

A Profile of Health among Massachusetts Adults, 2019

Results from the Behavioral Risk Factor Surveillance
System

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



December 2020

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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 2019, 2,677 landline interviews and 5,054 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 2019 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 2019 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 2019 in a separate table.

All percentages in this report are weighted (see definition on page 61) to represent the total Massachusetts population in 2019.

HEALTH EQUITY

Data collected through the BRFSS enable DPH to provide estimates of a variety of health risk factors, preventive behaviors, chronic conditions, and emerging public health issues for the overall Massachusetts population and grouped by demographic and socioeconomic characteristics (gender, age, race-ethnicity, disability status, education and annual household income). These analyses highlight inequities in health within and across population sub-groups. In interpreting these results, it is critical to recognize that the social, economic, behavioral and physical factors experienced by populations where they live and work have a profound impact on their health. Disparities in outcomes by race, for example, are more often due to social factors and the legacy of racial discrimination than biologic causes. The social determinants of health (SDOH) are rooted in systems, and therefore public health action to reduce and prevent health inequities must be directed at systems change. The Department of Public Health focuses on the six SDOH to eliminate inequities and achieve the vision of health and wellbeing for all residents of the Commonwealth. More information about Social Determinants of Health can be found on the Population Health Information Tool (PHIT) website [<https://www.mass.gov/orgs/population-health-information-tool-phit>].

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. (Table 1.1)
- Females were more likely than males to report that their mental health was not good for at least 15 days in the previous month. (Table 1.2)

HEALTH CARE ACCESS AND UTILIZATION

- Overall, 4.4% of adults ages 18-64 reported not having any health insurance. Males were more likely than females and Black and Hispanic adults were more likely than White adults to not have health insurance. (Table 2.1)
- Males were less likely than females and Black, Hispanic and Asian adults were less likely than White adults to have a personal health care provider. (Table 2.2)
- Black and Hispanic adults and those with a disability were more likely than other adults to report having at least one time in the previous year when they could not see a doctor due to cost. (Table 2.2)

RISK FACTORS AND PREVENTIVE BEHAVIORS

- The prevalence of cigarette smoking has been declining by an average of 4.2% per year since 2011. In 2019, 12.0% of adults reported current cigarette smoking. Adults with a disability* were twice as likely as those without a disability to be current cigarette smokers. (Table 3.1.1)
- Overall, use of electronic vaping products is 6.9%; however, among those 18-24 years of age, 24.5% report using electronic vaping products. Males were twice as likely as females to report using electronic vaping products. (Table 3.1.3) Massachusetts BRFSS began asking about use of electronic cigarettes or other electronic vaping product in 2016; overall use has increased 150% and use among 18-24 year olds has doubled since then.
- In 2019, 19.1% 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. (Table 3.3)
- 33.2% of adults reported texting or e-mailing while driving in the previous 30 days. Males were more likely than females to report this behavior. Prevalence increased with increasing education level and increasing household income. (Table 6.4)
- 59.7% of adults reported being overweight or obese (BMI \geq 25.0) and 25.2% reported being obese (BMI \geq 30.0). Obesity was higher among those with a disability* and was lowest among Asian adults. (Table 3.4)

- Only 52.8% of adults met the recommendation for aerobic activity. Black, Hispanic and Asian adults were less likely than White adults to report sufficient activity to meet the recommendation. (Table 3.5)
- Only 17.2% of adults reported consuming fruits and vegetables five or more times per day. Females reported higher intake of fruits and vegetables than males. Hispanic adults were less likely than White adults to report consuming fruits and vegetables five or more times per day. (Table 3.6)
- 90.6% of adults reported that they had their cholesterol checked within the past five years and 31.1% 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. (Table 3.7)
- 28.1% of adults report that they have ever been told they have high blood pressure; of these, 76.7% are currently taking medication. Those with a disability* were nearly 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. (Table 3.8)

IMMUNIZATION

- Among those ages 60 and older, Hispanic adults were less likely than White adults to report that they had received a shingles vaccine. (Table 4.4)
- Among those ages 18-49 years old, 42.1% reported that they received the flu vaccine within the past year, among those 50-64 years old, 53.0% received the flu vaccine, and among those 65 and older, 67.6% had received the flu vaccine within the past year (Tables 4.1.1 and 4.1.2).
- Among those 65 and older, 75.0% had ever received the pneumonia vaccine (Table 4.1.3).
- 43.1% of respondents reported that they had ever received the Hepatitis B vaccine (Table 4.3).

CHRONIC HEALTH CONDITIONS

- In 2019, 8.4% of adults reported that they had ever been diagnosed with diabetes and an additional 7.1% had been told that they have pre-diabetes. (Table 5.1)
- Asthma remains more prevalent in Massachusetts than in much of the rest of the nation. In 2019, 10.3% of adults reported that they currently have asthma (national range = 5.2 – 11.8%). Females were more likely than males to report currently having asthma. (Table 5.2)
- Nearly 1 in 4 adults report that they have ever been diagnosed with arthritis and 9.8% of all adults have experienced limitations in their usual daily activities due to arthritis. White

adults were more likely than Hispanic adults to have been diagnosed with arthritis. (Table 5.5)

- 18.5% 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. (Table 5.7)
- In 2019, 12.6% 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 37.1% of all residents. White adults were more likely than Black or Hispanic adults to have ever been diagnosed with cancer. (Table 5.6)

OTHER TOPICS – HIV TESTING, EXPERIENCES WITH SEXUAL VIOLENCE, NON-MEDICAL MARIJUANA USE, & PRESCRIPTION OPIOIDS

- 46.0% 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. (Table 6.2)
- 20.6% of female adults and 7.9% 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. (Table 6.3)
- 13.9% of adults reported non-medical use of marijuana on six or more occasions. 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. (Table 6.5.2)
- 40.0% of adults reported that they had ever been prescribed an opiate and 1.1% reported non-medical use on six or more occasions. White adults were more likely to have ever been prescribed an opiate than were Black, Hispanic, or Asian adults. (Table 6.5.1)

*see definition of disability on p.62

DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019

	UNWEIGHTED SAMPLE SIZE N	WEIGHTED PERCENT %†
OVERALL	7,731	100.0
GENDER		
MALE	3,578	47.9
FEMALE	4,153	52.1
AGE GROUP		
18–24	561	13.2
25–34	894	17.0
35–44	907	15.3
45–54	1,017	15.5
55–64	1,528	17.4
65–74	1,434	12.5
75 AND OLDER	1,091	9.1
RACE-ETHNICITY*		
WHITE	5,972	73.8
BLACK	446	7.2
HISPANIC	699	11.5
ASIAN	290	7.5
DISABILITY¶		
DISABILITY	2,028	25.0
NO DISABILITY	5,390	75.0
EDUCATION		
< HIGH SCHOOL	412	10.2
HIGH SCHOOL	1,568	24.9
COLLEGE 1–3 YRS	1,824	26.0
COLLEGE 4+ YRS	3,864	38.9
HOUSEHOLD INCOME		
<\$25,000	1,134	19.2
\$25,000–34,999	408	6.4
\$35,000–49,999	717	12.0
\$50,000–74,999	848	13.4
\$75,000+	2,712	49.0

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

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

¶ See p 62 for definition of disability

SECTION 1: OVERALL HEALTH MEASURES

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.

TABLE 1.1 – OVERALL HEALTH STATUS AMONG MASSACHUSETTS ADULTS, 2019					
	FAIR OR POOR HEALTH				
	N	%	95% CI		
OVERALL	7,710	14.1	13.1	-	15.1
GENDER					
MALE	3,566	14.0	12.5	-	15.4
FEMALE	4,144	14.3	13.0	-	15.7
AGE GROUP					
18–24	560	7.3	4.5	-	10.0
25–34	894	8.9	6.7	-	11.2
35–44	904	10.7	8.3	-	13.1
45–54	1,070	15.3	12.6	-	18.1
55–64	1,523	17.6	15.1	-	20.1
65–74	1,433	19.8	17.0	-	22.7
75 AND OLDER	1,085	24.7	21.2	-	28.1
RACE-ETHNICITY*					
WHITE	5,955	12.1	11.1	-	13.1
BLACK	445	18.5	13.7	-	23.2
HISPANIC	698	28.4	24.1	-	32.6
ASIAN	289	6.8	2.9	-	10.7
DISABILITY [¶]					
DISABILITY	2,018	38.5	35.7	-	41.2
NO DISABILITY	5,381	6.2	5.3	-	7.0
EDUCATION					
< HIGH SCHOOL	411	37.8	32.1	-	43.4
HIGH SCHOOL	1,559	18.6	16.4	-	20.8
COLLEGE 1–3 YRS	1,818	12.0	10.3	-	13.8
COLLEGE 4+ YRS	3,861	6.3	5.5	-	7.2
HOUSEHOLD INCOME					
<\$25,000	1,132	32.2	28.6	-	35.8
\$25,000–34,999	406	22.1	16.4	-	27.9
\$35,000–49,999	714	14.2	11.0	-	17.4
\$50,000–74,999	845	9.3	7.0	-	11.7
\$75,000+	2,711	6.0	4.9	-	7.1
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p>					

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, 2019										
	15+ DAYS OF POOR PHYSICAL HEALTH					15+ DAYS OF POOR MENTAL HEALTH				
	N	%	95% CI			N	%	95% CI		
OVERALL	7,539	9.7	8.9	-	10.6	7,551	11.7	10.7	-	12.7
GENDER										
MALE	3,492	9.5	8.2	-	10.8	3,496	10.2	8.8	-	11.5
FEMALE	4,047	9.9	8.8	-	11.1	4,055	13.2	11.7	-	14.6
AGE GROUP										
18–24	548	5.0	2.9	-	7.1	552	19.1	15.0	-	23.2
25–34	884	6.0	3.8	-	8.2	881	15.9	12.8	-	19.1
35–44	896	6.7	4.8	-	8.5	893	11.9	9.3	-	14.5
45–54	1,050	9.1	6.9	-	11.3	1,058	10.1	8.1	-	12.2
55–64	1,499	14.4	12.2	-	16.7	1,493	8.9	7.3	-	10.6
65–74	1,390	14.0	11.7	-	16.4	1,395	8.6	6.8	-	10.5
75 AND OLDER	1,039	14.1	11.4	-	16.8	1,050	5.8	4.0	-	7.7
RACE-ETHNICITY*										
WHITE	5,841	9.7	8.7	-	10.6	5,845	12.5	11.3	-	13.7
BLACK	429	9.8	5.8	-	13.8	431	12.3	8.1	-	16.6
HISPANIC	679	13.2	10.0	-	16.3	683	10.2	7.5	-	12.8
ASIAN	†					282	6.1	2.8	-	9.5
DISABILITY¶										
DISABILITY	1,927	27.4	24.9	-	30.0	1,945	25.5	22.8	-	28.2
NO DISABILITY	5,314	3.9	3.2	-	4.6	5,309	7.3	6.3	-	8.2
EDUCATION										
< HIGH SCHOOL	395	23.0	17.9	-	28.1	404	17.3	12.8	-	21.9
HIGH SCHOOL	1,502	11.8	10.0	-	13.6	1,517	14.0	11.7	-	16.3
COLLEGE 1–3 YRS	1,780	9.7	8.2	-	11.2	1,773	13.5	11.4	-	15.6
COLLEGE 4+ YRS	3,807	5.1	4.3	-	5.9	3,799	7.8	6.7	-	8.8
HOUSEHOLD INCOME										
<\$25,000	1,085	21.2	18.1	-	24.2	1,095	21.0	17.6	-	24.3
\$25,000–34,999	396	9.3	5.6	-	12.9	396	14.8	9.8	-	19.9
\$35,000–49,999	692	8.3	6.0	-	10.7	699	13.9	10.4	-	17.5
\$50,000–74,999	842	8.6	6.2	-	11.0	837	11.6	8.8	-	14.5
\$75,000+	2,683	5.3	4.2	-	6.5	2,682	7.9	6.5	-	9.3
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† Insufficient data										

SECTION 2: HEALTH CARE ACCESS AND UTILIZATION

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 – HEALTH CARE ACCESS AMONG MASSACHUSETTS ADULTS, 2019				
	NO HEALTH INSURANCE - AGES 18-64			
	N	%	95% CI	
OVERALL	4,547	4.4	3.6	5.2
GENDER				
MALE	2,169	6.8	5.3	8.3
FEMALE	2,378	2.1	1.4	2.8
AGE GROUP				
18–24	485	3.9	2.1	5.8
25–34	731	7.6	5.0	10.2
35–44	837	4.9	3.3	6.5
45–54	1,024	3.8	1.8	5.7
55–64	1,470	2.1	1.3	2.9
RACE-ETHNICITY*				
WHITE	3,307	3.1	2.2	4.0
BLACK	309	9.0	4.4	13.7
HISPANIC	541	8.9	6.2	11.5
ASIAN	†			
DISABILITY¶				
DISABILITY	930	5.7	3.8	7.6
NO DISABILITY	3,426	3.9	3.0	4.7
EDUCATION				
< HIGH SCHOOL	245	14.3	8.3	20.3
HIGH SCHOOL	932	6.5	4.9	8.1
COLLEGE 1–3 YRS	1,106	2.7	1.8	3.7
COLLEGE 4+ YRS	2,239	1.5	0.9	2.1
HOUSEHOLD INCOME				
<\$25,000	620	8.3	5.7	10.9
\$25,000–34,999	181	14.6	7.6	21.6
\$35,000–49,999	378	4.3	2.0	6.6
\$50,000–74,999	452	4.2	2.1	6.4
\$75,000+	1,919	1.9	0.9	2.9
* White, Black, and Asian race categories refer to non-Hispanic ¶ See p 62 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, 2019										
	HAVE PERSONAL HEALTH CARE PROVIDER					COULD NOT SEE DOCTOR DUE TO COST				
	N	%	95% CI			N	%	95% CI		
OVERALL	7,679	87.3	86.3	-	88.4	7,699	8.7	7.8	-	9.5
GENDER										
MALE	3,548	83.8	82.2	-	85.5	3,557	8.0	6.9	-	9.2
FEMALE	4,131	90.5	89.2	-	91.8	4,142	9.2	8.0	-	10.4
AGE GROUP										
18–24	548	75.6	71.4	-	79.7	557	13.9	10.5	-	17.2
25–34	886	75.8	72.3	-	79.3	890	12.3	9.7	-	14.9
35–44	904	86.4	83.9	-	88.8	903	7.7	5.8	-	9.5
45–54	1,064	91.4	88.9	-	93.8	1,066	8.5	6.5	-	10.5
55–64	1,525	93.7	92.3	-	95.0	1,523	7.2	5.7	-	8.8
65–74	1,431	95.9	94.5	-	97.4	1,433	4.2	2.9	-	5.4
75 AND OLDER	1,082	95.7	93.9	-	97.4	1,087	5.7	3.6		7.8
RACE-ETHNICITY*										
WHITE	5,943	90.1	89.0	-	91.2	5,956	7.1	6.2	-	7.9
BLACK	439	84.5	80.0	-	89.1	443	15.7	11.1	-	20.3
HISPANIC	694	77.9	74.1	-	81.6	690	15.6	12.4	-	18.9
ASIAN	283	79.0	73.6	-	84.4	288	7.1	3.7		10.5
DISABILITY¶										
DISABILITY	2,017	88.4	86.4	-	90.5	2,016	15.9	13.7	-	18.1
NO DISABILITY	5,355	87.2	86.0	-	88.4	5,375	6.3	5.5	-	7.2
EDUCATION										
< HIGH SCHOOL	406	76.8	71.5		82.1	405	15.4	11.2	-	19.6
HIGH SCHOOL	1,555	86.0	83.9	-	88.1	1,562	9.9	8.2	-	11.6
COLLEGE 1–3 YRS	1,814	87.8	85.8	-	89.8	1,815	9.3	7.6	-	11.0
COLLEGE 4+ YRS	3,846	90.7	89.5	-	91.8	3,857	5.6	4.7	-	6.5
HOUSEHOLD INCOME										
<\$25,000	1,124	85.2	82.6	-	87.9	1,129	15.5	12.7	-	18.3
\$25,000–34,999	403	75.7	69.3	-	82.0	406	15.3	10.4	-	20.2
\$35,000–49,999	713	87.4	84.3	-	90.4	716	10.2	7.4	-	13.1
\$50,000–74,999	846	88.7	86.0	-	91.3	847	7.4	5.4	-	9.5
\$75,000+	2,707	91.9	90.5	-	93.3	2,705	4.7	3.7	-	5.7
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† Insufficient data										

