4+ YRS	1,140	44.8	40.3 - 49.4
<b>HOUSEHOLD INCOME</b>			
<\$25,000	259	31.1	21.1 - 41.1
\$25,000–34,999	175	28.2	18.0 - 38.5
\$35,000–49,999	222	41.9	31.3 - 52.6
\$50,000–74,999	273	36.5	26.5 - 46.5
\$75,000+	830	43.3	37.8 - 48.7

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability

## SECTION 4.4: HERPES ZOSTER (SHINGLES) VACCINATION

All respondents ages 50 and older were asked if they had ever received the shingles vaccine. Presented here is the percentage of adults ages 60 or older who had ever received the shingles vaccine.

<b>TABLE 4.4 – SHINGLES VACCINE AMONG MASSACHUSETTS ADULTS, AGE 60+, 2017</b>			
	EVER HAD SHINGLES VACCINE		
	N	%	95% CI
OVERALL	4,093	30.7	28.2 - 33.1
<b>GENDER</b>			
MALE	1,738	28.0	24.4 - 31.5
FEMALE	2,351	32.9	29.5 - 36.3
<b>AGE GROUP</b>			
60-69	1,314	40.1	35.4 - 44.7
70-79	976	51.6	45.6 - 57.6
80 AND OLDER	524	52.1	43.1 - 61.0
<b>RACE-ETHNICITY*</b>			
WHITE	3,564	32.1	29.4 - 34.8
BLACK	170	29.1	16.2 - 42.0
HISPANIC	173	19.2	11.0 - 27.3
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,328	32.3	28.0 - 36.7
NO DISABILITY	2,717	29.8	26.8 - 32.9
<b>EDUCATION</b>			
< HIGH SCHOOL	184	23.2	14.6 - 31.8
HIGH SCHOOL	843	31.6	26.3 - 36.9
COLLEGE 1–3 YRS	989	29.6	24.8 - 34.5
COLLEGE 4+ YRS	2,051	32.7	29.2 - 36.1
<b>HOUSEHOLD INCOME</b>			
<\$25,000	428	30.8	23.0 - 38.7
\$25,000–34,999	312	41.3	31.7 - 50.9
\$35,000–49,999	386	28.1	20.2 - 36.0
\$50,000–74,999	474	36.2	28.7 - 43.7
\$75,000+	1,382	25.7	21.9 - 29.4

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

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## SECTION 5: CHRONIC HEALTH CONDITIONS

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## SECTION 5.1: DIABETES

All respondents were asked if a doctor had ever told them that they had diabetes or pre-diabetes (defined as a blood glucose level that is higher than normal but not yet diabetic). Women who reported that they had diabetes only during pregnancy (gestational diabetes) were categorized as not having diabetes. Presented here is the percentage of adults who reported that a health care provider had ever told them that they had diabetes and the percentage of adults who reported that a health care provider had ever told them that they had pre-diabetes.

**TABLE 5.1 – DIABETES AMONG MASSACHUSETTS ADULTS, 2017**

	PRE-DIABETES				DIABETES			
	N	%	95% CI		N	%	95% CI	
OVERALL	2,702	7.7	6.3	- 9.0	6,892	9.5	8.4	- 10.6
GENDER								
MALE	1,201	8.4	6.4	- 10.4	3,093	9.5	8.0	- 11.1
FEMALE	1,497	7.0	5.2	- 8.9	3,790	9.5	7.9	- 11.0
AGE GROUP								
18–24	†				†			
25–34	†				†			
35–44	310	7.1	3.5	- 10.6	†			-
45–54	432	12.9	8.4	- 17.4	1,033	7.5	5.1	- 9.8
55–64	553	12.2	8.1	- 16.4	1,440	17.5	14.3	- 20.8
65–74	502	11.6	7.2	- 15.9	1,352	20.6	16.3	- 24.9
75 AND OLDER	417	9.3	4.8	- 13.8	1,014	19.8	15.1	- 24.5
RACE-ETHNICITY*								
WHITE	2,173	6.5	5.1	- 7.9	5,511	9.2	7.9	- 10.4
BLACK	144	12.4	5.1	- 19.6	363	9.1	4.9	- 13.2
HISPANIC	183	11.2	6.1	- 16.4	506	16.2	11.7	- 20.8
ASIAN	†				†			
DISABILITY <sup>†</sup>								
DISABILITY	625	12.2	8.4	- 16.0	1,780	22.1	18.9	- 25.3
NO DISABILITY	1,964	6.5	5.0	- 7.9	4,863	5.6	4.6	- 6.6
EDUCATION								
< HIGH SCHOOL	†			-	343	20.7	15.3	- 26.2
HIGH SCHOOL	529	6.7	4.0	- 9.4	1,347	12.8	10.2	- 15.4
COLLEGE 1–3 YRS	661	8.8	6.0	- 11.7	1,650	8.3	6.3	- 10.2
COLLEGE 4+ YRS	1,380	7.5	5.4	- 9.6	3,510	4.9	3.9	- 5.9
HOUSEHOLD								
<\$25,000	261	11.5	6.0	- 17.0	744	16.0	12.2	- 19.9
\$25,000–34,999	176	13.1	6.4	- 19.8	454	11.6	7.1	- 16.2
\$35,000–49,999	†			-	616	8.4	5.5	- 11.3
\$50,000–74,999	314	9.4	4.5	- 14.2	758	9.6	5.9	- 13.3
\$75,000+	998	5.5	3.7	- 7.4	2,544	4.7	3.4	- 5.9

\* White, Black, and Asian race categories refer to non-Hispanic

† See p 63 for definition of disability

† Insufficient data

## SECTION 5.2: ASTHMA

All respondents were asked if a doctor, nurse, or other health care professional had ever told them that they had asthma. Those who reported ever having asthma were then asked if they currently have asthma. Reported here are the percentages of adults who have ever had asthma and those who currently have asthma.

TABLE 5.2 – ASTHMA AMONG MASSACHUSETTS ADULTS, 2017									
	EVER HAD ASTHMA				CURRENTLY HAVE ASTHMA				
	N	%	95% CI		N	%	95% CI		
OVERALL	6,868	16.8	15.3	- 18.3	6,828	11.5	10.1	- 12.8	
GENDER									
MALE	3,084	14.5	12.5	- 16.4	3,068	8.7	7.1	- 10.3	
FEMALE	3,775	19.1	16.8	- 21.3	3,751	14.0	11.9	- 16.1	
AGE GROUP									
18–24	434	21.2	15.0	- 27.4	429	15.2	9.1	- 21.4	
25–34	719	20.5	16.6	- 24.4	715	13.4	10.1	- 16.8	
35–44	712	15.4	11.8	- 18.9	708	9.1	6.2	- 12.1	
45–54	1,033	15.8	12.6	- 19.1	1,032	11.5	8.7	- 14.3	
55–64	1,439	16.1	13.0	- 19.2	1,431	10.9	8.3	- 13.5	
65–74	1,346	12.6	9.4	- 15.7	1,337	9.2	6.6	- 11.7	
75 AND OLDER	1,008	14.1	10.1	- 18.2	1,000	10.2	6.6	- 13.8	
RACE-ETHNICITY*									
WHITE	5,491	17.5	15.8	- 19.3	5,457	11.7	10.2	- 13.3	
BLACK	362	17.6	9.4	- 25.8	361	14.8	6.8	- 22.9	
HISPANIC	508	18.3	13.9	- 22.6	506	11.2	7.7	- 14.7	
ASIAN	237	8.7	4.1	- 13.3	†				
DISABILITY <sup>¶</sup>									
DISABILITY	1,761	22.9	19.5	- 26.4	1,741	17.6	14.4	- 20.8	
NO DISABILITY	4,862	14.8	13.2	- 16.4	4,845	9.3	7.9	- 10.6	
EDUCATION									
< HIGH SCHOOL	344	19.4	13.9	- 24.8	341	15.4	10.2	- 20.6	
HIGH SCHOOL	1,347	17.1	13.6	- 20.6	1,337	12.3	9.1	- 15.6	
COLLEGE 1–3 YRS	1,649	18.5	15.5	- 21.5	1,635	11.8	9.3	- 14.4	
COLLEGE 4+ YRS	3,487	14.8	13.0	- 16.7	3,474	9.4	7.9	- 11.0	
HOUSEHOLD INCOME									
<\$25,000	742	23.6	18.9	- 28.3	735	19.2	14.8	- 23.6	
\$25,000–34,999	452	13.4	8.9	- 18.0	452	10.5	6.4	- 14.7	
\$35,000–49,999	615	15.2	10.6	- 19.8	608	9.4	5.5	- 13.3	
\$50,000–74,999	757	16.9	12.2	- 21.7	756	11.0	6.8	- 15.1	
\$75,000+	2,536	15.4	13.1	- 17.8	2,526	9.2	7.1	- 11.2	

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
<sup>†</sup> Insufficient data

## SECTION 5.3: CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

All respondents were asked if a doctor, nurse, or other health care professional had ever told them that they had Chronic Obstructive Pulmonary Disease or COPD, emphysema or chronic bronchitis. Presented here is the percentage of adults who reported that they had ever been diagnosed with COPD, emphysema or chronic bronchitis.

<b>TABLE 5.3 – CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AMONG MASSACHUSETTS ADULTS, 2017</b>			
	EVER DIAGNOSED WITH COPD		
	N	%	95% CI
OVERALL	6,865	5.6	4.8 - 6.4
<b>GENDER</b>			
MALE	3,073	4.6	3.5 - 5.7
FEMALE	3,783	6.5	5.3 - 7.7
<b>AGE GROUP</b>			
18–24	†		
25–34	†		
35–44	†		
45–54	1,032	5.3	3.4 - 7.2
55–64	1,435	7.3	5.2 - 9.3
65–74	1,349	10.4	7.6 - 13.2
75 AND OLDER	1,007	14.5	10.1 - 18.9
<b>RACE-ETHNICITY*</b>			
WHITE	5,494	6.6	5.6 - 7.6
BLACK	†		
HISPANIC	†		
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,767	16.1	13.4 - 18.8
NO DISABILITY	4,851	2.3	1.6 - 3.0
<b>EDUCATION</b>			
< HIGH SCHOOL	340	11.3	7.2 - 15.4
HIGH SCHOOL	1,335	7.0	5.2 - 8.8
COLLEGE 1–3 YRS	1,647	6.2	4.6 - 7.8
COLLEGE 4+ YRS	3,503	2.6	1.8 - 3.4
<b>HOUSEHOLD INCOME</b>			
<\$25,000	744	12.6	9.4 - 15.8
\$25,000–34,999	452	7.9	4.3 - 11.4
\$35,000–49,999	615	6.3	3.3 - 9.3
\$50,000–74,999	758	5.3	2.4 - 8.2
\$75,000+	2,540	1.5	0.9 - 2.1

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

## SECTION 5.4: HEART DISEASE AND STROKE

All respondents were asked whether a doctor, nurse, or other health professional had ever told them that they had had a myocardial infarction (“MI,” also called a “heart attack”), angina or coronary heart disease, or a stroke. Presented here are the percentages of adults 35 and older who reported being told that they had experienced a heart attack, had angina or coronary heart disease, or had a stroke.