TABLE 2.2 (CONTINUED) - HEALTH CARE ACCESS AMONG MASSACHUSETTS ADULTS, 2019

	HAD A ROUTINE CHECKUP IN THE PAST YEAR		
	N	%	95% CI
OVERALL	7,642	81.8	80.7 - 83.0
GENDER			
MALE	3,531	78.8	77.0 - 80.6
FEMALE	4,111	84.6	83.1 - 86.2
AGE GROUP			
18–24	551	78.1	74.0 - 82.1
25–34	878	69.3	65.6 - 73.0
35–44	896	75.3	72.0 - 78.7
45–54	1,064	81.1	77.8 - 84.4
55–64	1,518	87.3	85.4 - 89.2
65–74	1,426	92.8	91.3 - 94.4
75 AND OLDER	1,078	95.9	94.6 - 97.3
RACE-ETHNICITY*			
WHITE	5,920	82.7	81.4 - 84.0
BLACK	437	82.4	77.3 - 87.5
HISPANIC	686	77.1	73.2 - 81.0
ASIAN	286	78.3	72.4 - 84.3
DISABILITY [¶]			
DISABILITY	2,006	85.7	83.5 - 87.9
NO DISABILITY	5,331	80.5	79.1 - 81.9
EDUCATION			
< HIGH SCHOOL	403	78.9	73.6 - 84.2
HIGH SCHOOL	1,543	82.4	80.1 - 84.8
COLLEGE 1–3 YRS	1,807	82.3	80.1 - 84.6
COLLEGE 4+ YRS	3,832	81.9	80.3 - 83.4
HOUSEHOLD INCOME			
<\$25,000	1,119	80.0	76.4 - 83.5
\$25,000–34,999	403	79.8	74.5 - 85.1
\$35,000–49,999	714	84.8	81.5 - 88.1
\$50,000–74,999	847	80.0	76.7 - 83.3
\$75,000+	2,689	81.0	79.1 - 83.0

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

¶ See p 62 for definition of disability

SECTION 3: RISK FACTORS AND PREVENTIVE BEHAVIORS

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, 2019										
	CURRENT SMOKER					FORMER SMOKER				
	N	%	95% CI			N	%	95% CI		
OVERALL	7,394	12.0	11.1	-	13.0	7,394	25.3	24.1	-	26.5
GENDER										
MALE	3,409	14.5	12.9	-	16.1	3,409	26.3	24.5	-	28.1
FEMALE	3,985	9.8	8.6	-	11.0	3,985	24.4	22.8	-	26.0
AGE GROUP										
18–24	539	7.9	5.1	-	10.7	539	4.8	3.1	-	6.6
25–34	848	14.9	11.8	-	18.1	848	16.3	13.2	-	19.4
35–44	864	14.3	11.5	-	17.1	864	21.0	17.8	-	24.2
45–54	1,020	14.2	11.5	-	16.9	1,020	24.1	20.9	-	27.3
55–64	1,461	14.5	12.4	-	16.7	1,461	31.6	28.7	-	34.5
65–74	1,399	10.5	8.4	-	12.6	1,399	39.3	36.1	-	42.5
75 AND OLDER	1,052	4.9	3.3	-	6.5	1,052	49.5	45.6	-	53.4
RACE-ETHNICITY*										
WHITE	5,758	12.3	11.2	-	13.5	5,758	29.9	28.4	-	31.3
BLACK	422	14.4	9.8	-	19.0	422	13.5	9.3	-	17.8
HISPANIC	649	12.3	9.3	-	15.3	649	14.2	10.9	-	17.4
ASIAN	272	6.1	2.6	-	9.6	272	9.1	4.9	-	13.2
DISABILITY¶										
DISABILITY	1,988	19.1	16.9	-	21.3	1,988	34.0	31.3	-	36.7
NO DISABILITY	5,317	9.7	8.6	-	10.8	5,317	22.4	21.0	-	23.7
EDUCATION										
< HIGH SCHOOL	388	20.0	15.0	-	24.9	388	24.0	19.0	-	28.9
HIGH SCHOOL	1,481	17.7	15.3	-	20.0	1,481	30.3	27.5	-	33.2
COLLEGE 1–3 YRS	1,748	14.4	12.4	-	16.5	1,748	26.3	23.9	-	28.7
COLLEGE 4+ YRS	3,726	5.1	4.3	-	6.0	3,726	22.0	20.5	-	23.6
HOUSEHOLD INCOME										
<\$25,000	1,101	22.0	18.8	-	25.2	1,101	22.3	19.3	-	25.3
\$25,000–34,999	400	15.2	10.8	-	19.5	400	29.3	23.5	-	35.1
\$35,000–49,999	702	15.7	12.2	-	19.3	702	28.5	24.3	-	32.7
\$50,000–74,999	831	13.7	10.6	-	16.9	831	29.9	26.2	-	33.6
\$75,000+	2,668	8.5	7.0	-	10.1	2,668	25.6	23.6	-	27.6
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† 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.

TABLE 3.1.2 - SMOKELESS TOBACCO USE AMONG MASSACHUSETTS ADULTS, 2019			
	USE SMOKELESS TOBACCO		
	N	%	95% CI
OVERALL	7,460	2.1	1.6 - 2.5
GENDER			
MALE	3,434	3.3	2.5 - 4.1
FEMALE	4,026	1.0	0.5 - 1.4
AGE GROUP			
18–24	544	4.1	2.2 - 6.0
25–34	855	2.6	1.3 - 3.9
35–44	871	2.9	1.4 - 4.4
45–54	1,027	1.9	0.9 - 3.0
55–64	1,474	1.0	0.5 - 1.5
65–74	†		
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	5,802	2.0	1.5 - 2.6
BLACK	†		
HISPANIC	†		
ASIAN	†		
DISABILITY [¶]			
DISABILITY	2,015	1.6	1.0 - 2.2
NO DISABILITY	5,356	2.2	1.6 - 2.7
EDUCATION			
< HIGH SCHOOL	†		
HIGH SCHOOL	1,501	2.8	1.8 - 3.9
COLLEGE 1–3 YRS	1,764	2.5	1.5 - 3.5
COLLEGE 4+ YRS	3,755	1.5	1.0 - 2.0
HOUSEHOLD INCOME			
<\$25,000	†		
\$25,000–34,999	†		
\$35,000–49,999	†		
\$50,000–74,999	†		
\$75,000+	2,683	2.4	1.6 - 3.1
* White, Black, and Asian race categories refer to non-Hispanic ¶ See p 62 for definition of disability † Insufficient data			

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

TABLE 3.1.3 – ELECTRONIC VAPING PRODUCT USE AMONG MASSACHUSETTS ADULTS, 2019			
	USE E-CIGARETTES		
	N	%	95% CI
OVERALL	3,380	6.9	5.8 - 8.1
GENDER			
MALE	1,519	9.5	7.5 - 11.4
FEMALE	1,861	4.7	3.4 - 5.9
AGE GROUP			
18–24	212	24.5	18.0 - 30.9
25–34	340	10.2	6.9 - 13.6
35–44	399	5.4	3.0 - 7.8
45–54	490	4.5	2.3 - 6.7
55–64	682	3.0	1.9 - 4.2
65–74	†		
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	2,657	7.0	5.7 - 8.4
BLACK	†		
HISPANIC	267	7.1	3.5 - 10.6
ASIAN	119	9.7	4.0 - 15.4
DISABILITY [¶]			
DISABILITY	932	9.1	6.6 - 11.6
NO DISABILITY	2,413	6.2	4.9 - 7.4
EDUCATION			
< HIGH SCHOOL	†		
HIGH SCHOOL	674	8.3	5.9 - 10.8
COLLEGE 1–3 YRS	831	9.4	6.8 - 12.0
COLLEGE 4+ YRS	1,699	4.6	3.2 - 6.0
HOUSEHOLD INCOME			
<\$25,000	480	9.9	6.6 - 13.3
\$25,000–34,999	†		
\$35,000–49,999	330	9.5	5.2 - 13.9
\$50,000–74,999	377	6.1	3.1 - 9.1
\$75,000+	1,244	5.8	4.0 - 7.5
* White, Black, and Asian race categories refer to non-Hispanic ¶ See p 62 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, 2019			
	QUIT ATTEMPT		
	N	%	95% CI
OVERALL	821	55.3	51.0 - 59.7
GENDER			
MALE	444	55.6	49.6 - 61.6
FEMALE	377	55.0	48.7 - 61.4
AGE GROUP			
18–24	†		
25–34	111	56.8	45.1 - 68.6
35–44	120	52.8	42.1 - 63.5
45–54	135	59.2	49.2 - 69.2
55–64	215	50.9	42.9 - 59.0
65–74	140	46.1	35.7 - 56.6
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	633	54.1	49.1 - 59.1
BLACK	53	65.4	49.6 - 81.2
HISPANIC	82	57.3	44.2 - 70.4
ASIAN	†		
DISABILITY [¶]			
DISABILITY	366	57.1	50.7 - 63.4
NO DISABILITY	449	53.8	47.8 - 59.8
EDUCATION			
< HIGH SCHOOL	78	65.3	52.9 - 77.8
HIGH SCHOOL	267	52.1	44.7 - 59.4
COLLEGE 1–3 YRS	261	52.7	45.1 - 60.2
COLLEGE 4+ YRS	213	57.9	49.5 - 66.4
HOUSEHOLD INCOME			
<\$25,000	248	61.1	53.1 - 69.2
\$25,000–34,999	56	58.4	43.3 - 73.6
\$35,000–49,999	98	54.2	42.1 - 66.3
\$50,000–74,999	92	54.2	41.8 - 66.6
\$75,000+	185	51.2	41.7 - 60.8
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p> <p>† Insufficient data</p>			

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, 2019

	BINGE DRINKING					HEAVY DRINKING				
	N	%	95% CI			N	%	95% CI		
OVERALL	7,232	19.1	17.9	-	20.3	7,184	7.8	6.9	-	8.6
GENDER										
MALE	3,313	23.2	21.3	-	25.1	3,287	8.0	6.7	-	9.4
FEMALE	3,919	15.4	13.9	-	17.0	3,897	7.5	6.5	-	8.6
AGE GROUP										
18–24	528	30.1	25.7	-	34.6	524	7.2	4.8	-	9.7
25–34	829	31.5	27.7	-	35.3	822	11.3	8.2	-	14.3
35–44	842	21.8	18.5	-	25.1	842	6.8	5.0	-	8.5
45–54	1,001	20.4	17.4	-	23.5	990	8.6	6.3	-	10.8
55–64	1,441	13.0	10.7	-	15.2	1,440	9.0	6.9	-	11.0
65–74	1,370	8.4	6.6	-	10.1	1,362	5.3	4.0	-	6.6
75 AND OLDER	1,027	3.6	2.1	-	5.1	1,010	4.2	2.8	-	5.6
RACE-ETHNICITY*										
WHITE	5,657	21.0	19.5	-	22.4	5,631	8.9	7.9	-	10.0
BLACK	412	15.2	10.6	-	19.8	403	5.1	2.4	-	7.9
HISPANIC	616	15.9	12.4	-	19.4	609	6.1	3.8	-	8.5
ASIAN	264	11.1	6.7	-	15.4	†				
DISABILITY¶										
DISABILITY	1,963	14.1	12.0	-	16.1	1,947	7.6	6.0	-	9.3
NO DISABILITY	5,183	20.9	19.4	-	22.3	5,155	7.8	6.9	-	8.8
EDUCATION										
< HIGH SCHOOL	364	15.5	10.5	-	20.4	357	8.4	4.3	-	12.4
HIGH SCHOOL	1,433	18.5	15.9	-	21.1	1,424	8.4	6.5	-	10.3
COLLEGE 1–3 YRS	1,718	20.7	18.2	-	23.2	1,707	6.6	5.1	-	8.2
COLLEGE 4+ YRS	3,675	19.5	17.8	-	21.1	3,656	8.0	6.9	-	9.1
HOUSEHOLD INCOME										
<\$25,000	1,067	15.6	12.6	-	18.6	1,061	6.1	4.3	-	7.8
\$25,000–34,999	392	9.8	6.4	-	13.2	387	4.8	2.2	-	7.4
\$35,000–49,999	690	14.8	11.3	-	18.4	685	9.7	6.7	-	12.8
\$50,000–74,999	821	24.1	20.3	-	27.9	817	8.9	6.5	-	11.3
\$75,000+	2,639	24.7	22.6	-	26.9	2,631	10.0	8.4	-	11.6

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

¶ See p 62 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, 2019

	OVERWEIGHT (BMI ≥ 25.0)					OBESE (BMI ≥ 30.0)				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,787	59.7	58.2	-	61.2	6,787	25.2	23.8	-	26.5
GENDER										
MALE	3,283	66.2	64.1	-	68.3	3,283	26.0	24.1	-	28.0
FEMALE	3,504	53.2	51.0	-	55.3	3,504	24.3	22.4	-	26.1
AGE GROUP										
18–24	500	38.4	33.3	-	43.4	500	15.2	11.2	-	19.2
25–34	767	48.9	44.6	-	53.2	767	20.5	16.9	-	24.0
35–44	783	68.2	64.4	-	72.1	783	32.1	28.2	-	36.0
45–54	933	65.7	62.1	-	69.3	933	26.4	23.1	-	29.7
55–64	1,372	67.3	64.3	-	70.4	1,372	28.8	25.8	-	31.7
65–74	1,295	68.3	65.1	-	71.5	1,295	30.4	27.2	-	33.6
75 AND OLDER	1,004	59.1	55.2	-	62.9	1,004	21.5	18.2	-	24.8
RACE-ETHNICITY*										
WHITE	5,418	59.5	57.8	-	61.2	5,418	25.3	23.9	-	26.8
BLACK	398	65.9	59.9	-	71.8	398	32.2	26.2	-	38.2
HISPANIC	493	67.1	62.0	-	72.2	493	28.0	23.0	-	33.0
ASIAN	234	42.2	34.6	-	49.7	234	11.6	5.9	-	17.4
DISABILITY [¶]										
DISABILITY	1,813	66.0	63.1	-	68.9	1,813	34.4	31.5	-	37.3
NO DISABILITY	4,852	57.7	56.0	-	59.5	4,852	22.2	20.7	-	23.7
EDUCATION										
< HIGH SCHOOL	295	62.8	56.0	-	69.6	295	32.7	26.2	-	39.2
HIGH SCHOOL	1,357	62.7	59.5	-	65.9	1,357	27.0	24.2	-	29.8
COLLEGE 1–3 YRS	1,638	61.5	58.5	-	64.6	1,638	29.4	26.6	-	32.2
COLLEGE 4+ YRS	3,472	55.8	53.7	-	57.8	3,472	19.6	18.0	-	21.2
HOUSEHOLD INCOME										
<\$25,000	967	63.7	59.7	-	67.8	967	30.5	26.7	-	34.2
\$25,000–34,999	372	57.9	51.2	-	64.6	372	28.9	22.5	-	35.3
\$35,000–49,999	677	63.9	59.1	-	68.6	677	28.1	23.4	-	32.8
\$50,000–74,999	804	56.8	52.5	-	61.1	804	24.0	20.5	-	27.5
\$75,000+	2,556	59.9	57.5	-	62.3	2,556	24.0	22.0	-	26.1

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

¶ See p 62 for definition of disability

SECTION 3.5: PHYSICAL ACTIVITY

In 2019, 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, 2019										
	MET AEROBIC ACTIVITY GUIDELINE					MET MUSCLE STRENGTHENING GUIDELINE				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,839	52.8	51.2	-	54.3	7,192	33.2	31.8	-	34.6
GENDER										
MALE	3,153	54.3	52.0	-	56.5	3,297	35.5	33.4	-	37.6
FEMALE	3,686	51.4	49.3	-	53.5	3,895	31.2	29.3	-	33.1
AGE GROUP										
18–24	511	52.8	47.7	-	57.9	523	45.1	40.1	-	50.1
25–34	794	50.6	46.4	-	54.8	815	38.9	34.8	-	43.0
35–44	817	52.6	48.5	-	56.7	835	34.2	30.4	-	38.1
45–54	964	55.6	51.8	-	59.3	989	30.5	27.0	-	34.1
55–64	1,379	53.4	50.2	-	56.6	1,432	29.3	26.6	-	32.1
65–74	1,327	57.0	53.6	-	60.4	1,378	28.8	25.9	-	31.7
75 AND OLDER	986	50.4	46.3	-	54.4	1,026	24.1	20.8	-	27.3
RACE-ETHNICITY*										
WHITE	5,349	56.5	54.8	-	58.2	5,610	34.2	32.6	-	35.8
BLACK	396	47.0	40.7	-	53.3	413	36.7	30.7	-	42.6
HISPANIC	599	36.0	31.2	-	40.8	624	18.9	15.3	-	22.4
ASIAN	251	46.9	39.8	-	54.0	266	38.4	31.3	-	45.6
DISABILITY¶										
DISABILITY	1,851	39.4	36.4	-	42.3	1,951	26.3	23.7	-	28.9
NO DISABILITY	4,916	57.2	55.5	-	59.0	5,157	35.5	33.9	-	37.2
EDUCATION										
< HIGH SCHOOL	363	32.3	26.4	-	38.2	371	21.9	16.5	-	27.3
HIGH SCHOOL	1,358	47.3	44.0	-	50.6	1,432	28.7	25.7	-	31.7
COLLEGE 1–3 YRS	1,633	53.8	50.8	-	56.8	1,710	31.3	28.4	-	34.1
COLLEGE 4+ YRS	3,456	60.8	58.7	-	62.8	3,637	40.2	38.3	-	42.2
HOUSEHOLD INCOME										
<\$25,000	1,026	42.9	38.8	-	46.9	1,075	24.9	21.2	-	28.6
\$25,000–34,999	366	38.7	32.3	-	45.1	387	26.1	20.1	-	32.0
\$35,000–49,999	668	50.6	45.6	-	55.5	679	28.3	23.8	-	32.8
\$50,000–74,999	785	54.5	50.2	-	58.9	812	36.0	31.9	-	40.0
\$75,000+	2,508	62.9	60.5	-	65.2	2,611	39.5	37.2	-	41.8
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 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.

TABLE 3.6 – FRUIT AND VEGETABLE CONSUMPTION AMONG MASSACHUSETTS ADULTS, 2019			
	CONSUMED FRUITS AND VEGETABLES FIVE OR MORE TIMES PER DAY		
	N	%	95% CI
OVERALL	6,662	17.2	16.1 - 18.4
GENDER			
MALE	3,049	15.9	14.3 - 17.6
FEMALE	3,613	18.4	16.7 - 20.0
AGE GROUP			
18–24	484	16.9	12.9 - 21.0
25–34	762	15.2	12.2 - 18.2
35–44	786	20.2	16.9 - 23.4
45–54	923	18.7	15.4 - 22.0
55–64	1,354	15.2	12.9 - 17.4
65–74	1,277	17.0	14.4 - 19.6
75 AND OLDER	910	17.5	14.3 - 20.7
RACE-ETHNICITY*			
WHITE	5,261	17.9	16.6 - 19.2
BLACK	360	16.3	11.8 - 20.7
HISPANIC	553	13.0	9.7 - 16.3
ASIAN	247	16.7	10.8 - 22.6
DISABILITY [¶]			
DISABILITY	1,743	15.7	13.5 - 17.9
NO DISABILITY	4,852	17.6	16.3 - 19.0
EDUCATION			
< HIGH SCHOOL	324	14.3	9.7 - 18.9
HIGH SCHOOL	1,270	14.6	12.1 - 17.1
COLLEGE 1–3 YRS	1,591	17.7	15.2 - 20.1
COLLEGE 4+ YRS	3,448	19.0	17.4 - 20.6
HOUSEHOLD INCOME			
<\$25,000	945	16.8	13.4 - 20.2
\$25,000–34,999	353	13.6	9.2 - 18.0
\$35,000–49,999	642	17.1	13.4 - 20.7
\$50,000–74,999	773	16.5	13.3 - 19.7
\$75,000+	2,518	19.0	17.0 - 20.9
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p>			

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.

TABLE 3.7 – CHOLESTEROL AWARENESS AMONG MASSACHUSETTS ADULTS, 2019										
	CHOLESTEROL CHECKED IN PAST 5 YEARS					HIGH CHOLESTEROL**				
	N	%	95% CI			N	%	95% CI		
OVERALL	7,146	90.6	89.6	-	91.6	6,536	31.1	29.7	-	32.5
GENDER										
MALE	3,286	89.2	87.6	-	90.7	2,961	34.3	32.2	-	36.5
FEMALE	3,860	92.0	90.8	-	93.2	3,575	28.3	26.5	-	30.1
AGE GROUP										
18–24	435	76.4	71.9	-	81.0	325	8.4	4.9	-	11.9
25–34	763	84.5	81.1	-	87.9	638	10.7	8.0	-	13.4
35–44	829	90.6	88.1	-	93.0	747	20.5	16.8	-	24.2
45–54	1,020	91.9	89.3	-	94.4	943	29.6	26.0	-	33.2
55–64	1,481	95.5	94.2	-	96.8	1,406	44.2	41.0	-	47.4
65–74	1,383	97.0	95.9	-	98.1	1,323	52.9	49.5	-	56.3
75 AND OLDER	1,024	97.4	96.3	-	98.5	971	44.3	40.3	-	48.3
RACE-ETHNICITY*										
WHITE	5,581	91.9	90.8	-	92.9	5,178	32.3	30.8	-	33.8
BLACK	403	88.1	83.5	-	92.7	360	30.5	24.7	-	36.4
HISPANIC	623	87.1	84.0	-	90.3	535	31.4	26.2	-	36.6
ASIAN	253	85.8	80.4	-	91.1	208	19.5	12.9	-	26.1
DISABILITY¶										
DISABILITY	1,848	90.5	88.4	-	92.6	1,696	41.4	38.4	-	44.4
NO DISABILITY	5,022	90.7	89.6	-	91.8	4,597	27.9	26.3	-	29.5
EDUCATION										
< HIGH SCHOOL	354	85.1	80.0	-	90.3	303	45.3	38.4	-	52.1
HIGH SCHOOL	1,418	88.5	86.4	-	90.6	1,264	30.1	27.1	-	33.0
COLLEGE 1–3 YRS	1,672	90.1	88.0	-	92.1	1,521	31.6	28.8	-	34.3
COLLEGE 4+ YRS	3,652	93.7	92.7	-	94.7	3,406	28.6	26.9	-	30.4
HOUSEHOLD INCOME										
<\$25,000	1,031	86.7	83.8	-	89.7	912	35.0	30.9	-	39.1
\$25,000–34,999	371	87.5	82.6	-	92.4	329	30.5	24.4	-	36.6
\$35,000–49,999	660	91.9	88.6	-	95.3	614	34.6	29.8	-	39.5
\$50,000–74,999	796	91.7	89.4	-	94.1	732	31.5	27.5	-	35.6
\$75,000+	2,579	92.6	91.1	-	94.0	2,416	29.2	27.0	-	31.3
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 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.

TABLE 3.8 – HYPERTENSION AWARENESS AMONG MASSACHUSETTS ADULTS, 2019									
	HIGH BLOOD PRESSURE				TAKE MEDICINE FOR HIGH BLOOD PRESSURE**				
	N	%	95% CI		N	%	95% CI		
OVERALL	7,684	28.1	26.9	- 29.3	2,593	76.7	74.5	- 78.9	
GENDER									
MALE	3,552	30.9	29.0	- 32.7	1,297	73.2	70.0	- 76.4	
FEMALE	4,132	25.5	23.9	- 27.1	1,296	80.5	77.5	- 83.6	
AGE GROUP									
18–24	559	6.0	3.8	- 8.3	†				
25–34	890	9.7	7.6	- 11.8	99	18.4	10.1	- 26.6	
35–44	904	17.4	14.3	- 20.4	158	53.0	43.3	- 62.6	
45–54	1,068	24.9	21.8	- 28.1	273	69.2	62.5	- 75.9	
55–64	1,522	39.3	36.2	- 42.3	576	85.1	81.8	- 88.5	
65–74	1,429	54.4	51.2	- 57.7	760	91.8	89.6	- 94.1	
75 AND OLDER	1,081	59.4	55.6	- 63.1	636	92.7	90.0	- 95.5	
RACE-ETHNICITY*									
WHITE	5,938	29.9	28.5	- 31.2	2,095	77.3	74.8	- 79.7	
BLACK	444	30.2	24.8	- 35.6	171	81.6	74.3	- 88.9	
HISPANIC	695	24.8	20.6	- 29.0	178	75.3	66.2	- 84.3	
ASIAN	289	11.9	7.5	- 16.4	†				
DISABILITY¶									
DISABILITY	2,015	44.8	41.9	- 47.6	1,016	80.1	76.5	- 83.7	
NO DISABILITY	5,368	22.9	21.6	- 24.2	1,498	73.9	71.0	- 76.9	
EDUCATION									
< HIGH SCHOOL	408	36.1	30.4	- 41.7	164	77.9	69.7	- 86.2	
HIGH SCHOOL	1,560	32.1	29.4	- 34.8	614	78.0	73.7	- 82.2	
COLLEGE 1–3 YRS	1,814	27.9	25.5	- 30.2	653	76.6	72.4	- 80.9	
COLLEGE 4+ YRS	3,846	23.6	22.0	- 25.1	1,146	75.0	71.6	- 78.3	
HOUSEHOLD INCOME									
<\$25,000	1,129	36.9	33.2	- 40.6	494	75.1	69.4	- 80.7	
\$25,000–34,999	407	34.5	28.8	- 40.2	172	77.7	68.9	- 86.6	
\$35,000–49,999	717	28.0	23.9	- 32.0	254	76.5	69.5	- 83.4	
\$50,000–74,999	841	31.9	28.1	- 35.6	309	82.7	77.8	- 87.7	
\$75,000+	2,707	22.4	20.5	- 24.2	707	71.0	66.5	- 75.4	
* White, Black, and Asian race categories refer to non-Hispanic ¶ See p 62 for definition of disability ** Analysis conducted among those who reported having high blood pressure † Insufficient data									

SECTION 4: IMMUNIZATION

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.