**TABLE 5.4.1 – HEART DISEASE AMONG MASSACHUSETTS ADULTS, AGES 35 YEARS AND OLDER, 2017**

	EVER DIAGNOSED WITH MYOCARDIAL INFARCTION				EVER DIAGNOSED WITH ANGINA OR CORONARY HEART DISEASE			
	N	%	95% CI		N	%	95% CI	
OVERALL	5,535	4.9	4.0	- 5.8	5520	4.7	3.8	- 5.6
GENDER								
MALE	2,420	6.8	5.2	- 8.4	2413	5.6	4.2	- 7.0
FEMALE	3,112	3.2	2.2	- 4.1	3103	3.9	2.8	- 5.1
AGE GROUP								
35–44	†				†			
45–54	†				†			
55–64	1,437	5.6	3.5	- 7.6	1434	3.7	2.0	- 5.4
65–74	1,352	8.7	5.9	- 11.4	1345	8.7	6.0	- 11.5
75 AND OLDER	1,004	11.3	7.5	- 15.0	995	12.4	8.6	- 16.1
RACE-ETHNICITY*								
WHITE	4,622	4.9	3.9	- 6.0	4608	4.7	3.7	- 5.7
BLACK	†				†			
HISPANIC	347	6.0	2.8	- 9.1	†			
ASIAN	†				†			
DISABILITY <sup>¶</sup>								
DISABILITY	1,589	10.7	8.3	- 13.1	1579	10.9	8.4	- 13.4
NO DISABILITY	3,771	2.6	1.7	- 3.5	3765	2.4	1.6	- 3.2
EDUCATION								
< HIGH SCHOOL	286	10.1	5.7	- 14.5	281	8.9	4.9	- 12.9
HIGH SCHOOL	1,107	5.0	3.2	- 6.9	1104	6.7	4.4	- 9.0
COLLEGE 1–3 YRS	1,300	5.3	3.3	- 7.3	1296	4.0	2.4	- 5.6
COLLEGE 4+ YRS	2,819	3.0	2.1	- 3.9	2816	2.7	1.8	- 3.6
HOUSEHOLD INCOME								
<\$25,000	583	7.6	4.7	- 10.6	578	8.6	5.2	- 12.0
\$25,000–34,999	†				†			
\$35,000–49,999	493	7.2	3.6	- 10.9	495	5.3	2.4	- 8.1
\$50,000–74,999	617	5.5	2.4	- 8.6	615	4.1	1.7	- 6.5
\$75,000+	2,079	2.3	1.2	- 3.3	2080	2.3	1.3	- 3.4

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data



**TABLE 5.4.2 – STROKE AMONG MASSACHUSETTS ADULTS,  
AGES 35 YEARS AND OLDER, 2017**

	EVER DIAGNOSED WITH STROKE		
	N	%	95% CI
OVERALL	5,546	3.9	3.0 - 4.7
<b>GENDER</b>			
MALE	2,423	3.9	2.7 - 5.2
FEMALE	3,119	3.8	2.7 - 4.9
<b>AGE GROUP</b>			
35–44	†		
45–54	†		
55–64	1,436	2.8	1.4 - 4.2
65–74	1,352	6.3	3.6 - 9.1
75 AND OLDER	1,008	11.7	8.0 - 15.5
<b>RACE-ETHNICITY*</b>			
WHITE	4,625	3.6	2.8 - 4.5
BLACK	†		
HISPANIC	†		
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,594	9.6	7.1 - 12.0
NO DISABILITY	3,775	1.6	0.9 - 2.2
<b>EDUCATION</b>			
< HIGH SCHOOL	287	8.5	4.6 - 12.5
HIGH SCHOOL	1,111	6.3	4.2 - 8.4
COLLEGE 1–3 YRS	1,300	2.9	1.3 - 4.4
COLLEGE 4+ YRS	2,825	1.6	0.9 - 2.3
<b>HOUSEHOLD INCOME</b>			
<\$25,000	583	9.3	5.6 - 12.9
\$25,000–34,999	†		
\$35,000–49,999	493	5.3	2.3 - 8.4
\$50,000–74,999	†		
\$75,000+	†		

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data

## SECTION 5.5: ARTHRITIS

All respondents were asked if a doctor, nurse or other health professional had ever told them they had arthritis. Respondents who indicated that they had been diagnosed with arthritis or who indicated that they had “symptoms of pain, aching, or stiffness in or around a joint” that had begun more than three months ago were then asked if they were limited in any way in any of their usual physical activities due to the arthritis or joint symptoms. Presented is the percentage of respondents who indicated that they had been diagnosed with arthritis and, if they had been or if they had the symptoms described above for more than three months, the percentage of respondents who experienced limitations in their usual daily activities due to the arthritis or symptoms.

**TABLE 5.5 – ARTHRITIS AMONG MASSACHUSETTS ADULTS, 2017**

	DOCTOR DIAGNOSED ARTHRITIS			LIMITATIONS DUE TO ARTHRITIS		
	N	%	95% CI	N	%	95% CI
OVERALL	6,845	23.9	22.3 - 25.5	6,822	11.3	10.2 - 12.5
GENDER						
MALE	3,072	19.6	17.4 - 21.7	3,068	8.6	7.2 - 10.1
FEMALE	3,764	27.9	25.6 - 30.3	3,745	13.9	12.1 - 15.6
AGE GROUP						
18–24	†			†		
25–34	722	8.8	5.9 - 11.8	720	4.6	2.5 - 6.8
35–44	710	11.7	8.2 - 15.2	709	4.9	2.6 - 7.1
45–54	1,030	21.2	17.5 - 24.8	1,030	10.7	8.1 - 13.2
55–64	1,431	35.7	31.7 - 39.8	1,425	17.2	14.0 - 20.4
65–74	1,344	45.9	41.1 - 50.8	1,338	21.6	17.8 - 25.4
75 AND OLDER	998	55.4	49.2 - 61.7	990	25.3	19.8 - 30.8
RACE-ETHNICITY*						
WHITE	5,481	27.2	25.3 - 29.1	5,460	12.4	11.0 - 13.8
BLACK	357	17.5	11.4 - 23.6	357	6.8	2.8 - 10.7
HISPANIC	502	16.7	12.5 - 20.9	501	10.8	7.3 - 14.3
ASIAN	†			†		
DISABILITY <sup>¶</sup>						
DISABILITY	1,754	49.2	45.3 - 53.2	1,739	32.2	28.7 - 35.8
NO DISABILITY	4,847	15.8	14.2 - 17.4	4,841	4.7	3.8 - 5.6
EDUCATION						
< HIGH SCHOOL	339	26.5	20.4 - 32.5	336	16.9	11.9 - 21.9
HIGH SCHOOL	1,336	30.5	26.8 - 34.3	1,330	13.6	11.0 - 16.2
COLLEGE 1–3 YRS	1,643	24.9	21.8 - 28.0	1,638	11.3	9.1 - 13.5
COLLEGE 4+ YRS	3,487	17.9	16.0 - 19.9	3,478	8.4	7.0 - 9.8
HOUSEHOLD INCOME						
<\$25,000	739	32.4	27.1 - 37.7	737	20.5	15.9 - 25.0
\$25,000–34,999	453	27.2	20.9 - 33.5	451	15.8	10.5 - 21.2
\$35,000–49,999	613	25.7	20.4 - 31.0	608	10.7	7.0 - 14.3
\$50,000–74,999	754	21.6	16.8 - 26.4	752	7.2	4.5 - 10.0
\$75,000+	2,538	17.4	15.2 - 19.6	2,535	6.1	4.8 - 7.4

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data

## SECTION 5.6: CANCER DIAGNOSIS

All respondents were asked if a doctor, nurse or other health professional had ever told them they had skin cancer and if they had ever been told they had any other type of cancer. Presented is the percentage of adults who were ever told they had one or more types of cancer.

<b>TABLE 5.6 – CANCER DIAGNOSIS AMONG MASSACHUSETTS ADULTS, 2017</b>			
	EVER DIAGNOSED WITH CANCER		
	N	%	95% CI
OVERALL	6,869	12.1	10.9 - 13.3
<b>GENDER</b>			
MALE	3,085	10.7	9.1 - 12.3
FEMALE	3,775	13.4	11.7 - 15.1
<b>AGE GROUP</b>			
18–24	†		-
25–34	†		-
35–44	†		-
45–54	1,031	10.3	7.6 - 12.9
55–64	1,435	18.5	15.2 - 21.9
65–74	1,349	27.1	22.9 - 31.3
75 AND OLDER	1,007	35.4	29.3 - 41.5
<b>RACE-ETHNICITY*</b>			
WHITE	5,490	14.5	13.0 - 16.0
BLACK	†		-
HISPANIC	507	6.6	3.5 - 9.7
ASIAN	†		-
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,767	19.8	16.9 - 22.8
NO DISABILITY	4,861	9.7	8.4 - 11.0
<b>EDUCATION</b>			
< HIGH SCHOOL	341	10.7	6.2 - 15.3
HIGH SCHOOL	1,340	11.4	8.9 - 13.9
COLLEGE 1–3 YRS	1,649	11.5	9.3 - 13.8
COLLEGE 4+ YRS	3,498	13.2	11.5 - 14.9
<b>HOUSEHOLD INCOME</b>			
<\$25,000	742	14.0	9.8 - 18.3
\$25,000–34,999	453	14.8	9.5 - 20.1
\$35,000–49,999	615	11.7	7.8 - 15.6
\$50,000–74,999	756	9.6	6.4 - 12.8
\$75,000+	2,540	11.1	9.4 - 12.8

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

## SECTION 5.7: DEPRESSION

All respondents were asked if a doctor, nurse or other health professional had ever told them they had a depressive disorder, including depression, major depression, dysthymia, or minor depression. Presented here is the percentage of adults who were ever told that they had a depressive disorder.