TABLE 4.1.1 – FLU VACCINE AMONG MASSACHUSETTS ADULTS, AGES 18-64, 2019										
	FLU VACCINE IN PAST YEAR, AGES 18-49					FLU VACCINE IN PAST YEAR, AGES 50-64				
	N	%	95% CI			N	%	95% CI		
OVERALL	2,586	42.1	39.8	-	44.4	2,010	53.0	50.4	-	55.7
GENDER										
MALE	1,281	35.8	32.6	-	39.0	922	49.9	46.0	-	53.9
FEMALE	1,305	48.2	44.9	-	51.5	1,088	55.8	52.2	-	59.4
AGE GROUP										
18–24	514	41.3	36.3	-	46.4					
25–34	813	38.8	34.8	-	42.8					
35–44	838	44.0	40.0	-	48.0					
45–49	421	47.6	41.7	-	53.5					
50–64						2,010	53.0	50.4	-	55.7
RACE-ETHNICITY*										
WHITE	1,709	44.2	41.4	-	47.1	1,671	53.0	50.2	-	55.9
BLACK	204	35.6	27.6	-	43.5	102	52.5	39.8	-	65.1
HISPANIC	381	40.0	33.8	-	46.2	127	55.2	44.4	-	66.0
ASIAN	207	40.0	32.1	-	48.0	†				
DISABILITY¶										
DISABILITY	453	36.7	31.2	-	42.1	499	49.1	43.6	-	54.6
NO DISABILITY	2,106	43.5	40.9	-	46.0	1,488	54.4	51.3	-	57.4
EDUCATION										
< HIGH SCHOOL	140	39.3	29.9	-	48.6	92	49.0	37.3	-	60.8
HIGH SCHOOL	492	36.9	31.9	-	42.0	398	42.9	37.1	-	48.8
COLLEGE 1–3 YRS	628	35.3	30.8	-	39.8	478	49.4	44.1	-	54.7
COLLEGE 4+ YRS	1,319	50.6	47.5	-	53.7	1,032	62.4	58.9	-	65.9
HOUSEHOLD INCOME										
<\$25,000	354	35.9	29.7	-	42.2	276	45.3	38.1	-	52.6
\$25,000–34,999	113	41.3	29.9	-	52.8	75	41.6	27.5	-	55.7
\$35,000–49,999	231	33.1	25.9	-	40.2	152	41.8	31.9	-	51.8
\$50,000–74,999	286	38.6	32.1	-	45.1	192	56.9	48.5	-	65.3
\$75,000+	1,076	48.4	44.9	-	52.0	952	57.3	53.5	-	61.1
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† Insufficient data										

TABLE 4.1.2 – FLU VACCINE AMONG MASSACHUSETTS ADULTS, AGES 65 YEARS AND OLDER, 2019

	FLU VACCINE IN PAST YEAR, AGES 65+		
	N	%	95% CI
OVERALL	2,432	67.6	65.2 - 70.0
GENDER			
MALE	1,041	67.1	63.3 - 70.8
FEMALE	1,391	68.0	64.8 - 71.2
AGE GROUP			
65–74	1,396	64.4	61.2 - 67.6
75 AND OLDER	1,036	72.1	68.4 - 75.8
RACE-ETHNICITY*			
WHITE	2,143	68.4	65.9 - 70.9
BLACK	91	66.4	53.2 - 79.6
HISPANIC	96	71.9	60.8 - 83.1
ASIAN	†		
DISABILITY¶			
DISABILITY	966	69.3	65.4 - 73.1
NO DISABILITY	1,436	66.3	63.2 - 69.5
EDUCATION			
< HIGH SCHOOL	129	67.7	57.8 - 77.7
HIGH SCHOOL	516	60.7	55.5 - 65.9
COLLEGE 1–3 YRS	571	66.2	61.5 - 70.9
COLLEGE 4+ YRS	1,210	73.5	70.6 - 76.5
HOUSEHOLD INCOME			
<\$25,000	428	65.1	59.1 - 71.1
\$25,000–34,999	199	58.9	50.4 - 67.5
\$35,000–49,999	287	64.5	57.1 - 71.9
\$50,000–74,999	319	70.1	63.7 - 76.4
\$75,000+	560	75.2	70.8 - 79.6
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p> <p>† Insufficient data</p>			

TABLE 4.1.3 – PNEUMONIA VACCINE AMONG MASSACHUSETTS ADULTS, AGES 65 YEARS AND OLDER, 2019

	EVER HAD PNEUMONIA VACCINE				
	N	%	95% CI		
OVERALL	2,300	75.0	72.8	-	77.2
GENDER					
MALE	975	70.0	66.4	-	73.6
FEMALE	1,325	78.9	76.2	-	81.6
AGE GROUP					
65–74	1,325	72.2	69.3	-	75.2
75 AND OLDER	975	78.9	75.6	-	82.2
RACE-ETHNICITY*					
WHITE	2,042	76.3	74.1	-	78.5
BLACK	82	67.4	53.0	-	81.8
HISPANIC	83	64.9	52.4	-	77.4
ASIAN	†				
DISABILITY¶					
DISABILITY	910	77.3	73.9	-	80.7
NO DISABILITY	1,366	73.1	70.2	-	76.0
EDUCATION					
< HIGH SCHOOL	118	66.6	57.0	-	76.2
HIGH SCHOOL	480	74.9	70.3	-	79.5
COLLEGE 1–3 YRS	544	79.4	75.4	-	83.3
COLLEGE 4+ YRS	1,153	74.5	71.5	-	77.5
HOUSEHOLD INCOME					
<\$25,000	405	68.4	62.5	-	74.3
\$25,000–34,999	179	76.2	68.4	-	83.9
\$35,000–49,999	280	78.5	72.8	-	84.2
\$50,000–74,999	311	79.1	73.7	-	84.6
\$75,000+	530	76.0	71.7	-	80.3

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

† Insufficient data

¶ See p 62 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.

TABLE 4.2 – HPV VACCINE AMONG MASSACHUSETTS FEMALES, AGES 18-34 YEARS, 2019

	EVER HAD HPV VACCINE					COMPLETED SERIES **				
	N	%	95% CI			N	%	95% CI		
OVERALL	222	61.5	54.2	-	68.9	120	84.7	77.4	-	92.1
AGE GROUP										
18-24	69	75.5	63.2	-	87.8	†				
25-34	153	53.9	45.1	-	62.7	76	85.1	75.8		94.3
RACE-ETHNICITY*										
WHITE	134	70.6	62.1	-	79.1	84	87.9	80.0	-	95.9
BLACK	†					†				
HISPANIC	†					†				
ASIAN	†					†				
DISABILITY¶										
DISABILITY	†					†				
NO DISABILITY	181	60.9	52.7	-	69.2	97	85.1	76.9	-	93.3
EDUCATION										
< HIGH SCHOOL	†					†				
HIGH SCHOOL	†					†				
COLLEGE 1-3 YRS	66	66.9	54.8		78.9	†				
COLLEGE 4+ YRS	103	66.2	55.7	-	76.6	66	91.9	85.6		98.3
HOUSEHOLD INCOME										
<\$25,000	†					†				
\$25,000-34,999	†					†				
\$35,000-49,999	†					†				
\$50,000-74,999	†					†				
\$75,000+	68	67.3	54.7	-	79.9	†				

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

¶ See p 62 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.

TABLE 4.3 – HEPATITIS B VACCINE AMONG MASSACHUSETTS ADULTS, 2019			
	RECEIVED 3 SHOTS HBV VACCINE		
	N	%	95% CI
OVERALL	2,713	43.1	40.7 - 45.5
GENDER			
MALE	1,219	36.7	33.3 - 40.1
FEMALE	1,494	48.9	45.7 - 52.2
AGE GROUP			
18–24	162	65.1	56.5 - 73.6
25–34	242	58.3	51.2 - 65.4
35–44	321	54.5	48.3 - 60.7
45–54	388	39.8	34.1 - 45.5
55–64	576	36.4	31.5 - 41.2
65–74	553	30.9	25.7 - 36.2
75 AND OLDER	401	14.2	10.1 - 18.4
RACE-ETHNICITY*			
WHITE	2,131	42.2	39.5 - 44.9
BLACK	175	45.4	36.1 - 54.8
HISPANIC	218	44.5	36.6 - 52.3
ASIAN	81	54.2	41.6 - 66.8
DISABILITY [¶]			
DISABILITY	747	38.8	34.1 - 43.5
NO DISABILITY	1,942	44.6	41.8 - 47.4
EDUCATION			
< HIGH SCHOOL	128	30.6	21.0 - 40.1
HIGH SCHOOL	547	34.6	29.5 - 39.6
COLLEGE 1–3 YRS	673	47.9	43.1 - 52.6
COLLEGE 4+ YRS	1,348	48.4	45.2 - 51.6
HOUSEHOLD INCOME			
<\$25,000	400	37.6	31.1 - 44.0
\$25,000–34,999	145	28.6	19.1 - 38.0
\$35,000–49,999	277	41.7	34.4 - 48.9
\$50,000–74,999	305	41.2	34.4 - 48.1
\$75,000+	980	48.8	44.9 - 52.6
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p>			

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.

TABLE 4.4 – SHINGLES VACCINE AMONG MASSACHUSETTS ADULTS, AGE 60+, 2019			
	EVER HAD SHINGLES VACCINE		
	N	%	95% CI
OVERALL	1,485	42.3	39.1 - 45.6
GENDER			
MALE	639	39.0	33.9 - 44.0
FEMALE	846	45.1	40.8 - 49.3
AGE GROUP			
60-69	706	35.0	30.6 - 39.4
70-79	508	54.1	48.5 - 59.6
80 AND OLDER	271	43.8	35.9 - 51.7
RACE-ETHNICITY*			
WHITE	1,317	43.8	40.5 - 47.2
BLACK	56	34.3	17.8 - 50.8
HISPANIC	55	23.0	10.7 - 35.3
ASIAN	†		
DISABILITY¶			
DISABILITY	528	40.5	34.9 - 46.2
NO DISABILITY	943	43.3	39.3 - 47.3
EDUCATION			
< HIGH SCHOOL	69	28.6	16.0 - 41.2
HIGH SCHOOL	293	40.6	33.3 - 48.0
COLLEGE 1–3 YRS	366	38.4	32.4 - 44.5
COLLEGE 4+ YRS	755	49.4	45.0 - 53.7
HOUSEHOLD INCOME			
<\$25,000	237	29.3	21.9 - 36.7
\$25,000–34,999	113	32.7	22.7 - 42.8
\$35,000–49,999	175	40.2	30.7 - 49.7
\$50,000–74,999	181	51.5	42.6 - 60.5
\$75,000+	426	46.3	40.6 - 52.0
* White, Black, and Asian race categories refer to non-Hispanic ¶ See p 62 for definition of disability † Insufficient data			

SECTION 5: CHRONIC HEALTH CONDITIONS

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, 2019

	PRE-DIABETES				DIABETES			
	N	%	95% CI		N	%	95% CI	
OVERALL	3,233	7.1	6.2	- 8.1	7,710	8.4	7.6	- 9.2
GENDER								
MALE	1,426	6.7	5.3	- 8.1	3,565	9.3	8.1	- 10.5
FEMALE	1,807	7.5	6.1	- 8.9	4,145	7.6	6.6	- 8.6
AGE GROUP								
18–24	†				†			
25–34	†				891	1.3	0.6	- 2.0
35–44	421	5.6	3.0	- 8.1	905	3.6	2.3	- 4.9
45–54	485	7.9	5.3	- 10.4	1,068	7.5	5.5	- 9.5
55–64	644	10.0	7.4	- 12.7	1,527	12.6	10.3	- 14.8
65–74	576	16.0	11.9	- 20.1	1,437	18.1	15.4	- 20.7
75 AND OLDER	430	12.2	8.6	- 15.7	1,087	19.1	16.0	- 22.3
RACE-ETHNICITY*								
WHITE	2,524	6.6	5.6	- 7.7	5,961	7.9	7.1	- 8.7
BLACK	192	11.5	5.8	- 17.2	445	12.8	8.6	- 16.9
HISPANIC	273	10.0	6.4	- 13.6	697	10.6	7.7	- 13.5
ASIAN	†				†			
DISABILITY [¶]								
DISABILITY	768	12.1	9.6	- 14.6	2,026	17.1	15.1	- 19.2
NO DISABILITY	2,362	5.9	4.8	- 7.0	5,382	5.4	4.7	- 6.2
EDUCATION								
< HIGH SCHOOL	141	8.7	4.3	- 13.0	410	16.4	11.9	- 20.8
HIGH SCHOOL	627	8.7	6.3	- 11.0	1,562	10.3	8.7	- 12.0
COLLEGE 1–3 YRS	780	6.6	4.9	- 8.4	1,822	8.0	6.6	- 9.4
COLLEGE 4+ YRS	1,664	6.3	5.0	- 7.6	3,858	5.3	4.6	- 6.1
HOUSEHOLD INCOME								
<\$25,000	412	11.2	7.9	- 14.6	1,133	14.0	11.5	- 16.4
\$25,000–34,999	173	8.0	3.3	- 12.7	405	9.4	6.3	- 12.5
\$35,000–49,999	305	11.8	6.9	- 16.6	715	10.9	7.5	- 14.2
\$50,000–74,999	356	7.2	4.4	- 10.1	847	8.6	6.4	- 10.8
\$75,000+	1,202	5.5	4.1	- 6.8	2,712	5.5	4.5	- 6.5

* White, Black, and Asian race categories refer to non-Hispanic
[¶] See p 62 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, 2019										
	EVER HAD ASTHMA					CURRENTLY HAVE ASTHMA				
	N	%	95% CI			N	%	95% CI		
OVERALL	7,686	15.5	14.4	-	16.5	7,658	10.3	9.4	-	11.2
GENDER										
MALE	3,559	12.6	11.2	-	14.0	3,540	7.2	6.2	-	8.3
FEMALE	4,127	18.2	16.6	-	19.7	4,118	13.1	11.8	-	14.5
AGE GROUP										
18–24	557	21.1	17.1	-	25.1	553	13.5	10.1	-	17.0
25–34	889	17.4	14.4	-	20.5	886	9.3	7.0	-	11.5
35–44	904	14.3	11.8	-	16.8	902	10.3	8.1	-	12.5
45–54	1,069	14.9	12.2	-	17.5	1,067	11.3	8.9	-	13.7
55–64	1,524	14.1	11.9	-	16.2	1,520	9.3	7.6	-	11.1
65–74	1,430	14.1	11.7	-	16.4	1,425	10.0	8.0	-	12.0
75 AND OLDER	1,080	11.9	9.5	-	14.3	1,075	8.8	6.7	-	11.0
RACE-ETHNICITY*										
WHITE	5,938	15.6	14.4	-	16.9	5,915	10.5	9.4	-	11.5
BLACK	444	16.4	11.9	-	20.9	443	12.7	8.6	-	16.9
HISPANIC	696	18.0	14.4	-	21.6	693	11.2	8.3	-	14.1
ASIAN	288	9.5	6.0	-	12.9	288	5.0	2.5	-	7.5
DISABILITY†										
DISABILITY	2,014	24.9	22.4	-	27.5	2,003	18.4	16.1	-	20.7
NO DISABILITY	5,373	12.6	11.4	-	13.7	5,357	7.9	6.9	-	8.8
EDUCATION										
< HIGH SCHOOL	408	18.9	14.3	-	23.4	408	13.8	9.9	-	17.8
HIGH SCHOOL	1,555	15.5	13.2	-	17.7	1,545	9.6	7.8	-	11.3
COLLEGE 1–3 YRS	1,815	17.9	15.7	-	20.1	1,808	12.0	10.1	-	13.9
COLLEGE 4+ YRS	3,850	13.1	11.8	-	14.4	3,839	8.7	7.6	-	9.9
HOUSEHOLD INCOME										
<\$25,000	1,129	20.0	16.8	-	23.2	1,123	14.6	11.7	-	17.5
\$25,000–34,999	405	11.3	7.9	-	14.6	403	8.3	5.3	-	11.3
\$35,000–49,999	713	16.1	12.7	-	19.4	711	10.5	7.7	-	13.4
\$50,000–74,999	846	16.2	13.0	-	19.4	844	10.7	8.1	-	13.3
\$75,000+	2,708	13.1	11.5	-	14.8	2,699	8.1	6.8	-	9.4
* White, Black, and Asian race categories refer to non-Hispanic										
† See p 62 for definition of disability										
‡ 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.