<b>TABLE 5.7 – DEPRESSION AMONG MASSACHUSETTS ADULTS, 2017</b>			
	EVER DIAGNOSED WITH DEPRESSION		
	N	%	95% CI
OVERALL	6,869	18.4	17.0 - 19.8
<b>GENDER</b>			
MALE	3,080	13.4	11.7 - 15.2
FEMALE	3,780	23.0	20.8 - 25.2
<b>AGE GROUP</b>			
18–24	430	18.2	13.3 - 23.2
25–34	719	22.1	17.9 - 26.2
35–44	713	17.1	13.6 - 20.7
45–54	1,030	19.6	16.1 - 23.0
55–64	1,433	21.2	17.8 - 24.7
65–74	1,352	18.1	14.6 - 21.6
75 AND OLDER	1,013	9.7	6.3 - 13.1
<b>RACE-ETHNICITY*</b>			
WHITE	5,492	19.2	17.5 - 20.9
BLACK	359	13.4	8.3 - 18.4
HISPANIC	508	23.3	18.5 - 28.1
ASIAN	237	7.8	3.5 - 12.1
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,769	36.8	33.0 - 40.5
NO DISABILITY	4,857	12.4	11.0 - 13.9
<b>EDUCATION</b>			
< HIGH SCHOOL	343	23.9	18.0 - 29.8
HIGH SCHOOL	1,340	19.4	16.3 - 22.5
COLLEGE 1–3 YRS	1,651	20.6	17.6 - 23.5
COLLEGE 4+ YRS	3,494	14.5	12.7 - 16.3
<b>HOUSEHOLD INCOME</b>			
<\$25,000	744	30.0	24.9 - 35.1
\$25,000–34,999	455	16.9	11.7 - 22.0
\$35,000–49,999	614	22.0	16.5 - 27.5
\$50,000–74,999	757	15.8	11.3 - 20.2
\$75,000+	2,538	13.4	11.3 - 15.4

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability

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## SECTION 6: OTHER TOPICS

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## SECTION 6.1: SEXUAL ORIENTATION AND GENDER IDENTITY

All respondents were asked if they considered themselves to be heterosexual or straight, homosexual (gay, lesbian), bisexual or other. The percentage of those who self-identified as homosexual, bisexual or other is presented.

All respondents were also asked whether they consider themselves to be transgender. Overall, in 2017, 0.7% of Massachusetts adults self-identified as transgender. A table of this data is not presented due to the low prevalence

<b>TABLE 6.1 - SEXUAL ORIENTATION AMONG MASSACHUSETTS ADULTS, 2017</b>			
	SELF-IDENTIFIED AS HOMOSEXUAL, BISEXUAL OR OTHER		
	N	%	95% CI
OVERALL	5,682	6.1	5.1 - 7.2
<b>GENDER</b>			
MALE	2,516	5.4	4.1 - 6.7
FEMALE	3,160	6.8	5.2 - 8.5
<b>AGE GROUP</b>			
18–24	271	14.0	8.9 - 19.0
25–34	471	13.7	9.4 - 18.0
35–44	580	4.5	2.3 - 6.6
45–54	882	4.2	2.4 - 6.0
55–64	1,255	3.0	1.7 - 4.4
65–74	1,211	3.3	1.5 - 5.2
75 AND OLDER	†		
<b>RACE-ETHNICITY*</b>			
WHITE	4,641	6.4	5.1 - 7.6
BLACK	†		
HISPANIC	385	7.5	4.0 - 10.9
ASIAN	†		
<b>DISABILITY<sup>¶</sup></b>			
DISABILITY	1,529	8.1	5.8 - 10.4
NO DISABILITY	4,085	5.4	4.3 - 6.6
<b>EDUCATION</b>			
< HIGH SCHOOL	258	7.8	3.4 - 12.2
HIGH SCHOOL	1,108	4.5	2.6 - 6.3
COLLEGE 1–3 YRS	1,389	8.4	6.0 - 10.9
COLLEGE 4+ YRS	2,898	5.2	3.9 - 6.4
<b>HOUSEHOLD INCOME</b>			
<\$25,000	566	7.6	4.2 - 10.9
\$25,000–34,999	†		
\$35,000–49,999	514	6.7	3.5 - 9.9
\$50,000–74,999	†		
\$75,000+	2,151	5.4	3.9 - 7.0

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data

## SECTION 6.2: HIV TESTING

All respondents were asked if they had ever been tested for HIV. Respondents were told not to include times that HIV testing had been done as part of a blood donation. Respondents who reported that they had ever been tested for HIV were asked the date of their most recent HIV test. Presented here is the percentage of adults ages 18-64 who report ever having been tested for HIV and the percentage who had been tested in the past year.

<b>TABLE 6.2 – HIV TESTING AMONG MASSACHUSETTS ADULTS, AGES 18-64, 2017</b>										
	EVER TESTED FOR HIV					TESTED FOR HIV IN PAST YEAR				
	N	%	95% CI			N	%	95% CI		
OVERALL	3,847	44.1	41.7	-	46.5	3,422	10.8	9.3	-	12.3
<b>GENDER</b>										
MALE	1,796	40.5	37.2	-	43.8	1,619	9.5	7.6	-	11.4
FEMALE	2,049	47.5	44.1	-	50.8	1,802	12.0	9.6	-	14.4
<b>AGE GROUP</b>										
18-24	382	28.7	22.2	-	35.1	365	13.6	9.1	-	18.0
25-34	639	55.2	49.9	-	60.5	575	17.8	13.8	-	21.9
35-44	635	57.5	51.9	-	63.0	544	12.5	8.5	-	16.4
45-54	922	46.1	41.3	-	51.0	809	6.7	4.1	-	9.3
55-64	1,269	31.4	27.3	-	35.5	1,129	4.2	2.4	-	6.0
<b>RACE-ETHNICITY*</b>										
WHITE	2,905	43.3	40.4	-	46.1	2,620	9.2	7.5	-	10.8
BLACK	234	64.9	55.4	-	74.4	197	23.6	15.1	-	32.1
HISPANIC	386	51.5	44.9	-	58.1	310	16.8	11.4	-	22.2
ASIAN	202	26.1	17.9	-	34.3	†				
<b>DISABILITY<sup>¶</sup></b>										
DISABILITY	765	48.4	42.9	-	53.9	649	13.1	9.3	-	16.8
NO DISABILITY	3,044	43.0	40.3	-	45.6	2,742	10.1	8.4	-	11.8
<b>EDUCATION</b>										
< HIGH SCHOOL	188	40.1	31.3	-	48.8	159	14.3	7.4	-	21.1
HIGH SCHOOL	666	41.2	35.8	-	46.7	566	8.8	5.6	-	12.0
COLLEGE 1-3 YRS	919	45.0	40.2	-	49.7	815	12.8	9.5	-	16.1
COLLEGE 4+ YRS	2,063	46.4	43.2	-	49.5	1,874	9.8	7.9	-	11.6
<b>HOUSEHOLD INCOME</b>										
<\$25,000	404	49.4	42.4	-	56.5	340	17.7	12.0	-	23.4
\$25,000-34,999	191	35.7	26.5	-	45.0	†				
\$35,000-49,999	305	43.5	35.1	-	52.0	273	16.1	9.1	-	23.0
\$50,000-74,999	429	44.5	37.1	-	52.0	381	8.7	4.9	-	12.4
\$75,000+	1,756	44.7	41.0	-	48.3	1,606	8.6	6.5	-	10.7

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
<sup>†</sup> Insufficient data

### SECTION 6.3: SEXUAL VIOLENCE

Respondents were asked if they had experienced sexual violence at any time in their lifetime. Sexual violence was defined as having the sexual parts of the body touched without consent or attempted or completed sex without consent. Presented here are the percentages of men and women who reported that they had experienced sexual violence at some time in their lifetime.

TABLE 6.3 – SEXUAL VIOLENCE AMONG MASSACHUSETTS ADULTS, 2017								
	SEXUAL VIOLENCE, WOMEN				SEXUAL VIOLENCE, MEN			
	N	%	95% CI		N	%	95% CI	
OVERALL	1,452	18.2	15.0	- 21.3	1,162	6.2	3.9	- 8.6
GENDER								
MALE					1,162	6.2	3.9	- 8.6
FEMALE	1,452	18.2	15.0	- 21.3				
AGE GROUP								
18–24	†				†			
25–34	121	23.7	14.6	- 32.9	†			
35–44	127	18.9	10.2	- 27.6	†			
45–54	247	19.7	12.6	- 26.9	†			
55–64	316	22.8	15.4	- 30.2	†			
65–74	327	11.8	6.0	- 17.6	†			
75 AND OLDER	†				†			
RACE-ETHNICITY*								
WHITE	1,221	20.0	16.3	- 23.7	956	5.2	3.1	- 7.4
BLACK	†				†			
HISPANIC	†				†			
ASIAN	†				†			
DISABILITY <sup>¶</sup>								
DISABILITY	418	22.0	16.0	- 28.0	†			
NO DISABILITY	1,017	16.1	12.4	- 19.8	872	5.8	3.0	- 8.5
EDUCATION								
< HIGH SCHOOL	†				†			
HIGH SCHOOL	244	14.3	6.7	- 22.0	†			
COLLEGE 1–3 YRS	368	22.8	16.1	- 29.5	†			
COLLEGE 4+ YRS	769	17.5	13.4	- 21.5	†			
HOUSEHOLD INCOME								
<\$25,000	154	24.2	14.5	- 33.8	†			
\$25,000–34,999	†				†			
\$35,000–49,999	†				†			
\$50,000–74,999	162	15.5	6.4	- 24.5	†			
\$75,000+	527	22.0	16.2	- 27.9	522	5.2	2.2	- 8.3

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability  
† Insufficient data



## SECTION 6.4: SEATBELT USE

Respondents were asked how often they wear a seatbelt when riding or driving in a car. Presented here is the percentage of adults who reported that they always wear their seatbelts.

TABLE 6.4 – SEATBELT USE AMONG MASSACHUSETTS ADULTS, 2017			
	ALWAYS USE A SEATBELT		
	N	%	95% CI
OVERALL	6,410	82.6	81.0 - 84.2
GENDER			
MALE	2,867	78.2	75.7 - 80.7
FEMALE	3,536	86.7	84.7 - 88.7
AGE GROUP			
18–24	401	74.4	68.4 - 80.3
25–34	661	79.0	74.5 - 83.4
35–44	667	82.7	78.5 - 86.9
45–54	967	84.4	80.8 - 88.0
55–64	1,338	84.2	80.8 - 87.7
65–74	1,283	87.3	84.1 - 90.6
75 AND OLDER	945	86.3	81.8 - 90.9
RACE-ETHNICITY*			
WHITE	5,155	83.4	81.6 - 85.2
BLACK	327	81.1	74.5 - 87.8
HISPANIC	469	83.1	78.4 - 87.8
ASIAN	223	80.7	73.1 - 88.3
DISABILITY <sup>¶</sup>			
DISABILITY	1,684	80.7	77.6 - 83.8
NO DISABILITY	4,653	83.4	81.5 - 85.2
EDUCATION			
< HIGH SCHOOL	311	77.5	71.2 - 83.8
HIGH SCHOOL	1,212	74.4	70.5 - 78.4
COLLEGE 1–3 YRS	1,530	83.0	80.0 - 86.0
COLLEGE 4+ YRS	3,320	89.2	87.4 - 91.0
HOUSEHOLD INCOME			
<\$25,000	686	72.1	66.2 - 78.1
\$25,000–34,999	433	77.4	70.7 - 84.2
\$35,000–49,999	579	81.2	75.8 - 86.5
\$50,000–74,999	726	79.2	74.0 - 84.4
\$75,000+	2,419	87.5	85.3 - 89.7

\* White, Black, and Asian race categories refer to non-Hispanic  
<sup>¶</sup> See p 63 for definition of disability

## SECTION 6.5: OPIOID AND MARIJUANA USE

Respondents were asked if they were ever prescribed pain killers (e.g. Vicodin, Darvon, Percocet, Codeine, or OxyContin) or medical marijuana by a doctor or other health professional. They were also asked if they had any “non-medical” use of prescription pain killers or marijuana in the previous year. “Non-medical” drug use was defined for respondents as using it to get high or experience pleasurable effects, see what the effects are like, or take with friends. Presented here are the percentages of adults who report that they have ever been prescribed an opiate or marijuana and the percent who report non-medical use of these drugs in the previous year.

**TABLE 6.5.1 – OPIOID AMONG MASSACHUSETTS ADULTS, 2017**

	EVER PRESCRIBED OPIATE			NON-MEDICAL USE OF OPIATE IN PAST YEAR			
	N	%	95% CI	N	%	95% CI	
OVERALL	5,698	27.3	25.4 - 29.2	5,755	1.7	1.2 - 2.3	
GENDER							
MALE	2,509	24.4	21.8 - 27.0	2,528	2.2	1.3 - 3.0	
FEMALE	3,183	29.9	27.2 - 32.7	3,221	1.3	0.8 - 1.9	
AGE GROUP							
18–24	286	15.1	9.7 - 20.4	†			
25–34	471	29.0	23.5 - 34.6	†			
35–44	572	31.0	25.5 - 36.6	†			
45–54	869	28.5	24.0 - 33.0	†			
55–64	1,252	31.9	27.6 - 36.1	†			
65–74	1,217	29.8	25.2 - 34.4	†			
75 AND OLDER	893	20.8	15.7 - 25.9	†			
RACE-ETHNICITY*							
WHITE	4,618	30.7	28.4 - 32.9	4,656	1.6	1.1 - 2.2	
BLACK	286	17.4	10.0 - 24.8	†			
HISPANIC	410	15.3	10.9 - 19.7	†			
ASIAN	175	14.5	7.1 - 21.8	†			
DISABILITY <sup>¶</sup>							
DISABILITY	1,547	34.0	30.2 - 37.8	1,565	3.5	2.0 - 4.9	
NO DISABILITY	4,085	25.1	22.9 - 27.3	4,123	1.2	0.7 - 1.7	
EDUCATION							
< HIGH SCHOOL	279	11.1	6.6 - 15.5	†			
HIGH SCHOOL	1,113	25.6	21.8 - 29.5	1,129	2.4	1.1 - 3.8	
COLLEGE 1–3 YRS	1,384	29.6	25.6 - 33.7	1,397	1.9	0.9 - 2.9	
COLLEGE 4+ YRS	2,886	31.9	29.1 - 34.7	2,909	1.2	0.6 - 1.7	
HOUSEHOLD INCOME							
<\$25,000	582	20.7	16.1 - 25.3	†			
\$25,000–34,999	394	23.0	16.5 - 29.4	†			
\$35,000–49,999	514	23.5	17.4 - 29.6	†			
\$50,000–74,999	649	29.8	23.5 - 36.1	†			
\$75,000+	2,116	30.7	27.5 - 33.9	2,132	1.5	0.8 - 2.2	

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data

**TABLE 6.5.2 – MARIJUANA USE AMONG MASSACHUSETTS ADULTS, 2017**

	EVER PRESCRIBED MARIJUANA			NON-MEDICAL USE OF MARIJUANA IN PAST YEAR		
	N	%	95% CI	N	%	95% CI
OVERALL	5,745	1.6	1.1 - 2.1	5,750	14.4	12.9 - 16.0
GENDER						
MALE	2,530	1.7	1.0 - 2.4	2,524	17.3	14.8 - 19.7
FEMALE	3,209	1.5	0.8 - 2.2	3,220	11.8	9.9 - 13.8
AGE GROUP						
18–24	†			283	34.5	27.1 - 41.8
25–34	†			474	24.6	19.7 - 29.6
35–44	†			579	14.3	10.3 - 18.4
45–54	†			883	9.8	7.1 - 12.6
55–64	1,254	2.0	1.0 - 3.1	1,258	10.7	7.9 - 13.5
65–74	†			1,227	6.7	4.4 - 9.0
75 AND OLDER	†			†		
RACE-ETHNICITY*						
WHITE	4,655	1.8	1.2 - 2.4	4,655	15.5	13.6 - 17.3
BLACK	†			291	12.6	6.2 - 19.0
HISPANIC	†			417	8.5	4.9 - 12.1
ASIAN	†			175	11.2	5.0 - 17.3
DISABILITY <sup>¶</sup>						
DISABILITY	1,561	3.8	2.4 - 5.3	1,564	11.9	9.3 - 14.4
NO DISABILITY	4,117	0.8	0.4 - 1.2	4,118	15.2	13.3 - 17.1
EDUCATION						
< HIGH SCHOOL	†			285	8.8	4.1 - 13.6
HIGH SCHOOL	†			1,128	15.8	12.4 - 19.2
COLLEGE 1–3 YRS	1,388	2.3	1.3 - 3.3	1,395	17.1	13.7 - 20.4
COLLEGE 4+ YRS	†			2,907	13.3	11.3 - 15.3
HOUSEHOLD INCOME						
<\$25,000	†			589	10.4	6.9 - 14.0
\$25,000–34,999	†			402	10.5	6.2 - 14.8
\$35,000–49,999	†			515	13.4	7.9 - 18.8
\$50,000–74,999	†			654	19.4	13.8 - 25.0
\$75,000+	†			2,130	16.7	14.0 - 19.4

\* White, Black, and Asian race categories refer to non-Hispanic

¶ See p 63 for definition of disability

† Insufficient data

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# APPENDIX

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## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017															
	FAIR OR POOR HEALTH			POOR MENTAL HEALTH			POOR PHYSICAL HEALTH			DISABILITY			NO HEALTH INSURANCE (AGES 18-64)		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	14.7	13.3	- 16.0	10.9	9.6	- 12.2	9.7	8.6	- 10.8	23.1	21.5	- 24.8	3.9	2.9	- 4.8
GENDER															
MALE	13.9	12.0	- 15.8	8.9	7.2	- 10.5	8.1	6.7	- 9.5	21.0	18.7	- 23.3	5.7	4.1	- 7.4
FEMALE	15.8	13.8	- 17.7	13.0	11.1	- 14.9	11.2	9.5	- 12.8	25.1	22.7	- 27.4	1.9	1.0	- 2.9
RACE-ETHNICITY*															
WHITE	12.4	10.9	- 13.8	11.2	9.7	- 12.8	9.7	8.4	- 10.9	20.9	18.9	- 22.8	2.2	1.4	- 3.0
BLACK	18.0	11.9	- 24.2	13.5	7.6	- 19.5	9.2	4.2	- 14.2	22.5	15.7	- 29.4	3.1	3.1	- 3.1
HISPANIC	30.4	25.1	- 35.7	12.9	9.2	- 16.6	11.6	8.0	- 15.2	45.1	39.9	- 50.3	8.5	8.4	- 8.6
ASIAN	9.2	3.8	14.6	†			†			14.2	6.2	- 22.2	†		
DISABILITY <sup>¶</sup>															
DISABILITY	39.1	34.8	- 43.5	31.3	26.7	- 35.9	28.1	24.2	- 32.0	n/a			6.1	3.0	- 9.2
NO DISABILITY	6.9	5.7	- 8.1	5.7	4.6	- 6.8	3.9	3.0	- 4.7	n/a			3.3	2.4	- 4.3
EDUCATION															
< HIGH SCHOOL	38.4	31.5	- 45.3	15.3	10.4	- 20.2	20.2	19.8	- 20.7	49.7	42.0	- 57.4	12.3	12.1	- 12.5
HIGH SCHOOL	18.1	15.0	- 21.2	13.8	10.5	- 17.0	11.6	9.4	- 13.9	29.6	25.6	- 33.7	3.7	2.1	- 5.2
COLLEGE 1-3 YRS	13.6	11.1	- 16.0	13.5	10.8	- 16.2	9.3	7.4	- 11.2	23.4	20.3	- 26.5	3.8	2.0	- 5.7
COLLEGE 4+ YRS	7.5	6.1	- 9.0	6.4	5.1	- 7.7	5.8	4.6	- 7.0	12.0	10.4	- 13.5	†		
HOUSEHOLD INCOME															
<\$25,000	37.9	32.1	- 43.6	20.4	15.8	- 25.0	20.8	16.2	- 25.3	48.0	42.2	- 53.8	5.4	2.5	- 8.4
\$25,000-34,999	17.2	11.9	- 22.5	13.7	8.4	- 19.0	12.2	8.0	- 16.4	32.0	24.5	- 39.5	9.5	9.5	- 9.5
\$35,000-49,999	10.7	7.2	- 14.3	12.3	7.8	- 16.8	8.8	5.4	- 12.1	23.3	18.0	- 28.7	5.5	5.3	- 5.7
\$50,000-74,999	10.8	7.0	- 14.7	12.0	7.4	- 16.7	6.6	3.7	- 9.5	21.5	16.0	- 27.1	5.1	5.1	- 5.1
\$75,000+	6.0	4.4	- 7.5	6.1	4.6	- 7.7	4.8	3.5	- 6.1	10.9	8.6	- 13.2	†		