TABLE 5.3 – CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AMONG MASSACHUSETTS ADULTS, 2019			
	EVER DIAGNOSED WITH COPD		
	N	%	95% CI
OVERALL	7,676	4.9	4.4 - 5.5
GENDER			
MALE	3,546	4.5	3.8 - 5.3
FEMALE	4,130	5.3	4.5 - 6.1
AGE GROUP			
18–24	†		
25–34	†		
35–44	†		
45–54	1,067	4.2	2.8 - 5.5
55–64	1,520	5.4	4.2 - 6.7
65–74	1,431	12.1	9.8 - 14.4
75 AND OLDER	1,076	12.8	10.3 - 15.3
RACE-ETHNICITY*			
WHITE	5,931	5.7	5.0 - 6.3
BLACK	†		
HISPANIC	693	3.6	1.9 - 5.2
ASIAN	†		
DISABILITY [¶]			
DISABILITY	2,002	12.4	10.7 - 14.2
NO DISABILITY	5,374	2.6	2.2 - 3.1
EDUCATION			
< HIGH SCHOOL	407	9.3	6.5 - 12.0
HIGH SCHOOL	1,551	6.7	5.4 - 8.0
COLLEGE 1–3 YRS	1,812	5.7	4.6 - 6.8
COLLEGE 4+ YRS	3,848	2.3	1.8 - 2.8
HOUSEHOLD INCOME			
<\$25,000	1,123	9.5	7.5 - 11.6
\$25,000–34,999	407	8.4	5.3 - 11.4
\$35,000–49,999	713	4.9	3.3 - 6.5
\$50,000–74,999	845	4.0	2.6 - 5.4
\$75,000+	2,705	2.7	2.0 - 3.3
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p> <p>† Insufficient data</p>			

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, 2019										
	EVER DIAGNOSED WITH MYOCARDIAL INFARCTION					EVER DIAGNOSED WITH ANGINA OR CORONARY HEART DISEASE				
	N	%	95% CI			N	%	95% CI		
OVERALL	5,997	5.7	5.0	-	6.5	5,969	5.1	4.4	-	5.8
GENDER										
MALE	2,688	7.7	6.4	-	9.0	2,671	6.8	5.6	-	8.0
FEMALE	3,309	4.0	3.2	-	4.8	3,298	3.7	2.9	-	4.5
AGE GROUP										
35–44	†					†				
45–54	1,067	2.5	1.4		3.6	1,063	2.4	1.3		3.5
55–64	1,522	5.3	3.8	-	6.8	1,516	4.1	2.8	-	5.3
65–74	1,430	9.4	7.2	-	11.6	1,415	8.0	6.0	-	9.9
75 AND OLDER	1,075	13.8	10.8	-	16.9	1,071	14.9	12.0	-	17.8
RACE-ETHNICITY*										
WHITE	4,896	5.8	5.0	-	6.6	4,878	5.5	4.7	-	6.3
BLACK	†					†				
HISPANIC	446	7.6	4.0	-	11.2	439	6.0	2.9		9.1
ASIAN	†					†				
DISABILITY¶										
DISABILITY	1,718	12.3	10.2	-	14.4	1,702	11.8	9.8	-	13.9
NO DISABILITY	4,059	3.3	2.6	-	4.0	4,048	2.8	2.2	-	3.4
EDUCATION										
< HIGH SCHOOL	317	14.3	9.8	-	18.9	312	11.3	7.3	-	15.3
HIGH SCHOOL	1,223	8.1	6.2	-	9.9	1,206	6.5	4.9	-	8.1
COLLEGE 1–3 YRS	1,378	4.9	3.8	-	6.1	1,375	5.3	4.0	-	6.6
COLLEGE 4+ YRS	3,052	2.7	2.1	-	3.3	3,049	2.7	2.1	-	3.2
HOUSEHOLD INCOME										
<\$25,000	889	11.5	8.4	-	14.5	888	9.6	7.0	-	12.3
\$25,000–34,999	329	6.9	3.7		10.2	326	5.9	2.8		9.0
\$35,000–49,999	560	7.1	4.1	-	10.1	556	6.3	3.6	-	9.0
\$50,000–74,999	652	7.2	4.5	-	9.9	651	7.4	4.9	-	9.9
\$75,000+	2,197	1.9	1.3	-	2.5	2,191	2.1	1.5	-	2.7
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† Insufficient data										

**TABLE 5.4.2 – STROKE AMONG MASSACHUSETTS ADULTS,
AGES 35 YEARS AND OLDER, 2019**

	EVER DIAGNOSED WITH STROKE		
	N	%	95% CI
OVERALL	6,016	3.2	2.6 - 3.7
GENDER			
MALE	2,700	3.3	2.5 - 4.1
FEMALE	3,316	3.0	2.3 - 3.7
AGE GROUP			
35–44	†		
45–54	1,069	2.2	1.1 - 3.3
55–64	1,524	4.3	3.0 - 5.5
65–74	1,433	3.2	2.2 - 4.3
75 AND OLDER	1,085	6.5	4.7 - 8.4
RACE-ETHNICITY*			
WHITE	4,904	3.1	2.6 - 3.6
BLACK	311	3.9	1.7 - 6.1
HISPANIC	447	4.7	2.0 - 7.4
ASIAN	†		
DISABILITY¶			
DISABILITY	1,731	7.9	6.4 - 9.5
NO DISABILITY	4,065	1.4	0.9 - 1.8
EDUCATION			
< HIGH SCHOOL	316	8.4	5.1 - 11.8
HIGH SCHOOL	1,228	3.1	2.1 - 4.1
COLLEGE 1–3 YRS	1,382	3.3	2.4 - 4.3
COLLEGE 4+ YRS	3,063	1.7	1.2 - 2.1
HOUSEHOLD INCOME			
<\$25,000	897	7.7	5.5 - 9.9
\$25,000–34,999	330	5.5	2.7 - 8.3
\$35,000–49,999	562	3.1	1.6 - 4.6
\$50,000–74,999	651	3.2	1.6 - 4.8
\$75,000+	2,203	1.1	0.7 - 1.5

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

¶ See p 62 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, 2019

	EVER DIAGNOSED WITH ARTHRITIS			LIMITATIONS DUE TO ARTHRITIS		
	N	%	95% CI	N	%	95% CI
OVERALL	7,657	24.5	23.4 - 25.7	7,621	9.8	9.0 - 10.5
GENDER						
MALE	3,533	20.6	19.0 - 22.3	3,519	8.1	7.0 - 9.2
FEMALE	4,124	28.1	26.4 - 29.8	4,102	11.3	10.2 - 12.4
AGE GROUP						
18–24	557	2.2	1.0 - 3.5	†		
25–34	886	6.7	4.4 - 9.0	885	3.2	1.5 - 4.8
35–44	903	14.5	11.7 - 17.3	901	6.1	4.3 - 7.9
45–54	1,063	22.7	19.6 - 25.9	1,061	8.4	6.4 - 10.5
55–64	1,509	35.7	32.8 - 38.7	1,504	15.9	13.6 - 18.3
65–74	1,428	47.5	44.2 - 50.8	1,418	19.1	16.5 - 21.6
75 AND OLDER	1,083	56.6	52.9 - 60.4	1,069	19.4	16.5 - 22.3
RACE-ETHNICITY*						
WHITE	5,928	27.1	25.8 - 28.5	5,898	10.5	9.6 - 11.4
BLACK	438	23.3	18.2 - 28.4	436	8.8	5.7 - 11.9
HISPANIC	691	19.5	15.7 - 23.3	690	9.8	7.1 - 12.6
ASIAN	285	7.7	3.8 - 11.7	†		
DISABILITY¶						
DISABILITY	2,003	47.0	44.1 - 49.9	1,980	26.7	24.3 - 29.1
NO DISABILITY	5,354	17.0	15.9 - 18.2	5,341	4.2	3.5 - 4.8
EDUCATION						
< HIGH SCHOOL	406	29.1	23.9 - 34.3	405	13.7	10.1 - 17.4
HIGH SCHOOL	1,552	28.5	25.8 - 31.2	1,545	12.0	10.1 - 13.8
COLLEGE 1–3 YRS	1,802	25.9	23.5 - 28.2	1,789	10.1	8.5 - 11.7
COLLEGE 4+ YRS	3,839	20.0	18.7 - 21.4	3,824	7.2	6.3 - 8.0
HOUSEHOLD INCOME						
<\$25,000	1,121	33.4	29.8 - 36.9	1,109	17.0	14.3 - 19.6
\$25,000–34,999	405	26.6	21.6 - 31.5	405	9.6	6.4 - 12.7
\$35,000–49,999	713	29.7	25.6 - 33.8	709	12.1	9.1 - 15.0
\$50,000–74,999	842	25.3	21.9 - 28.7	838	10.6	8.1 - 13.1
\$75,000+	2,701	20.5	18.6 - 22.3	2,695	7.0	5.8 - 8.2

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

¶ See p 62 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.

TABLE 5.6 – CANCER DIAGNOSIS AMONG MASSACHUSETTS ADULTS, 2019			
	EVER DIAGNOSED WITH CANCER		
	N	%	95% CI
OVERALL	7,680	12.6	11.8 - 13.4
GENDER			
MALE	3,550	11.1	10.0 - 12.3
FEMALE	4,130	14.0	12.8 - 15.2
AGE GROUP			
18–24	†		-
25–34	892	2.2	1.0 - 3.4
35–44	904	3.6	2.1 - 5.1
45–54	1,064	8.9	6.8 - 10.9
55–64	1,519	18.5	16.2 - 20.9
65–74	1,428	29.2	26.1 - 32.2
75 AND OLDER	1,083	37.1	33.5 - 40.7
RACE-ETHNICITY*			
WHITE	5,932	15.6	14.6 - 16.7
BLACK	446	4.5	2.3 - 6.7
HISPANIC	693	5.6	3.1 - 8.0
ASIAN	†		-
DISABILITY [¶]			
DISABILITY	2,007	20.8	18.6 - 22.9
NO DISABILITY	5,371	10.3	9.4 - 11.2
EDUCATION			
< HIGH SCHOOL	404	12.8	9.1 - 16.6
HIGH SCHOOL	1,557	11.6	9.9 - 13.4
COLLEGE 1–3 YRS	1,813	12.7	11.1 - 14.4
COLLEGE 4+ YRS	3,848	13.2	12.1 - 14.3
HOUSEHOLD INCOME			
<\$25,000	1,122	12.2	9.9 - 14.5
\$25,000–34,999	406	16.4	11.9 - 20.8
\$35,000–49,999	714	15.1	11.8 - 18.4
\$50,000–74,999	843	14.9	12.3 - 17.6
\$75,000+	2,703	10.9	9.7 - 12.1
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p> <p>† Insufficient data</p>			

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.

TABLE 5.7 – DEPRESSION AMONG MASSACHUSETTS ADULTS, 2019			
	EVER DIAGNOSED WITH DEPRESSION		
	N	%	95% CI
OVERALL	7,647	18.5	17.4 - 19.7
GENDER			
MALE	3,528	13.6	12.1 - 15.1
FEMALE	4,119	23.0	21.3 - 24.8
AGE GROUP			
18–24	555	23.9	19.5 - 28.4
25–34	884	23.1	19.7 - 26.6
35–44	895	18.8	15.8 - 21.8
45–54	1,063	17.4	14.8 - 20.0
55–64	1,517	18.1	15.9 - 20.3
65–74	1,423	16.7	14.3 - 19.0
75 AND OLDER	1,079	10.0	7.8 - 12.3
RACE-ETHNICITY*			
WHITE	5,912	19.8	18.4 - 21.1
BLACK	443	14.9	10.3 - 19.5
HISPANIC	690	20.5	16.8 - 24.3
ASIAN	286	8.3	4.4 - 12.1
DISABILITY [¶]			
DISABILITY	1,998	35.0	32.1 - 37.8
NO DISABILITY	5,354	13.3	12.1 - 14.5
EDUCATION			
< HIGH SCHOOL	406	24.2	19.2 - 29.2
HIGH SCHOOL	1,550	17.9	15.6 - 20.3
COLLEGE 1–3 YRS	1,808	20.3	17.8 - 22.8
COLLEGE 4+ YRS	3,827	16.4	15.0 - 17.9
HOUSEHOLD INCOME			
<\$25,000	1,121	28.8	25.3 - 32.4
\$25,000–34,999	404	19.0	13.6 - 24.4
\$35,000–49,999	713	19.0	15.0 - 23.0
\$50,000–74,999	844	17.2	13.9 - 20.4
\$75,000+	2,693	15.9	14.1 - 17.7
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p>			

SECTION 6: OTHER TOPICS

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 2019, 0.3% of Massachusetts adults self-identified as transgender. A table of this data is not presented due to the low prevalence

TABLE 6.1 - SEXUAL ORIENTATION AMONG MASSACHUSETTS ADULTS, 2019			
	SELF-IDENTIFIED AS HOMOSEXUAL, BISEXUAL OR OTHER		
	N	%	95% CI
OVERALL	6,627	6.8	6.0 - 7.7
GENDER			
MALE	3,011	5.8	4.6 - 6.9
FEMALE	3,616	7.8	6.6 - 9.0
AGE GROUP			
18–24	440	16.1	12.0 - 20.1
25–34	658	13.1	9.8 - 16.3
35–44	755	5.8	4.1 - 7.6
45–54	926	5.4	3.7 - 7.1
55–64	1,363	3.9	2.7 - 5.1
65–74	1,334	3.0	1.9 - 4.0
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	5,226	7.0	6.1 - 8.0
BLACK	381	7.7	3.6 - 11.7
HISPANIC	565	5.8	3.3 - 8.2
ASIAN	†		
DISABILITY [¶]			
DISABILITY	1,825	9.0	6.9 - 11.1
NO DISABILITY	4,722	6.1	5.2 - 7.0
EDUCATION			
< HIGH SCHOOL	†		-
HIGH SCHOOL	1,347	7.0	5.3 - 8.7
COLLEGE 1–3 YRS	1,608	7.6	5.7 - 9.5
COLLEGE 4+ YRS	3,311	6.8	5.7 - 7.9
HOUSEHOLD INCOME			
<\$25,000	993	7.8	5.5 - 10.2
\$25,000–34,999	357	9.7	4.9 - 14.5
\$35,000–49,999	650	9.7	6.1 - 13.3
\$50,000–74,999	747	7.5	5.1 - 10.0
\$75,000+	2,390	6.0	4.8 - 7.2
* White, Black, and Asian race categories refer to non-Hispanic ¶ See p 62 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.