\* White, Black, and Asian race categories refer to non-Hispanic  
† Insufficient data  
¶ See p 63 for definition of disability

**AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)**

<b>MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017</b>															
	PERSONAL DOCTOR			NO DOCTOR DUE TO COST			CHECKUP IN PAST YEAR			CURRENT SMOKER			FORMER SMOKER		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	85.9	84.4	- 87.4	9.9	8.5	- 11.2	74.9	73.1	- 76.7	14.0	12.6	- 15.5	23.5	21.9	- 25.1
GENDER															
MALE	83.9	81.8	- 85.9	10.1	8.4	- 11.9	72.3	69.8	- 74.8	15.3	13.2	- 17.5	26.6	24.2	- 29.0
FEMALE	88.0	85.9	- 90.0	9.3	7.4	- 11.2	77.5	75.0	- 79.9	12.9	11.0	- 14.8	20.9	18.8	- 23.0
RACE-ETHNICITY*															
WHITE	88.9	87.2	- 90.5	8.5	7.0	- 10.1	75.3	73.2	- 77.3	14.0	12.3	- 15.8	26.6	24.6	- 28.5
BLACK	88.3	82.8	- 93.8	11.8	6.4	- 17.2	78.9	71.9	- 86.0	15.2	8.7	- 21.6	13.5	8.2	- 18.8
HISPANIC	73.7	68.6	- 78.8	18.2	13.8	- 22.7	75.7	70.8	- 80.5	18.9	14.0	- 23.8	14.4	10.6	- 18.1
ASIAN	81.6	74.7	- 88.4	†			74.7	67.7	- 81.7	†					
DISABILITY¶															
DISABILITY	82.3	78.2	- 86.4	20.6	16.1	- 25.1	76.2	71.8	- 80.6	29.1	24.7	- 33.5	25.4	21.7	- 29.1
NO DISABILITY	86.7	85.2	- 88.3	7.2	6.0	- 8.5	74.2	72.2	- 76.2	10.5	9.0	- 12.0	22.7	20.9	- 24.6
EDUCATION															
< HIGH SCHOOL	69.9	63.0	- 76.8	22.7	16.4	- 29.0	73.6	66.8	- 80.5	31.3	24.2	- 38.3	17.2	11.5	- 22.9
HIGH SCHOOL	84.3	81.0	- 87.6	10.5	7.6	- 13.4	75.9	71.9	- 79.8	20.4	16.7	- 24.1	26.6	22.9	- 30.3
COLLEGE 1–3 YRS	88.4	85.9	- 90.9	10.5	7.7	- 13.3	76.3	72.7	- 79.9	15.7	12.7	- 18.8	31.7	27.9	- 35.4
COLLEGE 4+ YRS	89.3	87.4	- 91.1	6.0	4.8	- 7.3	73.0	70.5	- 75.5	5.6	4.4	- 6.9	18.7	16.9	- 20.6
HOUSEHOLD INCOME															
<\$25,000	80.9	76.0	- 85.8	18.4	13.9	- 22.9	77.7	72.7	- 82.7	27.7	22.1	- 33.2	19.6	15.3	- 24.0
\$25,000–34,999	76.8	69.2	- 84.4	13.1	7.8	- 18.3	69.4	61.6	- 77.2	19.1	12.6	- 25.7	19.2	14.1	- 24.4
\$35,000–49,999	82.9	77.4	- 88.4	13.9	8.5	- 19.3	73.7	67.1	- 80.4	15.7	10.2	- 21.2	24.3	18.7	- 29.8
\$50,000–74,999	85.3	80.4	- 90.2	10.2	6.3	- 14.1	70.8	65.1	- 76.4	16.6	11.5	- 21.8	27.8	23.0	- 32.5
\$75,000+	91.0	88.9	- 93.1	5.6	3.6	- 7.7	74.7	72.0	- 77.5	7.8	6.1	- 9.5	23.8	21.3	- 26.4

\* White, Black, and Asian race categories refer to non-Hispanic  
† Insufficient data  
¶ See p 63 for definition of disability

## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017															
	USE SMOKELESS TOBACCO			E-CIGARETTE USE			QUIT ATTEMPT			BINGE DRINKING			HEAVY DRINKING		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	2.3	1.6	- 3.1	3.4	2.6	- 4.2	57.6	57.3	- 57.9	19.8	18.1	- 21.5	6.9	5.9	- 7.9
GENDER															
MALE	3.9	2.6	- 5.2	4.3	3.1	- 5.6	55.5	55.2	- 55.8	22.8	20.4	- 25.2	6.1	4.7	- 7.4
FEMALE				2.6	1.6	- 3.6	59.9	51.9	- 68.0	17.1	14.8	- 19.5	7.7	6.4	- 9.1
RACE-ETHNICITY*															
WHITE	1.8	1.1	- 2.5	4.0	2.9	- 5.0	55.7	55.4	- 55.9	23.6	21.4	- 25.7	8.0	6.8	- 9.2
BLACK	†			†			68.2	68.2	- 68.2	11.1	6.1	- 16.0	†		
HISPANIC	†			†			66.3	64.4	- 68.3	13.9	9.8	- 18.0	5.1	2.6	- 7.6
ASIAN	†			†			19.4	8.4	- 30.5	8.3	8.1	- 8.4	†		
DISABILITY <sup>¶</sup>															
DISABILITY	†			4.6	2.9	- 6.4	57.7	49.0	- 66.4	18.5	14.3	- 22.8	7.0	4.7	- 9.3
NO DISABILITY	2.2	1.4	- 3.0	2.9	2.1	- 3.8	57.6	57.1	- 58.0	20.1	18.3	- 21.9	6.8	5.8	- 7.9
EDUCATION															
< HIGH SCHOOL	†			†			54.2	53.5	- 55.0	9.9	5.1	- 14.7	3.8	2.4	- 5.2
HIGH SCHOOL	2.3	1.2	- 3.4	5.7	3.3	- 8.0	57.5	56.7	- 58.3	19.9	16.0	- 23.7	7.7	5.6	- 9.9
COLLEGE 1–3 YRS	3.2	1.5	- 4.9	3.3	2.0	- 4.7	63.7	63.2	- 64.2	22.8	19.1	- 26.5	8.1	5.9	- 10.3
COLLEGE 4+ YRS	†			1.6	1.0	- 2.2	57.3	57.1	- 57.4	21.1	18.8	- 23.3	7.4	5.8	- 8.9
HOUSEHOLD INCOME															
<\$25,000	†			7.2	4.1	- 10.3	64.1	63.5	- 64.6	9.9	6.9	- 12.8	4.3	1.9	- 6.7
\$25,000–34,999	†			†			55.3	54.0	- 56.6	11.7	7.1	- 16.3	6.8	3.1	- 10.5
\$35,000–49,999	†			†			67.2	65.7	- 68.8	19.4	13.1	- 25.7	6.6	3.3	- 9.8
\$50,000–74,999	†			4.1	1.8	- 6.3	44.5	44.4	- 44.5	24.7	18.8	- 30.5	6.2	3.8	- 8.6
\$75,000+	1.5	0.7	- 2.3	2.6	1.2	- 3.9	58.5	57.7	- 59.3	24.2	21.4	- 26.9	8.5	6.8	- 10.3

\* White, Black, and Asian race categories refer to non-Hispanic  
† Insufficient data  
¶ See p 63 for definition of disability

## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017															
	OVERWEIGHT (BMI≥25.0)			OBESE (BMI≥30.0)			CONSUMED FRUITS AND VEGETABLES FIVE OR MORE TIMES PER DAY			MET GUIDELINES FOR AEROBIC ACTIVITY			MET GUIDELINES FOR MUSCLE STRENGTHENING		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	61.0	58.9	- 63.0	26.0	24.1	- 27.8	18.2	16.6	- 19.9	51.2	49.1	- 53.4	32.2	30.2	- 34.1
GENDER															
MALE	69.9	67.3	- 72.5	28.0	25.3	- 30.7	13.4	11.4	- 15.4	52.7	49.7	- 55.8	35.0	32.2	- 37.8
FEMALE	52.1	49.2	- 55.0	23.9	21.4	- 26.4	22.4	19.8	- 24.9	49.9	46.9	- 52.9	29.7	26.9	- 32.4
RACE-ETHNICITY*															
WHITE	62.2	59.8	- 64.5	26.2	24.0	- 28.5	17.7	15.9	- 19.5	54.1	51.6	- 56.7	33.5	31.1	- 35.9
BLACK	66.5	57.8	- 75.1	31.8	23.7	- 39.8	16.6	16.6	- 16.6	47.2	38.3	- 56.1	32.1	24.6	- 39.7
HISPANIC	69.9	64.6	- 75.2	31.2	25.5	- 36.8	15.3	10.7	- 19.8	36.5	30.8	- 42.3	25.1	20.0	- 30.1
ASIAN	38.0	30.5	- 45.5	†			23.3	14.9	- 31.8	46.3	45.7	- 46.9	31.2	19.4	- 42.9
DISABILITY¶															
DISABILITY	64.7	60.0	- 69.4	35.9	31.2	- 40.6	17.4	13.4	- 21.4	36.8	31.9	- 41.7	23.2	19.0	- 27.4
NO DISABILITY	59.8	57.5	- 62.1	23.0	20.9	- 25.0	18.9	17.0	- 20.8	56.0	53.5	- 58.4	35.0	32.7	- 37.3
EDUCATION															
< HIGH SCHOOL	69.8	63.4	- 76.2	34.8	27.7	- 41.9	12.2	10.4	- 14.0	37.7	29.7	- 45.7	25.8	18.7	- 32.9
HIGH SCHOOL	66.7	62.2	- 71.1	33.9	29.3	- 38.4	13.9	10.9	- 16.8	47.6	42.8	- 52.4	26.0	21.8	- 30.3
COLLEGE 1–3 YRS	63.4	59.2	- 67.6	27.4	23.6	- 31.2	17.4	13.9	- 20.9	51.7	47.3	- 56.1	32.7	28.6	- 36.9
COLLEGE 4+ YRS	54.7	51.9	- 57.6	18.5	16.3	- 20.6	21.6	19.2	- 24.0	57.5	54.6	- 60.3	38.1	35.3	- 40.9
HOUSEHOLD INCOME															
<\$25,000	67.3	62.1	- 72.5	35.4	29.6	- 41.2	12.9	8.9	- 16.8	33.9	28.1	- 39.6	24.0	18.8	- 29.2
\$25,000–34,999	56.5	48.8	- 64.3	27.5	20.3	- 34.7	13.8	8.2	- 19.4	45.6	36.9	- 54.2	26.0	18.2	- 33.8
\$35,000–49,999	67.5	61.6	- 73.5	30.4	23.8	- 37.0	23.0	16.0	- 30.0	52.1	44.7	- 59.5	29.3	22.5	- 36.1
\$50,000–74,999	67.8	61.7	- 73.9	25.8	19.8	- 31.7	13.7	9.2	- 18.1	51.4	44.7	- 58.1	29.3	23.5	- 35.2
\$75,000+	57.2	54.0	- 60.4	22.3	19.6	- 25.1	19.5	16.9	- 22.1	58.9	55.6	- 62.3	39.9	36.5	- 43.2

\* White, Black, and Asian race categories refer to non-Hispanic  
† Insufficient data  
¶ See p 63 for definition of disability



## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017															
	CHOLESTEROL CHECKED IN PAST 5 YEARS			HIGH CHOLESTEROL			HIGH BLOOD PRESSURE			TAKE MEDICINE FOR HIGH BLOOD PRESSURE			RECEIVED 3 SHOTS HBV VACCINE		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	86.7	85.2	- 88.2	28.8	26.9	- 30.6	26.1	24.5	- 27.7	57.2	51.2	- 63.2	39.6	36.1	- 43.1
GENDER				31.4	28.6	- 34.1									
MALE	85.1	82.9	- 87.2	26.2	23.8	- 28.5	29.4	27.0	- 31.8	56.6	49.7	- 63.5	35.0	30.2	- 39.7
FEMALE	88.4	86.3	- 90.4	27.6	25.4	- 29.7	22.7	20.8	- 24.6	60.4	50.6	- 70.2	44.8	40.1	- 49.5
RACE-ETHNICITY*				27.5	27.0	- 27.9									
WHITE	87.6	85.8	- 89.4	32.3	26.2	- 38.5	25.7	23.9	- 27.5	56.7	49.8	- 63.5	41.1	36.9	- 45.4
BLACK	88.8	82.7	- 94.9	40.8	32.2	- 49.4	33.1	25.9	- 40.3	58.2	58.2	- 58.2	36.3	23.9	- 48.8
HISPANIC	81.5	76.9	- 86.0	38.2	33.1	- 43.4	24.7	19.6	- 29.7	50.7	48.0	- 53.3	35.9	34.8	- 37.0
ASIAN	86.7	82.2	- 91.2	25.9	23.9	- 27.9	27.7	22.0	- 33.4	67.1	67.1	- 67.1	36.5	36.5	- 36.5
DISABILITY <sup>†</sup>				35.0	25.8	- 44.2									
DISABILITY	84.9	80.6	- 89.1	30.8	26.9	- 34.7	37.2	33.2	- 41.1	68.9	60.5	- 77.3	34.8	27.0	- 42.7
NO DISABILITY	87.0	85.3	- 88.6	27.1	23.3	- 31.0	22.6	20.8	- 24.3	53.2	46.8	- 59.6	41.0	37.0	- 44.9
EDUCATION				28.2	25.7	- 30.6									
< HIGH SCHOOL	81.5	75.6	- 87.5	37.4	31.2	- 43.6	34.9	28.4	- 41.4	62.0	60.3	- 63.8	26.0	24.6	- 27.4
HIGH SCHOOL	83.1	79.2	- 87.0	28.1	21.0	- 35.1	31.9	28.2	- 35.6	58.6	50.5	- 66.7	30.0	23.1	- 37.0
COLLEGE 1–3 YRS	85.8	82.8	- 88.7	21.9	16.9	- 26.8	26.0	22.9	- 29.2	53.6	42.9	- 64.3	39.1	33.1	- 45.1
COLLEGE 4+ YRS	90.8	89.2	- 92.4	30.2	24.7	- 35.7	19.9	18.1	- 21.7	47.5	41.9	- 53.0	47.5	42.3	- 52.7
HOUSEHOLD INCOME				28.8	25.8	- 31.8									
<\$25,000	81.2	76.6	- 85.8	28.8	26.9	- 30.6	37.0	31.9	- 42.1	68.0	59.8	- 76.2	30.6	29.0	- 32.2
\$25,000–34,999	81.3	74.5	- 88.1	31.4	28.6	- 34.1	30.5	23.3	- 37.7	57.0	56.4	- 57.7	30.6	30.3	- 30.8
\$35,000–49,999	80.1	73.8	- 86.4	26.2	23.8	- 28.5	25.4	20.3	- 30.5	49.5	49.0	- 50.1	45.7	44.8	- 46.6
\$50,000–74,999	87.0	82.0	- 92.1	27.6	25.4	- 29.7	23.7	19.0	- 28.4	46.8	38.4	- 55.3	44.0	34.2	- 53.7
\$75,000+	91.5	89.6	- 93.4	27.5	27.0	- 27.9	21.6	19.2	- 23.9	48.3	48.1	- 48.6	43.9	38.2	- 49.6

\* White, Black, and Asian race categories refer to non-Hispanic  
† Insufficient data  
¶ See p 63 for definition of disability

## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017															
	DIABETES			PRE-DIABETES			EVER HAD ASTHMA			CURRENTLY HAVE ASTHMA			EVER DIAGNOSED WITH COPD		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	8.5	7.5	- 9.6	7.6	6.2	- 9.0	16.7	15.2	- 18.3	11.2	9.9	- 12.6	5.0	4.2	- 5.7
GENDER															
MALE	8.7	7.3	- 10.2	8.5	6.4	- 10.6	14.3	12.3	- 16.3	8.6	7.0	- 10.3	4.2	3.2	- 5.2
FEMALE	8.3	6.9	- 9.7	6.7	4.9	- 8.5	19.2	16.9	- 21.6	14.0	11.9	- 16.2	5.6	4.6	- 6.7
RACE-ETHNICITY*															
WHITE	7.5	6.4	- 8.6	5.7	4.4	- 7.0	18.0	16.1	- 19.9	11.8	10.1	- 13.4	5.3	4.4	- 6.2
BLACK	9.4	5.1	- 13.7	†			17.2	10.8	- 23.6	14.6	8.4	- 20.8	†		
HISPANIC	19.1	14.6	- 23.5	17.2	16.0	- 18.3	18.8	14.1	- 23.5	11.7	7.8	- 15.6	†		
ASIAN	†			9.6	9.2	- 10.1	6.5	2.9	- 10.1	†			†		
DISABILITY <sup>¶</sup>															
DISABILITY	17.4	14.1	- 20.7	12.1	7.9	- 16.4	23.1	18.8	- 27.4	18.7	14.5	- 22.9	12.5	9.9	- 15.1
NO DISABILITY	5.4	4.5	- 6.4	6.6	5.1	- 8.0	14.7	13.0	- 16.3	9.1	7.7	- 10.4	2.3	1.6	- 2.9
EDUCATION															
< HIGH SCHOOL	17.3	12.5	- 22.1	9.0	7.9	- 10.1	18.3	12.8	- 23.8	14.2	9.1	- 19.2	9.4	5.8	- 12.9
HIGH SCHOOL	11.3	8.7	- 13.9	5.9	3.5	- 8.3	16.1	12.8	- 19.4	11.5	8.7	- 14.4	6.2	4.4	- 8.1
COLLEGE 1–3 YRS	7.5	5.7	- 9.4	8.8	6.1	- 11.6	18.3	15.2	- 21.4	11.8	9.2	- 14.4	5.5	4.0	- 6.9
COLLEGE 4+ YRS	4.4	3.5	- 5.3	6.8	4.8	- 8.7	15.1	13.1	- 17.1	9.3	7.7	- 10.9	2.5	1.7	- 3.2
HOUSEHOLD INCOME															
<\$25,000	14.3	11.0	- 17.7	12.6	11.4	- 13.9	24.4	19.4	- 29.4	19.9	15.3	- 24.5	12.2	9.1	- 15.2
\$25,000–34,999	9.5	4.6	- 14.3	13.8	13.5	- 14.2	13.3	8.6	- 17.9	9.7	5.7	- 13.7	5.2	2.7	- 7.7
\$35,000–49,999	7.5	4.9	- 10.1	5.7	5.5	- 5.9	14.7	10.0	- 19.4	9.0	5.5	- 12.5	5.6	2.9	- 8.2
\$50,000–74,999	9.5	5.2	- 13.8	9.3	3.9	- 14.6	17.0	11.9	- 22.1	11.2	6.6	- 15.8	4.4	2.0	- 6.8
\$75,000+	4.8	3.4	- 6.2	5.2	3.4	- 6.9	15.7	13.2	- 18.3	9.2	7.0	- 11.4	1.7	1.0	- 2.4

\* White, Black, and Asian race categories refer to non-Hispanic  
† Insufficient data  
¶ See p 63 for definition of disability

**AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)**

<b>MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017</b>															
	DOCTOR DIAGNOSED ARTHRITIS			LIMITATIONS DUE TO ARTHRITIS			EVER DIAGNOSED WITH CANCER			EVER DIAGNOSED WITH DEPRESSION			SELF-IDENTIFIED AS HOMOSEXUAL, BISEXUAL, OR OTHER		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	21.6	20.2	- 23.1	10.3	9.2	- 11.4	10.5	9.5	- 11.5	18.6	17.0	- 20.1	6.8	5.6	- 8.0
GENDER															
MALE	18.4	16.3	- 20.4	8.0	6.7	- 9.4	9.7	8.4	- 11.1	13.7	11.8	- 15.6	5.5	4.1	- 6.9
FEMALE	24.5	22.4	- 26.5	12.3	10.7	- 13.9	11.4	9.9	- 12.8	23.5	21.1	- 25.8	8.3	6.4	- 10.3
RACE-ETHNICITY*															
WHITE	23.4	21.5	- 25.2	10.8	9.4	- 12.1	11.4	10.3	- 12.6	20.1	18.2	- 22.0	8.0	6.3	- 9.6
BLACK	†			†			†			13.5	8.3	- 18.6	†		
HISPANIC	19.0	14.4	- 23.7	12.9	8.8	- 16.9	7.4	4.1	- 10.7	23.6	18.5	- 28.6	7.1	3.9	- 10.2
ASIAN	11.1	10.3	- 12.0	7.9	7.4	- 8.5	†			†			†		
DISABILITY¶															
DISABILITY	40.1	35.9	- 44.3	26.5	22.8	- 30.2	12.6	10.4	- 14.8	43.2	38.4	- 48.0	12.8	8.9	- 16.7
NO DISABILITY	15.8	14.2	- 17.3	4.7	3.7	- 5.7	9.4	8.2	- 10.6	12.4	11.0	- 13.9	5.7	4.5	- 6.9
EDUCATION															
< HIGH SCHOOL	23.8	17.9	- 29.7	16.1	10.8	- 21.5	8.5	4.7	- 12.2	25.0	18.5	- 31.5	10.5	10.3	- 10.7
HIGH SCHOOL	27.6	24.0	- 31.2	12.1	9.8	- 14.3	9.2	7.3	- 11.1	20.0	16.6	- 23.3	4.7	2.8	- 6.6
COLLEGE 1–3 YRS	23.6	20.5	- 26.6	11.0	8.6	- 13.4	10.3	8.4	- 12.3	21.6	18.4	- 24.8	8.8	6.3	- 11.3
COLLEGE 4+ YRS	16.2	14.6	- 17.9	7.3	6.1	- 8.5	12.1	10.7	- 13.6	14.4	12.6	- 16.3	5.6	4.2	- 6.9
HOUSEHOLD INCOME															
<\$25,000	31.7	26.5	- 36.9	20.4	15.7	- 25.0	13.1	9.3	- 16.8	32.3	26.8	- 37.8	9.0	5.0	- 12.9
\$25,000–34,999	19.8	15.0	- 24.6	11.9	7.6	- 16.1	9.4	5.8	- 13.1	17.1	11.4	- 22.8	†		
\$35,000–49,999	21.7	17.6	- 25.8	9.0	5.8	- 12.2	10.0	6.9	- 13.0	23.2	16.8	- 29.6	7.5	3.6	- 11.4
\$50,000–74,999	19.7	14.9	- 24.5	6.1	3.8	- 8.5	8.0	5.4	- 10.6	15.1	11.0	- 19.1	5.4	2.3	- 8.6
\$75,000+	17.5	15.5	- 19.6	6.2	4.9	- 7.4	11.3	9.7	- 12.9	13.5	11.3	- 15.6	6.1	4.3	- 8.0

\* White, Black, and Asian race categories refer to non-Hispanic

† Insufficient data

¶ See p 63 for definition of disability

## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017															
	EVER TESTED FOR HIV - AGES 18-64			TESTED FOR HIV IN PAST YEAR - AGES 18-64			SEXUAL VIOLENCE - WOMEN			ALWAYS USE A SEATBELT			EVER PRESCRIBED OPIATE		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	46.2	43.8	- 48.7	11.3	9.6	- 12.9	18.9	15.4	- 22.5	82.2	80.5	- 83.9	27.6	25.6	- 29.7
GENDER															
MALE	42.3	39.0	- 45.7	9.8	7.8	- 11.8				77.7	75.1	- 80.3	24.8	22.0	- 27.5
FEMALE	50.3	46.7	- 53.8	13.0	10.4	- 15.6				86.3	84.1	- 88.4	30.4	27.4	- 33.4
RACE-ETHNICITY*															
WHITE	46.3	43.3	- 49.3	10.0	8.1	- 11.8	21.8	17.4	- 26.3	82.4	80.4	- 84.5	31.4	28.8	- 33.9
BLACK	†			†			†			81.2	74.6	- 87.7	17.1	16.0	- 18.1
HISPANIC	53.0	52.4	- 53.6	17.2	16.5	- 17.9	15.6	15.3	- 15.9	83.4	78.8	- 88.0	16.0	11.3	- 20.6
ASIAN	28.3	19.3	- 37.4	†			†			85.9	79.1	- 92.8	15.3	6.9	- 23.7
DISABILITY <sup>¶</sup>															
DISABILITY	52.7	46.3	- 59.2	16.1	11.4	- 20.9	26.7	26.2	- 27.2	78.1	73.9	- 82.3	36.1	31.3	- 40.9
NO DISABILITY	44.8	42.1	- 47.5	10.3	8.6	- 12.1	16.2	12.4	- 20.0	83.2	81.3	- 85.1	25.4	23.1	- 27.7
EDUCATION															
< HIGH SCHOOL	44.5	43.7	- 45.2	16.7	15.8	- 17.6	20.6	20.1	- 21.0	77.5	71.2	- 83.8	13.3	7.5	- 19.0
HIGH SCHOOL	46.2	40.4	- 52.1	9.3	5.8	- 12.9	16.9	8.0	- 25.8	73.4	69.1	- 77.8	27.0	22.6	- 31.5
COLLEGE 1-3 YRS	49.0	44.0	- 54.0	14.2	10.2	- 18.2	25.2	24.9	- 25.5	81.9	78.6	- 85.3	29.8	25.5	- 34.2
COLLEGE 4+ YRS	46.7	43.3	- 50.0	10.6	8.5	- 12.7	17.3	12.6	- 22.0	88.4	86.4	- 90.4	31.6	28.5	- 34.8
HOUSEHOLD INCOME															
<\$25,000	56.1	55.2	- 57.0	20.6	19.6	- 21.6	30.8	30.1	- 31.4	71.6	65.4	- 77.7	22.7	17.3	- 28.0
\$25,000-34,999	†			†			†			75.4	67.0	- 83.7	20.6	13.9	- 27.2
\$35,000-49,999	44.6	44.2	- 45.0	15.9	15.8	- 15.9	15.6	14.4	- 16.8	79.9	73.9	- 85.8	25.7	18.8	- 32.7
\$50,000-74,999	47.0	47.0	- 47.0	9.4	9.4	- 9.4	18.9	18.9	- 18.9	77.6	71.7	- 83.5	29.9	23.0	- 36.7
\$75,000+	46.0	42.1	- 49.8	9.3	7.0	- 11.7	22.6	16.2	- 29.0	87.4	85.1	- 89.6	30.8	27.5	- 34.2

\* White, Black, and Asian race categories refer to non-Hispanic

† Insufficient data

¶ See p 63 for definition of disability

## AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017									
	NON-MEDICAL USE OF OPIATE IN PAST YEAR			EVER PRESCRIBED MARIJUANA			NON-MEDICAL USE OF MARIJUANA IN PAST YEAR		
	%	95% CI		%	95% CI		%	95% CI	
OVERALL	1.9	1.3	- 2.4	1.7	1.2	- 2.3	15.9	14.2	- 17.6
GENDER									
MALE	2.2	1.2	- 3.1	1.9	1.1	- 2.7	18.3	15.7	- 20.9
FEMALE	1.5	0.8	- 2.2	1.6	0.8	- 2.3	13.7	11.5	- 15.9
RACE-ETHNICITY*									
WHITE	1.9	1.2	- 2.7	2.2	1.4	- 3.0	18.7	16.4	- 20.9
BLACK	1.4	1.3	1.6	1.0	0.9	1.1	12.6	12.3	- 12.9
HISPANIC	†	-		†			8.4	4.8	- 12.0
ASIAN	†	-		†			5.7	2.6	- 8.8
DISABILITY <sup>¶</sup>									
DISABILITY	4.0	1.9	- 6.1	5.0	2.8	- 7.1	17.5	13.3	- 21.7
NO DISABILITY	1.2	0.7	- 1.8	0.9	0.4	1.3	15.6	13.7	- 17.5
EDUCATION									
< HIGH SCHOOL	†	-		†			10.0	4.6	- 15.3
HIGH SCHOOL	†	-		†			17.4	13.5	- 21.2
COLLEGE 1–3 YRS	2.3	1.0	- 3.7	2.4	1.4	- 3.5	17.7	14.3	- 21.0
COLLEGE 4+ YRS	1.6	0.7	- 2.5	†			16.8	14.2	- 19.4
HOUSEHOLD INCOME									
<\$25,000	†	-		†	-		11.5	7.5	- 15.5
\$25,000–34,999	†			†			14.5	8.5	- 20.5
\$35,000–49,999	†	-		†	-		16.1	9.2	- 23.1
\$50,000–74,999	†			†			23.1	16.5	- 29.7
\$75,000+	1.6	0.8	- 2.4	†			18.6	15.8	- 21.5
* White, Black, and Asian race categories refer to non-Hispanic									
† Insufficient data									
¶ See p 63 for definition of disability									