TABLE 6.2 – HIV TESTING AMONG MASSACHUSETTS ADULTS, AGES 18-64, 2019										
	EVER TESTED FOR HIV					TESTED FOR HIV IN PAST YEAR				
	N	%	95% CI			N	%	95% CI		
OVERALL	4,375	46.0	44.1	-	47.8	3,759	11.3	10.0	-	12.6
GENDER										
MALE	2,110	42.8	40.2	-	45.4	1,823	10.4	8.7	-	12.0
FEMALE	2,265	49.0	46.5	-	51.6	1,936	12.2	10.2	-	14.1
AGE GROUP										
18–24	493	28.9	24.2	-	33.6	460	15.5	11.4	-	19.5
25–34	780	55.6	51.3	-	59.9	681	18.5	15.1	-	21.9
35–44	804	56.3	52.1	-	60.5	675	12.0	9.2	-	14.8
45–54	943	50.5	46.6	-	54.4	799	6.7	4.8	-	8.6
55–64	1,355	36.4	33.3	-	39.6	1,144	4.1	2.7	-	5.6
RACE-ETHNICITY*										
WHITE	3,206	43.4	41.3	-	45.5	2,790	9.4	8.0	-	10.8
BLACK	297	58.2	51.1	-	65.3	251	21.2	14.9	-	27.5
HISPANIC	497	61.9	56.5	-	67.4	387	20.6	15.6	-	25.5
ASIAN	231	31.9	25.0	-	38.9	207	8.1	3.7	-	12.5
DISABILITY¶										
DISABILITY	908	56.7	52.6	-	60.9	722	18.3	14.5	-	22.0
NO DISABILITY	3,421	43.3	41.3	-	45.3	3,000	9.8	8.5	-	11.1
EDUCATION										
< HIGH SCHOOL	230	57.7	49.9	-	65.5	170	17.7	11.0	-	24.4
HIGH SCHOOL	857	41.6	37.7	-	45.5	725	9.3	6.8	-	11.9
COLLEGE 1–3 YRS	1,055	41.5	37.9	-	45.1	919	11.8	9.2	-	14.4
COLLEGE 4+ YRS	2,218	48.7	46.3	-	51.2	1,933	10.7	9.1	-	12.3
HOUSEHOLD INCOME										
<\$25,000	608	60.2	55.0	-	65.4	473	21.7	16.7	-	26.7
\$25,000–34,999	180	52.3	42.7	-	61.8	151	18.9	9.7	-	28.2
\$35,000–49,999	371	46.1	39.8	-	52.4	333	10.2	6.6	-	13.9
\$50,000–74,999	460	44.7	39.3	-	50.0	410	11.6	7.8	-	15.3
\$75,000+	1,922	45.5	42.8	-	48.2	1,684	8.3	6.8	-	9.9
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† 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, 2019										
	SEXUAL VIOLENCE, WOMEN					SEXUAL VIOLENCE, MEN				
	N	%	95% CI			N	%	95% CI		
OVERALL	1,532	20.6	18.0	-	23.1	1,308	7.9	6.2	-	9.7
AGE GROUP										
18–24	85	24.1	14.4	-	33.8	128	8.8	3.7	-	13.9
25–34	145	26.4	18.6	-	34.2	†				
35–44	137	28.7	19.4	-	37.9	167	10.4	5.1	-	15.7
45–54	214	16.2	10.7	-	21.7	161	6.3	2.6	-	10.1
55–64	324	23.1	18.1	-	28.2	262	7.3	4.1	-	10.4
65–74	334	14.6	10.7	-	18.6	254	7.1	3.5	-	10.8
75 AND OLDER	252	6.8	3.7	-	10.0	†				
RACE-ETHNICITY*										
WHITE	1,252	21.0	18.2	-	23.8	1,016	8.0	6.0	-	10.1
BLACK	82	16.6	7.4	-	25.8	†				
HISPANIC	114	23.9	12.8	-	34.9	†				
ASIAN	†					†				
DISABILITY¶										
DISABILITY	437	25.5	20.0	-	31.0	343	13.2	8.4	-	18.0
NO DISABILITY	1,077	18.8	15.9	-	21.7	949	6.3	4.5	-	8.0
EDUCATION										
< HIGH SCHOOL	†					†				
HIGH SCHOOL	288	14.7	9.2	-	20.1	283	7.1	3.5	-	10.7
COLLEGE 1–3 YRS	351	18.7	13.9	-	23.5	328	10.6	6.7	-	14.5
COLLEGE 4+ YRS	809	24.4	20.8	-	28.0	618	6.9	4.5	-	9.3
HOUSEHOLD INCOME										
<\$25,000	260	25.4	17.8	-	33.1	177	10.0	4.3	-	15.7
\$25,000–34,999	†					†				
\$35,000–49,999	130	20.1	11.3	-	28.9	†				
\$50,000–74,999	182	20.8	13.8	-	27.8	156	6.7	2.9	-	10.6
\$75,000+	512	21.4	17.2	-	25.7	516	9.9	6.6	-	13.2
* White, Black, and Asian race categories refer to non-Hispanic										
¶ See p 62 for definition of disability										
† Insufficient data										

SECTION 6.4: TEXTING AND DRIVING

Respondents were asked how frequently they texted or emailed while driving a car or other vehicle in the previous 30 days. Presented here is the percent of adults who reported texting or emailing while driving at least occasionally.

TABLE 6.4 – TEXTING AND DRIVING AMONG MASSACHUSETTS ADULTS, 2019				
	TEXT OR EMAIL WHILE DRIVING			
	N	%	95% CI	
OVERALL	3,066	33.2	31.1	- 35.3
GENDER				
MALE	1,433	36.9	33.8	- 40.1
FEMALE	1,633	29.7	26.8	- 32.6
AGE GROUP				
18–24	214	52.2	44.6	- 59.7
25–34	315	51.6	45.3	- 58.0
35–44	341	44.7	38.7	- 50.8
45–54	433	34.2	29.1	- 39.3
55–64	642	21.6	18.0	- 25.3
65–74	612	12.4	9.4	- 15.4
75 AND OLDER	415	4.7	2.7	- 6.8
RACE-ETHNICITY*				
WHITE	2,454	34.4	32.0	- 36.8
BLACK	155	31.0	22.1	- 39.9
HISPANIC	249	25.8	19.7	- 31.9
ASIAN	95	39.6	28.5	- 50.7
DISABILITY [¶]				
DISABILITY	753	25.1	21.1	- 29.2
NO DISABILITY	2,269	35.6	33.1	- 38.1
EDUCATION				
< HIGH SCHOOL	135	19.3	10.9	- 27.7
HIGH SCHOOL	601	25.5	20.9	- 30.1
COLLEGE 1–3 YRS	736	34.0	29.8	- 38.3
COLLEGE 4+ YRS	1,582	39.6	36.6	- 42.6
HOUSEHOLD INCOME				
<\$25,000	420	22.4	16.9	- 27.9
\$25,000–34,999	161	15.6	8.9	- 22.3
\$35,000–49,999	299	32.0	25.3	- 38.7
\$50,000–74,999	364	37.2	30.8	- 43.6
\$75,000+	1,137	43.7	40.1	- 47.2
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 62 for definition of disability</p>				

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. “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 six or more times.

TABLE 6.5.1 – OPIOID AMONG MASSACHUSETTS ADULTS, 2019

	EVER PRESCRIBED OPIATE			NON-MEDICAL USE OF OPIATE		
	N	%	95% CI	N	%	95% CI
OVERALL	3,306	40.0	37.9 - 42.1	3,325	1.1	0.6 - 1.5
GENDER						
MALE	1,478	40.7	37.5 - 43.9	1,489	1.6	0.7 - 2.5
FEMALE	1,828	39.3	36.5 - 42.1	†		-
AGE GROUP						
18–24	206	21.7	15.8 - 27.5	†		
25–34	331	41.0	34.9 - 47.2	†		
35–44	392	41.0	35.5 - 46.4	†		
45–54	479	42.9	37.7 - 48.1	†		
55–64	673	48.6	44.0 - 53.2	†		
65–74	656	48.5	43.4 - 53.6	†		
75 AND OLDER	488	30.1	25.1 - 35.0	†		
RACE-ETHNICITY*						
WHITE	2,606	44.5	42.1 - 46.9	†		-
BLACK	201	35.4	26.9 - 43.9	†		
HISPANIC	261	24.5	18.4 - 30.6	†		
ASIAN	116	17.3	8.9 - 25.7	†		
DISABILITY [¶]						
DISABILITY	905	49.3	45.0 - 53.7	†		-
NO DISABILITY	2,368	37.2	34.9 - 39.6	†		-
EDUCATION						
< HIGH SCHOOL	152	28.6	19.9 - 37.3	†		
HIGH SCHOOL	656	32.3	28.0 - 36.7	†		-
COLLEGE 1–3 YRS	817	43.8	39.5 - 48.1	†		-
COLLEGE 4+ YRS	1,664	45.3	42.4 - 48.1	†		-
HOUSEHOLD INCOME						
<\$25,000	470	31.5	26.4 - 36.6	†		
\$25,000–34,999	181	35.4	25.2 - 45.6	†		
\$35,000–49,999	323	44.0	37.0 - 51.0	†		
\$50,000–74,999	364	42.8	36.6 - 48.9	†		
\$75,000+	1,225	46.0	42.5 - 49.4	†		-

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

¶ See p 62 for definition of disability

† Insufficient data

TABLE 6.5.2 – MARIJUANA USE AMONG MASSACHUSETTS ADULTS, 2019

	EVER PRESCRIBED MARIJUANA					NON-MEDICAL USE OF MARIJUANA				
	N	%	95% CI			N	%	95% CI		
OVERALL	3,346	2.1	1.5	-	2.7	3,320	13.9	12.4	-	15.5
GENDER										
MALE	1,500	2.5	1.5	-	3.6	1,483	18.4	15.8	-	21.0
FEMALE	1,846	1.7	1.1	-	2.3	1,837	9.9	8.2	-	11.7
AGE GROUP										
18–24	†					205	28.4	21.6	-	35.2
25–34	337	3.8	1.6	-	6.0	328	27.5	22.0	-	33.1
35–44	†					394	11.7	8.3	-	15.1
45–54	†					481	11.1	7.8	-	14.4
55–64	678	1.8	0.8	-	2.9	674	10.6	7.6	-	13.6
65–74	†					657	4.1	2.6	-	5.7
75 AND OLDER	†					†				
RACE-ETHNICITY*										
WHITE	2,642	2.2	1.5	-	2.9	2,623	15.1	13.2	-	17.0
BLACK	†					199	9.8	4.7	-	15.0
HISPANIC	†					260	9.6	5.2	-	14.1
ASIAN	†					116	12.1	5.1	-	19.1
DISABILITY¶										
DISABILITY	920	3.6	2.1	-	5.2	914	15.4	12.0	-	18.8
NO DISABILITY	2,393	1.5	0.9	-	2.0	2,373	13.5	11.7	-	15.3
EDUCATION										
< HIGH SCHOOL	†					152	12.5	5.8	-	19.1
HIGH SCHOOL	†					662	13.5	10.4	-	16.6
COLLEGE 1–3 YRS						814	17.6	14.1	-	21.1
COLLEGE 4+ YRS	1,685	2.6	1.7	-	3.5	1,672	11.9	10.0	-	13.9
HOUSEHOLD INCOME										
<\$25,000	†					475	13.4	9.5	-	17.3
\$25,000–34,999	†					181	13.7	7.0	-	20.5
\$35,000–49,999	†					326	20.6	14.2	-	26.9
\$50,000–74,999	†					370	15.6	11.0	-	20.2
\$75,000+	1,230	1.6	0.8	-	2.4	1,231	13.9	11.4	-	16.3

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

¶ See p 62 for definition of disability

† Insufficient data

APPENDIX

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019															
	FAIR OR POOR HEALTH			POOR MENTAL HEALTH			POOR PHYSICAL HEALTH			NO HEALTH INSURANCE (AGES 18-64)			PERSONAL DOCTOR		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	13.0	11.8	- 14.1	12.5	11.3	- 13.7	8.9	7.9	- 9.8	4.5	3.5	- 5.4	87.9	86.7	- 89.0
GENDER															
MALE	13.7	12.2	- 15.2	10.5	9.0	- 11.9	9.1	7.8	- 10.3	7.2	5.6	- 8.8	83.1	81.5	- 84.8
FEMALE	13.4	12.1	- 14.8	13.6	12.0	- 15.1	9.3	8.1	- 10.4	2.3	1.5	- 3.1	89.8	88.4	- 91.2
RACE-ETHNICITY*															
WHITE	10.9	9.9	- 11.9	13.6	12.2	- 15.0	9.1	8.0	- 10.1	3.2	2.2	- 4.2	88.7	87.5	- 90.0
BLACK	19.3	14.4	- 24.2	12.5	11.4	- 13.5	8.5	5.4	- 11.6	9.0	8.7	- 9.4	84.7	80.3	- 89.0
HISPANIC	31.4	27.1	- 35.7	9.9	7.3	- 12.5	14.4	11.1	- 17.8	8.8	6.2	- 11.4	80.1	76.9	- 83.3
ASIAN	6.1	3.9	8.3	3.4	3.2	3.5	†			†	-		82.9	81.2	84.6
DISABILITY¶															
DISABILITY	35.8	32.6	- 39.1	30.3	26.8	- 33.8	25.4	22.5	- 28.3	6.5	4.3	8.7	85.1	82.3	- 88.0
NO DISABILITY	6.2	5.4	- 7.1	7.4	6.4	- 8.4	3.9	3.2	- 4.7	4.1	3.2	5.0	87.2	86.0	- 88.3
EDUCATION															
< HIGH SCHOOL	36.7	31.0	- 42.3	17.8	12.8	- 22.8	21.1	16.2	- 25.9	15.3	15.1	- 15.6	74.8	69.5	- 80.1
HIGH SCHOOL	17.6	15.4	- 19.8	14.2	11.8	- 16.6	11.1	9.2	- 12.9	7.2	5.3	- 9.1	85.0	82.7	- 87.4
COLLEGE 1–3 YRS	12.3	10.4	- 14.2	13.7	11.5	- 15.8	9.9	8.2	- 11.5	3.0	1.9	- 4.0	88.2	86.3	- 90.1
COLLEGE 4+ YRS	6.0	5.1	- 6.9	8.5	7.1	- 9.8	5.0	4.1	- 5.9	1.8	1.1	- 2.5	89.3	87.9	90.6
HOUSEHOLD INCOME															
<\$25,000	31.4	27.6	- 35.2	22.1	18.4	- 25.8	20.8	17.6	- 23.9	8.6	5.9	- 11.3	84.9	82.1	- 87.7
\$25,000–34,999	23.4	16.1	- 30.7	16.4	14.9	- 17.8	10.8	5.5	- 16.2	14.3	14.1	- 14.6	71.6	64.9	- 78.4
\$35,000–49,999	13.9	10.5	- 17.3	14.6	10.9	- 18.4	8.2	5.7	- 10.7	4.8	4.5	- 5.0	85.5	82.0	- 89.1
\$50,000–74,999	8.6	6.3	- 11.0	12.2	9.0	- 15.4	8.3	5.7	- 10.9	†	-		88.0	85.2	- 90.8
\$75,000+	6.1	5.0	- 7.3	8.3	6.8	- 9.9	5.4	4.2	- 6.6	2.1	0.9	- 3.2	91.5	90.0	93.1
* White, Black, and Asian race categories refer to non-Hispanic															
† Insufficient data															
¶ See p 62 for definition of disability															

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019											
	NO DOCTOR DUE TO COST		CHECKUP IN PAST YEAR		CURRENT SMOKER		FORMER SMOKER		USE SMOKELESS TOBACCO		
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
OVERALL	8.7	7.7 - 9.7	80.0	78.6 - 81.5	13.3	12.1 - 14.6	24.8	23.4 - 26.1	2.3	1.7 - 2.9	
GENDER											
MALE	8.2	7.0 - 9.4	77.5	75.6 - 79.4	15.0	13.3 - 16.7	25.6	23.8 - 27.4	3.4	2.5 - 4.3	
FEMALE	9.6	8.3 - 10.9	83.4	81.7 - 85.1	10.3	9.0 - 11.6	22.6	21.0 - 24.2	1.1	0.6 - 1.6	
RACE-ETHNICITY*											
WHITE	7.4	6.5 - 8.4	80.4	78.9 - 81.9	13.3	11.9 - 14.6	27.4	25.9 - 28.9	2.4	1.7 - 3.1	
BLACK	15.7	11.2 - 20.2	83.4	78.6 - 88.2	14.6	14.2 - 14.9	14.5	13.7 - 15.2	†		
HISPANIC	15.9	12.5 - 19.2	78.9	75.2 - 82.5	13.1	9.9 - 16.2	15.4	11.9 - 18.8	†		
ASIAN	5.3	5.1 - 5.5	80.6	74.3 - 86.9	5.3	4.5 - 6.2	11.0	10.8 - 11.2	†		
DISABILITY¶											
DISABILITY	19.3	16.4 - 22.2	81.3	78.3 - 84.3	21.5	18.6 - 24.4	29.0	25.9 - 32.0	1.7	0.9 - 2.4	
NO DISABILITY	6.3	5.4 - 7.1	80.0	78.6 - 81.5	10.1	9.0 - 11.3	22.5	21.1 - 23.8	2.3	1.7 - 2.9	
EDUCATION											
< HIGH SCHOOL	16.3	11.7 - 20.9	75.9	70.2 - 81.6	21.2	15.7 - 26.7	20.9	16.4 - 25.4	†		
HIGH SCHOOL	10.3	8.4 - 12.2	80.5	77.8 - 83.3	19.8	17.0 - 22.6	29.6	26.6 - 32.6	3.0	1.8 - 4.2	
COLLEGE 1–3 YRS	9.0	7.4 - 10.7	81.2	78.7 - 83.7	15.7	13.4 - 18.0	26.6	24.0 - 29.2	2.5	1.5 - 3.6	
COLLEGE 4+ YRS	6.5	5.3 - 7.6	81.0	79.3 - 82.8	5.1	4.1 - 6.0	20.6	19.1 - 22.2	1.6	1.0 - 2.2	
HOUSEHOLD INCOME											
<\$25,000	15.8	12.8 - 18.8	79.2	75.5 - 82.9	24.9	21.1 - 28.7	20.0	17.0 - 23.0	†		
\$25,000–34,999	16.7	11.2 - 22.3	76.0	69.5 - 82.5	17.9	12.2 - 23.7	24.3	18.7 - 29.9	†		
\$35,000–49,999	11.0	7.8 - 14.2	82.3	78.5 - 86.1	17.2	13.2 - 21.1	25.1	21.1 - 29.1	†		
\$50,000–74,999	7.8	5.6 - 10.0	78.6	74.9 - 82.3	15.0	11.4 - 18.7	27.8	24.0 - 31.5	†		
\$75,000+	4.9	3.8 - 6.0	81.3	79.3 - 83.2	8.5	6.9 - 10.1	24.9	23.0 - 26.9	2.5	1.7 - 3.4	
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 62 for definition of disability											

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019															
	E-CIGARETTE USE			QUIT ATTEMPT			BINGE DRINKING			HEAVY DRINKING			OVERWEIGHT (BMI≥25.0)		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	7.7	6.2	- 9.2	56.8	51.8	- 61.8	22.1	20.6	- 23.6	8.9	7.8	- 9.9	60.0	58.3	- 61.7
GENDER															
MALE	9.9	8.0	- 11.8	55.5	54.0	- 57.0	24.3	22.3	- 26.2	8.3	6.9	- 9.6	66.2	64.1	- 68.3
FEMALE	5.0	3.6	- 6.5	57.0	50.0	- 63.9	16.7	15.0	- 18.3	7.5	6.4	- 8.7	53.1	50.9	- 55.3
RACE-ETHNICITY*															
WHITE	8.4	6.8	- 10.0	56.0	50.8	- 61.1	23.8	22.2	- 25.5	9.3	8.1	- 10.5	59.0	57.2	- 60.8
BLACK	†			†			14.6	14.3	- 14.8	5.1	5.0	- 5.2	66.4	65.2	- 67.5
HISPANIC	†			58.8	58.2	- 59.4	15.4	12.0	- 18.9	6.0	3.6	- 8.3	68.3	63.1	- 73.6
ASIAN	†			†			8.0	7.5	- 8.5	1.7	0.8	- 2.6	45.8	42.7	- 48.9
DISABILITY¶															
DISABILITY	12.0	8.6	- 15.4	60.3	53.3	- 67.2	17.3	14.4	- 20.1	8.9	6.7	- 11.1	65.0	61.4	- 68.6
NO DISABILITY	6.3	5.0	- 7.6	53.4	47.5	- 59.4	21.3	19.8	- 22.8	7.9	6.9	- 8.8	58.1	56.4	- 59.9
EDUCATION															
< HIGH SCHOOL	7.2	5.6	- 8.8	†			17.1	11.6	- 22.6	9.1	4.8	- 13.4	64.4	57.6	- 71.2
HIGH SCHOOL	8.9	8.6	- 9.3	53.3	51.0	- 55.5	20.2	17.2	- 23.1	9.5	7.4	- 11.7	63.7	60.2	- 67.1
COLLEGE 1–3 YRS	8.7	6.3	- 11.1	53.1	50.8	- 55.4	21.1	18.5	- 23.7	6.9	5.2	- 8.6	64.1	61.2	- 67.0
COLLEGE 4+ YRS	6.3	4.3	- 8.3	59.3	56.6	- 62.0	22.0	20.1	- 23.8	8.5	7.1	- 9.9	54.4	52.2	- 56.7
HOUSEHOLD INCOME															
<\$25,000	10.8	7.0	- 14.6	62.0	59.6	- 64.4	16.1	12.8	- 19.4	5.9	4.1	- 7.7	65.2	61.1	- 69.3
\$25,000–34,999	2.1	2.0	- 2.1	†			12.1	7.1	- 17.1	†			62.5	55.6	- 69.3
\$35,000–49,999	11.0	9.6	- 12.4	53.2	50.2	- 56.3	16.3	12.3	- 20.3	10.6	7.2	- 14.0	64.0	59.1	- 68.9
\$50,000–74,999	6.7	6.6	- 6.9				25.8	21.7	- 30.0	9.1	6.5	- 11.6	56.6	52.1	- 61.1
\$75,000+	6.9	4.7	- 9.1	51.5	50.4	- 52.5	25.2	23.0	- 27.5	9.8	8.2	- 11.4	58.4	55.9	- 60.8
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 62 for definition of disability															

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019															
	OBESE (BMI≥30.0)			MET GUIDELINES FOR AEROBIC ACTIVITY			MET GUIDELINES FOR MUSCLE STRENGTHENING			CONSUMED FRUITS AND VEGETABLES FIVE OR MORE TIMES PER DAY			CHOLESTEROL CHECKED IN PAST 5 YEARS		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	25.9	24.4	- 27.5	55.2	53.4	- 57.0	34.9	33.2	- 36.6	17.8	16.3	- 19.2	90.0	88.8	- 91.3
GENDER															
MALE	26.6	24.6	- 28.6	54.2	51.9	- 56.6	36.1	33.9	- 38.3	16.0	14.3	- 17.8	88.5	86.8	- 90.1
FEMALE	24.4	22.4	- 26.4	52.1	49.9	- 54.3	31.8	29.7	- 33.9	18.5	16.7	- 20.2	91.0	89.5	- 92.4
RACE-ETHNICITY*															
WHITE	25.4	23.8	- 27.0	57.0	55.1	- 58.9	35.6	33.8	- 37.4	18.1	16.6	- 19.6	90.4	89.1	- 91.7
BLACK	33.0	32.4	- 33.6	46.9	45.3	- 48.4	36.5	35.4	- 37.5	16.6	15.6	- 17.5	88.8	87.3	- 90.3
HISPANIC	28.4	23.3	- 33.5	36.1	31.2	- 41.0	18.0	14.7	- 21.2	12.3	9.2	- 15.5	88.7	88.0	- 89.3
ASIAN	12.2	9.0	- 15.5	51.1	50.0	52.2	32.8	31.1	- 34.5	18.3	18.1	- 18.5	88.2	86.1	- 90.3
DISABILITY†															
DISABILITY	35.2	31.5	- 38.9	41.5	37.7	- 45.2	27.8	24.4	- 31.1	15.7	12.9	- 18.5	86.7	83.5	- 89.8
NO DISABILITY	22.6	21.1	- 24.2	57.6	55.8	- 59.3	35.7	34.0	- 37.4	17.7	16.3	- 19.1	90.4	89.2	- 91.5
EDUCATION															
< HIGH SCHOOL	33.5	26.4	- 40.5	32.5	26.3	- 38.6	22.7	17.1	- 28.2	14.6	9.6	- 19.7	83.3	77.3	- 89.4
HIGH SCHOOL	28.1	25.0	- 31.2	48.1	44.5	- 51.7	29.7	26.4	- 33.0	14.8	12.0	- 17.6	87.7	85.4	- 90.1
COLLEGE 1–3 YRS	32.1	29.0	- 35.2	53.6	50.5	- 56.8	31.5	28.4	- 34.6	17.5	14.9	- 20.1	89.7	87.5	- 92.0
COLLEGE 4+ YRS	19.0	17.3	- 20.7	60.3	58.0	- 62.5	41.0	38.8	- 43.2	18.8	17.2	- 20.5	92.4	91.1	- 93.7
HOUSEHOLD INCOME															
<\$25,000	32.2	27.9	- 36.5	43.9	39.4	- 48.3	25.3	21.2	- 29.3	17.1	13.4	- 20.8	86.5	83.3	- 89.7
\$25,000–34,999	33.3	25.8	- 40.8	37.5	29.8	- 45.1	28.5	21.5	- 35.5	11.9	7.4	- 16.4	85.7	79.8	- 91.5
\$35,000–49,999	27.8	22.9	- 32.8	49.9	44.9	- 55.0	28.2	23.3	- 33.0	17.4	16.3	- 18.5	90.3	86.7	- 94.0
\$50,000–74,999	23.7	20.0	- 27.5	53.6	48.8	- 58.4	37.4	32.8	- 41.9	16.6	13.0	- 20.3	90.3	87.4	- 93.1
\$75,000+	23.6	21.5	- 25.8	62.6	60.1	- 65.1	40.3	37.8	- 42.7	18.8	16.7	- 20.9	91.8	90.1	- 93.4

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

† Insufficient data

¶ See p 62 for definition of disability

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019															
	HIGH CHOLESTEROL **			HIGH BLOOD PRESSURE			TAKE MEDICINE FOR HIGH BLOOD PRESSURE**			RECEIVED 3 SHOTS HBV VACCINE			PRE-DIABETES		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	27.4	25.9	- 28.9	25.8	24.5	- 27.1	54.2	51.1	- 57.3	46.9	44.0	- 49.7	7.5	6.4	- 8.7
GENDER															
MALE	30.8	28.6	- 32.9	29.6	27.8	- 31.4	54.2	50.7	- 57.6	39.1	35.4	- 42.8	6.9	5.5	- 8.4
FEMALE	23.8	22.1	- 25.4	22.0	20.6	- 23.5	54.7	49.7	- 59.6	53.3	50.0	- 56.6	7.2	5.8	- 8.6
RACE-ETHNICITY*															
WHITE	26.7	25.2	- 28.2	25.9	24.5	- 27.2	53.9	50.6	- 57.2	48.0	45.0	- 51.0	5.9	4.9	- 6.8
BLACK	30.5	29.3	- 31.7	31.0	26.6	- 35.4	†		-	44.3	44.3	- 44.3	11.8	11.5	- 12.1
HISPANIC	33.2	31.6	- 34.8	28.5	24.4	- 32.6	54.6	54.4	- 54.7	45.2	43.9	- 46.5	14.5	14.3	- 14.8
ASIAN	21.2	18.8	- 23.7	16.4	10.6	- 22.2	†			†			†		
DISABILITY¶															
DISABILITY	33.2	29.8	- 36.7	35.9	32.8	- 39.0	54.5	49.1	- 59.9	47.2	41.6	- 52.7	11.8	8.7	- 14.8
NO DISABILITY	25.8	24.2	- 27.3	22.7	21.5	- 24.0	54.4	50.9	- 57.8	46.4	43.6	- 49.3	6.1	5.0	- 7.2
EDUCATION															
< HIGH SCHOOL	39.5	32.8	- 46.2	31.6	26.5	- 36.7	53.7	42.5	- 64.9	33.6	32.0	- 35.3	†		
HIGH SCHOOL	25.2	22.4	- 27.9	29.0	26.5	- 31.5	55.6	54.6	- 56.6	36.4	31.1	- 41.7	8.9	6.4	- 11.4
COLLEGE 1–3 YRS	28.6	25.9	- 31.3	27.4	25.0	- 29.7	54.4	52.3	- 56.5	49.2	44.3	- 54.0	6.8	5.0	- 8.6
COLLEGE 4+ YRS	25.5	23.7	- 27.3	21.4	19.9	- 22.8	53.7	49.6	- 57.9	53.7	50.2	- 57.1	5.7	4.5	- 6.9
HOUSEHOLD INCOME															
<\$25,000	31.3	27.0	- 35.7	33.4	29.6	- 37.3	50.9	43.7	- 58.0	39.6	33.1	- 46.1	12.1	8.3	- 15.9
\$25,000–34,999	25.8	19.1	- 32.5	29.5	23.6	- 35.4	55.9	54.6	- 57.2	31.8	30.8	- 32.9	9.8	9.7	- 10.0
\$35,000–49,999	28.9	24.1	- 33.8	24.2	20.5	- 27.9	50.5	50.0	- 51.0	44.3	41.7	- 46.9	9.9	9.5	- 10.3
\$50,000–74,999	25.6	22.0	- 29.3	28.1	24.7	- 31.5	63.4	62.4	- 64.4	45.6	44.5	- 46.6	7.0	6.1	- 8.0
\$75,000+	27.4	25.4	- 29.4	22.5	20.7	- 24.3	54.5	50.0	- 59.0	51.1	46.9	- 55.2	5.6	4.3	- 6.9
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 62 for definition of disability															