**MASSACHUSETTS AND NATIONAL ESTIMATES**

<b>MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017</b>			
VARIABLES	MA %	US MEDIAN <sup>¶</sup> %	US RANGE <sup>¶</sup> %
<b>OVERALL HEALTH MEASURES</b>			
FAIR OR POOR HEALTH	15.2	17.7	10.8 – 37.1
15+ POOR MENTAL HEALTH DAYS	10.7	11.4	8.7 – 16.7
15+ DAYS IN POOR PHYSICAL HEALTH	10.0	11.2	6.4 – 17.8
DISABILITY	24.4	26.1	20.9 – 42.1
<b>HEALTH CARE ACCESS AND UTILIZATION</b>			
NO HEALTH INSURANCE (18-64)	3.7	†	
HAVE PERSONAL HEALTH CARE PROVIDER	86.6	77.6	66.2 – 87.8
COULD NOT SEE DOCTOR DUE TO COST	9.3	12.6	7.9 – 20.5
CHECKUP IN PAST YEAR	76.4	70.4	54.8 – 81.5
<b>RISK FACTORS AND PREVENTIVE BEHAVIORS</b>			
CURRENT SMOKER	13.7	17.1	8.9 – 26.4
FORMER SMOKER	25.1		
QUIT ATTEMPT AMONG CURRENT SMOKERS	57.2	57.9	50.8 – 67.4
USE SMOKELESS TOBACCO	2.3	4.0	0.9 – 9.1
CURRENT E-CIGARETTE USE	3.3	4.6	1.2 – 7.1
BINGE DRINKING	18.8	17.4	11.5 – 25.9
HEAVY DRINKING	6.9	6.3	3.6 – 8.9
OVERWEIGHT	61.4	66.3	53.9 – 71.7
OBESITY	25.8	31.6	22.6 – 38.1
MET GUIDELINES FOR AEROBIC ACTIVITY	50.9	49.5	19.6 – 59.7
MET GUIDELINES FOR MUSCLE-STRENGTHENING ACTIVITY	31.2	30.2	9.8 – 35.5
5+ SERVINGS OF FRUIT/VEGETABLES PER DAY	18.5	17.8	4.0 – 26.9
CHOLESTEROL CHECKED IN PAST 5 YEARS	88.2	85.9	75.1 – 91.4
HIGH CHOLESTEROL	33.1	34.0	27.7 – 40.8
HIGH BLOOD PRESSURE	28.6	32.2	24.5 – 44.7
TAKE MEDICINE FOR HIGH BLOOD PRESSURE	78.1	76.7	64.4 – 81.1
<b>IMMUNIZATION</b>			
FLU VACCINE IN PAST YEAR (18-49)	35.2	32.1	20.2 – 40.0
FLU VACCINE IN PAST YEAR (50-64)	44.2	43.4	19.1 – 51.1
FLU VACCINE IN PAST YEAR (65+)	57.5	60.0	39.0 – 68.5
EVER HAD PNEUMONIA VACCINATION (65+)	76.1	75.3	31.2 – 81.9
<b>CHRONIC HEALTH CONDITIONS</b>			
DIABETES	9.5	10.5	7.1 – 17.2
EVER HAD ASTHMA	16.8	14.2	10.7 – 18.9
CURRENTLY HAVE ASTHMA	11.5	9.4	7.3 – 13.2
HAVE ARTHRITIS	23.9	24.8	14.6 – 39.2
LIMITATIONS DUE TO ARTHRITIS	11.3	12.9	7.3 – 22.9
MYOCARDIAL INFARCTION (35+)	4.9	5.9	4.0 – 9.9
ANGINA OR CORONARY HEART DISEASE (35+)	4.7	5.5	3.4 – 9.9
STROKE (35+)	3.9	4.1	2.9 – 6.7
CHRONIC OBSTRUCTIVE PULMONARY DISEASE	5.6	6.4	3.6 – 15.0
EVER DIAGNOSED WITH CANCER	12.1	11.7	4.2 – 15.0
EVER DIAGNOSED WITH DEPRESSION	18.4	20.0	9.0 – 26.0
<b>OTHER TOPICS</b>			
EVER TESTED FOR HIV (18-64)	44.1	43.2	26.6 – 75.5
TESTED FOR HIV IN PAST YEAR (18-64)	10.8	12.1	6.2 – 41.5
ALWAYS WEAR A SEATBELT	82.6	86.7	70.5 – 94.8

<sup>¶</sup> The US median percentage and range are based on data for all 50 states, District of Columbia, and Puerto Rico.

† No comparable US data available

# TERMS, DEFINITIONS AND STATISTICAL METHODOLOGY

This report presents data from the **combined sample** - both landline and cell phone respondents. The combined sample contained 6,912 respondents.

- The survey design included two versions (or “splits”), to allow for an increase in the number of optional modules and Massachusetts-added questions asked without an increase in the length of the survey:
  - Split 1 contained 1,556 landline respondents and 1,545 cell phone respondents,
  - Split 2 contained 1,673 landline respondents and 1,613 cell phone respondents,

The BRFSS data were **weighted** to represent the adult population of Massachusetts. Weighting makes the sample representative in two ways:

- It adjusts for differences in the probability of selection due to the telephone number, the number of telephones in a household, and the number of adults in a household.
- Adjustments are also made to reduce bias from non-response, non-coverage of households without landline telephones or cell phones, and differential participation by sex, age, race/ethnicity, marital status, education, and owner/renter status.

All the weighting factors were multiplied together to get the final weight for each respondent so that the weighted BRFSS data represent the adult population of Massachusetts. Weights were produced for the combined (landline and cell phone) sample, for the entire landline sample, and for each of the three versions of the landline questionnaire.

The underlying **sample size (N)** in each cell of the presented tables is the number of individuals who responded to the specific BRFSS question. These are unweighted numbers. These numbers exclude individuals who reported "not sure, don't know," those who refused to answer the question, or had no response coded (missing or skipped). The underlying size of the sample used to produce particular estimates varies depending on whether the data come from the combined land line and cell phone sample or from one of the sample splits through which some of the optional modules and Massachusetts-added questions were administered.

The **crude percentage** is the weighted proportion of respondents in a particular category. When percentages are reported in the text of this report, they are referring to crude percentages. The crude percentage of respondents used in this report reflects the burden of a certain health status indicator in a specific group of the population, e.g. age group, gender, etc.

The **age-adjusted percentage** is a weighted average of the age-specific proportions. The projected 2000 US population was used as a standard for the calculation. The age-adjusted percentage is a single, calculated number. Age-adjustment is done in order to be able to compare population subgroups with potentially different age structures (e.g., Hispanic vs. White non-Hispanic). The reader should exercise caution when using age-adjusted percentages for the comparison of survey data subgroups. While the estimates have been adjusted by age, other factors like gender, income, or education and their possible correlation may also have an impact on the results of subgroup comparisons (see Appendix). The percentages were not age-adjusted for health indicators obtained for restricted age groups such as cancer screening. Age-adjusted estimates are presented in tables in the Appendix of this report.

The **data presented** here are univariate, descriptive percentages that are either crude or age-adjusted. No multivariate analysis was performed on this data. In addition, all data presented here are cross-sectional and thus this report contains no inferences about causality.

**The US median** was calculated for the estimates from all participating states, the District of Columbia, and territories for each respective indicator when available. The values were ordered from lowest to highest and the middle value is then chosen (if the number of values is odd) or calculated as the average of the two middle values (if the number of values is even). The median then represents a value for which half of the states have higher estimates and half of the states have lower estimates.

**The 95% confidence interval (95% CI)** is a range of values determined by the degree of variability of the data within which the true value is likely to lie. The confidence interval indicates the precision of a calculation; the wider the interval the less precision in the estimate. The 95% confidence intervals used in this report for crude and age-adjusted percentages are the indicators of reliability (or stability) of the estimate. Smaller population subgroups or smaller numbers of respondents yield less precise estimates.

**Suppression of the presented estimates:**

- a) Estimates and their 95% confidence intervals are not presented in the tables if the underlying sample size is less than 50 respondents.
- b) Following recommendations of the National Center for Health Statistics, data are not presented in the tables if a ratio of standard error to the estimate itself exceeds 30% (relative standard error of greater than 30%). Standard error of the estimate is a measure of its variability. Bigger standard errors yield wider confidence intervals and less reliable estimates.<sup>1</sup>

For this report, respondents were classified as having a **disability** if they answered “yes” to one or more of the following questions:

1. Are you limited in any way in any activities because of physical, mental, or emotional problems?
2. Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?
3. Are you blind or do you have serious difficulty seeing, even when wearing glasses?
4. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering or making decisions?
5. Do you have serious difficulty walking or climbing stairs?
6. Do you have difficulty dressing or bathing?
7. Because of a physical, mental or emotional condition, do you have difficulty doing errands alone such as visiting a doctor’s office or shopping?

**Race-ethnicity categories** in this report include White, Black, Hispanic, and Asian. When referring to White, Black, or Asian, these categories include only non-Hispanic respondents. All respondents reporting Hispanic ethnicity are included in the Hispanic category regardless of race.



# LIMITATIONS

There are some limitations that should be considered when interpreting results from the BRFSS, based on the nature of the survey data:

- The health characteristics estimated from the BRFSS pertain to the adult population, aged 18 years and older, who live in households with either a landline telephone or a cell phone.
- Telephone coverage varies across population subgroups: minorities and those in lower socioeconomic groups typically have lower telephone coverage. No direct method of compensating for non-telephone coverage is employed by the BRFSS; however, weighted data are used, which may partially correct for any bias caused by non-telephone coverage. Weighting is designed to make the total number of cases equal to some desired number which, for MA BRFSS data, is the number of people in the state who are aged 18 years and older. In the BRFSS, such weighting serves as a blanket adjustment for non-coverage and non-response and forces the total number of cases to equal population estimates.
- All data collected by the BRFSS are based on self-report from the respondents. By its nature, self-reported data may be subject to error for several reasons. An individual may have difficulty remembering events that occurred a long time ago or the frequency of certain behaviors. Some respondents may over report socially desirable behaviors, while underreporting behaviors they perceive to be less acceptable. Finally, because the BRFSS surveys a randomly selected sample of Massachusetts adults, these results may differ from another random sample to some extent simply due to chance.
- Persons with the most severe limitations and with certain disabilities are not represented in this sample since individuals living in institutions are not included in the BRFSS. BRFSS methodology also precludes anyone from assisting respondents in completing the interview if the selected adult had difficulty in participating for any reason, such as an intellectual or developmental disability.
- All data collected is cross-sectional and should not be used to employ causality.
- BRFSS interviews are conducted in English, Spanish and Portuguese. Adults who are unable to complete a telephone survey in one of these languages are excluded.