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019															
	DIABETES			EVER HAD ASTHMA			CURRENTLY HAVE ASTHMA			EVER DIAGNOSED WITH COPD			EVER DIAGNOSED WITH ARTHRITIS		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	7.6	6.8	- 8.4	15.4	14.1	- 16.7	10.1	9.1	- 11.2	4.4	3.8	- 4.9	23.0	21.8	- 24.3
GENDER															
MALE	8.6	7.5	- 9.7	12.4	11.0	- 13.9	7.1	6.0	- 8.3	4.2	3.5	- 4.8	19.5	17.9	- 21.1
FEMALE	6.4	5.6	- 7.3	18.6	16.9	- 20.3	13.5	12.0	- 14.9	4.7	3.9	- 5.5	24.8	23.3	- 26.3
RACE-ETHNICITY*															
WHITE	6.3	5.6	- 7.0	16.3	15.0	- 17.7	10.7	9.6	- 11.9	4.7	4.1	- 5.3	23.0	21.7	- 24.3
BLACK	12.4	8.8	- 16.0	15.6	11.3	- 19.9	12.5	8.5	- 16.5	†	-		24.2	20.0	- 28.3
HISPANIC	12.4	9.2	- 15.6	18.5	14.8	- 22.3	11.6	8.6	- 14.7	4.0	2.2	- 5.9	23.0	19.0	- 27.0
ASIAN	†	-		10.5	7.5	- 13.6	7.3	4.3	- 10.3	†	-		12.6	6.6	- 18.5
DISABILITY¶															
DISABILITY	13.3	11.3	- 15.3	27.4	24.1	- 30.7	20.2	17.3	- 23.2	9.7	8.0	- 11.4	37.8	34.8	- 40.8
NO DISABILITY	5.3	4.5	- 6.0	12.5	11.3	- 13.6	7.9	6.9	- 8.8	2.6	2.2	- 3.1	16.9	15.8	- 18.1
EDUCATION															
< HIGH SCHOOL	13.1	9.7	- 16.6	19.4	14.6	- 24.2	14.4	10.1	- 18.6	8.2	5.7	- 10.8	24.6	20.1	- 29.1
HIGH SCHOOL	9.2	7.7	- 10.8	15.3	12.8	- 17.7	9.4	7.5	- 11.3	5.8	4.6	- 7.0	26.4	23.6	- 29.2
COLLEGE 1–3 YRS	7.9	6.5	- 9.2	17.5	15.2	- 19.7	11.6	9.8	- 13.5	5.4	4.3	- 6.5	25.3	23.0	- 27.7
COLLEGE 4+ YRS	4.8	4.0	- 5.5	13.7	12.2	- 15.2	9.1	7.8	- 10.4	2.2	1.7	- 2.7	17.9	16.7	- 19.1
HOUSEHOLD INCOME															
<\$25,000	12.0	9.8	- 14.3	21.2	17.7	- 24.7	15.8	12.6	- 19.1	8.6	6.4	- 10.7	30.4	26.8	- 34.1
\$25,000–34,999	7.4	4.5	- 10.2	11.6	7.7	- 15.5	8.8	5.3	- 12.3	6.0	3.3	- 8.6	20.0	18.8	- 21.3
\$35,000–49,999	9.9	6.5	- 13.3	16.8	13.2	- 20.4	10.9	7.9	- 13.9	4.1	2.7	- 5.4	25.8	21.9	- 29.7
\$50,000–74,999	7.3	5.1	- 9.5	16.1	12.5	- 19.6	10.7	7.7	- 13.7	3.3	2.2	- 4.5	22.0	18.8	- 25.2
\$75,000+	5.6	4.5	- 6.6	13.2	11.6	- 14.9	8.3	6.9	- 9.6	2.8	2.1	- 3.5	20.3	18.6	- 22.1
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 62 for definition of disability															

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019															
	LIMITATIONS DUE TO ARTHRITIS			EVER DIAGNOSED WITH CANCER			EVER DIAGNOSED WITH DEPRESSION			SELF-IDENTIFIED AS HOMOSEXUAL, BISEXUAL, OR OTHER			EVER TESTED FOR HIV - AGES 18-64		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
OVERALL	9.4	8.5	- 10.3	11.1	10.3	- 12.0	19.6	18.1	- 21.0	8.0	6.9	- 9.1	49.7	47.6	- 51.8
GENDER															
MALE	7.8	6.7	- 8.9	10.1	9.1	- 11.1	13.8	12.2	- 15.3	6.2	4.9	- 7.4	44.1	43.6	- 44.6
FEMALE	10.1	9.0	- 11.1	12.0	10.9	- 13.2	24.2	22.3	- 26.0	8.8	7.4	- 10.2	51.5	48.9	- 54.1
RACE-ETHNICITY*															
WHITE	9.0	8.1	- 9.9	12.4	11.5	- 13.3	20.9	19.4	- 22.4	8.4	7.2	- 9.6	45.9	43.7	- 48.2
BLACK	9.4	6.2	- 12.6	5.0	2.6	- 7.4	14.9	10.5	19.2	7.4	7.3	- 7.5	58.7	57.7	- 59.6
HISPANIC	11.6	8.5	- 14.7	6.5	3.6	- 9.3	21.0	17.1	- 24.8	5.6	3.2	- 8.1	62.2	60.9	- 63.4
ASIAN	†			†			7.2	3.6	10.9	†			†		
DISABILITY¶															
DISABILITY	21.8	19.5	- 24.2	14.5	12.7	- 16.4	40.7	37.0	- 44.4	12.3	9.4	- 15.2	60.7	56.1	- 65.2
NO DISABILITY	4.2	3.5	- 4.8	10.3	9.4	- 11.1	13.5	12.2	- 14.7	6.3	5.4	- 7.3	44.8	42.7	- 46.9
EDUCATION															
< HIGH SCHOOL	13.0	9.7	- 16.4	11.2	7.8	- 14.5	24.7	19.4	- 30.0	†			58.5	57.6	- 59.3
HIGH SCHOOL	11.0	9.1	- 12.9	9.4	8.0	- 10.8	18.5	15.9	- 21.1	7.8	5.7	- 9.8	45.8	41.6	- 50.0
COLLEGE 1–3 YRS	10.1	8.4	- 11.9	12.0	10.3	- 13.7	20.9	18.3	- 23.4	7.6	5.7	- 9.6	45.3	43.9	- 46.7
COLLEGE 4+ YRS	6.3	5.5	- 7.1	11.6	10.6	- 12.6	17.1	15.4	- 18.8	7.3	6.0	- 8.5	49.3	46.6	- 52.0
HOUSEHOLD INCOME															
<\$25,000	16.1	13.4	- 18.7	10.3	8.2	- 12.4	29.8	26.0	- 33.6	8.4	5.9	- 10.9	63.7	58.3	- 69.1
\$25,000–34,999	7.1	6.2	- 8.0	13.4	8.0	- 18.9	20.9	14.6	- 27.3	10.7	10.3	- 11.1	52.8	51.6	- 54.0
\$35,000–49,999	10.8	7.9	- 13.6	12.4	9.4	- 15.4	20.5	16.2	- 24.8	10.7	6.9	- 14.5	48.8	46.8	- 50.7
\$50,000–74,999	9.4	7.0	- 11.7	11.2	9.2	- 13.2	16.7	13.2	- 20.3	8.7	5.8	- 11.7	†		
\$75,000+	6.9	5.7	- 8.1	11.0	9.9	- 12.2	16.1	14.1	- 18.0	6.6	5.2	- 8.0	45.4	42.5	- 48.2

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

† Insufficient data

¶ See p 62 for definition of disability

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019							
	TESTED FOR HIV IN PAST YEAR - AGES 18-64		SEXUAL VIOLENCE - WOMEN			TEXTING AND DRIVING	
	%	95% CI	%	95% CI		%	95% CI
OVERALL	12.3	10.8 - 13.8	23.7	20.2	- 27.2	38.4	35.9 - 41.0
GENDER							
MALE	10.8	10.6 - 11.0		-		38.9	35.7 - 42.1
FEMALE	12.6	10.6 - 14.5		-		32.6	29.5 - 35.8
RACE-ETHNICITY*							
WHITE	9.9	8.4 - 11.3	22.4	18.9	- 25.8	39.4	36.7 - 42.1
BLACK	21.2	21.0 - 21.5	18.0	16.1	- 19.9	29.0	28.8 - 29.2
HISPANIC	19.4	19.1 - 19.7	22.7	22.4	- 23.0	22.5	22.4 - 22.5
ASIAN	†	-	†			36.9	35.5 - 38.3
DISABILITY¶							
DISABILITY	21.2	16.8 - 25.7	32.6	24.8	- 40.3	32.0	27.0 - 37.0
NO DISABILITY	9.8	8.5 - 11.1	19.4	16.3	- 22.5	36.8	34.3 - 39.3
EDUCATION							
< HIGH SCHOOL	17.9	17.8 - 18.0	†			19.0	18.2 - 19.8
HIGH SCHOOL	10.1	9.7 - 10.5	16.6	16.1	- 17.1	27.8	23.0 - 32.7
COLLEGE 1-3 YRS	11.7	11.3 - 12.1	20.8	15.0	- 26.6	35.9	31.5 - 40.3
COLLEGE 4+ YRS	11.4	9.6 - 13.1	25.2	21.0	- 29.4	43.6	40.3 - 47.0
HOUSEHOLD INCOME							
<\$25,000	21.9	21.0 - 22.8	29.9	21.1	- 38.7	22.6	21.9 - 23.2
\$25,000-34,999	17.1	17.1 - 17.2	24.2	19.3	- 29.1	18.0	17.3 - 18.6
\$35,000-49,999	10.1	9.0 - 11.1	25.2	24.7	- 25.6	36.9	36.1 - 37.8
\$50,000-74,999	†		20.6	18.9	- 22.4	41.4	39.5 - 43.4
\$75,000+	9.2	7.3 - 11.1	21.7	16.7	- 26.6	45.2	41.6 - 48.8
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 62 for definition of disability							

MASSACHUSETTS AND NATIONAL ESTIMATES

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019			
VARIABLES	MA %	US MEDIAN [¶] %	US RANGE [¶] %
OVERALL HEALTH MEASURES			
FAIR OR POOR HEALTH	14.1	18.2	13.6 – 34.4
15+ POOR MENTAL HEALTH DAYS	11.7	13.1	10.1 – 19.8
15+ DAYS IN POOR PHYSICAL HEALTH	9.7	11.7	8.5 – 17.9
HEALTH CARE ACCESS AND UTILIZATION			
NO HEALTH INSURANCE (18-64)	4.4	†	
HAVE PERSONAL HEALTH CARE PROVIDER	87.3	77.0	66.3 – 88.4
COULD NOT SEE DOCTOR DUE TO COST	8.7	12.6	8.2 – 20.6
CHECKUP IN PAST YEAR	81.8	77.6	68.5 – 83.8
RISK FACTORS AND PREVENTIVE BEHAVIORS			
CURRENT SMOKER	12.0	16.0	7.9 – 23.8
FORMER SMOKER	25.3	25.2	16.6 – 30.4
QUIT ATTEMPT AMONG CURRENT SMOKERS	55.3	57.1	49.8 – 70.5
USE SMOKELESS TOBACCO	2.1	4.3	0.4 – 9.2
BINGE DRINKING	19.1	16.8	11.2 – 24.9
HEAVY DRINKING	7.8	6.5	4.2 – 9.4
OVERWEIGHT	59.7	67.7	55.9 – 72.7
OBESITY	25.2	32.4	23.8 – 40.8
MET GUIDELINES FOR AEROBIC ACTIVITY	52.8	49.9	30.2 – 62.3
MET GUIDELINES FOR MUSCLE-STRENGTHENING ACTIVITY	33.2	35.6	11.6 – 40.6
5+ SERVINGS OF FRUIT/VEGETABLES PER DAY	17.2	15.8	4.5 – 25.6
CHOLESTEROL CHECKED IN PAST 5 YEARS	90.6	86.6	79.2 – 93.4
HIGH CHOLESTEROL	31.1	33.9	28.5 – 40.7
HIGH BLOOD PRESSURE	28.1	32.2	25.8 – 43.8
TAKE MEDICINE FOR HIGH BLOOD PRESSURE	76.7	76.7	58.1 – 84.0
IMMUNIZATION			
FLU VACCINE IN PAST YEAR (18-49)	42.1	33.3	22.3 – 43.0
FLU VACCINE IN PAST YEAR (50-64)	53.0	45.2	20.4 – 53.0
FLU VACCINE IN PAST YEAR (65+)	67.6	62.9	37.0 – 70.5
EVER HAD PNEUMONIA VACCINATION (65+)	71.4	71.4	33.4 – 76.3
CHRONIC HEALTH CONDITIONS			
DIABETES	8.4	10.8	7.0 – 16.7
EVER HAD ASTHMA	15.5	14.9	10.4 – 18.1
CURRENTLY HAVE ASTHMA	10.3	9.7	5.2 – 11.8
HAVE ARTHRITIS	24.5	25.8	16.2 – 41.3
LIMITATIONS DUE TO ARTHRITIS	9.8	10.6	6.6 – 19.9
MYOCARDIAL INFARCTION (35+)	5.7	5.9	3.7 – 11.2
ANGINA OR CORONARY HEART DISEASE (35+)	5.1	5.3	3.1 – 10.0
STROKE (35+)	3.2	4.3	3.0 – 7.1
CHRONIC OBSTRUCTIVE PULMONARY DISEASE	4.9	6.4	3.2 – 12.3
EVER DIAGNOSED WITH CANCER	12.6	12.5	4.0 – 16.6
EVER DIAGNOSED WITH DEPRESSION	18.5	19.7	10.6 – 28.8
OTHER TOPICS			
EVER TESTED FOR HIV (18-64)	46.0	46.6	31.4 – 77.5
TESTED FOR HIV IN PAST YEAR (18-64)	11.3	12.8	7.7 – 43.5
[¶] 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 7,731 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 1,331 landline respondents and 2,315 cell phone respondents,
 - Split 2 contained 1,346 landline respondents and 2,300 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.¹

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.
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